

# A GREENER GULFTON

*For Improved Health,  
Climate Resilience, and  
Biodiversity*





## **Letter from the Community**

Our team is excited to unveil this report heavily informed by local leadership, the Greener Gulfton Ambassadors, and the Greener Gulfton Steering Committee. Throughout the planning process, our team reflected on and prioritized inclusion, connectivity, hopefulness, and vitality. Throughout this report you will see how our collective vision came to fruition with invaluable input from community members and leaders.

Drafting this plan meant coming together with a common vision, common guiding principles, and a common understanding. Working together with passionate supporters and consultants we have crafted a nature-based solutions plan for the Gulfton community that simultaneously addresses Environmental Health, Human Health and Wellbeing, and Biodiversity Health.

Overall, while the vision and guiding principles are shared in the report, our Green Ambassadors understand how bringing life, color, smells, creativity, unity, and togetherness for all in Gulfton, including people, wildlife and plants can truly make an impact to the overall health and quality of life for our community.

We hope that this report shines light on the unique neighborhood qualities in Gulfton, how nature can enhance this community, and the strong leadership that exists in this neighborhood to ensure the success of the recommendations outlined in this report.

After all, in the words of our community leaders, "A success for this plan would be when the neighborhood has the tools, resources and know-how to drive the change."

With gratitude,

**Green Ambassador Team for Greener Gulfton**

# Acknowledgements

The Greener Gulfton report represents the efforts dedicated by community members and leaders in Gulfton, and a consultant team aimed at reflecting and amplifying what we learned through the engagement process. We cannot express enough thanks to the Green Ambassadors, steering committee members, and to the neighborhood as whole for sharing and teaching us about your home. We were humbled by your openness and are grateful to have had this opportunity to meet each of you.



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# 01

# Preface & Community Summary



## Introduction

What does nature do for the Gulfton Neighborhood?

How did the team work together and make decisions?

Community Summary

## Introduction

The preface section of the report introduces the importance that nature has on human health and wellbeing, environmental health, and the health of other living organisms within our communities. This section also includes the high level overview and synthesis of the project results within the Community Summary. The Community Summary also is translated into Spanish to support access to the report more broadly for the Gulfton community.

# What does Nature Do for the Gulfton Community?

## Nature is Essential for a Healthier Gulfton

Nature is a key element in making our neighborhoods healthier and safer. In order to truly flourish, all communities need easy access to fresh fruits and vegetables, safe and well-maintained parks and greenspaces, lush tree canopies, green schoolyards, adequate sidewalks, and safe bike lanes to access these places. Nature should never be seen as a luxury but rather as critical community health infrastructure that uplifts the mental, physical, cultural, and spiritual health and well-being of its human and non-human residents.

### Nature, Human Health and Wellbeing

Abundant nature has been shown to have many positive impacts on human health and wellbeing. For instance, urban trees have been shown to reduce depressive symptoms. In one study, adults with major depressive disorder reported improvements in both mood and cognitive performance after taking weekly walks on streets with trees. Similarly, many people report feeling restored and delighted by the sound of birdsongs outside their window. Ready access to nature has also been shown to significantly reduce feelings of loneliness, which contributes to mental health challenges and can contribute to chronic conditions like heart disease. Nature can also help encourage social interactions and can connect Gulfton's residents to their cultural touchstones and ancestors – including through the planting

of gardens which produce healthy foods. Lastly, students who attend schools that are rich in nature have been shown to have higher levels of academic achievement and better focus.

Human health and wellbeing is also dependent on **environmental health** – the health of the soil, air, water, and climate of a place and nature plays a key role here too. Urban trees have been shown to reduce air pollution which can contribute to asthma and other respiratory ailments. Trees, shrubs, grasses, and other vegetation can also help cool hot urban environments. The 2020 Houston-Harris County Heat Watch Campaign identified Gulfton as Houston's physical hottest neighborhood – a full 17 degrees hotter than the coolest neighborhood in Harris County. It is clear that Gulfton needs a better tree canopy to become cooler as the impacts of climate change continues to worsen. Lastly, strategically emplaced **nature-based solutions**, like rain gardens and bioswales, can help soak up and clean stormwater.

### Nature and Biodiversity

Gulfton is one of our nation's most ethnically diverse neighborhoods – a real strength for this community. It is also home to a diversity of indigenous and exotic plants and wildlife, as well

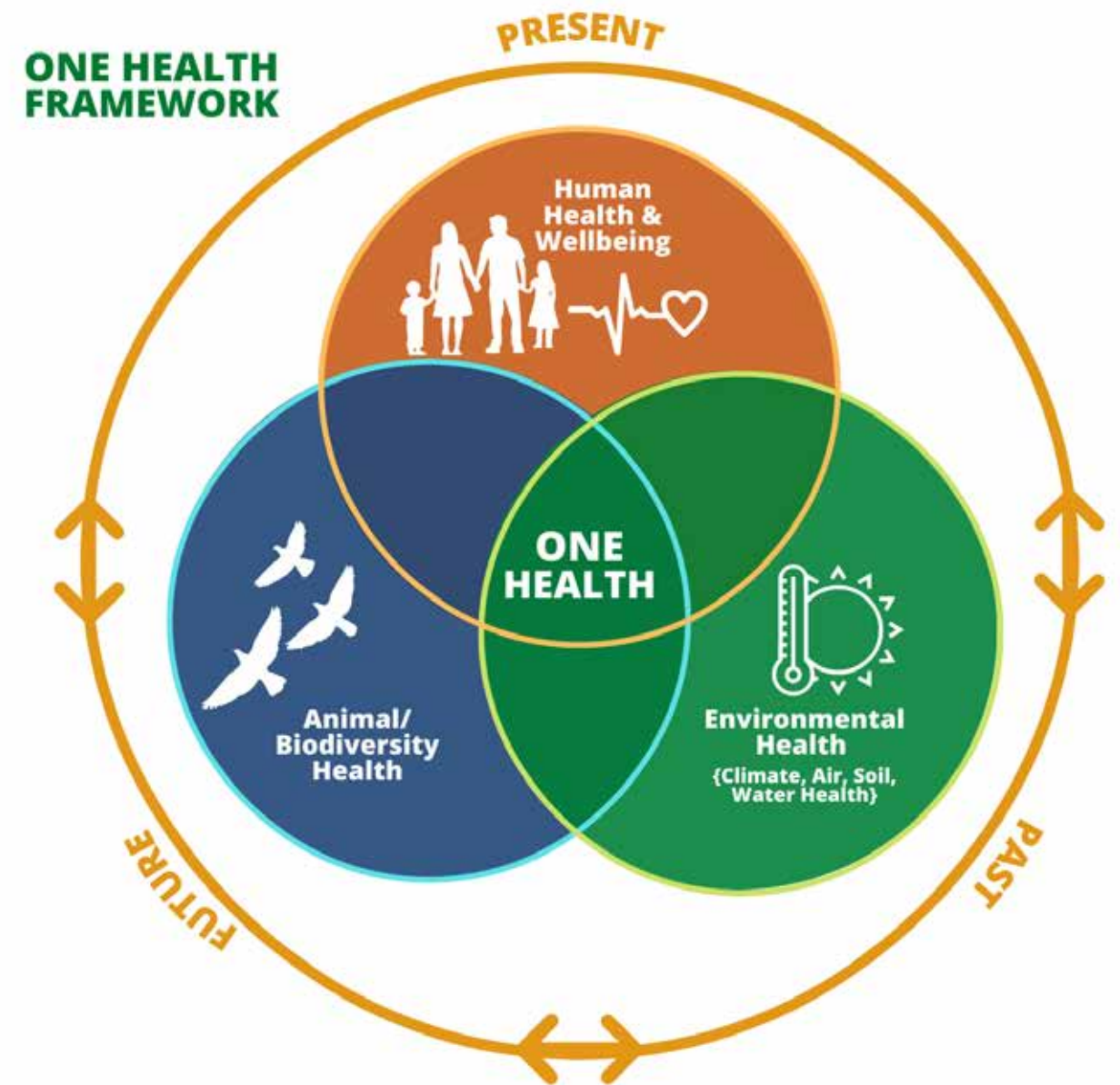


**BIODIVERSITY** is the variety and number of living things on Earth and includes all species, from the fungi living on the roots of a maple tree, to the owl that lives in its branches, to the tree itself. It includes diversity within species, between species, and among ecosystems.

as domesticated animals. This diversity of non-human life is called biodiversity. Human health and wellbeing is highly dependent on having nature-rich parks, greenspaces, schoolyards, patios, and civic spaces. Selecting resilient, indigenous species and culturally significant plants can greatly improve Gulfton's biodiversity, while providing its people more opportunities to experience the awe of nature such as seeing a migrating monarch butterfly or a colorful songbirds.

### One Health

In truth, human health and wellbeing, environmental health, and biodiversity health, are interdependent and tightly woven and is known as **One Health**. As we take actions to create a Greener Gulfton, strategies which use nature and nature-based solutions which uplift human, biodiversity, and environmental health simultaneously will maximize their positive impacts.



# Community Action Summary

## Introduction

A Greener Gulfton for Nature, Health, and Resilience was an interdisciplinary planning effort that relied on community leaders, passionate residents, and non-profits in collaboration with a consulting team that included planning, design, environmental, health, art, and multilingual engagement expertise. The work was undergone in three main phases that include **Understand**, **Envision**, and **Act**, below are more details on each of these phases.



The **Envision Phase** outlines a vision for Gulfton, informed by community engagement, the Guiding Principles that support our work, and the specific recommendations we are making for the neighborhood. The overall effort is to support and green the Gulfton Super neighborhood in a way that considers both people and non-human residents alike. The team hosted a walking tour with the Green Ambassadors and their family members to document what is working well in Gulfton and what aspects of the urban environment could use improvements.



The **Understand Phase** of the report starts with a brief history of the region and existing conditions within Gulfton, including zone comparisons across four main areas within the super neighborhood. We also outline the main planning documents within the neighborhood and in the region, and provide nature and art projects that inspire us. The team hosted a kick-off event with the community in collaboration with Madres del Parque and asked participants what nature means to them.



The **Act Phase** of the report gets into the more granule details of a proposed pilot project. With feedback from the community and inspirational ideas from UP Art Studio, a Placita pilot project idea was developed and cultivated. This phase includes the details that have gone along with that process and provides visual resources for fund-raising and the next steps. The team hosted an in-person event at Burnett Bayland Park to gather feedback on the neighborhood recommendations and narrowed down pilot project ideas.

