## **Beyond the Bayous**

A Vision for Expanding Greater Houston's Public Realm



A nonprofit dedicated to creating, improving, protecting and advocating for parks for everyone.

November 2017 – Revised November 2018 Design Team: Michael Van Valkenburgh Associates and Huitt-Zollars



### **BEYOND THE BAYOUS**

Bayou Greenways 2020 (BG2020) is changing the way Houstonians live, work, play and travel. This linear park system along our bayous creates a network of equitable open space. With over 150 miles of trails and 3000 acres of park space, it is dramatically improving neighborhood connectivity. Access to parks, natural areas, jobs, schools and transit are now safer and easier than ever.

The question that *Beyond the Bayous* asks is: "What's next?" Using BG2020 as a model, how can we extend these benefits into communities that aren't near a bayou?

The study to answer this question was funded by a generous grant from Houston Endowment. It sets up a Houston vision of:

Parks and greenways that weave throughout Houston's urban fabric creating a tapestry of vibrant, connected communities.

It also gives us a path to get there. We started by looking at Houston's past and present to get to this vision for our future.



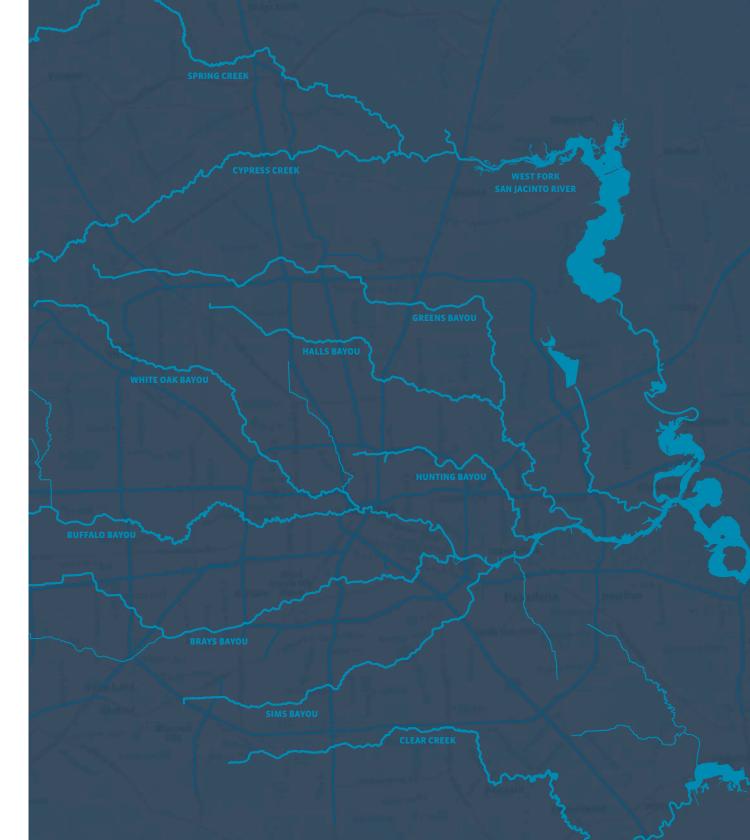


### **OUR BAYOU CITY BEGINNINGS**

Houston was born on the bayou. On August 26, 1836 the Allen brothers bought 2,214 acres from Elizabeth Parrot for \$5,000. They named the city after General Sam Houston. The land centered around the confluence of White Oak and Buffalo Bayous. It was chosen because it connected to Galveston Bay and therefore the world beyond.

Indeed, Houston's first big industry was shipping. In January 1837, the Laura was the first steamship to visit Houston. At that time there were 12 residents and one log cabin. Four months later there were 1,500 residents and 100 houses. City government established the Port of Houston in 1842, with the head of navigation at Allen's Landing.

The Port of Houston is still one of our largest industries, employing 1.2 million Texans and generating over \$264.9 billion in statewide economic impact.



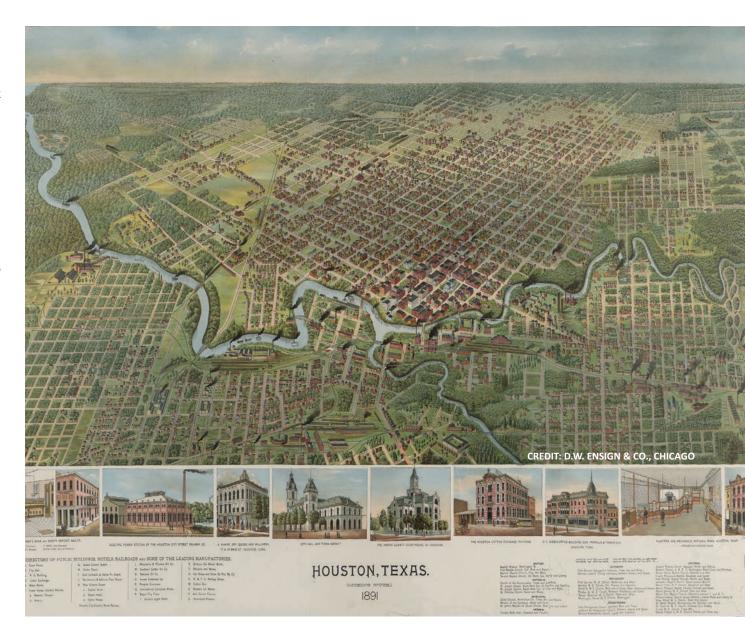


### COASTAL PRAIRIE, MARSHES AND HOUSTON

In his 1857 *A Journey Through Texas*, Frederick Law Olmsted provides a view of the young state.

"To Houston the road lay across a flat surface, having a wet, sandy or 'craw-fish' soil, bearing a coarse, rushy grass, diversified by occasional belts of pine and black-jack. We had reached the level prairie region of the coast, and in fact saw henceforth not one appreciable elevation until we crossed the Mississippi. Five miles from Houston we entered a pine forest, which extends to the town."

At the time, Houston was a prosperous, bustling cotton trading center on the banks of Buffalo Bayou. Churches and a theater mixed with bars and gambling saloons. The first rail line had reached Harrisburg, east of Houston.





### OIL, GROWTH AND THE COMEY PLAN

"The backbone of a park system for Houston will naturally be its bayou or creek valleys, which readily lend themselves to parks and cannot so advantageously be used for any other purpose." – Arthur Comey, Consultant on City Planning

In 1901 Spindletop started producing oil. Houston's second big industry was born. By 1913, twelve oil companies were based in Houston. The modern Port of Houston was officially opened in 1914, 74 years after digging started on Buffalo Bayou. By then there were 25 tall buildings in the city ranging from six to sixteen stories.

In 1912, recognizing the potential for continued growth, Arthur Comey created the first comprehensive plan for the Houston Park Commission. He observed that Houston ranked far behind other major U.S. cities in parkland. It had one acre of park for every 685 residents. Seattle was a distant second at 224 residents per acre.

To address this inequity, Comey's plan included a visionary idea. Noting that the city's network of bayous were already "natural parks," he proposed a series of linear and large parks along their lengths.





#### **PLAN INTERRUPTED**

Some of Comey's vision was realized early on. It began with real estate investor and industrialist George H. Hermann. In May of 1914, he announced that he would deed 285 acres for a municipal park. Hermann Park was established across the street from Rice University.

In 1924, the City of Houston established Memorial Park on part of Camp Logan, a former World War I training ground. In 1925, Elizabeth Stevens MacGregor donated money to develop MacGregor Park along Brays Bayou. In 1928, Mason Park was established. It was a great decade for parks in Houston.

By 1929, things began to change as the country entered into the Great Depression. Houston also experienced flood events in 1929 and 1935 that devastated downtown. The Harris County Flood Control District (HCFCD) was formed as a result. The U.S. Army Corp of Engineers began construction of Addicks and Barker Reservoirs in the 1940s.

