Mid-Brays Bayou Communities: Housing the Next 60,000
Aspiration and Strategies

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Mid-Brays Bayou Resiliency & Revitalization
Housing & Community Development Strategies

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Findings

1. The Mid-Brays communities are Braeburn, Westbury, Greater Meyerland, Brays Oaks, and the Near Southwest Super neighborhoods.

2. These communities are racially diverse with a median income that is below the Area Median Income (AMI) for the Houston region. Mid-Brays is 35% Hispanic; 29% Black; 27% White; 8% Asian; 2% Other. The median income of $47,277.50 is below the median income of Harris County, which is $57,791.1

3. Mid-Brays has been growing at a rate of approximately 5,634 persons per year since 1990. At this rate almost 50,000 more people are expected to live there by 2045. Not only should Mid-Brays communities facilitate resilient housing options for the 141,000 people currently living in Mid-Brays, but they also have to identify housing for another @ 50,000 persons.

4. The Brays Bayou watershed is the most populous watershed in Harris County and contains the highest percentage of people living in the 100 year floodplain.

5. Flooding occurring in North West Harris County (Or the failing Addicks and Barker dams) will not affect people living in the Brays Bayou watershed.

6. From a sustainability perspective, protecting homes and businesses from flooding in the Brays Bayou watershed is more beneficial than reducing development in the floodplain, since this floodplain cannot function naturally2. The traditional rhetoric, ‘reduce development in the floodplain’, does not apply to floodplains where the main river/ bayou is channelized by concrete. The City should provide Elevation Grants or loans to persons living in the Brays watershed since there is no ecological or sustainable reason to encourage evacuating the floodplain.

7. Residential density and development standards need to be implemented in Mid-Brays: to promote cost efficient resilience strategies for private owners and to minimize local government infrastructure maintenance costs.

8. The Mid-Brays communities are represented by a very stellar and diverse group of elected officials. The highest priority should be ‘collaboration’ to identify and initiate large scale resilience projects and programs to reduce flooding. (See Page 54 for full list of projects)

   o Houston City Council representatives: Ellen Cohen (C), Martha Castex-Tatum (K) and Mike Laster (J):
     - Add the Decommissioning of the South West Waste-Water treatment plant to the 2020-2024 Capital Improvement Planning projects.
     - Direct City of Houston Housing and Community Development Department to revise their funding guidance to allow funds to be used for ELEVATION GRANTS - in floodplains that lead to a ‘concrete channeled Bayous’ (See Exec. notes #5 & #6 above).

   o Harris County Commissioners: Rodney Ellis (Pct1), Steve Radack (Pct3):
     - Authorize HCFDC to partner with Westwood Golf Course and Braeburn Golf Course to redevelop these large areas as DUAL Detention and Recreation facilities.
     - Authorize HCFCD to Purchase of the South West Waste-water treatment plant to be developed into Detention space.
     - Authorize HCFCD to purchase Ruffino Hills property to be developed into Detention space.

   o Texas House/ Senate Representatives: Shawn Thierry (H146), Sarah Davis (H134), Alma Allen (H131), Borris Miles (S13) and Joan Huffman (S17):
     - Rainy Day funds made available as loans or direct grants to places devastated by natural hazards.

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1 ACS 5Yr_2017

Figure 1: Mid Brays Communities
Mid-Brays Bayou Resiliency & Revitalization Housing & Community Development Strategies

BRAEBURN

BRAEBURN COUNTRY CLUB

The country club was founded back in 1903 and now provides a large community gathering area. The course was originally designed by the legendary architect, Robert Trent Jones, Sr. It is a challenging 18-hole par 72 course with a driving range, practice putting green, and locker rooms.

SEVEN ACRES JENNYH SENIOR FARM

At 1925, Seven Acres Jennyh Senior Farm provides a safe and secure environment for seniors to live independently. The farm offers a variety of activities, including gardening, horticulture, and animal care, to keep residents engaged and active.

FOXBROOK SHOPPING CENTER

Located in 1922, Foxbrook Shopping Center provides a great mix of retail stores, restaurants, and entertainment options. The center is home to a large grocery store, electronics store, and a variety of smaller specialty shops.

SOUTHWEST FINS

The district is known for its variety of restaurants and cafes, as well as its lively nightlife scene. Whether you're looking for a quick bite or a full meal, there's something for everyone at Southwest Fins.

BRAYS OAKS

BRAYS OAKS PARK

Bray Oaks does not have many public parks, however, there are several playgrounds and sports fields available for residents. The park provides a great space for children to play and for families to enjoy outdoor activities.

NCC BRAES OAKS CAMPUS

In 1923, the campus opened its doors to the community. The campus offers a variety of programs and services to help residents improve their lives, including education, healthcare, and social services.

FOSTER ED VILLAGE HALL

In 1924, the Village Hall is a community center that hosts a variety of events and activities. The hall is available for rent and is used for everything from weddings to community meetings.

MEYERLAND

MEYERLAND COMMUNITY CENTER

MEYERLAND PLAZA

One of Meyerland's most prominent landmarks is the Meyerland Plaza, a large shopping center that houses several major retail stores. The mall is a popular destination for shopping and entertainment.

KOLTER ELEMENTARY

Established in 1925, Kolter Elementary is one of the schools in the Meyerland area. The school offers a comprehensive education program to students in grades K-5.

SOUTH MEYERLAND:

FOSTER ED SARDINIA

Founded in 1926, Sardinia is a small neighborhood that is known for its intimate atmosphere and friendly residents. The neighborhood is safe and quiet, making it a great place to live.

WESBURY

WESBURY HIGH SCHOOL

Located in 1927, Wesbury High School is a magnet school that offers a variety of programs and courses. The school is known for its strong academic program and its athletics teams.

WESBURY AIRPORT

Founded in 1928, Wesbury Airport is a busy airport that serves the needs of both local residents and tourists. The airport has a variety of services, including charter flights, private rentals, and student training programs.

WILLIAM MEADOWS/ WILLOWBEND

WILLIAM MEADOWS

WILLIAM MEADOWS is a community park that offers a variety of amenities, including a playground, basketball courts, and a walking trail. The park is also home to a beautiful lake and a variety of wildlife.

WILLOWBEND

ROBERT M. BOREN ACADEMY

Established in 1929, Robert M. Boren Academy provides education for middle and high school students in the area. The school is known for its strong academic program and its emphasis on community service.

WEDGEMARK INC

Located near the community center, Wedgemark Inc is a commercial development that includes retail stores, restaurants, and office space. The development is well-designed and provides a great place for residents to shop and dine.

ALT 90

The roadbeds for Woodlawn include Brays Bayou along the eastern and southern boundaries for the woodlands. The roadbeds for Galleria include Brays Bayou along the western and northern boundaries for the woodlands. There was a marsh area, but later developed roads.

ALT 91

The roadbeds for Woodlawn include Brays Bayou along the eastern and southern boundaries for the woodlands. The roadbeds for Galleria include Brays Bayou along the western and northern boundaries for the woodlands. There was a marsh area, but later developed roads.