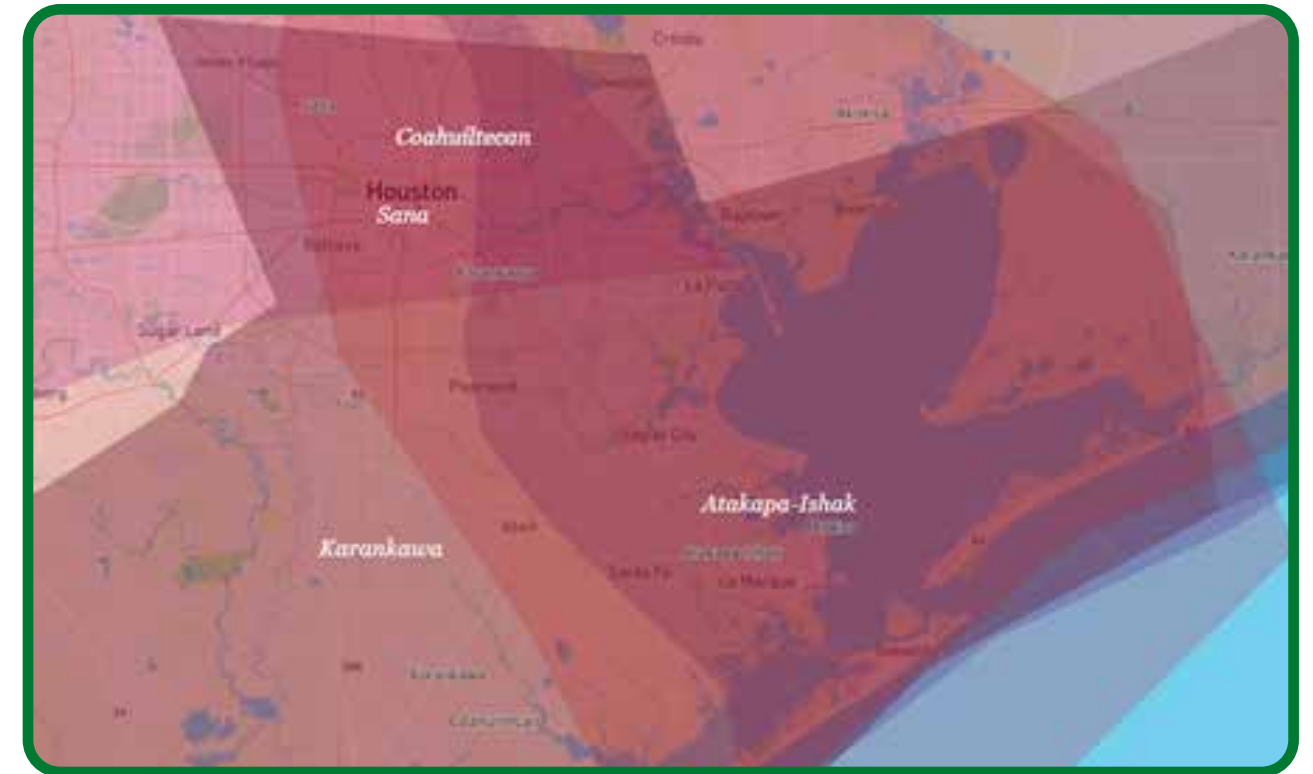


## VALUING INDIGENOUS PRESENCE AND KNOWLEDGE

As step toward honoring the truth and achieving healing and reconciliation, we commit to acknowledging that the native Karankawa, Akokisa, and other Indigenous Peoples were heavily impacted by the legacy of forced removal from these unceded lands.

We also acknowledge that Gulfton is currently home to Indigenous Peoples from Texas, Mexico, Central America, and other parts of the world and their presence should be recognized and honored.

Gulfton residents, Greener Gulfton Ambassadors, and others preparing this plan, have strongly advised that Traditional Ecological Knowledge (TEK) be valued for its inherent worth and integrated with western science and community knowledge to help co-create a greener, healthier, and better connected Gulfton. It is important to note that residents specifically called out a desire for Gulfton's greening efforts to be a means of recognizing their ancestors, both their genetic ancestors and the original Indigenous Peoples of this land.



Historic Indigenous Communities of Gulfton and Houston, Source: NATIVE-LAND.CA

## Community Action Summary

Continued

### Our Process

In the Greener Gulfton planning process, it was critical to include voices from local leadership and community members as thoroughly as possible. Gulfton has had momentum toward addressing community needs from the grass roots level to the institutional and local government level. Considering this, it was important to tap into leadership that continues to be involved in the future of Gulfton. This meant assembling a Greener Gulfton Steering Committee as well as Green Ambassadors to inform our work and recommendations as robustly as possible.

The **Steering Committee** provided an opportunity to guide research during the Understand Phase, draft a vision statement during the Envision Phase, and provide feedback on the Pilot Project for the Act Phase.

"Spending time in nature is an opportunity to relax and free my mind."  
*-Lenora Fields, Green Ambassador*

As part of our efforts, it was important to include local voices and leadership through an ambassador program. Tecolotl, our sub consultant team, recruited and lead a group of five **Green Gulfton Ambassadors** which provided a method of enriching input and feedback from the Gulfton Community. Through monthly meeting we discussed a vision statement, strategy card recommendations, and finally pilot project opportunities.

"Our group, Madres del Parque is a group of mothers dedicated to the health and wellbeing of our community. We know spending time in nature is good for not only us as parents, but for our children as well."  
*- Maria Hernandez, Steering Committee Member and Green Ambassador*

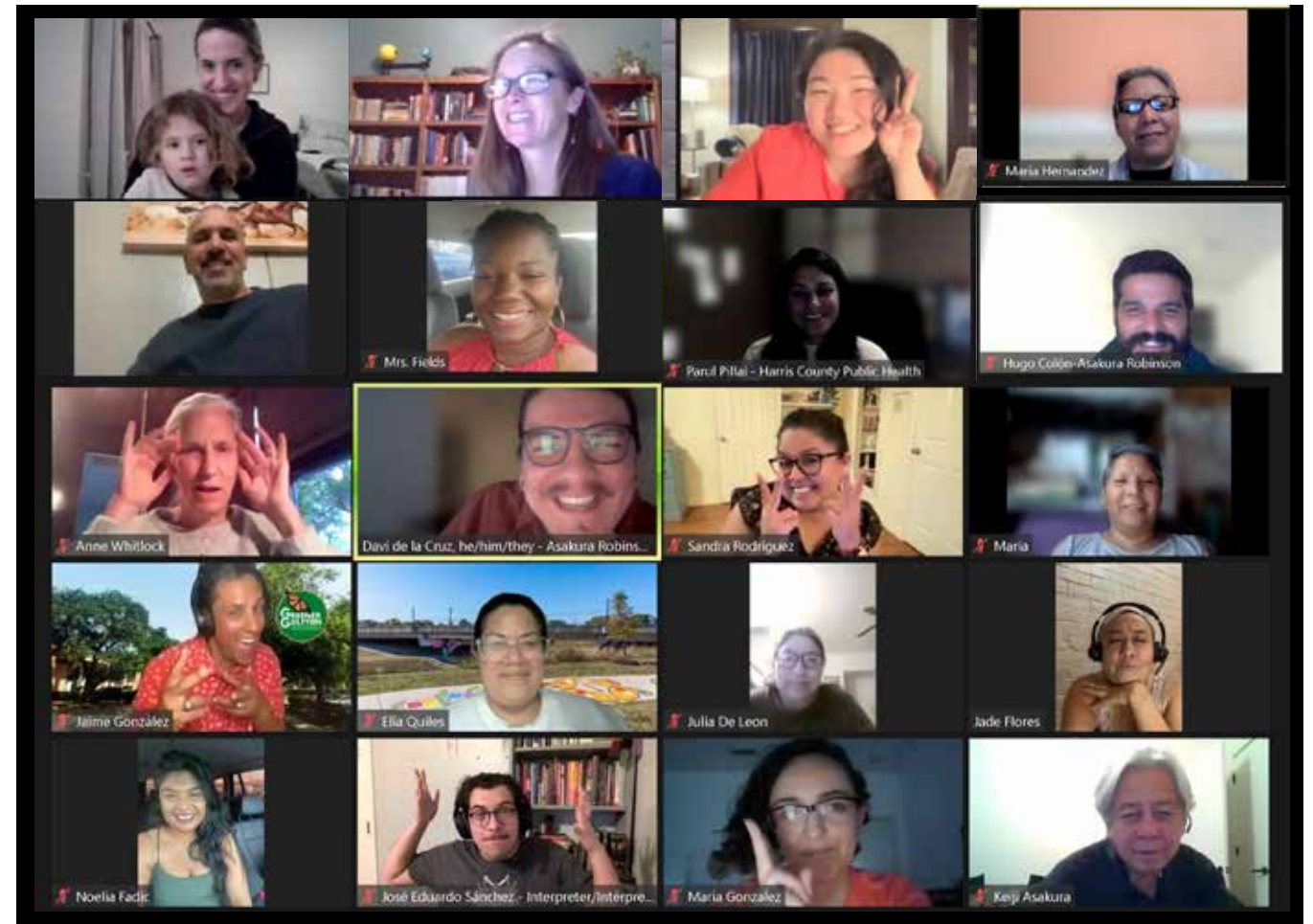
STEERING COMMITTEE	GREEN AMBASSADORS
<b>Maria Hernandez</b> Madres del Parque	<b>Brigitte Felix</b>
<b>Anne Whitlock</b> Connect Community	<b>Bahaa Abraham Felix</b>
<b>Kristi Rangel</b> City of Houston, Health Department	<b>Julia de Leon Fadic</b>
<b>Parul Pillai</b> Harris County Public Health (HCPH)	<b>Lenora Fields</b>
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	<b>Noelia Fadic</b>

### PROJECT SPONSOR



Jaime González, The Nature Conservancy  
 Kathy Jack, Ph.D., The Nature Conservancy

### CONSULTANT TEAM



Captured during a virtual combined steering committee and Green Ambassadors meeting.

## Community Action Summary

Continued

### Understand Phase

Houston's Gulfton neighborhood is a vibrant, diverse community, with strong leadership, shared aspirations, and origins from across the planet. Gulfton's wild community is also vibrant and includes both Indigenous wildlife and plant life living alongside exotic plants prized for their cultural significance and beauty. Together, the human and non-human residents of Gulfton form a vibrant living community who need and deserve more nature for their health and wellbeing. Here are the main things we found out during our Understand Phase of the project:

"I am a garden volunteer. My children support me so that they feel happy discovering / Soy voluntaria de jardinería. Mis hijos me apoyan para que se sientan felices descubriendo"

- Greener Gulfton Resident, Public Kick-off Boards



#### PEOPLE:

- **Gulfton is an Immigrant Hub:** 58% of residents are born outside the U.S. with 75% of that born in Latin America.
- **Gulfton Residents Speak Many Different Languages:** 14.9% of residents speak only English, 70% speak Spanish.
- **Gulfton Residents Primarily Rent and Live in Multi-Family Residential Units:** Only 4.3% of residents own a home. The main housing type in Gulfton is multi-family residential with approximately 18,846 occupied housing units.
- **Gulfton is Lacking Public Park Space:** The 2015 Houston Parks Master Plan recommends 8 acres of park space per 1,000 people, 86 additional acres would need to be added to the Gulfton neighborhood to meet these recommendations.
- **Gulfton is Culturally Rich and Reflected Through Urban Art:** The Gulfton Story Trail Mural Project brings the spirit of the people living in the neighborhood to the fore, and is a creative way to provide a more welcoming space.
- **Gulfton Residents Are Relatively Young and Include Children:** 34% of residents are younger than 20 years old, and 37% are less than 40 years old.

#### ECOLOGY:

- **Gulfton is in the Humid Gulf Coastal Prairie Ecoregion:** Approximately 1% of the Gulf Coastal Prairie Ecoregion remains in Texas; much of this ecosystem has been converted to other landscape and land use types.
- **Gulfton and the Houston Region is a Migration Route:** Over the course of a season, millions of birds species pass through Texas. This winged migration also includes bats and insects of important significance.
- **Gulfton is in the Brays Bayou Watershed and the Southeastern Portion of the Neighborhood is in the Floodplain:** Brays Bayou is an urbanized watershed that covers 127 square miles and severe flooding occurs at least once every 10 years.
- **Gulfton Does Not Directly Connect to Bayou Trails:** Brays Bayou and the corresponding bayou trail is approximately 1.5 miles from the southern edge of the neighborhood.
- **Gulfton's Vegetative Cover and Tree Canopy is Not Evenly Distributed Throughout the Neighborhood:** The densest vegetative cover is located in the Shenandoah community and associated with Burnett Bayland Park in Gulfton.

#### ENVIRONMENT & CLIMATE:

- **Gulfton is Highly Urbanized and Developed:** The majority of the neighborhood is highly developed, urbanized, and experiences high urban heat values. Gulfton is a climate vulnerable community.
- **Gulfton Residents Do Not All Have Vehicles:** Approximately 12.7% of households do not have access to vehicles, and families rely on other means of transportation.
- **Gulfton Lacks Connected Sidewalks:** The sidewalk conditions in the community are of poor quality, with 41% of existing sidewalks having some kind of obstruction.
- **Gulfton Needs to Improve Street Right of Way (ROW) Safety:** In most cases, streets are designed to carry large amounts of vehicles with a large amount of wide traffic lanes. This places a major challenge for pedestrians crossing wide segments of road or with limited sidewalk space.