Houston became a key player in the war effort during World War II. Many rural Texans migrated to Houston to work in the fuel refining industry, steel mills and shipyards. The city shifted away from parks towards infrastructure for growth.





#### **HOUSTON'S HIGHWAYS**

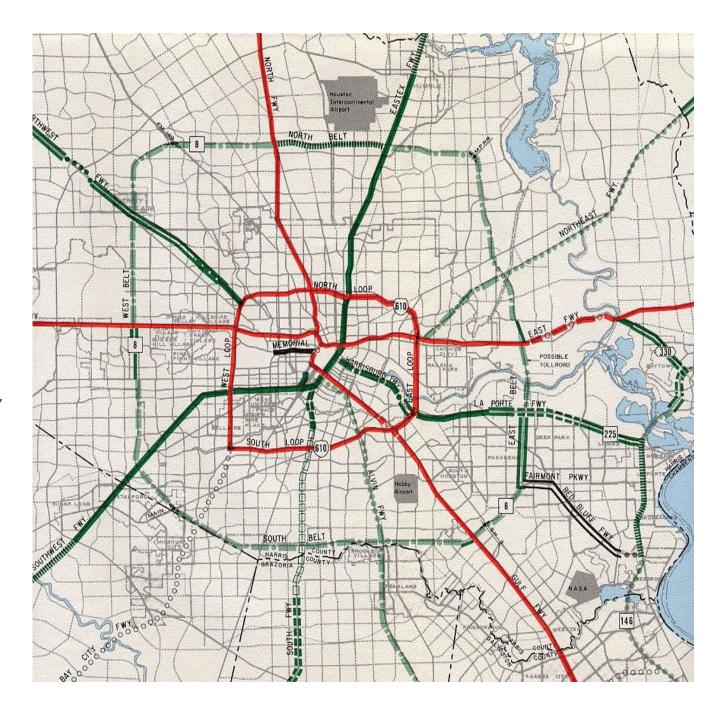
"The story of Houston is more than the history of a shipping channel, oil and gas or the space program. It's also the story of the highways that link these industries with the people and resources that created growth. Houston highways also changed the layout of communities – relocating some neighborhoods and hemming in others."

- Christopher De Los Santos, Texas Standard

From the 1940s to the 1970s, "It is fair to say that Houston and all these other cities focused on highways to the detriment of public transportation, bicycle infrastructure and pedestrian infrastructure." – Kyle Shelton, author of *Power Moves*.

This gray highway infrastructure helped facilitate the city's rapid expansion and growth, including more than doubling the population from 1960 to 2000. However, it also created major physical and socioeconomic barriers between neighborhoods, while disrupting others.

As the highway system expanded, the bayous also became part of the city's infrastructure as flood control channels, rather than parks.



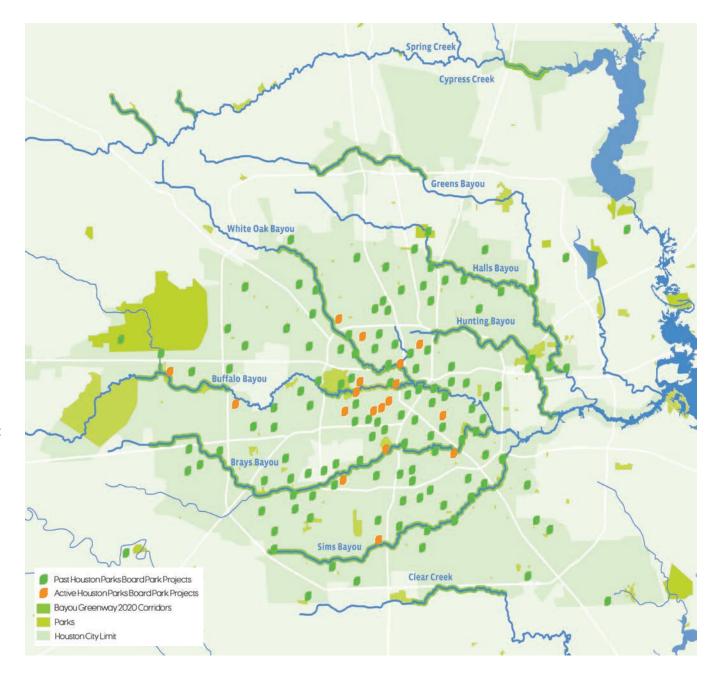


### **PARKS AND BAYOUS**

New federal regulations in the 1970s slowed the highway building tide. The new laws required environmental impact reviews and public comment. Earlier 1960s environmental concerns, such as water and air pollution, created broader public awareness of landscapes, including parks.

In 1976, the Houston Parks Board (HPB) was created to improve, protect and advocate for parks in the region. It began as a way to allow private money to improve parks in collaboration with the City of Houston's Parks and Recreation Department. Since it's inception HPB has raised and leveraged millions of dollars and touched at least 75% of the City's parkland, either through acquisitions and/or capital improvements.

In 1986, Buffalo Bayou Partnership was formed to focus on the 10 mile stretch of Buffalo Bayou from Shepherd Drive to the Port of Houston Turning Basin. They began work on the gold standard of linear waterfront park development in Houston—Buffalo Bayou Park.





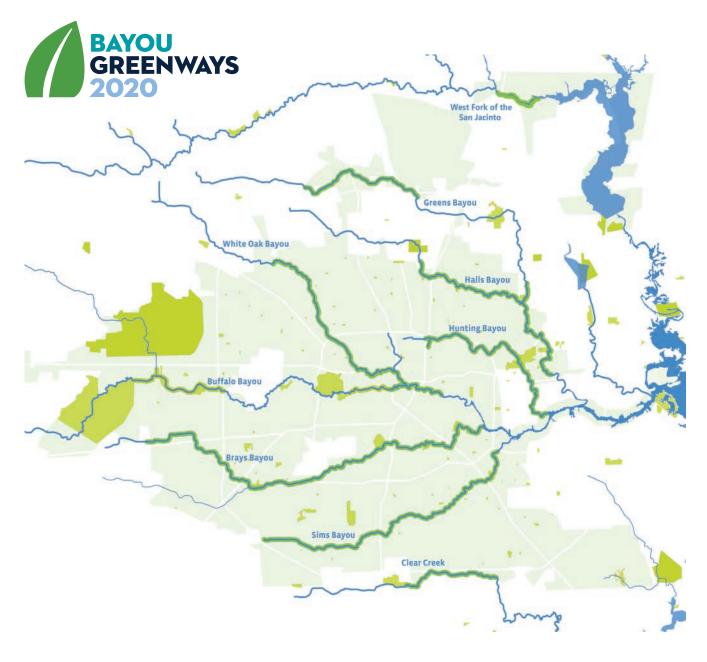
### **PARKS CONNECTED**

In the 21st century, Houston is experiencing a park renaissance. New and revitalized parks such as Buffalo Bayou Park, Discovery Green, Levy Park, Hermann Park, Memorial Park and Emancipation Park are redefining the essence of Houston, just as freeways and office buildings defined the city in the 20th century.

This trend was amplified in 2012 when Houstonians passed a bond providing \$166 million to fund parks. One hundred million was set aside for Bayou Greenways 2020. HPB was charged with raising an additional \$120 million in matching funds. HPB is managing the acquisition, design and construction of the project.

Bayou Greenways 2020 is finally creating the citywide linear park network envisioned by Comey a century before.

Through new land acquisition and the repurposing of Harris County Flood Control District property, Bayou Greenways makes 3,000 acres of open space publicly accessible. The trails along the Greenways provide access to nature and connections between neighborhoods, schools and job centers.