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I. INTRODUCTION
Purpose, Process, People, Context

Houston is a city of neighborhoods and communities, and the Mid-Brays communities are a prime example of how communities can enrich the cultural diversity and economic viability of our city when they are allowed to set roots in an area over time. The Mid-Brays area is home to many diverse faiths, cultures, institutions, and outstanding public schools such as Kolter Elementary & Bellaire High School, these make it an ideal area for young families.

Long before Hurricane Harvey, the Mid-Brays communities have known the physical danger, psychological trauma, and financial devastation of catastrophic weather, but in recent years the impact of those storms has worsened considerably. The cumulative effect of successive floods, in a very short period of time, has challenged the perseverance and patience of those who flooded, and the trust they have in agencies tasked with preventing future floods. Based on the shared sub-regional impacts from repetitive flooding events, residents within the Mid-Brays communities have recognized the need to develop a single sub-regional approach to identify solutions to the flooding. The Mid-Brays Communities are Braeburn, Westbury, Greater Meyerland, Brays Oaks, and the Willow Meadows/ Willow Bend (Near Southwest) Super neighborhoods.

- Communities along the Brays Bayou watershed, in Houston, are not adequately prepared for riverine flooding (See Table 1).
- The Demographic constitution in Mid-Brays is 35% Hispanic; 29% Black; 27% White; 8% Asian; 2% Other. This makes the Mid-Brays communities a racial and ethnically diverse area. The median income of $47,277.50 is below the median income of Harris County, which is $57,791.³
- Both the 2016 Tax Day storm and the 2015 Memorial Day storm resulted in institutional and residential flooding of approximately 1,400 and 1,200 homes respectively in Brays Bayou watershed. These damages occurred under rainfall conditions much less severe than the August 25-29, 2017 Tropical Storm Harvey.
- Following this most recent storm event, TS Harvey:
  o Mid-Brays residents have recognized an immediate need to integrate flood hazard mitigation into routine community planning and neighborhood governance.
  o Residents have chosen to approach this task utilizing available expertise and resources from area universities, since there is no local precedent within city planning or the business community for Community Resilience Planning.

³ ACS 5Yr_2017
Context: Geography

• The study area is located in Harris County, which is the most populous county in Texas. Harris county is located in South-East Texas, adjacent to the Gulf of Mexico (Figure 2:1).

• This is a region where several major rivers drain to the Gulf of Mexico. The San Jacinto River is the major river, which drains through Harris County (Figure 2:2).

• The San Jacinto river watershed drains Harris County and Montgomery County. Precipitation falling in surrounding counties, will not affect Harris County (Figure 2:3). From a regional planning perspective, Montgomery county and Harris county should partner since they share common flooding vulnerability.

• The San Jacinto River watershed is subdivided into 22 major sub-watersheds. Each one drains into 22 major waterways. The watersheds all have different land sizes and drain waterways that have different shapes and morphological ages.

• Precipitation falling within one of these sub-watersheds will not normally drain into other sub-watersheds (Figure 2:4). For instance, flooding occurring in North West Harris County (Or the failing Addicks and Barker dams) will not affect people living in the Brays Bayou watershed.
Context: Sustainability

- We conducted a Sustainability Assessment of the Buffalo Bayou and Brays Bayou watersheds using variables to measure economics and ecological function.
- Figure 3:2 shows the large amount of area (Area in orange is in 100-year floodplain) that is not protected from flooding in the Brays Bayou watershed, compared to the Buffalo Bayou watershed. In the Brays Bayou watershed 205,450 people are vulnerable, while in the Buffalo Bayou watershed, 17,675 are vulnerable by living in the 100-year floodplain.
- Our findings concluded that the Buffalo Bayou watershed functions naturally. Therefore, efforts should preserve the floodplain’s natural ecological and drainage functions. However, Brays Bayou watershed does not function in its natural state. There is no naturally functioning floodplain for Brays Bayou, since there is a concrete lined channel along most of its length.
- From a sustainability perspective, protecting homes and businesses from flooding in the Brays Bayou watershed is more ecologically beneficial than reducing development in the floodplain since the floodplain cannot function naturally\(^4\). The traditional rhetoric, ‘reduce development in the floodplain’, does not apply to places where the main river/bayou is channelized by concrete. The City should provide Home Elevation funding for persons living in the Brays watershed.

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Planning for flooding resilience should be conducted with the watershed boundary in mind. We developed an analysis showing the number and percentage of people living within the 100-year floodplain in Harris County.

- Brays Bayou watershed contains the largest number of people throughout all of Harris County. 762,806 live in the Brays Bayou watershed.
- Almost 30% of people who live in the Brays Bayou watershed are vulnerable to frequent flooding. This is the largest number and percentage of people throughout Harris County.
- Based on these figures, the Brays Bayou watershed can be considered, the most poorly managed of all the watersheds across Harris County.

### Context: Population vulnerability

<table>
<thead>
<tr>
<th>Watershed</th>
<th>Population in Watershed</th>
<th>Population in 100Yr Flood plain</th>
<th>Percent of Pop in 100Yr Flood plain</th>
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<tbody>
<tr>
<td>BRAYS BAYOU</td>
<td>762,806</td>
<td>205,450</td>
<td>27.36</td>
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<tr>
<td>GREENS BAYOU</td>
<td>572,204</td>
<td>111,420</td>
<td>14.84</td>
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<tr>
<td>BUFFALO BAYOU</td>
<td>471,650</td>
<td>17,675</td>
<td>3.56</td>
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<tr>
<td>WHITE OAK BAYOU</td>
<td>461,625</td>
<td>74,504</td>
<td>9.92</td>
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<tr>
<td>CYPRESS CREEK</td>
<td>380,259</td>
<td>50,068</td>
<td>6.76</td>
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<tr>
<td>ADDICKS RESERVOIR</td>
<td>333,003</td>
<td>38,306</td>
<td>5.10</td>
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<td>SIMS BAYOU</td>
<td>301,397</td>
<td>51,820</td>
<td>6.90</td>
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<td>SAN JACINTO RIVER</td>
<td>219,485</td>
<td>48,788</td>
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<td>CLEAR CREEK</td>
<td>185,114</td>
<td>49,534</td>
<td>6.60</td>
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<td>ARMAND BAYOU</td>
<td>131,697</td>
<td>15,926</td>
<td>2.12</td>
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<tr>
<td>BARKER RESERVOIR</td>
<td>98,964</td>
<td>6,862</td>
<td>0.91</td>
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<tr>
<td>VINCE BAYOU</td>
<td>91,660</td>
<td>6,694</td>
<td>0.89</td>
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<tr>
<td>HUNTING BAYOU</td>
<td>77,325</td>
<td>15,722</td>
<td>2.09</td>
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<tr>
<td>CARPENTERS BAYOU</td>
<td>63,373</td>
<td>6,175</td>
<td>0.82</td>
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<td>WILLOW CREEK</td>
<td>57,344</td>
<td>9,374</td>
<td>1.25</td>
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<td>SPRING GULLY &amp; GOOSE CREEK</td>
<td>54,372</td>
<td>5,851</td>
<td>0.78</td>
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<tr>
<td>SPRING CREEK</td>
<td>52,075</td>
<td>12,089</td>
<td>1.61</td>
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<td>LITTLE CYPRESS CREEK</td>
<td>43,381</td>
<td>8,732</td>
<td>1.16</td>
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<td>CEDAR BAYOU</td>
<td>41,694</td>
<td>7,333</td>
<td>0.98</td>
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<td>JACKSON BAYOU</td>
<td>14,539</td>
<td>1,876</td>
<td>0.25</td>
</tr>
<tr>
<td>SAN JACINTO &amp; GALVESTON BAY</td>
<td>14,409</td>
<td>6,107</td>
<td>0.81</td>
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<td>LUCE BAYOU</td>
<td>5,855</td>
<td>681</td>
<td>0.09</td>
</tr>
<tr>
<td><strong>Total Harris County</strong></td>
<td><strong>4,434,232</strong></td>
<td><strong>750,985</strong></td>
<td><strong>100</strong></td>
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</tbody>
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Data Source: ACS_5Yr_2016