**CLIMATE CHANGE:** Gulfton was the hottest Harris County neighborhood identified in the 2020 Houston Heat Watch Campaign - a full 17 degrees hotter than the coolest community in the county.



# Gulfton Super Neighborhood

# Community Action Summary Continued

## People

## Environment / Climate

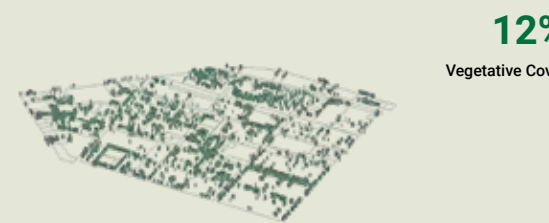
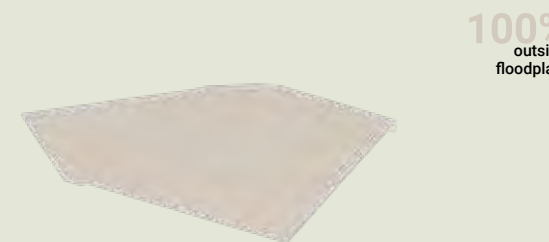
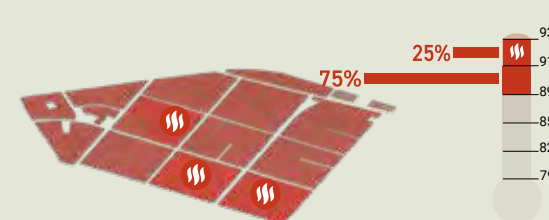
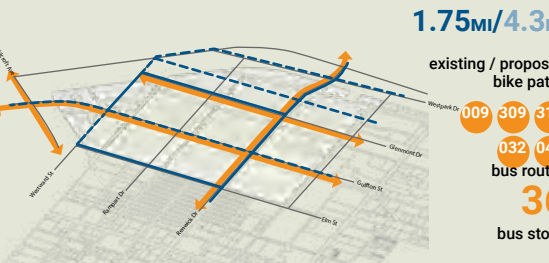
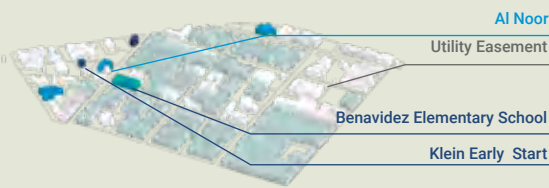
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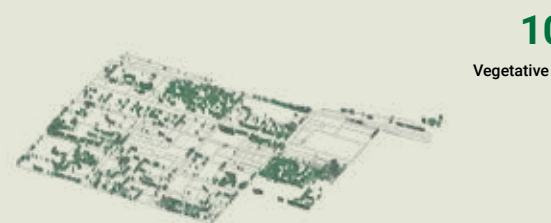
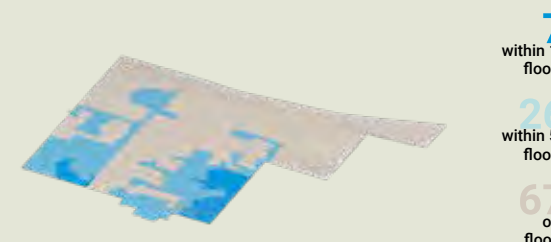
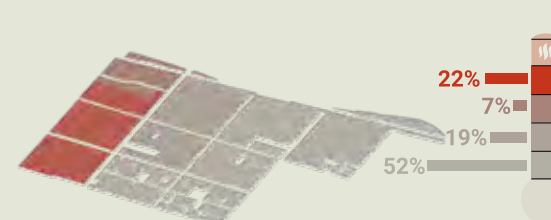
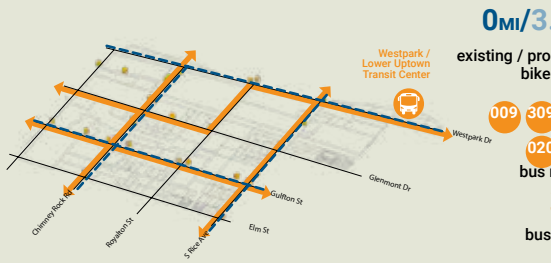
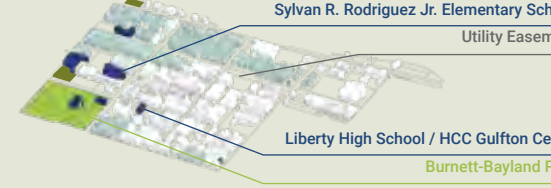
## Ecology

\* Vegetation over 9 feet tall  
iNaturalist Download, November 23, 2021 & HARC Research for Gulfton

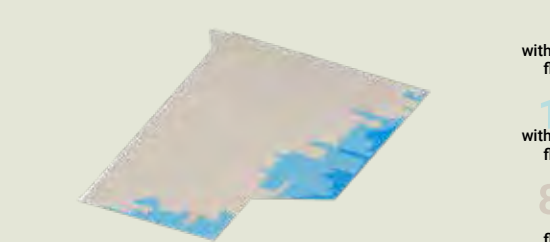
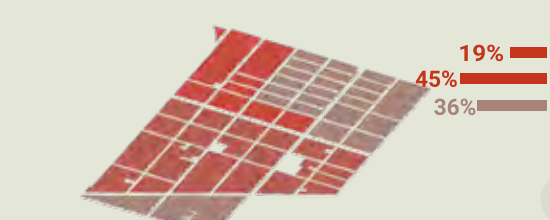
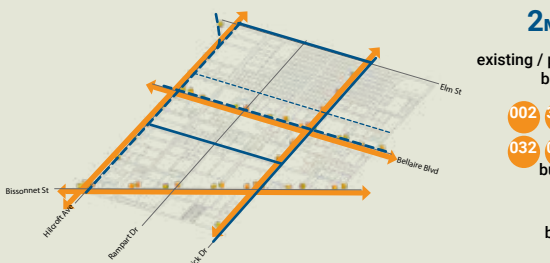
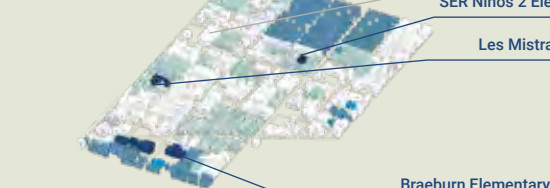
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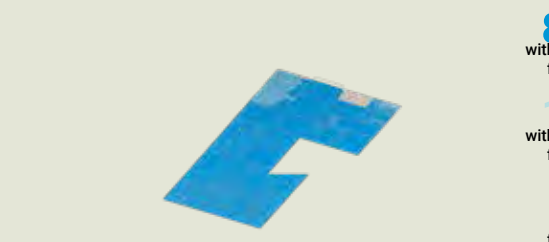
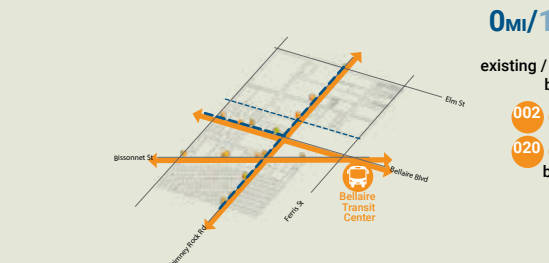
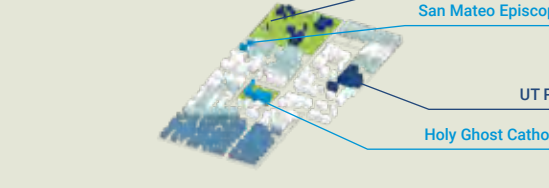
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### Zone 3



### Zone 4



## Community Action Summary Continued

### Envision Phase

As part of envisioning a Greener Gulfton, our team met with community members, steering committee members, and Gulfton Green Ambassadors to not only share the existing conditions data about the neighborhood that is available, but also to hear from them on the benefits that nature provides to their everyday lives, opportunities they imagine in their neighborhood, and ultimately the vision and guiding principles that should be reflected in a plan that hopes to make this neighborhood responsive to the needs of all residents, amidst the reality of the varied conditions. A vision statement and a series of guiding principles were developed and listed on this page.



#### VISION:

**Greener Gulfton is a DIVERSE and VIBRANT community that is HEALTHY, CLIMATE PREPARED, and CONNECTED to NATURE**

**Gulfton más verde es una comunidad DIVERSA y VIBRANTE que está SANA, CLIMÁTICAMENTE PREPARADA, y CONECTADA a la NATURALEZA**

#### GUILDING PRINCIPLES:

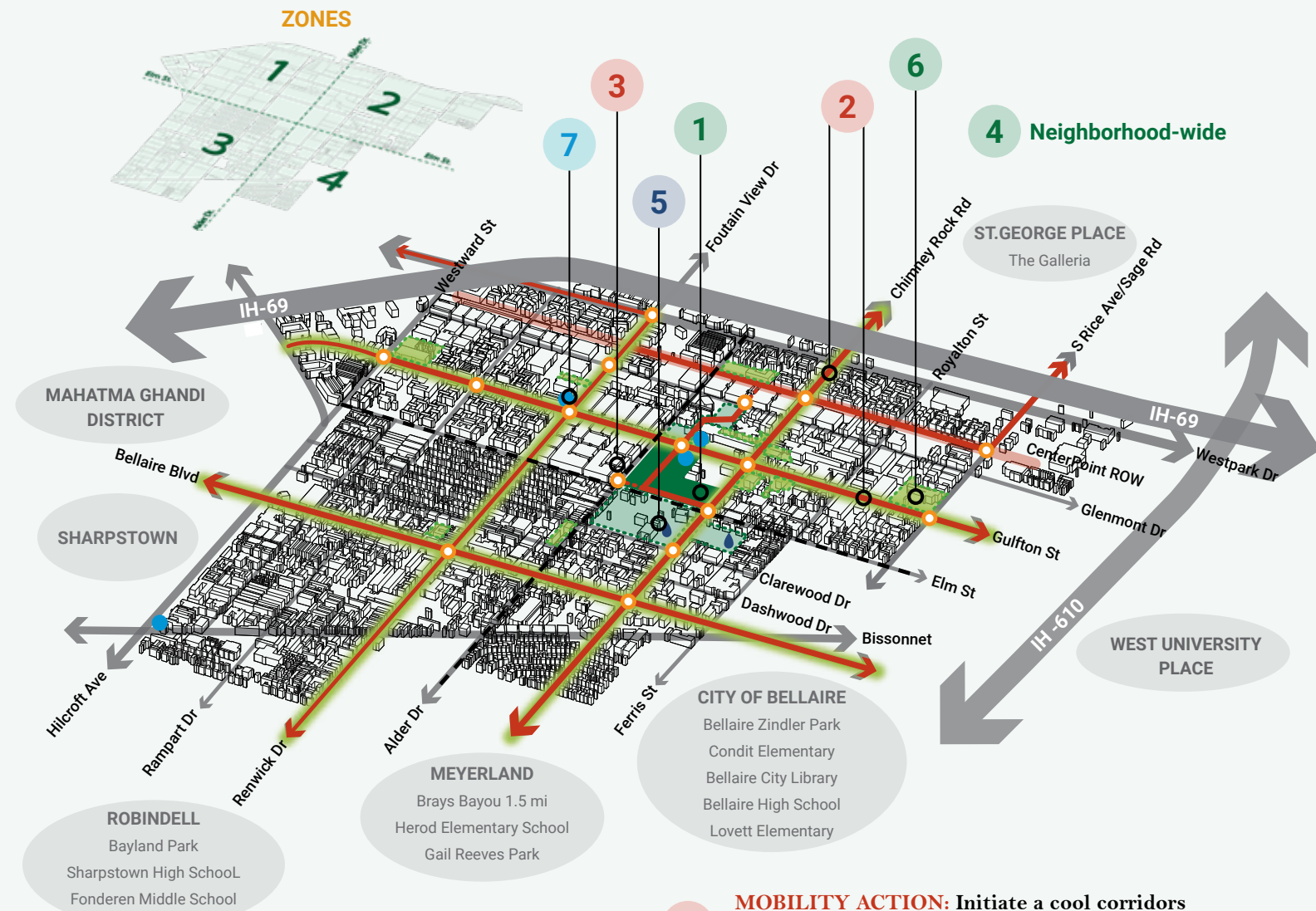
**HEALTH & WELLNESS.** Gulfton is a place where communities are supported in their goals toward improved health and wellness and where people and wildlife are supported to live long, happy, healthy lives

**HONORING ANCESTORS.** Gulfton is a place where our full selves, roots, and histories are part of solutions for healthier futures, and improved human health, ecological health, and environmental health.