- 3,000 ACRES OF GREENSPACE
- 60% OF HOUSTONIANS WITHIN 1.5 MILES OF A GREENWAY



### **GREENWAY BENEFITS**

In August 2011, Houston Parks Board commissioned John Crompton of Texas A&M University to study the potential benefits of the Bayou Greenways. His study looked at the following:

### Physical and Mental Health Benefits:

- Health care cost savings resulting from exercising and decompressing outdoors
- Recreational use value
- Urban cohesion
- Safety

#### **Environmental Health Benefits:**

- Ecosystem services
- Flood/runoff reduction and water quality
- Air quality and enhanced bicycle use

#### **Economic Health Benefits:**

- Company and talent retention and relocation
- Enhanced property tax base
- Retiree retention and relocation
- New greenway centered development

With a total estimated savings of \$90 million per year, Bayou Greenways 2020 would provide a positive return on investment 2.5 years after completion.





## BEYOND THE BAYOUS — HIGHWAY PRESSURE RETURNS

More recently, however, emphasis on highway development has increased dramatically.

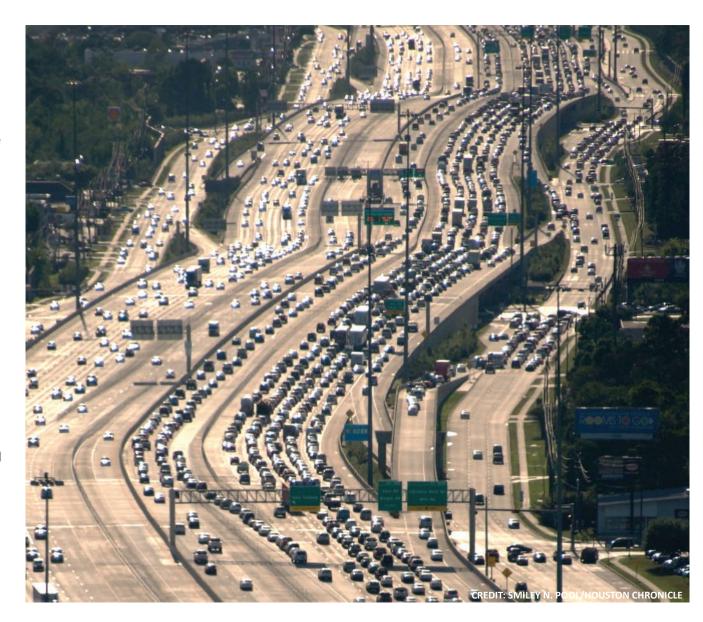
In 2008 the expansion of I-10 into a sixteen lane highway was completed. It is now the widest highway in the United States.

Currently Highway 290 is being expanded. This \$1.8 billion project began in 2011. It covers a 38 mile long corridor. Completion is expected at the end of 2018.

TxDOT's next big planned construction project is I-45. The 24-mile long proposal is broken into three segments. Segments 1 and 2 widen the highway from Beltway 8 to I-10. Segment 3 reroutes I-45 to the north and east of downtown. The project would cost around \$7 billion. It would take at least a decade to complete.

There are also plans to widen Highways 249 and 288. Gray infrastructure abounds.

To accomplish the vision of walkable communities connected by greenways, we need to pay equal attention to our parks infrastructure.





### **CHALLENGES**

As transformative as Bayou Greenways 2020 is, much work remains. We must create a comprehensive open space system in Greater Houston. Moving beyond the bayous faces multiple challenges:

**EQUITY**: Houston suffers from high levels of income and heath disparity across the city.

**ACCESS**: Major roads, highways and railroads separate communities from each other and open space opportunities.

NATURAL RESOURCES: Even before Hurricane Harvey in 2017, flooding represented a continuing problem with ongoing serious events including the Memorial Day flood of 2015 and the Tax Day flood of 2016.

Addressing these challenges sets our goals for further expanding the public realm.





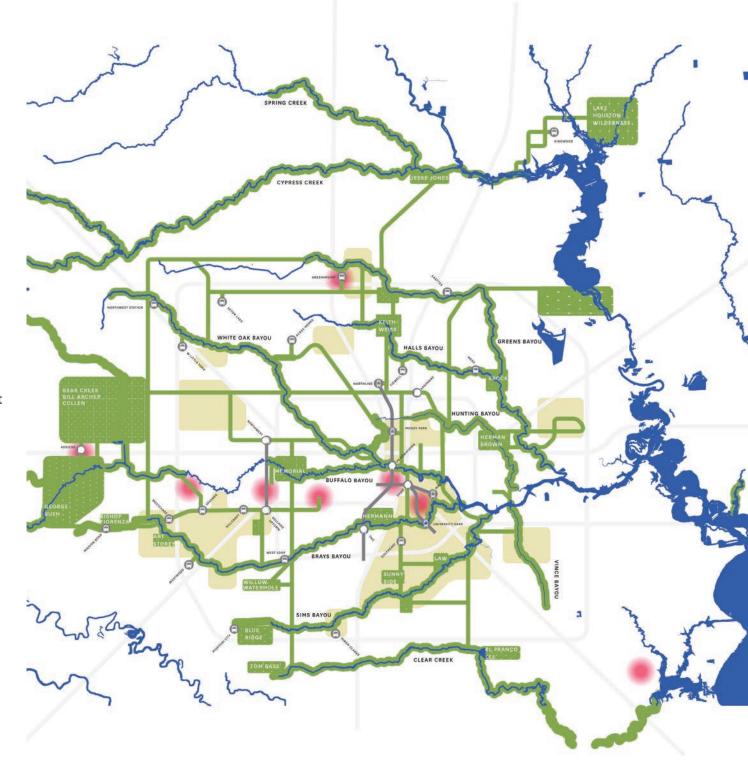
### **MOVING BEYOND THE BAYOUS**

Bayou Greenways brought linear parks within reach for many Houstonians. But their geography—and, consequently, their access—is limited by nature.

Bayou drainage patterns primarily flow easterly into Galveston Bay. To build a truly comprehensive open space network—one that will build more complete communities throughout Houston—greenways and parks must be expanded into areas of Houston that are not close to a bayou.

Realizing how Bayou Greenways has already shaped Houston and seeing the potential for expanding that model, the Houston Endowment funded a study by the Houston Parks Board to explore parks and open space connections beyond Bayou Greenways.

Beyond the Bayous provides a vision that expands and improves Greater Houston's public realm to accomplish the goals of improved EQUITY, ACCESS and NATURAL RESOURCES.

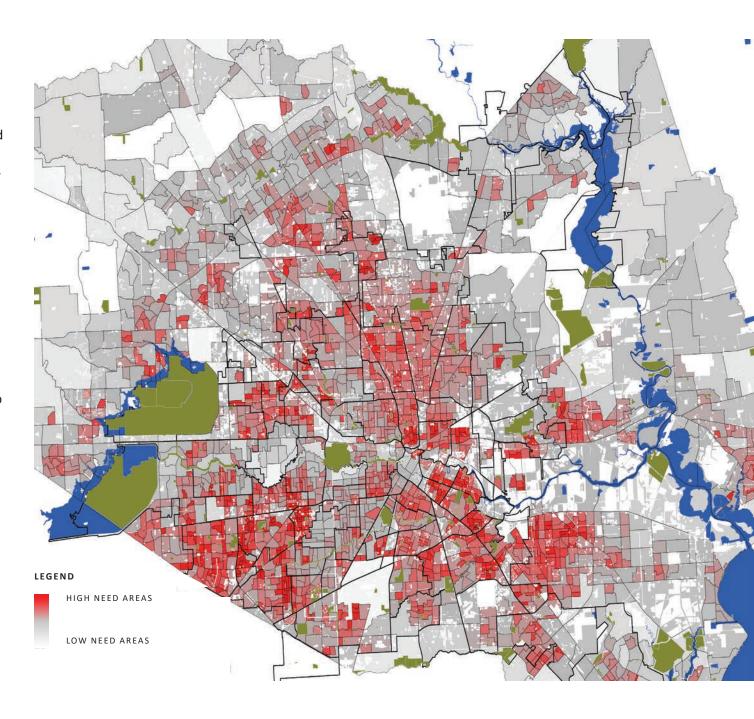




To accomplish the goals of improved EQUITY, ACCESS and NATURAL RESOURCES, the Beyond the Bayous planners first conducted extensive contextual research. They collected data and mapped issues such as income, population density, public heath, park needs, flooding, transit and land use patterns. That data was analyzed to identify opportunities and constraints to meet those goals.