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Table 1: Harris County Population by Watershed
Context: Political Geography

- Houston City Council Representatives Ellen Cohen (C), Martha Castex-Tatum (K) and Mike Laster (J) to ensure that the Decommissioning of the South-West Wastewater treatment plant is listed under the 2020-2024 Capital Improvement Planning project.
- Harris County Commissioners Rodney Ellis (Pct1) and Steve Radack (Pct3) to ensure that the following projects are included in the 2018 $2.5 Billion Flood Infrastructure bond:
  - Development plan for Westwood Golf Course and Braeburn Golf Course to function as Dual detention and recreation facilities.
  - Purchase of the South-West Wastewater treatment plant and conversion into Detention space.
  - Purchase of Ruffino Hill property and conversion into Detention space.
- Texas House & Senate Representatives Shawn Thierry (H146), Sarah Davis (H134), Alma Allen (H131), Boris Miles (S13) and Joan Huffman (S17); can collaborate to ensure that Rainy Day funds are made available as loans or direct grants.

Figure 4: Political Context
Context: Demographics

- **Recommended planning goal for Mid-Brays is** – ‘**PLANNING FOR THE NEXT 60,000 IN MID-BRARY!**’
- **Race/Ethnicity**: 35% Hispanic; 29% Black; 27% White; 9% Other.
- **Median Household Income**: $47,277.50
- **Mid-Brays area had approximately 140,626 persons in 2017.**
- **The area is growing at a rate of approximately 5,634 persons per year since 1990. This is a modest growth rate.**
- **By 2040, the population is expected to grow to 187,957 persons, which will be approximately 47,331 more people than currently live in Mid-Brays.**
• Mid-Brays neighborhoods have good access to job concentrations in Houston.
• The unemployment rate is 5%
• There are 58,718 Housing Units in Mid-Brays serving the 140,626 people living there.
II. HOUSING & LONG-TERM GROWTH ASSESSMENT

Opportunities & Constraints

On April 25, 2018, we convened community residents at Congregation Beth Yeshurun to discuss Recovery and the future for Houston’s Mid-Brays Bayou communities. The workshop objectives included:

Objectives:
- Provide an overview of a Mid-Brays Bayou Strategic Plan purpose and process
- Share highlights from stakeholder meetings
- Identify critical Opportunities & Constraints a strategic planning should address

The attendees were welcomed by Ben Samuels, co-chair of the Jewish Federation’s Flood Resilience Task Force. Dr. Bruce Race from the University of Houston, and Dr. David Abraham from Rice University, facilitated the strategic planning process and highpoints for committee input. Participants then worked in teams to identify top opportunities and constraints for Mid-Brays Bayou communities.

The framework utilized was a very open-ended review of:

2. Governmental and Business Infrastructural & Social Services – Issues & Opportunities
3. Other Issues & Opportunities
Ben Samuels committee co-chair for the Federation Harvey Recovery Team welcomes attendees to the workshop.
Following is a summary of the top Constraints and Opportunities agreed to by attendees at the Workshop. This list will guide the work of the technical team to develop the Resilience & Revitalization Strategic Community Plan for the Mid-Brays Communities.

<table>
<thead>
<tr>
<th>CONSTRAINTS</th>
<th>OPPORTUNITIES</th>
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<tbody>
<tr>
<td><strong>Social Issues</strong></td>
<td><strong>Social Opportunities</strong></td>
</tr>
<tr>
<td>1. Need to preserve community Identity and family units</td>
<td>1. Opportunity to enhance civic pride (Schools, libraries)</td>
</tr>
<tr>
<td>2. What city services can we reasonably expect in the next flood?</td>
<td>2. Opportunity to strengthen the family unit and foster civic pride</td>
</tr>
<tr>
<td>3. Lack of enough cultural and recreational opportunities</td>
<td>3. Create strategy for increasing police</td>
</tr>
<tr>
<td>4. Crime is a growing concern</td>
<td>4. Opportunity to integrate good neighborhood/community design</td>
</tr>
<tr>
<td>5. Lack of diversity</td>
<td></td>
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<tr>
<td>6. Standard of schools and funding support is decreasing</td>
<td><strong>Economic Opportunities</strong></td>
</tr>
<tr>
<td>7. Problems with crime at some apartments</td>
<td>5. Secure funding for flooded households</td>
</tr>
<tr>
<td><strong>Economic Issues</strong></td>
<td>6. Opportunity to balance immediate needs with long term needs</td>
</tr>
<tr>
<td>8. Residents leaving because of the cost of raising their homes</td>
<td>7. Develop mixed use properties (Commercial and residential)</td>
</tr>
<tr>
<td>9. Lack of sufficient entertainment options</td>
<td>8. Create strategy to develop partnerships for multi-stakeholder buy-in (residents, city, institutions, business)</td>
</tr>
<tr>
<td>10. Business leaving and abandoned strip malls are adding blight to the community</td>
<td><strong>Environmental Opportunities</strong></td>
</tr>
<tr>
<td>11. Lack of enough funding support for homeowners</td>
<td>9. Provide to integrate more options for stormwater runoff</td>
</tr>
<tr>
<td><strong>Environmental Issues</strong></td>
<td>10. Develop a community plan</td>
</tr>
<tr>
<td>12. Clarity on evacuation options in case of flooding</td>
<td>11. Develop more greenspace that can also function as stormwater detention</td>
</tr>
<tr>
<td>13. Drainage needs to be improved</td>
<td>12. Develop more affordable housing</td>
</tr>
<tr>
<td>14. Lack of greenspace to convert to flooding detention and recreation</td>
<td>13. Repurpose South-West wastewater treatment plant from major public health liability into major community amenity with recreational and flood detention functions</td>
</tr>
<tr>
<td>15. Lack of Housing options for Aging in Place</td>
<td>14. Opportunity to plan for sustainable and healthy living environment</td>
</tr>
<tr>
<td>16. Lack of diversity</td>
<td>15. Opportunity to redesign streets, trails and bridges</td>
</tr>
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Vision & Goals

Figure 7: Mid-Brays Housing Redevelopment
Mid-Brays Bayou Resiliency & Revitalization Housing & Community Development Strategies

“Housing the Next 60,000”

- The Mid-Brays housing strategy establishes a framework of redevelopment strategies for the displaced residents of the Mid-Brays area, while also offering diverse housing opportunities to fulfill the unique future population demands of the Mid-Brays communities.
- This development framework represents the reoccurring concerns and objectives extracted from stakeholder engagement with the affected community, and it serves as a product of a joint effort with expert focus groups, and various community leaders.