**SAFETY.** Gulfton is a place where smart urban design can create safer, healthier, and more welcoming place for all residents and visitors.

**PERSEVERANCE.** Gulfton is a place where all residents regardless of income, race, gender, or abilities are fully supported to lead and implement solutions that benefit them, their families, their neighbors, and their community and in the vision that they hold for their communities that supports improved human, ecological, and environmental health.

**EQUITY.** Gulfton is a place where increasing nature and access involves addressing historical injustices and improving the physical and social conditions of all residents with a vision of justice and equity for all.



### Neighborhood-Wide Actions - Over the Next 5 years

The recommendations for the Gulfton super neighborhood are divided into two sections. The first section focuses on the neighborhood-wide recommendations supported by the Green Ambassadors, Steering Committee, and residents we met at community events. The second section outlines, in broad terms, different strategy actions that can be taken in the neighborhood. These categories include Mobility Actions, Stormwater Management Actions, Architectural/Structural Actions, Nature-Based Community Capacity Actions, and Community Capacity Actions.

**1 NATURE-BASED COMMUNITY CAPACITY ACTION:** Fund and implement a Burnett Bayland Park Master Plan for improved recreational and nature experiences

**2 MOBILITY ACTION:** Initiate a cool corridors program to combat climate change and urban heat island impacts

**3 MOBILITY ACTION:** Support and implement sidewalk improvements and safe crossings to address pedestrian safety and access issues

**4 NATURE-BASED COMMUNITY CAPACITY ACTION:** Activate a neighborhood urban forestry strategy to mitigate heat, improve air quality, and support wildlife

**5 STORMWATER MANAGEMENT ACTION:** Facilitate a green stormwater feasibility study and action plan, in southeast Gulfton, to reduce street-level flooding and add greenspace

**6 NATURE-BASED COMMUNITY CAPACITY ACTION:** Increase gardens, parks, and natural habitats at schools for improved health and academic achievement

**7 COMMUNITY CAPACITY ACTION:** Create nature-rich civic spaces - including the 'Placita' Pilot Project - for cultural, physical, mental, and biodiversity health

# Community Action Summary

## Continued

### Envision Phase

#### Strategy Actions for a Greener Gulfton

The strategy actions for a Greener Gulfton outlined different design improvements that can be taken in the Gulfton neighborhood. These strategy cards were used during meetings and in-person events to communicate with the steering committee, Green Ambassadors, neighborhood residents, and other planning participants about what they want to prioritize in Gulfton. The cards are provided in English, Spanish, and Arabic and a full copy of these can be found in the Appendix of this report. These categories for the strategies include:

- MOBILITY ACTIONS,
- STORMWATER MANAGEMENT ACTIONS,
- ARCHITECTURAL/STRUCTURAL ACTIONS,
- NATURE-BASED COMMUNITY CAPACITY ACTIONS and,
- COMMUNITY CAPACITY ACTIONS.

1.0 MOBILITY ACTION





### MOBILITY ACTIONS - BICYCLE

BIKE LANES ADDITION/IMPROVEMENT | COVERED/LOCKED BIKE PARKING | BIKE RACKS | SHARED USE PATH OR TRAIL ADDITION/IMPROVEMENT

### ACCIONES DE MOVILIDAD - CICLISTA

ADICIÓN/MEJORA DE CICLOVÍAS | ESTACIONAMIENTO CUBIERTO/CON LLAVE PARA BICICLETAS | APARCABICICLETAS | ADICIÓN/MEJORA DE CAMINOS DE USO COMPARTIDO O SENDEROS

**A**ny action taken to improve the bicycle environment within the public Right-of-Way. Bike lanes are portions of roadways that have been designated by striping, signage, and pavement markings for the use of bicyclists. Adding or improving bike lanes, paths, and bicycling amenities can encourage more cycling by creating a safer and more comfortable environment.

**C**ualquier acción realizada para mejorar el entorno de la bicicleta dentro del derecho de paso público. Las ciclovías son porciones de las carreteras que han sido designadas por medio de franjas, señalización y marcas en el pavimento para el uso de los ciclistas. Añadir o mejorar ciclovías, los caminos y los servicios para ciclistas puede fomentar el uso de la bicicleta al crear un entorno más seguro y cómodo.

2.0 STORMWATER MANAGEMENT ACTION





### NON VEGETATED STORMWATER ACTIONS & RAINWATER HARVESTING

CISTERN | RAIN TANK | POROUS PAVEMENT | STORMWATER DRAIN MARKERS | POROUS PAVEMENT

### ACCIONES PLUVIALES NO VEGETADAS Y RECOLECCIÓN DE AGUAS DE LLUVIA

CISTERNA | TANQUE DE LLUVIA | ALMACENAMIENTO SUBTERRÁNEO | MARCADORES DE DESAGÜE DE AGUAS PLUVIALES | PAVIMENTO POROSO

**T**hese actions include stormwater management improvements that do not include vegetation. Rainwater harvesting are passive methods of gathering rainwater either with a container (like a cistern or tank) for future use or using pavement that allows water to infiltrate into the soil below. Stormwater drain markers are warning signs placed at storm drains to deter deliberate dumping of pollutants.

**A**cciones de aguas pluviales o de lluvia que no incluyen la vegetación. La recolección de aguas de lluvia son métodos pasivos para recolectar el agua de lluvia, ya sea con un recipiente (como una cisterna o un tanque) para su uso futuro o utilizando un pavimento que permita que el agua se infiltre en el suelo de abajo. Los marcadores de desagüe de aguas pluviales son señales de advertencia colocadas en los desagües pluviales para disuadir del vertido deliberado de contaminantes.

4.0 NATURE-BASED COMMUNITY CAPACITY ACTION




### HABITAT & WILDLIFE SUPPORT ACTIONS

TREE PLANTS (STREET TREES, PARKING LOT TREES, PARK TREES) | NATIVE VEGETATION PLANTING

### ACCIONES DE APOYO AL HÁBITAT Y LA VIDA SILVESTRE

PLANTACIÓN DE ÁRBOLES (ÁRBOLES PARA LA CALLE, ÁRBOLES PARA EL ESTACIONAMIENTO, ÁRBOLES PARA PARQUES) | PLANTACIÓN DE VEGETACIÓN NATIVA

**H**abitat and wildlife support actions include planting trees and native vegetation to restore habitat and make more habitable spaces. This may include planting trees or installing vegetation along streets, in parking lots, around apartments and living areas, and in parks.

**L**as acciones de apoyo al hábitat y a la vida silvestre incluyen la plantación de árboles y vegetación nativa para restaurar el hábitat y hacer más habitables los espacios. Esto puede incluir la plantación de árboles o la instalación de vegetación a lo largo de las calles, en los estacionamientos, alrededor de los apartamentos y las áreas habitables, y en los parques.

3.0 STRUCTURAL ACTION







### VERTICAL GREEN

GREEN COLUMNS (FREEWAYS) | GREEN FACADES (BUILDINGS) | GREEN TRELLIS | GREEN WALLS | GREEN FENCES | PASSIVE COOLING FENCE

### JARDINES VERTICALES

COLUMNAS VERDES (AUTOPISTAS) | FACHADAS VERDES (EDIFICIOS) | ENREJADO VERDE | MUROS VERDES | "CERCAS VERDES" | CERCA DE REFRIGERACIÓN PASIVA

**V**ertical green systems incorporate plants on vertical surfaces such as freeway columns, walls, and fences. These systems can include both vegetation and soils, such as green walls, or structures that hold vegetation such as green facades or green trellises.

**L**os sistemas verdes verticales incorporan plantas en superficies verticales como columnas de autopistas, muros y cercas. Estos sistemas pueden incluir tanto la vegetación como los suelos, como los muros verdes, o las estructuras que sostienen la vegetación, como las fachadas verdes o los enrejados verdes.

5.0 COMMUNITY CAPACITY ACTION





### PUBLIC ART

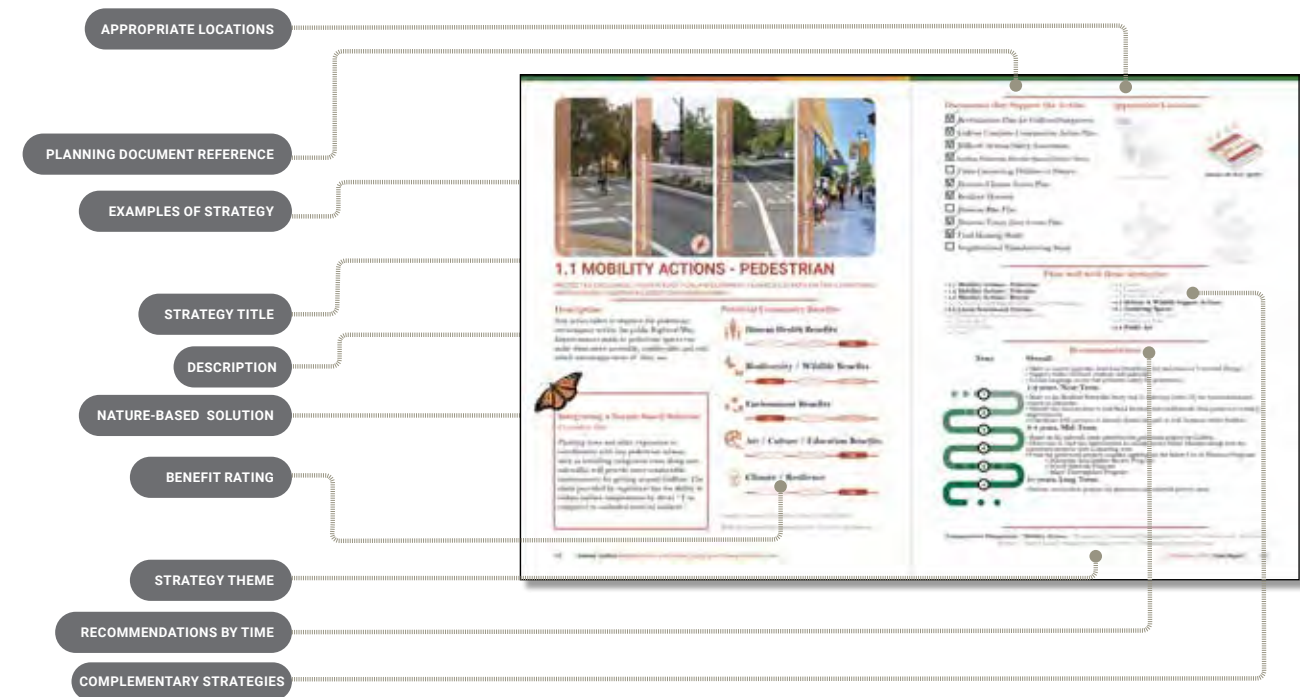
SCULPTURE | MURAL | SPACES

### ARTE PÚBLICO

ESCUPTURA | MURAL | ESPACIOS

**P**ublic art is works made through the use of imagination and creative skills by artists in any form that is visually and physically accessible to the general public.