### EQUITY: Provide equitable distribution of open space throughout the Houston area.

The first driver of *Beyond the Bayous* is to create and enhance park space where it is most needed. Maps such as the one to the right can be used to prioritize projects. The map identifies areas of high population density, low income, and public health risk to identify areas of highest need.

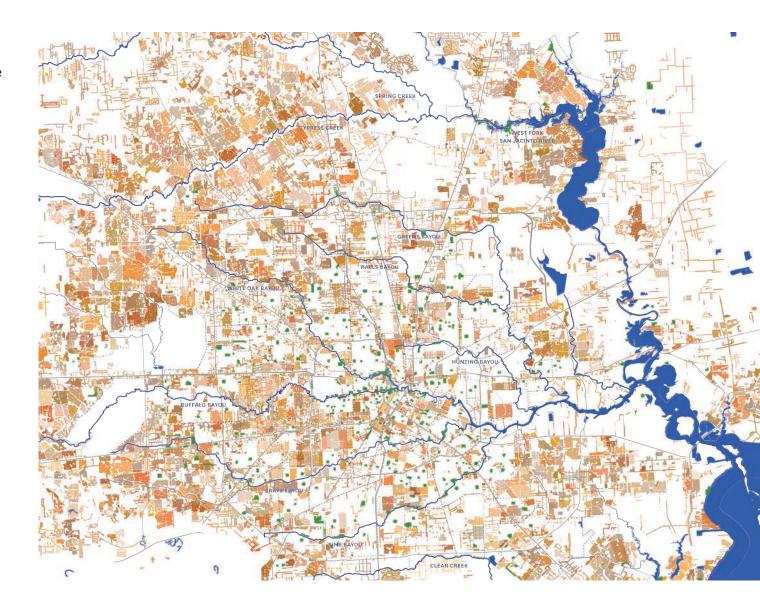




ACCESS: Increase public access to open space and connectivity between parks, homes and jobs.

Providing distributed park space helps little unless people can get there easily and safely. Currently, many Houstonians are cut off from neighborhood parks by railroads, highways, major roads, or lack of sidewalks.

The hike-and-bike trails along the greenways provide access to nature and sorely needed connections between neighborhoods, schools and job centers. A goal of *Beyond the Bayous* is to expand that connectivity further into neighborhoods that lack access to a park.





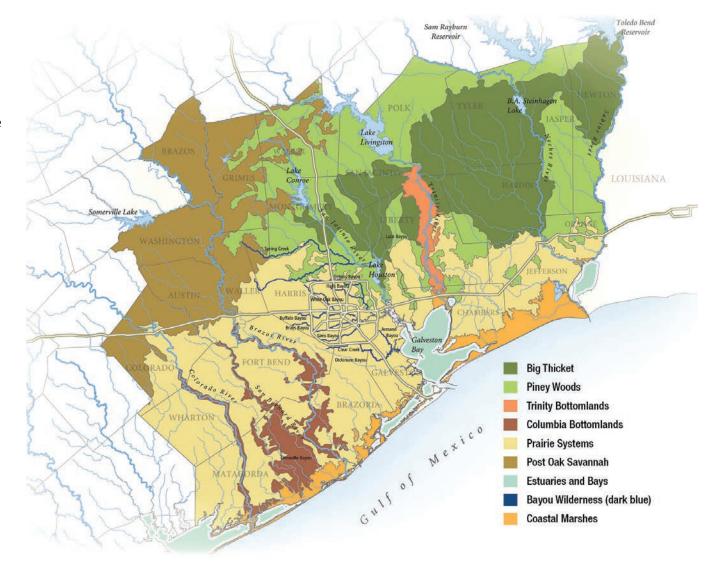
### NATURAL RESOURCES: Preserve and enhance urban ecosystems.

Bayous and prairies once formed the backbone of Houston's ecology. Now both are severely compromised by development.

As seen on the map to the right, prairie systems used to make up most of the Houston region's landscape. According to Houston Wilderness, "The Texas coast once held 6.5 million acres of prairies, thick with chest-high grass that supported enormous numbers of prairie chickens. Less than 1 percent of these acres remain." These prairies provide a multitude of benefits including: improving soils, filtering and absorbing stormwater, trapping sediment, reducing the heat island effect, capturing carbon and providing pollinator habitat.

Similarly, "many bayous were modified and their biological diversity was nearly eliminated. Few natural bayous remain."

In the face of an ongoing process of habitat loss and isolation, many landscape ecologists emphasize the value of landscape corridors and higher-quality linkages between habitat ecosystems.





#### **NATURAL RESOURCES - BAYOUS AND HARVEY**

On Friday August 25, 2017, Hurricane Harvey hit the Houston region. Within three days more than 9 trillion gallons of water fell on Southeast Texas. Even after the record setting 2015 Memorial Day and 2016 Tax Day floods, this rain event devastated even larger swaths of the city.

Post-Harvey, the Houston region must embrace the Dutch mantra, "make room for the river," by making space for the bayous. The region can't solely engineer its way out of flood risk. We must instead accommodate the natural flood function of our bayou system by acquiring and preserving land within the floodplain.

A resilient Houston region requires a comprehensive approach to land use that keeps people out of harm's way and organizes development within a supportive system of transit, parks and walkable communities.





With the goals of equity, access, and natural resources in mind, we analyzed the data. A set of tactics emerged. These are:

#### 1. Foster collaboration:

Foster collaboration between public agencies, utilities, private development and non-profit organizations to maximize use of available land and financial resources to expand the public realm.

### 2. Reinvest in existing parks:

Upgrade existing recreational opportunities while enhancing the natural landscape experience.

### 3. Pursue open space and connectivity opportunities:

Identify opportunities to more fully establish parks and open space connections as critical to the region's infrastructure system.



ACRES HOME YOUTH EXERCISING HIS HORSE



SIMS BAYOU—REED ROAD BEFORE BIKE LANE CONVERSION



ACRES HOME PROPOSED PARK WITH BRIDLE TRAIL



SIMS BAYOU—REED ROAD BIKE LANE CONVERSION CONCEPT



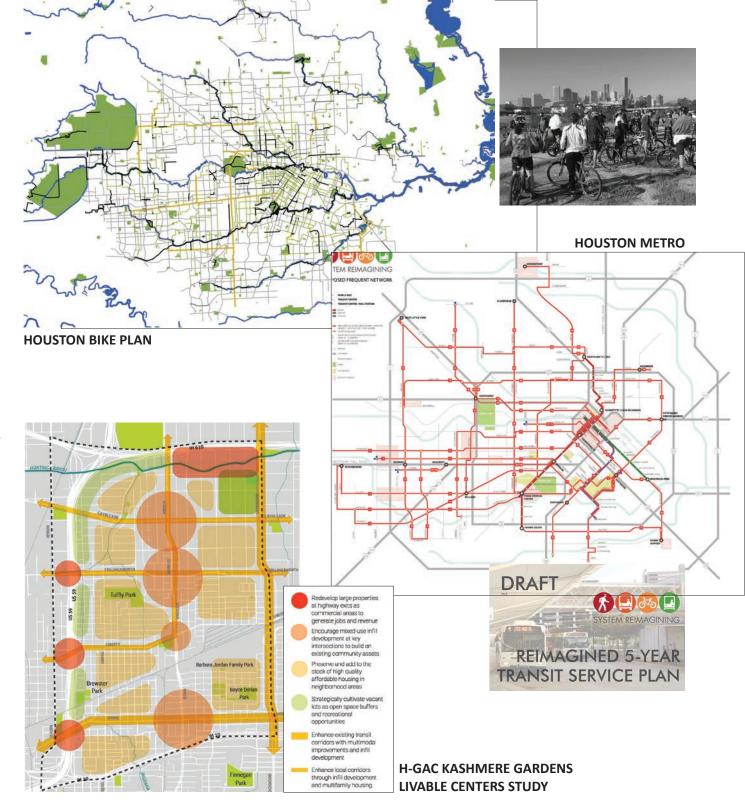
#### 1. FOSTER COLLABORATION:

Foster collaboration between public agencies, utilities, private development and non-profit organizations to maximize use of available land and financial resources to expand the public realm.