“Housing the Next 60,000” aims to replace the lost housing inventory with resilient, mixed-use developments.

- The goal of these developments is to not only house the displaced residents within the Mid Brays Area, but also account for the projected population growth to 2045.
- This plan aims to both restore and rejuvenate the affected communities of the Mid Bray’s area by mitigating flood prone damages with integrated environmental efforts, promoting urban equity through housing stock diversity, and increasing the total region’s housing capacity with efficient multifamily developments.
- This housing strategy is a community-based planning effort that utilized supporting information from both infrastructural and environmental analysis.
- The intent is to identify where major networks of infrastructure intersect environmental mitigation efforts, thus defining areas where housing redevelopment can serve as a project catalyst for the affected communities.
- Utilizing an inventory of the existing housing conditions, this strategy plans to account for the vulnerable units identified as well as the projected population growth of demand for the contiguous Mid-Brays communities.
GOAL 1: Near Term Replacement 1 – 5 Years (2018 – 2022)

- Replace vulnerable units with flood resilient, mixed-use developments for displaced inhabitants.
- Construct affordable housing units proportional to the rate of population growth projections. 49.1% of units are currently affordable. Since projected household growth is 24,705 (by 2045), this gives a need for 12,130 affordable housing units needed.
- Vulnerable Apartment units within the 100_Yr Floodplain – 4,438
  - Best Practice – Public/Private partnerships to ensure low-income apartments are made available. Also to enhance the possibility of building mixed-use developments to meet modern demands.
- Vulnerable Single Family rental units within the 100_Yr Floodplain – 4,218
  - Best Practice – Homes within the 100_Yr Floodplain need to be elevated (@ $200k each).

Goal 2: Long-Term Demand to 2045

- Population Growth Estimate – 61,524 more people/ 24,705 more households
- Implement residential density and development standards to maximize land usage and promote cost efficient strategies for private owners and local government infrastructure maintenance costs.
- Best Practices
  - Mixed Use developments
  - Public-Private Partnerships
  - Parks and Open spaces serve dual detention and recreational needs
Housing Demand

Braeburn Housing Demand

- The relatively low housing costs in Braeburn make it the second most affordable Mid-Brays community.
- Housing units in Braeburn are predominately renter-occupied. Braeburn has the highest renter occupancy rate among the Mid-Brays communities.
- The population in Braeburn has been in decline since 2000, with a substantial decrease from 2010 to the present year. The current estimated population of 19,261 is nearly the same as it was in 1990 (19,300).
- The majority of renter-occupied housing units are in structures with five or more units, while virtually all owner-occupied housing units are single units that are detached or attached.
Brays Oaks Housing Demand

- Brays Oaks is the fastest growing of the Mid-Brays communities.
- Housing costs are the lowest among the five Mid-Brays communities.
- The significant rate of population growth in Brays Oaks is expected to result in more than 80,000 inhabitants by 2030, nearly half (46%) of the total projected population for the mid-brays region in 2030.
- The relatively low housing costs in Brays oaks are a major reason for the constant and rapid population growth in the super neighborhood. The median housing values that are the lowest in the Mid-Brays region.
- Housing units in brays oaks are predominantly renter-occupied, with nearly two-thirds of all housing units occupied by renters.

Figure 10: Brays Oaks Housing Demand
Meyerland Housing Demand

- Meyerland has the highest median housing values among the Mid-Brays communities.
- The total population in Meyerland has remained relatively unchanged throughout the past thirty years, with an estimated difference of only 2,000 inhabitants from 1990 to the present year.
- Housing units in Meyerland are predominantly owner-occupied, with the second-highest owner occupation rate among the Mid-Brays super neighborhoods.
- The majority of renter-occupied Housing units are in structures with five or more units, while virtually all owner-occupied housing units are single units that are detached or attached.
- The dominance of single-family housing units throughout the area are a likely factor for the minimal population growth.
Westbury Housing Demand

- Westbury has the closest to average housing values throughout the Mid-Brays communities.
- Westbury has the highest owner-occupied rate among the Mid-Brays communities.
- There have been many fluctuations in the population of Westbury in recent decades, with substantial growth from 1990 - 2000 followed by a consistent decline over the last twenty years.
- The median housing values in Westbury are slightly higher than that of Harris County, and are reflective of the median housing values for the Mid-Brays region.

Figure 12: Westbury Housing Demand
Willow Meadows/ Willow Bend Housing Demand

- Willow Meadows/ Willow Bend has had a very slight population growth over the last 30 years.
- This community has the second highest median housing value among the Mid-Brays communities.
- Willow Meadows/ Willow Bend has an almost equal share of owner occupied and renter occupied housing units.
- The population in Willow Meadows/ Willow Bend has grown consistently but marginally in recent decades, with an increase of less than 3,000 inhabitants over the past thirty years.
- The dominance of single-family housing units throughout the area are a likely factor for the minimal population growth.

Figure 13: Willow Meadows/ Willow Bend Housing Demand
III. PREFERRED COMMUNITY DEVELOPMENT & REVITALIZATION OPPORTUNITY AREAS

- The prevalent Single-Family Home Ownership Associations (HOAs), have no existing procedures to sensibly integrate diverse housing opportunities for population growth within the boundaries of the HOAs and still maintain neighborhood existing character.

- The following graphics show opportunities to facilitate growth that is projected to occur where current multi-family apartments are vulnerable to flooding; have already flooded; or are Class Z. In all cases, replacement of multi-family units with Mixed-Use apartments, are the current Best Practice across the country. This is already occurring in some parts of Houston.

- To facilitate economic development and the provision of necessary services for communities throughout Mid-Brays, target ‘Opportunity Areas’ were identified.

- Our Team developed visioning samples for the Opportunity development target areas in the Meyerland Community. Since there is no precedent for Community Resiliency Planning in Houston, we developed these samples to demonstrate Best Practices that our team collected from other developments outside of Houston.
**Braeburn Opportunity Areas**

**COMMUNITY DEVELOPMENT PATTERNS**

**S. GESSNER CORRIDOR**
- **NOTABLE CHARACTERISTICS:**
  - Heavily commercialized corridor located between the intersections of SW Freeway @ South Gessner and South Gessner @ Bissonnet.
  - Large multi-family residential block located along the corridor provides a market for personal service oriented businesses.
  - Opportunity Site for forecasted population growth

**BRAEBURN POINT**
- **NOTABLE CHARACTERISTICS:**
  - Heavily commercialized corridor located along Bissonnet Street between the intersections of Beechnut Street and Hillcroft Avenue.
  - This area contains a few industrial parcels as well.
  - There is a large recreational playground to the immediate north of this area.
  - Opportunity Site for forecasted population growth

---

Figure 14: Braeburn Community Patterns
Braeburn Housing Development

- There are 19 apartments in Braeburn.
- These apartments have a combined total of 5,063 units.
- The median housing value in Braeburn was $116,547 in 2015.
- Projected growth in new households by 2045 is 9,495. According to current demand, 12.3% of these households will require affordable options.
Brays Oaks Opportunity Areas

COMMUNITY DEVELOPMENT PATTERNS

GESSNER GARDENS

- Major intersection of South Gessner @ West Bellfort.
- Already existing large institutional and public parcels.
- Good proximity to single family homes and nearby apartment complexes.
- Commercial development on all four corners of this intersection.
- Proximity to large undeveloped parcels.
- Opportunity Site for forecasted population growth

FONDREN CORRIDOR

- Located along Fondren road between Brayswood boulevard and West Bellfort avenue.
- Several multifamily residential properties located along this corridor.
- Commercial development located at intersections.
- Several office properties also available along this corridor.
- Opportunity Site for forecasted population growth
There are 51 apartments in Brays Oaks. These apartments have a combined total of 12,598 units.