**E**l arte público son obras realizadas mediante el uso de la imaginación y las habilidades creativas de los artistas en cualquier forma que sea visual y físicamente accesible para el público en general.



## Community Action Summary Continued

### Act Phase

#### 'La Placita' Pilot Project

Gulfton's need to increase biodiversity and open space opportunities for its residents will require developing strategies at multiple scales. As stated in previous sections, these range from large street reconstruction projects to smaller interventions.

Since many of these strategies will take a number of years to implement, it is important to develop smaller, more tactical interventions in the short term. These interventions can provide opportunities for residents to enjoy the outdoor space while increasing social and nature access opportunities. As part of the public engagement process multiple strategies were presented from which providing social interaction opportunities was selected as one of the top priorities for a pilot project.

The pilot project developed brings the idea of a "Placita" (small plaza) that can be used by residents to socialize, enjoy nature and in some cases, promote economic development by supporting businesses such as food trucks or street vendors. The pilot project's conceptual design intends to create a semi- temporary installation that can be located at any location with a large pavement area such as a parking lot and can be moved to different locations as needed.

#### 'La Placita' Pilot Project Details

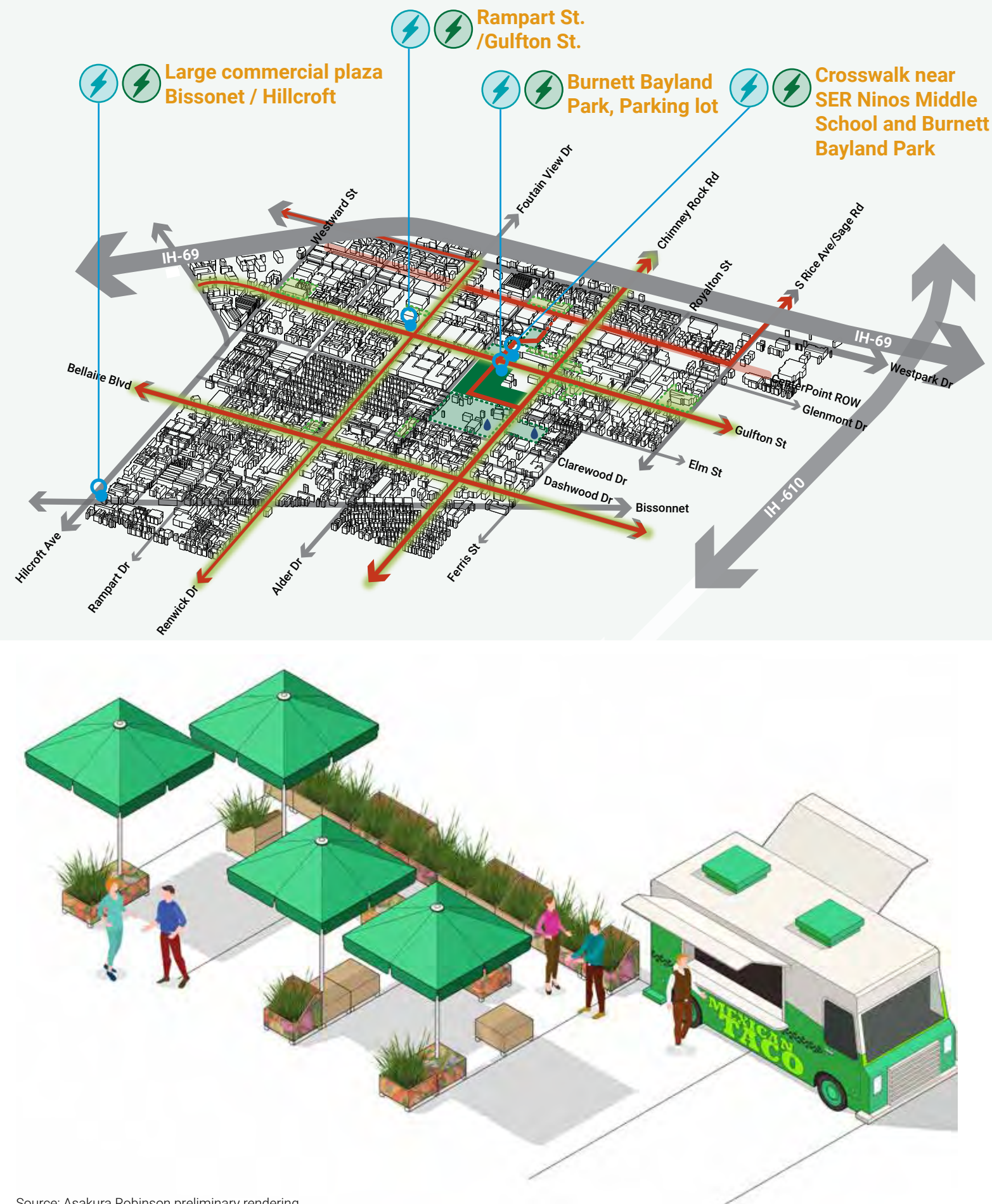
The pilot project consists of a simple modular system of planters and seating elements that can be arranged as needed to promote social gathering, planting, or even art interventions. The modular system selected is derived from the dimensions of a parking space so that it can be arranged within the limits of any surface parking area in Gulfton. The modules can be made out of wood and be movable with casters. Although location can be in any surface parking or large pavement area it is recommended to be located where there is already an established use such as a food truck or a street vendor, or even a school parking lot.

In addition to planting and seating, art is considered an important element to express the diversity of cultures in Gulfton, serve as an educational opportunity, or bring nature to the community in a more artistic way.

Other iterations of the module were done with local artists to bring dynamism to the space and additional artistic opportunities, see following pages.

#### Implementation Steps

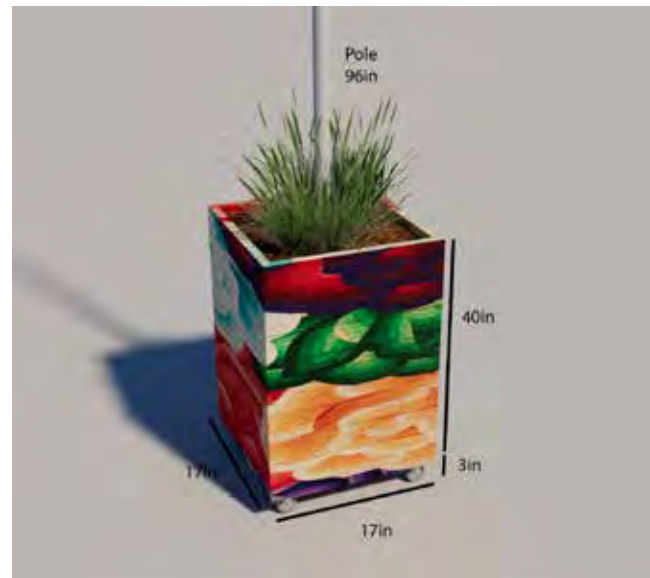
- Build modules in collaboration with UP Art Studio and local artists
- Select location in Gulfton and storage partner (school as a potential)
- Identify planting with assistance of TNC, the community or Ambassadors
- Plant modules at an event with the community



Source: Asakura Robinson preliminary rendering

## 'La Placita' Pilot Project Process

These preliminary pilot project renderings (shown on the previous two pages) were shared with UP Art Studio and developed further. These renderings are shown here. The art in the current renderings is a placeholder for the final artwork, which will be finalized with community stakeholder input. As part of the implementation process, UP Art Studio will present two or more artwork concepts to be considered. Each of these concepts will be tailored around different themes that arose from the Greener Gulfton plan such as plants native to Houston and Gulfton, the diverse cultures of the residents of Gulfton, honoring the indigenous ancestors before us, climate impact, urban heat, etc.



Source: UP Art Studio's process rendering



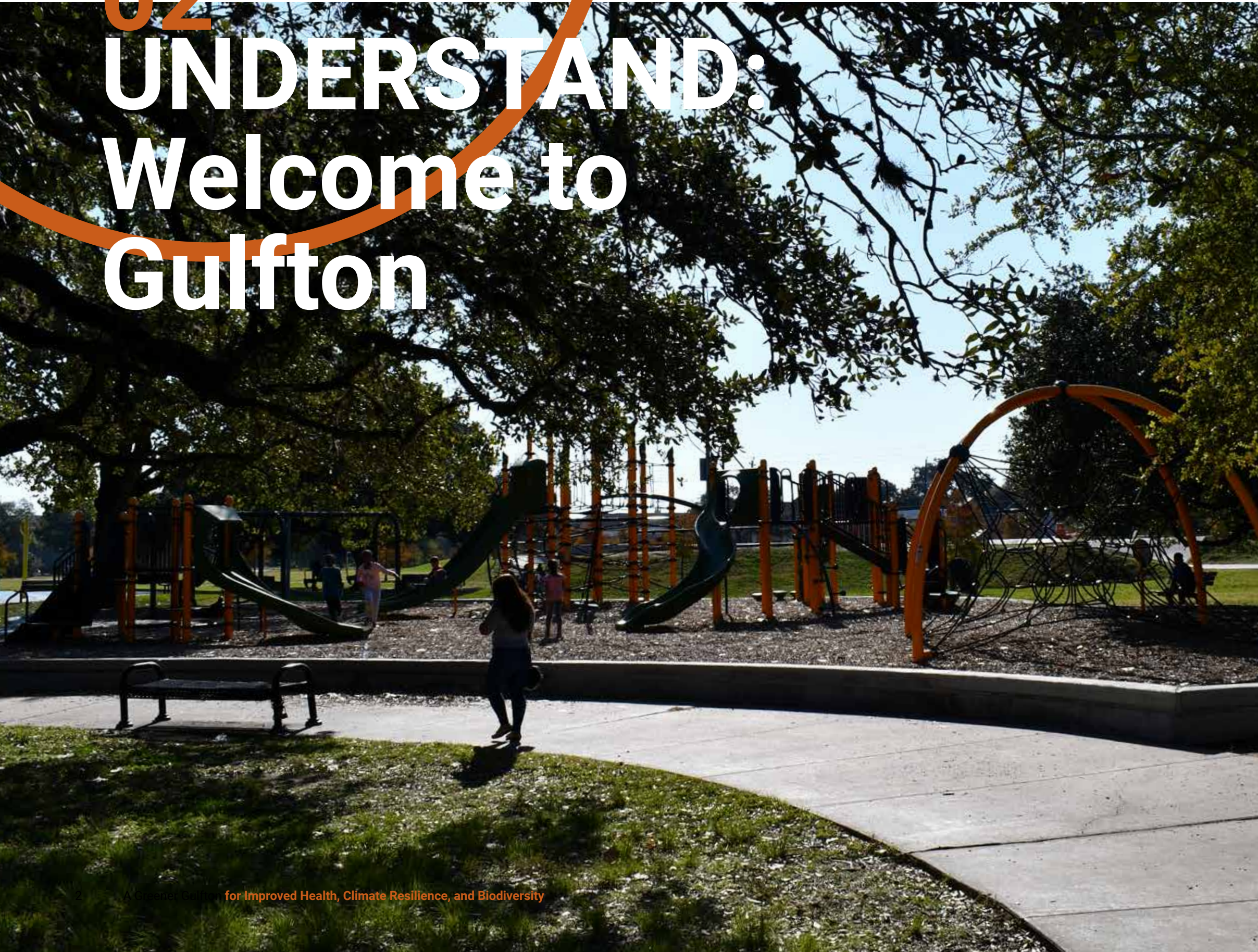
Source: UP Art Studio's process rendering



Source: UP Art Studio's process renderings

02

# UNDERSTAND: Welcome to Gulfton



**Gulfton: Past. Present. Future**

**Gulfton Residents**

**Who and What is Here?**

**What is Here by Zone?**

**What is Going On?**

**What Work Inspires Us?**

## **Understanding Gulfton**

The understand section of the report starts with a brief history of the region and existing conditions within Gulfton, including zone comparisons across four key areas within the Super Neighborhood. We also outline the main planning documents within the neighborhood and in the region, and provide case studies that reflect a combination of art and nature which inspire us.