Houstonians are fortunate that many organizations are working to improve our city. Many already work collaboratively, but more can be done to coordinate planning efforts and sources of revenue.

Beyond the Bayous aims to further catalyze parks-centered development through partnerships. By fostering collaboration we can maximize our impact. Together, we can more easily identify and bridge the gaps in park equity and access.

To this end, we gathered existing plans from around the greater Houston area, then overlaid them with a comprehensive vision. Pulling these plans together fosters cooperation and allows us to build on the great work that already exists.





2. REINVEST IN EXISTING PARKS: Upgrade existing recreational opportunities while enhancing the natural landscape experience.

According to The Trust for Public Land's 2016 ParkScore, Houston has 52,915 acres of parkland, 37,859 of which are overseen by the Houston Parks and Recreation Department (HPARD). As the city becomes more densely populated, some parks undergo more use than they can withstand.

One example is Burnett-Bayland Park in Gulfton, the densest community in Houston. With few other park options in the area, Burnett-Bayland Park is well used. Poor drainage restricts usage during rainy seasons.

Reinvesting in existing parks, especially well-used ones, provides immediate impact. This is the primary goal of HPARD's 2015 Parks Master Plan. Reinvestment must be further expanded to find economically self-sustaining models to adequately maintain our park systems.





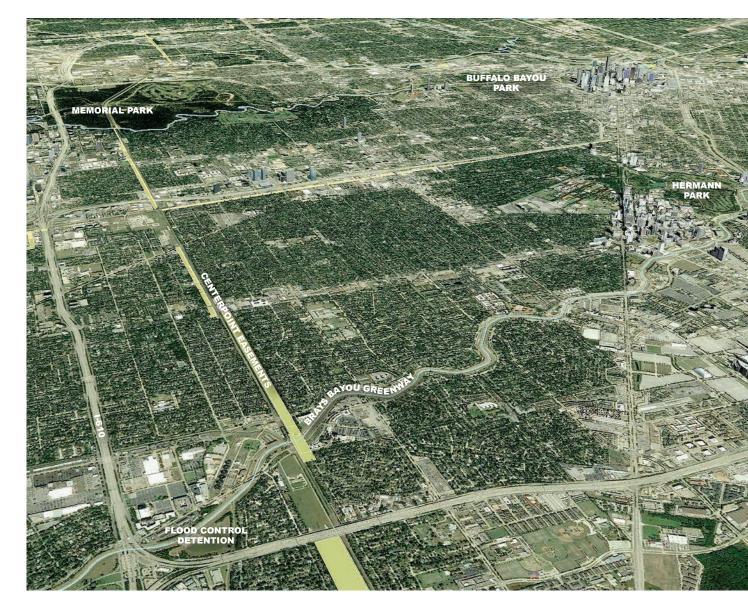
### 3. PURSUE ADDITIONAL OPEN SPACE AND CONNECTIVITY:

Identify opportunities to more fully establish parks and open space connections as critical to the region's infrastructure system.

Beyond the Bayous identifies a number of tools to implement this tactic:

- a. Expand Bayou Greenways 2020 beyond the city limits and along secondary bayous and drainage systems.
- b. **Pursue the additional open space opportunities** offered by utility corridors while emphasizing their ecologic value.
- Retrofit key public rights-of-way as greenways, providing the complete range of safe transportation options together with landscape and improved drainage.
- d. Identify vacant or underutilized land in potential growth areas to preserve as flood control detention, habitat conservation and recreation.
- e. Use a complete community approach to coordinate multi-use investment in existing neighborhoods and new development to provide jobs, shopping, affordable housing, social services, walkable streets, transit and drainage in addition to parks.

Applying these tools will result in an integrated greenspace network, locally and regionally, for the benefit of all.



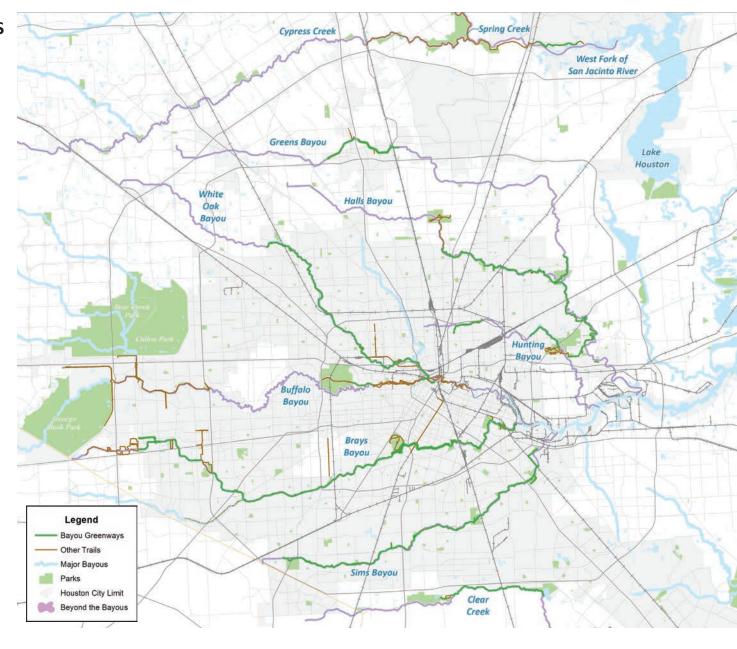


#### **EXPAND BAYOU GREENWAYS:**

Because the Bayou Greenways 2020 initiative was funded partly through a City of Houston bond, the work has been within the city limits.

The bayous, however, have no political jurisdictions or socioeconomic boundaries. They flow through, and consequentially, have the potential to unite divergent communities and land uses.

We can expand the Bayou Greenways 2020 initiative to the county to more fully integrate the open space system.





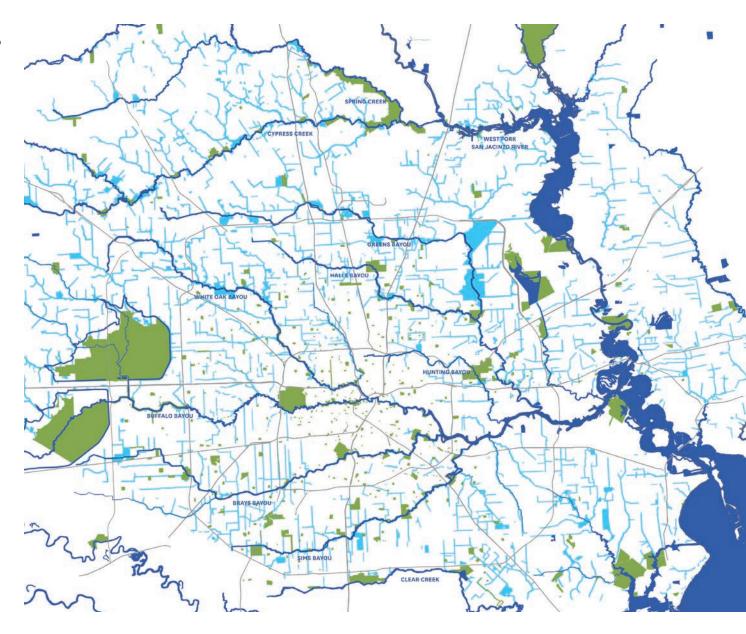
### UTILIZE SECONDARY BAYOUS AND DRAINAGE AREAS:

Harris County Flood Control District manages over 2500 miles of waterways. The greenway can be expanded to secondary bayous and engineered drainage channels.