The median housing value in Brays Oaks was $94,250 in 2018.

Projected growth in new households by 2045 is 34,107. According to current demand, 44.3% of these households will require affordable options.
Meyerland Opportunity Areas

**COMMUNITY DEVELOPMENT PATTERNS**

**BRAESWOOD SQUARE**
- **NOTABLE CHARACTERISTICS:**
  - Large multi-family residential parcels
  - Large amount of commercial activity
  - Several multifamily apartments
  - New high-rise luxury multifamily apartments recently developed

**LAND-USE PATTERNS:**
- Major community center located within the area.
- Major community center located within this square.
- Opportunity Site for forecasted population growth

**MEYERLAND PLAZA**
- **NOTABLE CHARACTERISTICS:**
  - Large commercial parcels
  - Large amount of commercial activity
  - Several multifamily apartments
  - New high-rise luxury multifamily apartments recently developed

**LAND-USE PATTERNS:**
- Major community center located within the area.
- Major community center located within this square.
- Opportunity Site for forecasted population growth

- **Braeswood Square**
  - Located along Braeswood Boulevard between Chimney Rock road and Hillcroft avenue.
  - Large multi-family residential parcels.
  - Existing commercial centers near intersection.
  - Major community center located within this square.
  - **Opportunity Site for forecasted population growth**

- **Meyerland Plaza**
  - Located at the intersection of Loop 610 and Beechnut street.
  - Regional shopping destination.
  - Large amount of commercial activity.
  - Several multifamily apartments.
  - **Opportunity Site for forecasted population growth**
There are 13 apartments in Meyerland. These apartments have a combined total of 3,381 units.

- The median housing value in Meyerland was $292,900 in 2018.
- Projected growth in new households by 2045 is 13,294. According to current demand, 17.3% of these households will require affordable options.

Figure 19: Meyerland Housing Complexes
Westbury Opportunity Areas

COMMUNITY DEVELOPMENT PATTERNS

**WESTBURY COURT**

- **Notable Characteristics:**
  - Large multi-family residential parcels located in the north-west corner of the intersection of Hillcroft Avenue @ Highway 90.
  - Direct freeway access.
  - Proximity to single family neighborhoods.
  - Opportunity site for forecasted population growth.

- **Land Use Patterns:**
  - Mixed-use development.
  - Open space areas.
  - Public and institutional uses.
  - Industrial and commercial areas.
  - Single-family residential neighborhoods.

**WESTBURY PLAZA**

- **Notable Characteristics:**
  - Large multi-family residential parcels located in the south-west corner of the intersection of West Bellfort Avenue @ Chimney Rock Road.
  - Major retail anchor – Home Depot.
  - Several multifamily apartments.
  - Adjacent to several first-response facilities.
  - Adjacent to major recreational park.
  - City of Houston recently purchased land for new library facility in Westbury Plaza.

- **Land Use Patterns:**
  - Mixed-use development.
  - Open space areas.
  - Industrial and commercial areas.
  - Single-family residential neighborhoods.

- **Opportunity Site for forecasted population growth**

**Figure 20**: Westbury Community Patterns
Westbury Housing Development

- There are 12 apartments in Westbury. These apartments have a combined total of 2661 units.
- The median housing value in Westbury was $178,100 in 2018.
- Projected growth in new households by 2045 is 11,144. According to current demand, 14.5% of these households will require affordable options.

Figure 21: Westbury Housing Complexes
Willow Meadows/ Willow Bend Opportunity Areas

COMMUNITY DEVELOPMENT PATTERNS

**S. POST OAK CORRIDOR**

- Notable Characteristics:
  - Early commercial anchor near freeway intersection
  - Located along South Post Oak road between Loop 610 and Willow Water Hole Bayou.
  - Large multi-family residential parcels.
  - Direct freeway access.
  - Proximity to single family neighborhoods.
  - Opportunity Site for forecasted population growth

**PINE OAK POINT**

- Notable Characteristics:
  - Large institutional parcels serves as core
  - Located in the intersection between Loop 610, Highway 90 and Stella Link road.
  - Several multifamily apartments.
  - Direct access to major freeway.
  - Opportunity Site for forecasted population growth

Figure 22: Willow Meadows/ Willow Bend Community Patterns
Willow Meadows/ Willow Bend Housing Development

- There are 22 apartments in Willow Meadows/ Willowbend. These apartments have a combined total of 2387 units.
- The median housing value in Willow Meadows/ Willowbend was $268,300 in 2018.
- Projected growth in new households by 2045 is 8,936. According to current demand, 11.6% of these households will require affordable options.

Figure 23: Willow Meadows/ Willow Bend Housing Complexes
IV. IMPLEMENTATION

1. STAGED HOUSING ENGAGEMENT, PRIORITY FOR HOA GROUPS ADJACENT TO BRAYS BAYOU
   
   1. Delineate Mid-Brays communities into 3 priority area segments
   
   2. **4,500 Properties** supported
   
   3. **$1,482,198,264 property value**
   
   4. Support MULTIPLE HOA GROUPS with HOUSING PRESERVATION guidelines & Redevelopment Design Standards

2. HOUSING BUY-OUTS FOR AT-RISK PROPERTY ADJACENT TO UPPER WILLOW TRIBUTARY
   
   1. **80 Properties** supported
   
   2. **$91,863,028 property value**

3. FOCUSED CONVENING OF THE MID BRAYS SUPER NEIGHBORHOODS TO ADVISE AND IMPLEMENT THE ‘HOUSING PLAN’ AND TO SECURE INFRASTRUCTURE PROJECTS
   
   1. Engagement units: City of Houston, West University, Bellaire, Harris County Flood Control District, State representatives; Homeownership Associations, Area Businesses
   
   2. POLICY instruments: COH chapter 19; Houston Disaster Recovery Program; Harris County Flood Control District Bond
Our recommended approach to Housing Implementation is based on a prioritization strategy reflective of federal (HUD) and county policy to target public dollars for the areas of greatest immediate NEEDS. Therefore, we have created a strategy of prioritization according to NEED - defined using the Median Income of existing areas.5

- **Priority Area 1**: $0 – $60,902 (Low – Middle Income)
- **Priority Area 2**: $60,902.01 - $150,000 (Moderate Income)
- **Priority Area 3**: $150,000 + (Upper Income)

5 Independently wealthy and those with access to sufficient capital will quickly afford and implement solutions for personal resilience. Such as displayed in Appendix A. Priority areas 1 and 2 follow HUD guidance.
Priority Area 1: Low-Middle Income Areas

- **Priority Area 1: $0 – $60,902 (Low – Middle Income)**

- Targeted Buyouts for Braeburn Glen and Nob Hill Apartment. Both areas were heavily inundated with flooding and will continue to flood. Both areas cater to persons in the Low-Middle Income Category.