# Gulfton: Past. Present. Future.

## Gulfton's Ancient Roots

Gulfton is often seen as a relatively new community. It's first subdivision, Shenandoah, was not established until the 1950s and many of its largest apartment complexes, which predominate the landscape, weren't built until the 1960's and 1970s. Yet, Gulfton has been home to a variety of living communities (both human and wild) for thousands of years. These deep historical roots can serve as an inspiration and guide for how nature, and its many deep cultural, resilience, health, and artistic dimensions, can uplift the current and future living communities of Gulfton.

A traveler visiting the Gulfton area of 12,000 years ago would have seen a dramatic landscape populated by Columbian mammoths, giant ground sloths, saber-toothed cats, and even American lions. These creatures would have inhabited our region's native grasslands, forests, bayou systems, and wetlands. Living alongside these giants were some of Gulfton's most familiar wildlife species such as northern raccoons, gray squirrels, leopard frogs, opossums, blue jays, and its pollinators – they were the survivors of the Ice Age.

As importantly, humans were an essential part of this living community. Local archeological digs have revealed that Indigenous peoples first entered our area at least 13,500 thousand years ago. These peoples had a big impact on the land through hunting and through their extensive use of fire. They were Gulfton's first environmental stewards. Over time the ancestors of these ancient peoples, and others arriving

at the area, would continue to use what is now Gulfton as hunting grounds and as a transit zone in between local bayous such as Buffalo Bayou and Brays Bayou. One of those tribes was called the Karankawa, a local tribe of hunter-gatherers, who migrated between the coast and the prairies that once blanketed most of the Houston region, including Gulfton.

By the early 1800s, the Karankawa, Akokisa, and other local tribes had been decimated by diseases or pushed out of their ancestral lands by settlers, yet, there are reminders of their presence. Many of the indigenous plants still found in Gulfton today were used for food or medicine by the Karankawa and other groups – a living link to Gulfton's first residents. There are also over 50,000 self-identifying Indigenous People in Houston today, including some Gulfton residents. **It is important to note that community members repeatedly expressed strong support, during the Greener Gulfton planning process, for remembering and uplifting ancestral influences, their own and the neighborhoods Indigenous presence.**

## Gulfton's Agricultural Age

American and European settlers began to colonize what is now the Greater Houston Region in the 1820s, drawn by the region's rich river soils (agriculture), prairies (cattle raising), and access to the Gulf of Mexico for trading agricultural goods for other goods. At the time, Gulfton was still a wild coastal prairie dominated by indigenous grasses, like little bluestem grass and sunflowers. The area was a part of the Mexican state of Coahuila y Tejas and was part of the Austin Colony. These prairies were home to red wolves, meadowlarks and countless insects. They were also home to feral longhorn cattle and wild horses. Embedded in these prairies were small, seasonally wet "prairie potholes" - wetlands. Together, these features attracted

cattle ranchers and hunters. In the late 1800s Rice University founder William Marsh Rice established the 9,449-acre W.M. Rice Ranch and cattle production, and oil exploration were prevalent in Gulfton. In 1908, William Wright Baldwin purchased this ranch from the Rice estate and established Westmoreland Farms in what is now Gulfton and adjoining City of Bellaire. Westmoreland Farms was conceived of as a residential community surrounded by "truck farms" – small farms whose goods were trucked into adjoining towns and the city of Houston. These farms included both row crops and a prominent dairy. There was also an equestrian center located near what is now Burnett-Bayland Park. By 1944 the neighborhood was a mixture of truck farms, wild nature, and individual homes. It is important to note that residents expressed strong support for reinvigorating Gulfton with gardens and orchards – a way of connecting to their rich cultural heritages and supporting healthy lifestyles while reconnecting to Gulfton agricultural roots.

## Gulfton's Modern History and Future

In the 1950s the Shenandoah subdivision became modern Gulfton's first major residential development, a community of small ranch-style homes and large trees located in the heart of the neighborhood. In the 1960s and 1970s, Houston's booming economy attracted large numbers of white, single, young energy workers. In response developers constructed, and marketed, thousands of new apartment units featuring amenities such as swimming pools, laundry rooms, and easy access to the Galleria area. Many new Gulfton residents were transplants from the mid-west and northeast. In the early 1980s Houston's oil economy slumped and many of Gulfton's residents moved out – decreasing rents and increasing vacancies. This trend led apartment owners to rebrand their apartments to newly



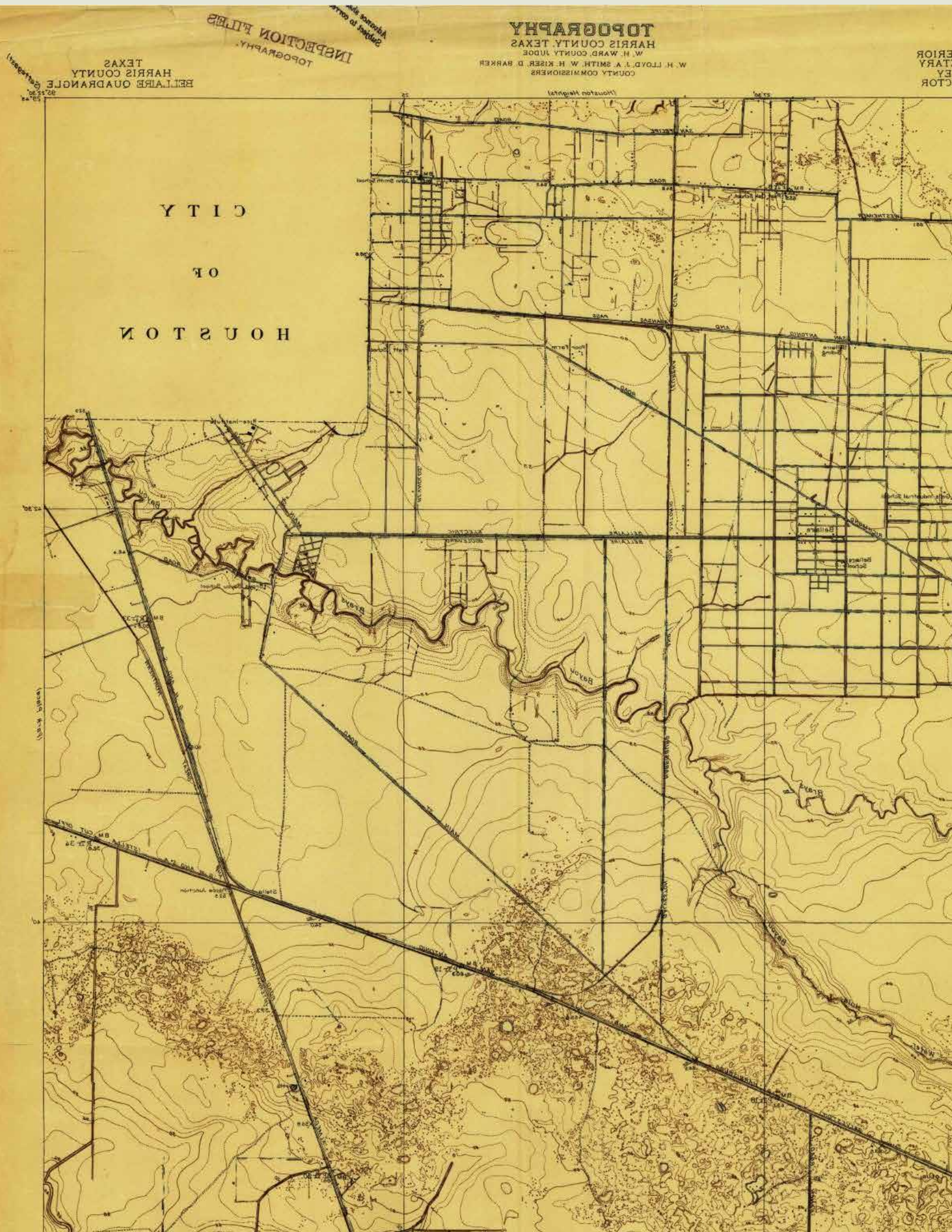
Local Indigenous dart points  
Source: Jason Barrett, Texas Department of Transportation



State of Coahuila y Tejas, including the Austin Colony (in purple)  
Source: Woodson Research Center, Rice University



Native coastal prairie, Gulfton's original landscape  
Source: Jaime González



arriving immigrant families from Mexico, Central America, Vietnam and other locations. By 2000, the number of Gulfton residents doubled, even without the addition of housing.

Today, Gulfton’s dazzling tapestry of international cultures, and welcoming character, is well recognized and serves as a great source of strength, often giving rise to Gulfton’s nickname – “Houston’s Ellis Island”. Yet, it is important to note that the style of intense urbanization used to build modern Gulfton, replaced much of Gulfton’s original ecology with imperious surfaces which absorb more heat and less water than natural environments. This land use change has made Gulfton one of Houston’s physically hottest neighborhoods and one where street flooding has been an issue, particularly in the southeast portion of the neighborhood.

This urbanization has also imperiled Gulfton’s wild residents, providing relatively little habitat for pollinators, birds, and indigenous plants in comparison to other neighborhoods throughout the city. Residents participating in the Greener Gulfton planning process consistently expressed strong support for creating new nature-rich areas (including ponds, tree plantings, gardens, and orchards) to attract butterflies, birds, and other wildlife which adds to the aesthetic appeal of the neighborhood while also uplifting mental, physical, cultural, and spiritual health of residents.



Longhorn cattle  
Source: Ed Schipul, Wikipedia



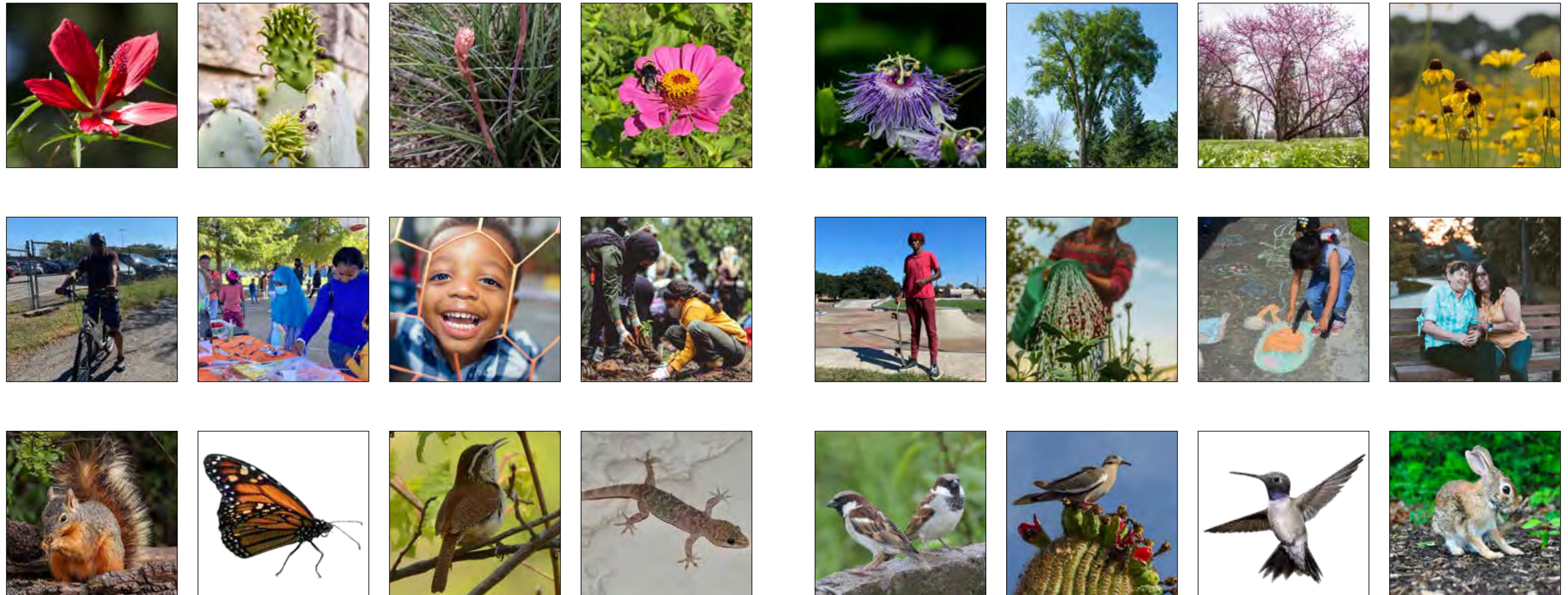
Article about Westmoreland Farms.  
Source: Woodson Research Center, Rice University



Map of Westmoreland Farms (shown in green)  
Source: Woodson Research Center, Rice University



# Gulfton Residents



**58%** of Gulfton residents were born outside the U.S.

Houston's Gulfton neighborhood is a vibrant, diverse community, with strong leadership, shared aspirations, and origins from across the planet. Gulfton's wild community is also vibrant and sports both Indigenous wildlife and plant life living alongside exotic plants prized for their

Of that 58%, **75%** were born in Latin America

cultural significance and beauty. Together, the human and non-human residents of Gulfton form a vibrant living community who need and deserve more nature for their health and wellbeing.