#### PRESERVE AND RECLAIM THE FLOODPLAIN:

HCFCD has moved beyond rapid flush, concrete channelization of bayous to a more modulated approach that includes storm water detention. This approach has resulted in the District buying out whole subdivisions within the floodplain and developing detention basins that include well-landscaped park spaces.

We can continue to preserve and reclaim the floodplain and especially the floodways for integrated flood control, recreation and natural habitat open space.





#### **UTILIZE CENTERPOINT EASEMENTS**

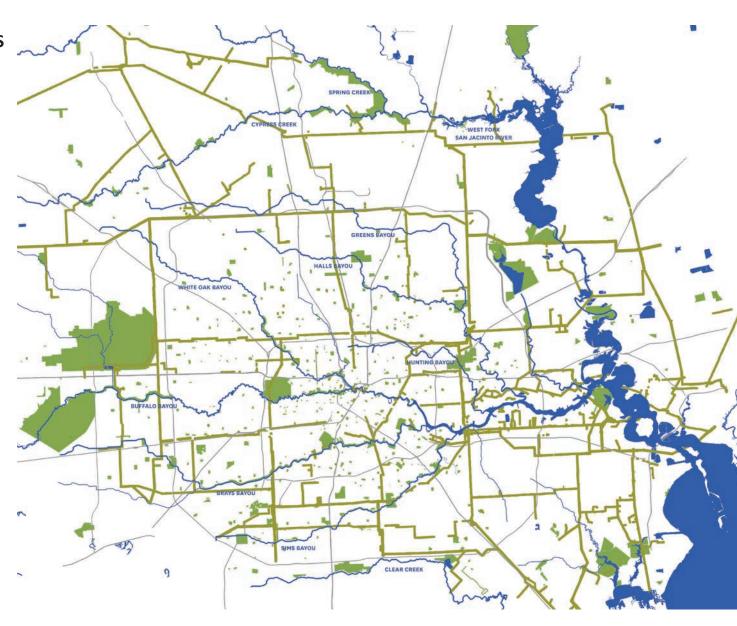
In 2014, the City of Houston and CenterPoint Energy reached an agreement allowing recreational trails along utility rights-of-way. This opened up the possibility of large-scale north-south connections. CenterPoint easements are also some of the last vestiges of the natural prairie system that used to cover large areas of Houston.

There are miles of CenterPoint easements in Harris County. The scale of the opportunity is evident in the map to the right.

The open space connectivity offered by utility corridors will heighten the public's awareness of their ecologic value to the region.

### CONVERT UNDER UTILIZED RIGHTS-OF-WAY TO GREENWAYS:

Unused City, METRO and Railroad rightsof-way throughout the region should be converted to alternative transportation and greenways.





#### **RETROFIT KEY STREET RIGHTS-OF-WAY:**

Street rights-of-way can be converted to active transportation corridors. For example, Reed Road is a four lane road along Sims Bayou in the Golfcrest area. It was originally planned as a connector road, but development happened differently than expected. The result is a wider than necessary neighborhood road. This provides the opportunity to convert the street right-of-way into trails, as shown in the illustrations to the right. The result is safer and more beautiful conditions for walking and biking.









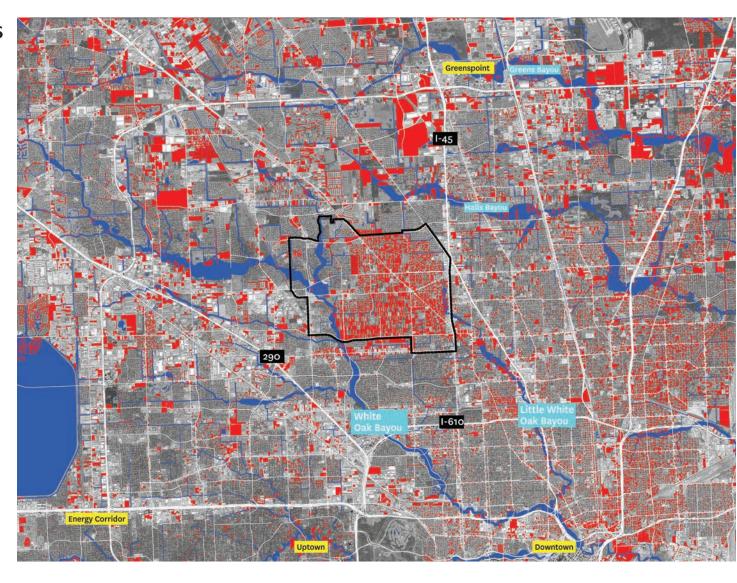
### PURSUE UNDEVELOPED OR VACANT LAND OPPORTUNITIES:

To provide additional parks we need to identify and acquire undeveloped or vacant land that can be used for flood control detention, habitat conservation, connectivity and recreation.

The map on the right shows an analysis of vacant and undeveloped land in northwest Houston. Acres Home, one of the Mayor's Complete Communities, has a large amount of open land potential.

### NEW DEVELOPMENT OPEN SPACE AND CONNECTIVITY REQUIREMENTS:

Currently, we are connecting and weaving green space through existing development. Going forward, open space and connectivity should be integrated into every new development, just as roads and other infrastructure are currently required as part of new projects. Parks, open space, access and connectivity should be thought of as essential infrastructure.





# Floodway Vacant Parcel Acres Home Complete Community Boundary

LEGEND

## BEYOND THE BAYOUS — FRAMEWORK FOR THE FUTURE

The *Beyond the Bayous* initiative provides a vision that expands and improves Greater Houston's public realm. The goals, tactics and tools identified in *Beyond the Bayous* provide the framework for a park-centered future for Houston.

It can truly lead us to a system of parks and greenways that weave throughout Houston's urban fabric creating a tapestry of vibrant, connected communities.

By looking at open space and connectivity comprehensively this study will promote the creation of:

- Eight new regional connectors
- Twenty new hub parks
- Nineteen neighborhood networks













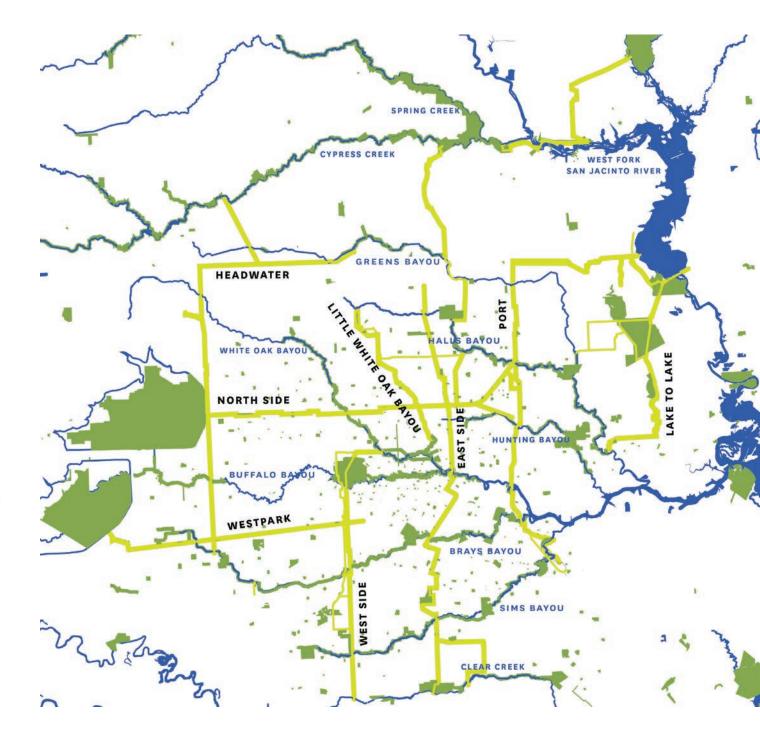


## BEYOND THE BAYOUS — REGIONAL CONNECTORS

Regional greenways create an equitable network where Houstonians can walk and bike, safely separated from traffic. These regional connections create an alternative means of reaching jobs, education and recreation.