- The Braeburn Glen neighborhood is predominately Single-Family homes and abandoned lots from years of flooding.

- Nob-Hill Apartment is a privately-owned apartment adjacent to the Bayou and has been restored following TS Harvey with units on the ground floor. This is a public hazard for needy families. Opportunity for a Public-Private affordable housing development rebuilt according to flood resilient standards.

- The Lower Willow Tributary consists of an area with relatively affordable single-family units. Residents there are asking for assistance with Elevation Grants.

- Other areas colored in purple on the map require support with funding for elevation.

*Figure 25: Mid Brays Priority Area 1*
The communities highlighted in purple in Figure 25: Mid Brays Priority Area 1, are within the Priority Area 1 and in the Floodway. These neighborhoods require:

- Immediate Need of public assistance
  - The City of Houston will implement the following programs for assistance⁶:
    - Homeowner Assistance Program - $385,028,859
      - NOT AVAILABLE TO PRIORITY 1 AREA in Mid Brays due to location in Floodway
    - Single Family Development Program - $200,000,000
      - AVAILABLE TO PRIORITY 1 AREA RESIDENTS in Mid Brays to purchase homes outside of floodway
    - Multifamily Rental Program - $314,979,000
      - AVAILABLE TO PRIORITY 1 AREA in Mid Brays
    - Small Rental Program - $60,005,000
      - NOT AVAILABLE TO PRIORITY 1 AREA in Mid Brays due to location in Floodway
    - Homebuyer Assistance Program - $21,315,000
      - AVAILABLE TO PRIORITY 1 AREA RESIDENTS in Mid Brays to purchase homes outside of floodway
    - Buyout Program - $40,000,000
      - AVAILABLE TO PRIORITY 1 AREA in Mid Brays
  - AFFORDABLE Elevated apartments
    - The City of Houston will implement the following programs for assistance:
      - Multifamily Rental Program - $314,979,000
        - AVAILABLE TO PRIORITY 1 AREA in Mid Brays
  - Buyout assistance
    - The City of Houston will implement the following programs for assistance:
      - Buyout Program - $40,000,000
        - AVAILABLE TO PRIORITY 1 AREA in Mid Brays
  - RESILIENT HOUSING assistance
    - The City of Houston will implement the following programs for assistance:
      - Homeowner Assistance Program - $385,028,859
        - NOT AVAILABLE TO PRIORITY 1 AREA in Mid Brays due to location in Floodway
  - Best Practices for maximizing lot value to gain equity for more flexible rebuilding options

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⁶ City of Houston, 2018. Houston Local Action Plan. Housing & Community Development Department, Houston, TX
Priority Area 2: Moderate Income Areas

- **Priority Area 2: $60,902.01 - $150,000 (Moderate Income)**
- Targeted Buyouts for residents along the Willow Tributary North of Post Oak.
- The Upper Willow Tributary consists of an area with relatively affordable single-family units. Residents there are asking for assistance with elevation grants.
- Other areas colored in purple on the map require support with funding for elevation.

*Figure 26: Mid Brays Priority Area 2*
The communities highlighted in purple in Figure 26: Mid Brays Priority Area 2 are within the Priority Area 2 and in the Floodway.

These neighborhoods require:

- Moderate Need of public assistance
  - The City of Houston will implement the following programs for assistance:\n    - Homeowner Assistance Program - $385,028,859
      - NOT AVAILABLE TO PRIORITY 2 AREA in Mid Brays due to location in Floodway
    - Single Family Development Program - $200,000,000
      - AVAILABLE TO PRIORITY 2 AREA RESIDENTS in Mid Brays to purchase homes outside of floodway
    - Multifamily Rental Program - $314,979,000
      - AVAILABLE TO PRIORITY 2 AREA in Mid Brays
    - Small Rental Program - $60,005,000
      - NOT AVAILABLE TO PRIORITY 2 AREA in Mid Brays due to location in Floodway
    - Homebuyer Assistance Program - $21,315,000
      - AVAILABLE TO PRIORITY 2 AREA RESIDENTS in Mid Brays to purchase homes outside of floodway
    - Buyout Program - $40,000,000
      - AVAILABLE TO PRIORITY 2 AREA in Mid Brays

- Moderate Income Elevated apartments
  - The City of Houston will implement the following programs for assistance:
    - Multifamily Rental Program - $314,979,000
      - AVAILABLE TO PRIORITY 1 AREA in Mid Brays

- Buyout assistance
  - The City of Houston will implement the following programs for assistance:
    - Buyout Program - $40,000,000
      - AVAILABLE TO PRIORITY 2 AREA in Mid Brays

- RESILIENT HOUSING assistance
  - The City of Houston will implement the following programs for assistance:
    - Homeowner Assistance Program - $385,028,859
      - NOT AVAILABLE TO PRIORITY 2 AREA in Mid Brays due to location in Floodway

- Best Practices for maximizing lot value to gain equity for more flexible rebuilding options

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7 City of Houston, 2018. Houston Local Action Plan. Housing & Community Development Department, Houston, TX
Priority Area 3: Upper Income Areas

- Priority Area 3: $150,000 + (Upper Income)
- Lesser need of public assistance to support Single-Family housing resilience.
- Many of the private elevation models displayed in Appendix E are located in the area colored in purple.

Figure 27: Mid Brays Priority Area 3
The communities highlighted in purple in Figure 27: Mid Brays Priority Area 3 are within the Priority Area 3 and in the Floodway.

These neighborhoods require:
- Lower Need of public assistance
- Upscale Elevated apartments
- Best Practices for maximizing lot value to gain equity for more flexible rebuilding options

Priority 3 Area residents will not be able to benefit from the City’s Housing support programs as a result of not meeting income thresholds.
RESILIENCE STRATEGIES

AFTER PROJECT BRAYS IS COMPLETE

Figure 28: Post Project Brays Vulnerable Areas
AFTER PROJECT BRAYS IS COMPLETE:

- 21,637 People will remain in the 100 Yr Floodplain in the Mid-Brays Communities.
- 4,537 Properties will remain in the 100 Yr Floodplain
- The total value of these properties is $2,038,167,142 (HCAD 2017)

RESILIENCE STRATEGY

A technical team including representatives from Rice University, University of Houston and Texas Southern University, has identified a set of initial proposals to provide a basis for collaboration and alignment with the many governing entities representing the Mid-Brays communities. Advocacy for specific projects will evolve as an outcome of efforts by elected and appointed government officials, neighborhood associations and representatives, residents and community stakeholders.