**209** species of plants and animals were found throughout Gulfton based on the citizen science application, iNaturalist.

The **common trees species** observed include: Elms (*Ulmus sp.*), Pines (*Pinus sp.*), Ashes (*Fraxinus sp.*), Oaks such as, Water Oak (*Quercus nigra*), Willow Oak (*Quercus phellos*), Southern Live Oak (*Quercus virginiana*) Chinkapin Oak (*Quercus muehlenbergii*), Pecan (*Carya illinoensis*), and Sugar Hackberry (*Celtis laeigata*).

# Who and What is Here?

## People of Gulfton

Understanding the ethnic, cultural, and ages of the people in Gulfton ensures we are tailoring the planning process and product to reflect the resident's expectations, and developing engagement strategies that are accessible and available to all residents of Gulfton. In addition, it provides an opportunity to work towards long-term stewardship of this plan's greening recommendations that is responsive to all of these factors.

### What we found:

- **Gulfton is an Immigrant Hub:** 58% of residents are born outside the U.S. with 75% of that born in Latin America.<sup>1</sup>
- **Gulfton Residents Speak Many Different Languages:** 14.9% of residents speak only English, 70% speak Spanish.<sup>2</sup>
- **Gulfton Residents Are Relatively Young and Include Children:** 34% of residents are younger than 20 years old, and 37% are less than 40 years old.
- **Gulfton Residents Live with Less Economic Resources:** 36% of residents live below the poverty line with a median household income of \$31,651 (compared to the median of Houston at \$52,450). Research and recommendations should look to support economic development for the existing residents, as well as provide opportunities to strengthen the community and support the younger generations.

Housing affordability and ownership are issues that are only going to place Gulfton residents that are already vulnerable at higher risk of economic instability and loss of stable housing.

### What we found:

- **Gulfton Residents Primarily Rent and Live in Multi-Family Residential Units:** Only 4.3% of residents own a home, compared to 37.5% in Houston. The main housing type in Gulfton is multi-family residential with approximately 18,846 occupied housing units.
- **Gulfton Residents Need Affordable Housing:** 50% of renters in Gulfton spend 30% or more of their income on rent. Planning for sustained housing affordability must be considered as part of research and recommendations to properly address equity.<sup>3</sup>

Understanding equitable access to assets in both economic and physical proximity is important. Building from the community's strong foundation of social assets, recommendations should address issues of economic hardship and lack of green and biologically diverse open spaces, in order for the community to continue to be able to adapt and thrive as one.

### What we found:

- **Gulfton Residents Have Some Community Assets:** Gulfton's assets include community centers such as Baker Ripley and Southwest service center, Burnett Bayland Park, as well as schools with Spark Parks and places of worship.
- **Gulfton is Lacking Public Park Space:** The 2015 Houston Parks Master Plan recommends 8 acres of park space per 1,000 people, 86 additional acres would need to be added to the Gulfton neighborhood to meet these recommendations. About 40% of residents live within a 10-minute walk to a park.

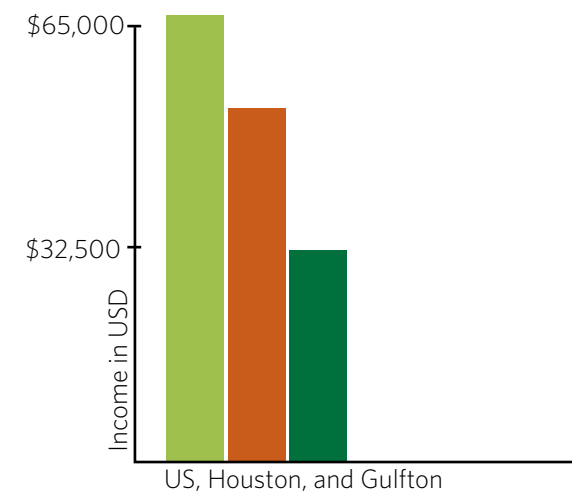
Figure 1.0 Languages Spoken

LANGUAGE SPOKEN	GULFTON	HOUSTON
Only English	14.9%	51.2%
Spanish	70.0%	38.8%
Other and unspecified languages	8.2%	1.2%
Other Indo-European Languages:	3.2%	2.1%
French, Haitian, or Cajun	1.2%	0.6%
Chinese (including Mandarin, Cantonese)	1.0%	1.3%
Tagalog (including Filipino)	0.4%	0.4%
Other Asian and Pacific Island Languages	0.4%	0.8%
Vietnamese	0.3%	2.2%
Arabic	0.3%	0.7%
Russian, Polish or other Slavic language	0.1%	0.3%
Korean	0.1%	0.2%

Source: ACS 5-year Estimate 2015-2019

Figure 1.1 Income across scales

**\$31,651** is the median household income for Gulfton, compared to **\$52,450** for Houston, and **\$65,712** in the United States



Source: ACS 5-year Estimate 2015-2019

- **Gulfton is Cultural Rich and Reflected Through Urban Art:** The Gulfton Story Trail Mural Project brings the spirit of the people living in the neighborhood to the fore, and is a creative way to provide a more welcoming space. The project was made possible by a partnership between Culture of Health — Advancing Together (CHAT), a Houston area nonprofit organization, along with Houston Arts Alliance (HAA) and the Mayor's Office of Cultural Affairs.

**What We Saw:** Gulfton Recreates - During our site visit on November 6 2021, we observed families coming together at Burnett Bayland Park for organized recreation such as soccer and basketball, and solo recreation such as jogging and skateboarding.



Gulfton resident documenting nature and heat  
Source: Jaime González



**CLIMATE CHANGE:** In order to identify nature-based solutions to Climate Change, we must understand how vulnerable communities experience climate change impacts. *Frontline communities* should be part of decision making toward identifying local priorities, addressing access to natural resources, and ensuring equity in access to public services.<sup>4</sup>

# Who and What is Here?

## Environment & Climate

Land cover, land use, and understanding how an urban area has developed over time helps us to interpret the environment and infrastructure of the neighborhood. The ways these urban spaces are stitched together, and what networks of mobility link areas together illuminate spatial characteristics that can be improved or expanded in Gulfton.

### What we found:

- Gulfton is Highly Urbanized and Developed:** The majority of the neighborhood features highly developed land uses including, multifamily housing, commercial, and industrial with parking lots, streets, and buildings. Although this decreases the availability of open space in the neighborhood, it is also an asset to the community since its population density makes it an ideal place for a more walkable community.
- Gulfton Includes Mixed Land Uses in Close Proximity:** Mixed land uses is not necessarily a poor indicator of the urban environment, however in the neighborhood mobility networks are often interrupted between land use types.
- Gulfton has Land Use Opportunities:** The land use maps show some opportunities within the neighborhood that include: a east-west utility corridor north of Glenmont Street, Harris County owned land south of Burnett Bayland Park, and some vacant land.

Gulfton is one of the most challenging and dangerous places to walk or bike in the City of Houston. Using a lens of equity and environmental justice, new transportation infrastructure can address the issues of both safety and environmental health. What we found:

- Gulfton Residents Do Not All Have Vehicles:** Approximately 12.7% of households do not have access to vehicles, and families rely on other means of transportation.
- Gulfton Lacks Connected Sidewalks:** The sidewalk conditions in the community are of poor quality, with 41% of existing sidewalks having some kind of obstruction.
- Gulfton Needs to Improve Street Right of Way (ROW) Safety:** In most cases, streets are designed to carry large amounts of vehicles with traffic lanes. This places a major challenge for pedestrians crossing wide segments of road or with limited sidewalk space. Pedestrian and bicycle crashes with vehicles are not uncommon in the neighborhood, with a total of 41 pedestrian and bike crashes, 6 of which resulted in a fatality from 2014–2018.
- Gulfton Vehicular ROW is Relatively Wide:** Many streets are between 50'- 60' as local or collector streets, and tend to be wide, multi-lane roads that are utilized primarily by vehicles passing through the neighborhood. and/or pilot project.

High urban temperatures are caused by a density of parking lots, buildings, streets, and other impervious surfaces that reflect heat back into the atmosphere, causing urbanized areas to be warmer than surrounding, less developed neighborhoods. High temperatures and air

pollution can harm health by triggering asthma and heat-related illness. What we found:

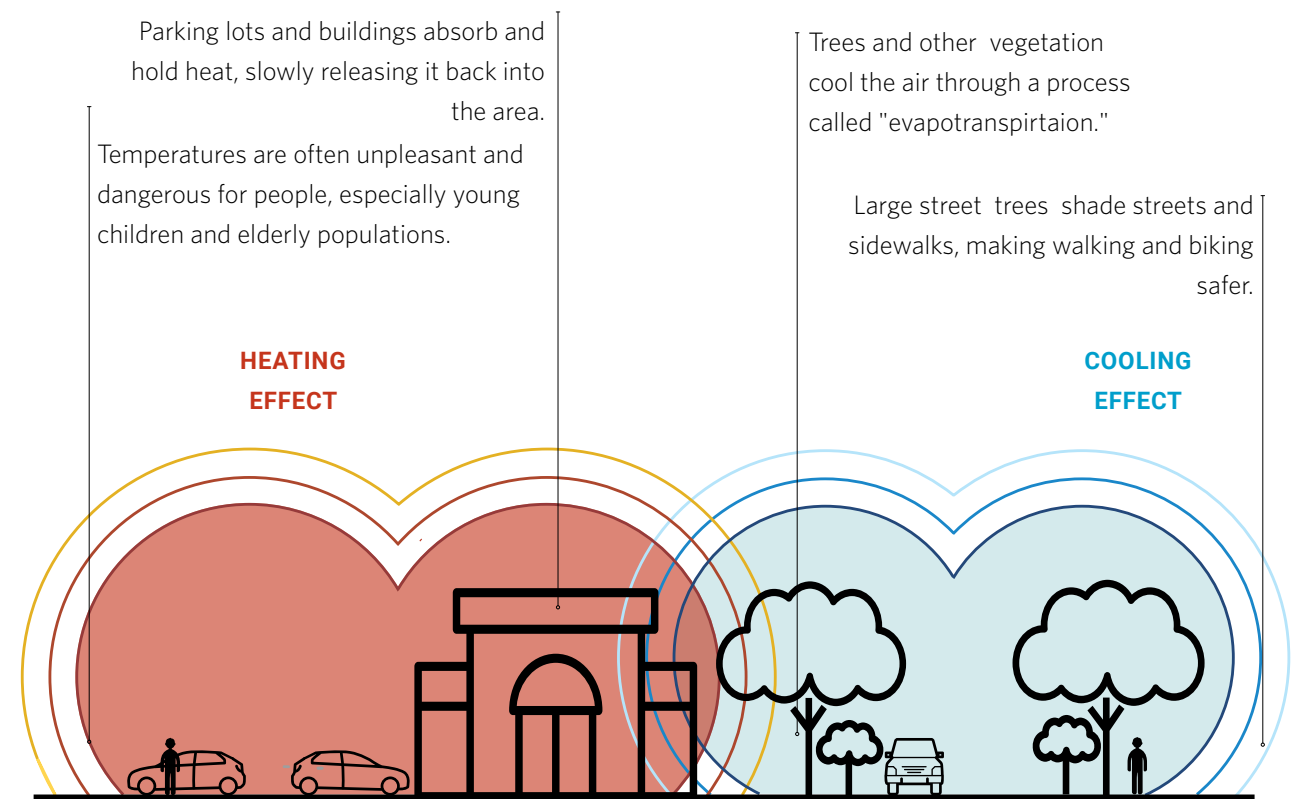
- Gulfton Experiences High Urban Heat:** The highly urbanized character of the neighborhood makes it vulnerable to high urban heat, especially in the northern portion of the area along Southwest Freeway, I-69 where most residents are located.
- Gulfton's Urban Heat Shifts Through the Day:** Higher urban heat shifts from east to west in the neighborhood with heat lingering late into evening. The neighborhood has many paved parking lot areas which contribute to urban heat and reduce comfort for pedestrians. Areas of large open vegetated space, such as Burnett Bayland Park is cooler than the surrounding neighborhood.