The Bayou Greenways already facilitate commutes. Expanding and improving connectivity will add more neighborhoods to this network, producing both local and regional benefits. *Beyond the Bayous* has identified **eight new regional connector corridors**.

These would connect, largely in a north-south direction, with the principally east-west network of Bayou Greenways. The locations of these potential new greenways were identified based upon an analysis of open space needs and the opportunities for creating them.



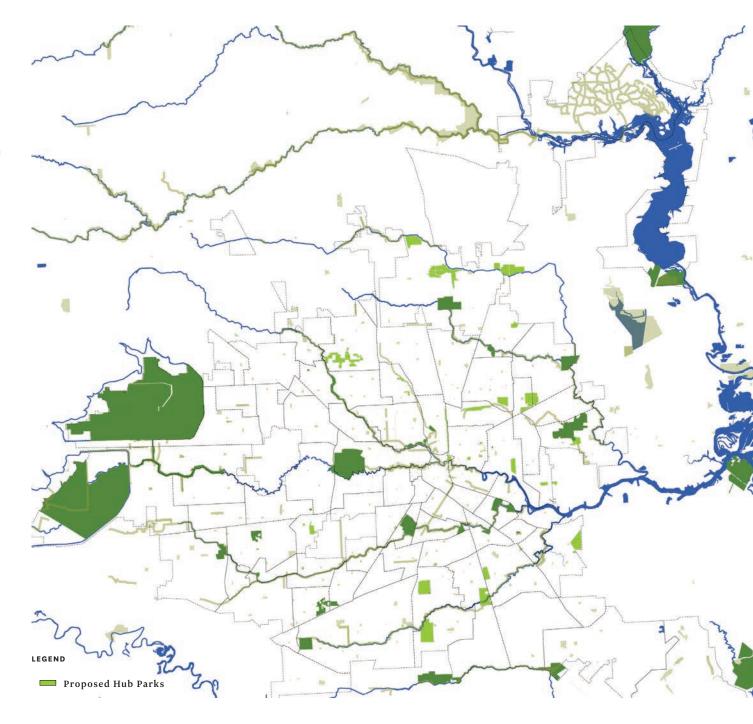


### **BEYOND THE BAYOUS — HUB PARKS**

Beyond the Bayous identifies a new system of "hub parks." Hub parks are large enough for people to feel immersed in nature. They offer a moment of restorative relief from the sensory overload of urban life. Unlike neighborhood parks, hub parks will draw people from miles around. Hub park visitors will arrive by car, via transit or on a bike, as well as on foot.

### Beyond the Bayous has identified twenty new potential hub parks.

These new open spaces would supplement the city's existing network of more than 370 large and small parks. The new hub parks would be located in neighborhoods that lack major open spaces, have persistent flooding problems and/or high natural landscape value. They can be created from vacant land, flood control detention basins, and even Port of Houston Authority dredge deposit sites.



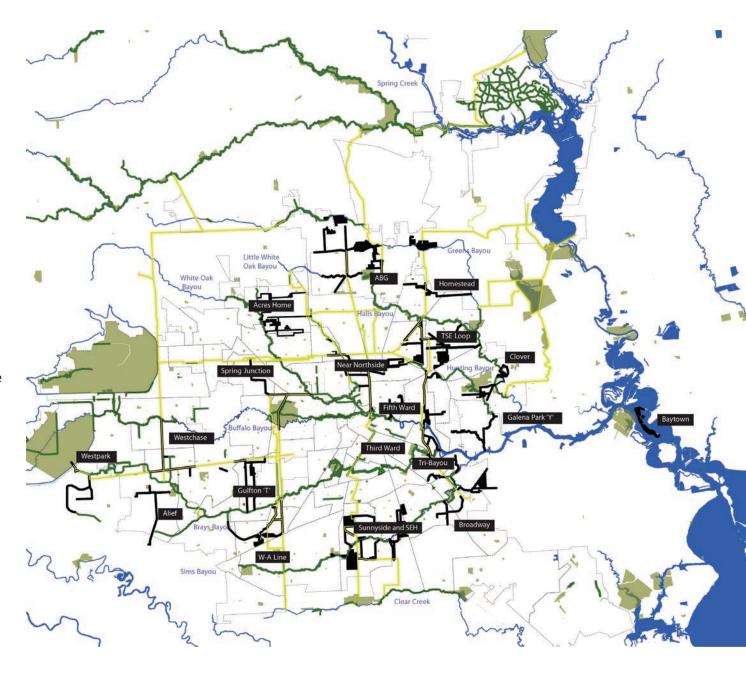


## BEYOND THE BAYOUS — NEIGHBORHOOD NETWORKS

### **Nineteen Neighborhood Networks**

Implementing such a complex regional open space system in a single implementation project would not be practical or even comprehendible. Instead, the *Beyond the Bayous* primary implementation strategy breaks down the vision into a series of "neighborhood network" plans for 19 communities where significant open space gaps have been identified. Each neighborhood network utilizes multiple tools to produce a comprehensive system of transit, jobs, housing and schools through broader open space connections.

The neighborhood networks also link to create the broader regional open space system.



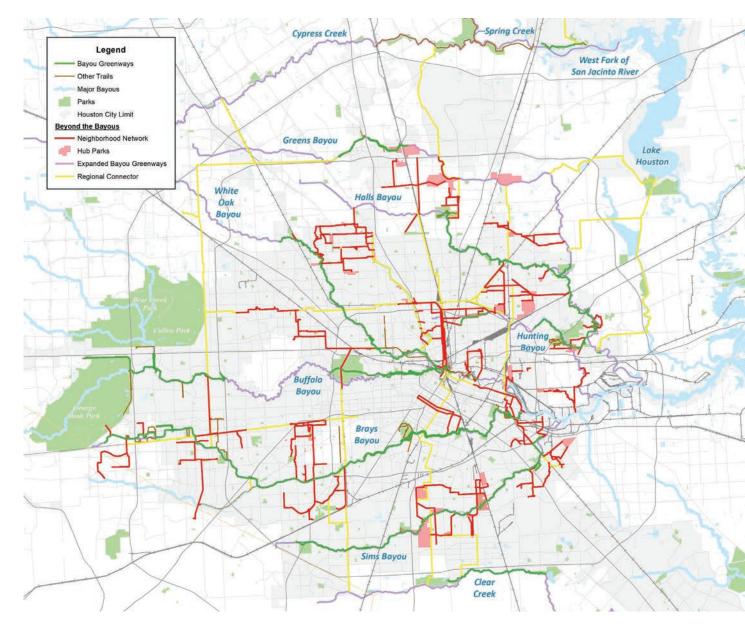


### BEYOND THE BAYOUS — COMPOSITE PLAN

As we compile the regional connectors, hub parks, and neighborhood networks into one map, we begin to see the fantastic opportunities ahead of us.