- MAXIMIZE FLOOD DETENTION:
  - Accelerate acquisition and development of several Retention/ Detention sites across the Mid-Brays area. Priority focus on decommissioning the Southwest Wastewater Treatment facility to be used as a Retention Stormwater basin; converting the abandoned Southwest police substation to Retention; and similar large properties such as Ruffino Hills Waste Transfer Station. The Westwood Country Club and Westbury Country Clubs should be redeveloped as DUAL recreation and Detention projects. Golfing opportunities will be preserved along with flood detention in the event of flooding.

- SMART INFRASTRUCTURE AND MITIGATION
  - Prioritize fortification of critical institutions - Focus on identifying and implementing resilience infrastructure for critical institutions across the Mid-Brays Bayou area; including religious and cultural institutions to develop solutions for resilience to flooding.
Figure 29: Bond Program Map of Projects in Mid Brays
## 2018 BOND PROJECTS

<table>
<thead>
<tr>
<th>WATERSHED</th>
<th>TYPE</th>
<th>MAP ID</th>
<th>PROJECT ID</th>
<th>TITLE</th>
<th>PRECINCT</th>
<th>LOCAL ONLY</th>
<th>GRANT TOTAL COST</th>
<th>PARTNER SHARE</th>
<th>LOCAL MATCH</th>
<th>DESCRIPTION OF BENEFITS</th>
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</thead>
<tbody>
<tr>
<td>Brays Bayou</td>
<td>Partnership</td>
<td>C-11</td>
<td>D100-09-06-USACE</td>
<td>Design and Construction of Project Brays Corps of Engineers (Section 2110)</td>
<td>1, 2, 3, 5</td>
<td>320,000,000</td>
<td>60,000,000</td>
<td>70,000,000</td>
<td>-</td>
<td>The 1% floodplain could be removed from up to 15,000 structures.</td>
</tr>
<tr>
<td>Brays Bayou</td>
<td>Community Input</td>
<td>C1-2</td>
<td>D100-05-06-MD</td>
<td>Investigation of Additional Stormwater Detention Basins in the Brays Bayou Watershed</td>
<td>1, 2, 3</td>
<td>200,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>The project could reduce the risk of flooding for structures in the watershed.</td>
</tr>
<tr>
<td>Brays Bayou</td>
<td>Buyout</td>
<td>D100-HMG</td>
<td>Federal Grant-Funded Volunteer Home Buyouts</td>
<td>3</td>
<td>-</td>
<td>11,800,000</td>
<td>-</td>
<td>8,700,000</td>
<td>2,900,000</td>
<td>Purchase of approximately 40 buildings. Project will be coordinated with existing OHI plans.</td>
</tr>
<tr>
<td>Brays Bayou</td>
<td>Community Input</td>
<td>C1-2</td>
<td>D100-USFondren</td>
<td>Investigation of Channel Improvements Uppercreeks of Fondren Road</td>
<td>1</td>
<td>-</td>
<td>250,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Brays Bayou</td>
<td>Partnership</td>
<td>C-12</td>
<td>D111-00-00-404</td>
<td>Rights-Of-Way, Design and Construction of Conveyance Improvements along Poor Farm Ditch</td>
<td>3</td>
<td>-</td>
<td>18,000,000</td>
<td>-</td>
<td>13,500,000</td>
<td>4,500,000</td>
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<tr>
<td>Brays Bayou</td>
<td>Community Input</td>
<td>C1-02</td>
<td>D115-00-00-00</td>
<td>Restore Channel Conveyance Capacity Along D115-00-00-00</td>
<td>2</td>
<td>-</td>
<td>30,000,000</td>
<td>-</td>
<td>15,000,000</td>
<td>15,000,000</td>
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<tr>
<td>Brays Bayou</td>
<td>Local</td>
<td>F-07</td>
<td>D118-00-00-PP001</td>
<td>Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Keggs Bayou</td>
<td>1</td>
<td>-</td>
<td>32,500,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Brays Bayou</td>
<td>Partnership</td>
<td>C-13</td>
<td>D135-00-00-00</td>
<td>Rights-Of-Way, Design and Construction of Conveyance Improvements along Brisk Etch</td>
<td>3</td>
<td>-</td>
<td>30,000,000</td>
<td>-</td>
<td>22,500,000</td>
<td>7,500,000</td>
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<tr>
<td>Brays Bayou</td>
<td>Local</td>
<td>F-28</td>
<td>D140-00-00-PP001</td>
<td>Rights-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Fondren Division-Chanel</td>
<td>1</td>
<td>-</td>
<td>35,500,000</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Brays Bayou</td>
<td>Storm Repair</td>
<td>D-StormRep</td>
<td>Storm Repairs in Brays Bayou Watershed</td>
<td>1, 2, 3</td>
<td>-</td>
<td>3,150,000</td>
<td>-</td>
<td>2,520,000</td>
<td>630,000</td>
<td>Approximately 81 repair projects of erosion and infrastructure identified after Hurricane Harvey.</td>
</tr>
</tbody>
</table>
## Mid Brays Communities Priority Recommended Projects

<table>
<thead>
<tr>
<th>Retention Ponds</th>
<th>Property Area (Acres)</th>
<th>Water Capacity (Acre/Feet)</th>
<th>Owner</th>
<th>Land Acquisition Cost</th>
<th>Development Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Existing) Willow Waterhole</td>
<td>280</td>
<td>2,169</td>
<td>Public</td>
<td></td>
<td></td>
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<tr>
<td>(Existing) Meyer Detention</td>
<td>17</td>
<td>132</td>
<td>Public</td>
<td></td>
<td></td>
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<tr>
<td>Abandoned Police Station next to Beth Yeshurun (Southwest Station)</td>
<td>12</td>
<td>93</td>
<td>COH</td>
<td>$1,093,703</td>
<td>$1,093,703</td>
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<tr>
<td>South-West WasteWater Treatment Plant</td>
<td>35</td>
<td>271</td>
<td>COH</td>
<td>$3,189,967</td>
<td>$3,189,967</td>
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<tr>
<td>Ruffino Hills</td>
<td>144</td>
<td>1,116</td>
<td>Public</td>
<td>$13,124,438</td>
<td>$13,124,438</td>
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<tr>
<td>Westwood country club</td>
<td>150</td>
<td>1,162</td>
<td>Private</td>
<td>$13,671,289</td>
<td>$13,671,289</td>
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<tr>
<td>Braeburn country club</td>
<td>149</td>
<td>1,154</td>
<td>Private</td>
<td>$13,580,147</td>
<td>$13,580,147</td>
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<tr>
<td>Brays Acres Subdivision</td>
<td>90</td>
<td>697</td>
<td>Private</td>
<td>$8,202,773</td>
<td>$8,202,773</td>
</tr>
</tbody>
</table>
**FULL LIST OF MID BRAYS PROJECTS ENDORSED BY COMMUNITY LEADERSHIP**

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Request</th>
<th>Project Location</th>
<th>Problem</th>
<th>Corrective Action</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Design and Construction of the Shell Gasmer Research Center Stormwater Detention Basin</td>
<td><a href="https://goo.gl/maps/gBfD1nnwCD2">https://goo.gl/maps/gBfD1nnwCD2</a></td>
<td>Need additional detention</td>
<td>Purchase the Shell Gasmer Research Center which currently has 28 acres available for sale.</td>
<td>The project could reduce the risk of flooding for structures in the watershed.</td>
</tr>
</tbody>
</table>
| 2         | Revise the scope of the proposed “Fondren Diversion Channel Improvements” (D140-00-00-FP001) | [https://goo.gl/maps/P2TmbNNzbPx](https://goo.gl/maps/P2TmbNNzbPx) | This area does not function well as designed. Westbury should not be the unintended detention basin for Fondren area water or water not intended to flow to D112. | * Include channel improvements along Willow Waterhole Bayou - up to and including the Willow Waterhole Detention Basins  
* Re-grade the Braewick ditches where they meet the Willow Waterhole Bayou on the western edge of Westbury.  
* De-silt and re-grade the Willow Waterhole Bayou from the existing dam to the Willow Waterhole Detention Facility.  
* Add pumps/turbines to increase flow into the Detention Facility. | Right of way acquisition, design and construction of this project could reduce the risk of flooding for over 400 structures in the 1% floodplain. Project will be coordinated with existing COH plans. |
<p>| 3         | Acquire detention between the Fondren Diversion channel and Braewick ditches | <a href="https://goo.gl/maps/7S5wHE4gBrw">https://goo.gl/maps/7S5wHE4gBrw</a> | Need additional detention | Acquire additional property | The project could reduce the risk of flooding for structures in the watershed. |
| 4         | Elevated bridges along the Willow Waterhole Bayou at Lansdowne, Chimney Rock, and Hillcroft | <a href="https://goo.gl/maps/oKJFhbEiFps">https://goo.gl/maps/oKJFhbEiFps</a> | Stormwater currently flows out of the Willow Waterhole Bayou at the bridges even when the channel still has capacity. | Elevate 3 bridges | The project could reduce the risk of flooding for structures in the watershed. |
| 5         | Federal Grant-Funded Volunteer Home Buyouts in Westbury along 5600 blocks of Cartagena and Ludington | <a href="https://goo.gl/maps/oKJFhbEiFps">https://goo.gl/maps/oKJFhbEiFps</a> | These properties have flooded as many as twelve times. | Provide &quot;Extreme Event Overflows&quot; to the Willow Waterhole Bayou when street drainage capacity is exceeded | Purchase of approximately 40 buildings. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>HCFCD MAP ID</th>
<th>Key Features</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Design and Construction of the Southwest Waste Water Treatment Plant, Stormwater Detention Basin</td>
<td>CI-11</td>
<td>Need additional detention; Southwest Waste Water Treatment Plant which currently has 35 acres available for sale.</td>
<td>The project could reduce the risk of flooding for structures in the watershed. Project will be coordinated with existing COH plans.</td>
</tr>
<tr>
<td>7</td>
<td>Design and Construction of the Ruffino Hills landfill, Stormwater Detention Basin</td>
<td>CI-025</td>
<td>Need additional detention; Purchase the Property which currently has 144 acres available for sale.</td>
<td>The project could reduce the risk of flooding for structures in the watershed. Project will be coordinated with existing COH plans.</td>
</tr>
<tr>
<td>8</td>
<td>Design and Construction of the Aramco Building, Stormwater Detention Basin</td>
<td>CI-034</td>
<td>Need additional detention; Purchase the Property which currently has 17 acres available for sale.</td>
<td>The project could reduce the risk of flooding for structures in the watershed.</td>
</tr>
<tr>
<td>9</td>
<td>Design and Construction of the Westwood Country Club, Joint Use Facility - Stormwater Detention Basin/ Country Club</td>
<td>CI-034</td>
<td>Need additional detention; Purchase the Property which currently has 150 acres available for sale.</td>
<td>The project could reduce the risk of flooding for structures in the watershed. Project will be coordinated with Westwood Country Club.</td>
</tr>
<tr>
<td>10</td>
<td>Design and Construction of the Braeburn Country Club, Joint Use Facility - Stormwater Detention Basin/ Country Club</td>
<td>CI-034</td>
<td>Need additional detention; Purchase the Property which currently has 149 acres available for sale.</td>
<td>The project could reduce the risk of flooding for structures in the watershed. Project will be coordinated with Braeburn Country Club.</td>
</tr>
<tr>
<td>11</td>
<td>Brays Bayou Subsurface Improvements.</td>
<td></td>
<td>Channel conveyance capacity; Replace failing culverts with larger ones, reroute street drainage as appropriate.</td>
<td>Major maintenance to restore channel conveyance capacity.</td>
</tr>
<tr>
<td>D100-00-00-USACE</td>
<td>Design and Construction of Project Brays Corps of Engineers (Section 211(f) Project)</td>
<td>C-11</td>
<td>The 1% floodplain could be removed from up to 15,000 structures.</td>
<td></td>
</tr>
<tr>
<td>D100-AddDet</td>
<td>Investigation of Additional Stormwater Detention Basins in the Brays Bayou Watershed</td>
<td>CI-025</td>
<td>Purchase of approximately 40 buildings. Project will be coordinated with existing COH plans.</td>
<td></td>
</tr>
<tr>
<td>D100-HMGP</td>
<td>Federal Grant-Funded Volunteer Home Buyouts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D100-USFondren</td>
<td>Investigation of Channel Improvements Upstream of Fondren Road</td>
<td>CI-034</td>
<td></td>
<td>This project could reduce the risk of flooding along Brays Bayou.</td>
</tr>
</tbody>
</table>

**Mid-Brays Bayou Resiliency & Revitalization Housing & Community Development Strategies**
<table>
<thead>
<tr>
<th>Project ID</th>
<th>Description</th>
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</tr>
</thead>
<tbody>
<tr>
<td>D111-00-00-404</td>
<td>Right-Of-Way, Design and Construction of Conveyance Improvements along Poor Farm Ditch</td>
<td>C-12</td>
<td>The project could reduce the risk of flooding for over 270 structures in the 1% floodplain.</td>
</tr>
<tr>
<td>D115-00-00-FP</td>
<td>Restore Channel Conveyance Capacity Along D115-00-00</td>
<td>CI-038</td>
<td>Major maintenance to restore channel conveyance capacity in partnership with the City of Houston. Project will be coordinated with existing COH plans.</td>
</tr>
<tr>
<td>D118-00-00-FP001</td>
<td>Planning, Right-Of-Way Acquisition, Design, and Construction of Channel Conveyance Improvements on Keegans Bayou</td>
<td>F-07</td>
<td>Right of way acquisition, design and construction of this project could reduce the risk of flooding for over 900 structures in the 1% floodplain. Project will be coordinated with existing COH plans.</td>
</tr>
<tr>
<td>D133-00-00-404</td>
<td>Right-Of-Way, Design and Construction of Conveyance Improvements along Bintliff Ditch</td>
<td>C-13</td>
<td>The project could reduce the risk of flooding for over 720 structures in the 1% floodplain. Project will be coordinated with existing COH plans.</td>
</tr>
<tr>
<td>D-StormRep</td>
<td>Storm Repairs in Brays Bayou Watershed</td>
<td>F-08</td>
<td>Approximately 91 repair projects of erosion and infrastructure identified after Hurricane Harvey.</td>
</tr>
</tbody>
</table>