To be certain, this is a grand vision for Houston and its open space system. But, how do we get there? And, most importantly, how do we prioritize the various options and opportunities, based on the goals of equity, access and natural resources?

It will take collaboration between entities ranging from otherwise single purpose governmental agencies and private companies to local TIRZ's and management districts, to non-profits and community based initiatives.



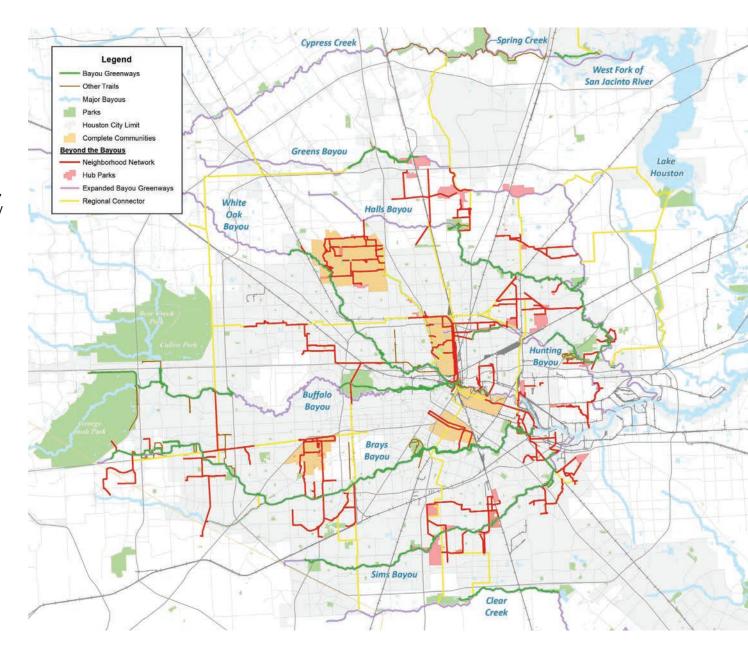


# BEYOND THE BAYOUS — NEIGHBORHOOD NETWORKS AND COMPLETE COMMUNITIES

The neighborhood networks coincide with and support Mayor Turner's Complete Communities strategy to comprehensively empower underserved neighborhoods throughout Houston, starting with Acres Home, Near Northside, Gulfton, Third Ward, and Second Ward. This gives us a method by which to prioritize our next steps.

Gulfton is the prototypical example of a low income, high density neighborhood. Here improving open space opportunities meets all three *Beyond the Bayous* goals of improving equity, access, and natural resources.

Each neighborhood network in the study features an analysis of the area's existing conditions, challenges and opportunities. It then employs the tactics identified to expand open space and connectivity both within the neighborhood and beyond.





### BEYOND THE BAYOUS — PARTNERSHIP OPPORTUNITIES

A neighborhood network may identify new greenway opportunities along utility corridors, secondary drainage channels and city streets as part of the City of Houston Bike Plan. Existing underserved parks may be targeted for improvements. New parks may come from a Harris County Flood Control District detention basin or reuse of a Port of Houston dredge deposit site. A vacant land parcel may be redeveloped by a private developer incorporating public open space and connections.

Each neighborhood network identifies the partner stakeholders that could play a role in implementing the plan.





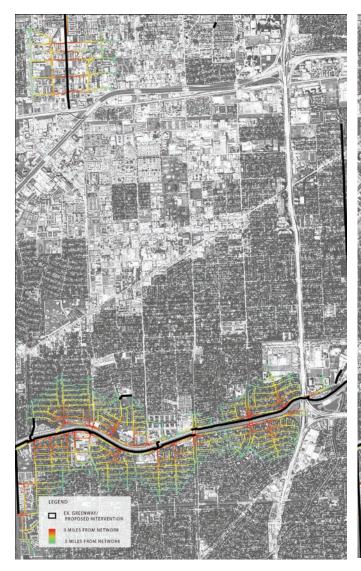
## BEYOND THE BAYOUS — THE RESULTS

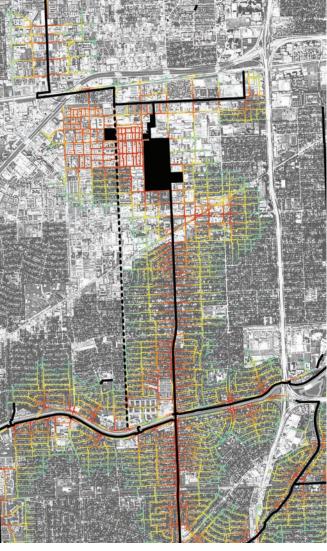
Based on the key goals of the plan — improving equity, access, and natural resources — the anticipated results are:

Equitable distribution of open space throughout Houston;

Increased public access to open space, as well as connectivity between parks, homes, and jobs; and

Preserved and enhanced natural ecosystems in Houston.







#### **BEYOND THE BAYOUS — NEXT STEPS**

The Beyond the Bayous plan concludes with a series of recommended next steps:

#### 1. STAKEHOLDER OUTREACH

Work with key partner organizations (including agencies within the City of Houston, Harris County Flood Control District, CenterPoint, Port of Houston and Metro) to determine level of interest and potential commitment.

#### 2. COMMUNITY OUTREACH

Work with communities to test observations and discuss how specific neighborhood networks might be developed. Consider different options for communicating aspects of the plan, including an interactive website updated continuously as new projects are incorporated and new data becomes available.

3. IMPLEMENTATION PLAN Identify specific steps for phased implementation of *Beyond the Bayous*, identifying

**Low-hanging Fruit** — Which projects are most feasible in the short-term based on a combination of stakeholder interest, available funds and affordability?

**Maximum Impact** — Which projects are the most pressing and go the furthest in addressing critical connectivity, equity and ecology issues in high-need communities?

**Tom Sawyer Approach** — Demonstrate that making parks and open space is fun! Identify which organizations are best-positioned to oversee various parts of the plan.

Share the Wealth — What combination of funding—or single source of funding—is available to support different portions of this plan (greenways, hub parks and neighborhood parks)? How might the plan need to be framed to attract available funding?

- 4. ORDER OF MAGNITUDE COST ESTIMATE Conduct a study to project the general cost of the overall improvements and to establish a system for making a quick assessment of anticipated individual project costs.
- 5. MAINTENANCE AND RESOURCE PLAN Identify, as each portion of the plan comes online, who will maintain the project, what ongoing resources will be required and what are the possible funding sources.
- 6. BENEFITS ANALYSIS

Conduct further studies to determine the following related to the Beyond the Bayou objectives:

**Health Impact Study** — Examine more closely the health issues in individual communities and the extent to which improved open space and connectivity may improve health outcomes.

**Environmental Benefits** 

**Economic Value** 

With a very generous additional grant from the Houston Endowment, Houston Parks Board will begin implementing the next steps by focusing on the Mayor's Complete Communities. Undoubtedly, other opportunities to implement *Beyond the Bayous* will emerge as they have been doing so organically for the last few years. The Houston Parks Board's key role will be to drill down on and coordinate those opportunities.



### **BEYOND THE BAYOUS**

Houston is no longer known just for it's traffic and highways, but for great parks and greenways that connect Houstonians like never before.

Beyond the Bayous expands the vision of parks and greenspace weaving throughout Greater Houston, resulting in a tapestry of connected communities.

Beyond the Bayous also recognizes the massive scope of this effort—both in time and cost. Yet, it also presents a unique opportunity for the future of Houston.

There is incredible potential for collaboration between existing agencies and organizations to make Houston communities even healthier today and more vibrant well into the future.









www.houstonparksboard.org