**What We Saw:** Gulfton's People-Centered Infrastructure Need - During our site visit on November 6, we observed neighbors with strollers and walking with young children through the area. We also biked around the neighborhood and experienced multi-roadways that felt unsafe to be on and gaps along sidewalk infrastructure. In addition, some of the less immediately apparent concerns are flooding in the south-eastern portion of the neighborhood, which is more easily noticed in the data to follow.



**CLIMATE CHANGE:** Houston will go from experiencing 10 days a year with a heat index of 105 or more during our hot summers today to 74 days a year by 2050.<sup>5</sup>

Figure 1.2 Urban Microclimates



# Who and What is Here?

## Ecology

Understanding your local ecoregion provides an idea of what plant species and plant communities the site supported historically and what it is capable of supporting in the future. Ecoregions are areas of land or water that contain geographically distinct climates, groups of plant and animal species, and environmental conditions.<sup>6</sup> Animals that have adapted to conditions within the gulf coast region still rely on important vegetation for survival; for example, the Monarch Butterfly (*Danaus plexippus*) needs both Milkweed (*Asclepias sp.*) and abundant nectar sources to complete its long migration.

### What we found:

- **Gulfton is in the Humid Gulf Coastal Prairie Ecoregion:** Approximately 1% of the Gulf Coastal Prairie Ecoregion remains in Texas; much of this ecosystem has been converted to out landscape and land use types.
- **Gulfton and the Houston Region is a Migration Route:** Over the course of a season, millions of birds species pass through Texas. This winged migration also includes bats and insects of important significance.

Bayou systems throughout Houston are key routes for urban wildlife to move safely throughout the city. The prehistoric-looking alligator snapping turtle (*Macrochelys temminckii*) has been found in Buffalo Bayou in downtown Houston! Climate change is likely to increase the

severity of rainfalls, potentially causing homes that are currently within an area of minimal flood hazard to be in a flood-prone area. Reducing impervious cover and adding green infrastructure now may have flood benefits in the future. What we found:

- **Gulfton is in the Brays Bayou Watershed and the Southeastern Portion of the Neighborhood is in the Floodplain:** Brays Bayou is an urbanized watershed that covers 127 square miles and severe flooding occurs at least once every 10 years.
- **Gulfton Does Not Directly Connect to Bayou Trails:** Brays Bayou and the corresponding bayou trail is approximately 1.5 miles from the southern edge of the neighborhood.

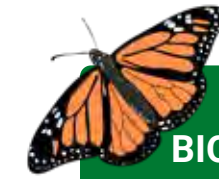
Measuring and understanding the vertical complexities of vegetative cover is important because this three-dimensional information can serve as indicators for the potential of green space to support biodiversity, nature-based infrastructure (stormwater management), and climate mitigation, among other ecosystem services. In addition, biodiversity richness supports mental health for people but also ensures a thriving ecosystem for nature. What we found:

- **Gulfton's Vegetative Cover and Tree Canopy is Not Evenly Distributed Throughout the Neighborhood:** The densest vegetative cover is located in the Shenandoah community and associated with Burnett Bayland Park in Gulfton. In general streets lack trees to provide consistent shade and enhance biodiversity of species throughout the neighborhood. Some streets such as Gulfton, Alder, Renwick and Bellaire have trees sporadically along medians or along sidewalks. The species most observed are Elms, Pines and Ashes which vary in growth rates, however a more thorough tree

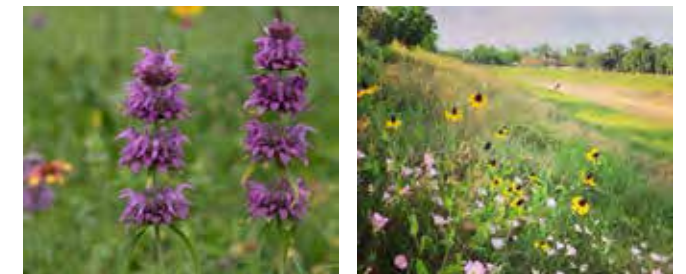
inventory should be done to understand the health and diversity of trees in the neighborhood.

- **Gulfton has Low Biodiversity Richness:** The lack of natural areas and green space in Gulfton has a negative effect on biodiversity in the neighborhood. In addition, not many bird species were observed in the area.

**What We Saw:** Gulfton's Green Thumb - During our site visit on November 6, we observed neighbors and community groups tending to the pollinator garden at Burnett Bayland Park. We also noticed people using any free outdoor space around multifamily housing units to plant vegetation, even using 5-gallon buckets from Lowes and Home Depot for fruit trees.



**BIODIVERSITY** is the variety and number of living things on Earth and includes all species, from the fungi living on the roots of a maple tree, to the owl that lives in its branches, to the tree itself. It includes diversity within species, between species, and among ecosystems.

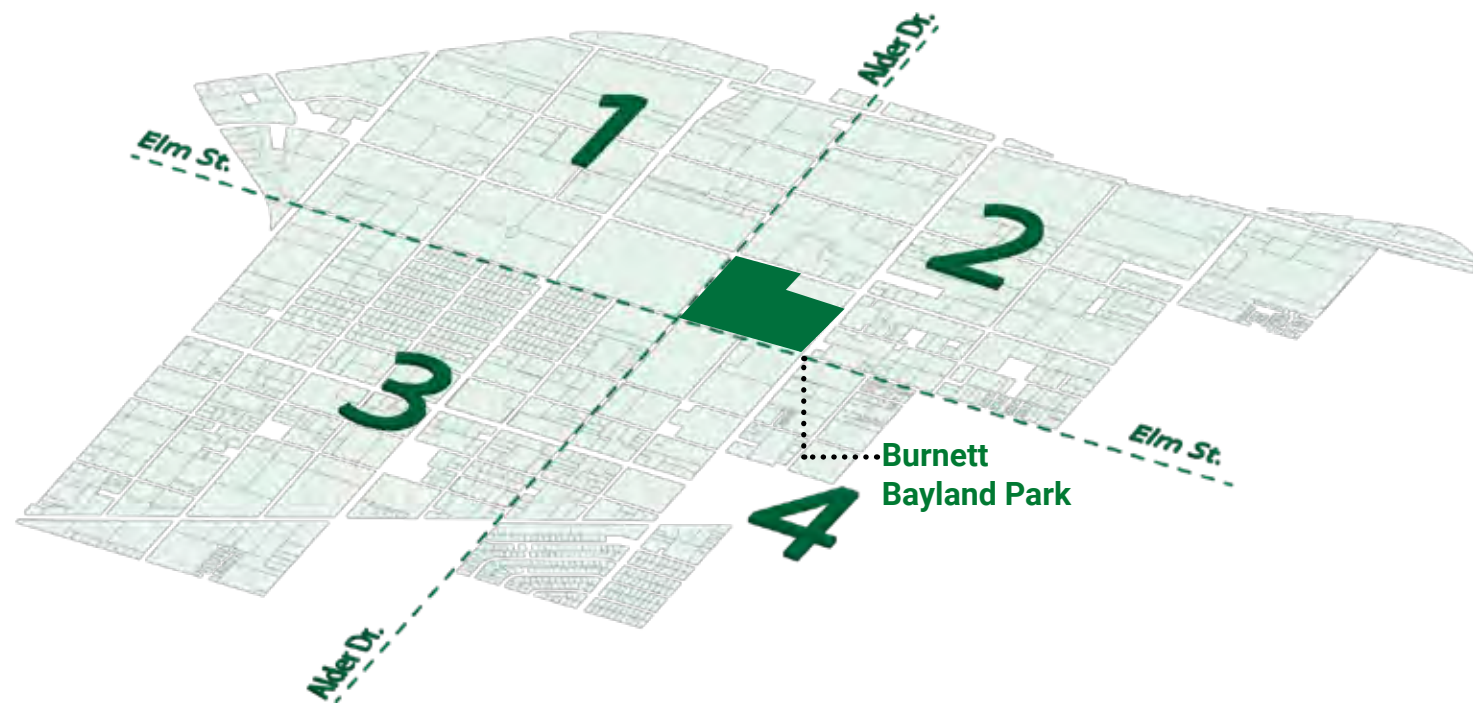


Prairies are part of the ecoregion of Houston, and understanding their plant communities can help in identifying supporting context-sensitive and locally adapted plantings responsive to these conditions throughout Gulfton.



Understanding the role of vegetation along ditches throughout Gulfton can help not only with controlling or reducing sediment, but also increasing tree canopy coverage; overall planting along ditches can increase biodiversity. Pictured we see bald cypresses along typical Gulfton Street.

# What is Here by Zones?



**CLIMATE CHANGE:** Gulfton was the hottest Harris County neighborhood identified in the 2020 Houston Heat Watch Campaign - a full 17 degrees hotter than the coolest community in the county.

## Gulfton Zones: Overview

As part of our analysis, our team split the Gulfton neighborhood up into four zones to create distinct community profiles that help shape the themes of recommendations by zone. Each zone has concerns of interest that helps guide the neighborhood-wide recommendations and priorities.

### Zone 1

The northwest section of the Gulfton Super Neighborhood is bounded to the north by I-69/Southwest Freeway and is one of the densest zones of the neighborhood. The primary land use is multi-family residential where 60% of the residents were born outside the United States. Due to the built-out, impervious conditions, urban heat can be high and tree canopy is limited accounting for 12% of the surface area. There are opportunities to enhance nature-based strategies on private property and at local schools.

### Zone 2

The northeast section of the Gulfton Super Neighborhood is bounded to the north by I-69/Southwest Freeway. The land use is a mixture of industrial, commercial, and multi-family residential where 48% of the residents were born outside the United States. Urban heat can be high in this zone. Tree canopy is limited, accounting for 10% of the surface area, and much of the tree cover is associated with Burnett Bayland Park. There are opportunities to enhance park space at Burnett Bayland Park and at schools within this part of Gulfton.



### Zone 3

The southwest section of the Gulfton Super Neighborhood is bounded to the west by Hillcroft Avenue. The land use is a mixture of industrial, commercial, multi-family, and single-family residential where 63% of the residents were born outside the United States. Urban heat can be high in this zone, however, the tree canopy accounts for 14% of the surface area, and much of the vegetation is associated with the Shenandoah neighborhood. There are opportunities to create 'cooling corridors' from residential to more commercial areas of Gulfton.



### Zone 4

The southeast section of the Gulfton Super Neighborhood is bounded to the west by Alder Drive. The land use is a mix of industrial, commercial, multi-family, and single-family residential where 56% of the residents were born outside the United States. Urban heat is lower in this zone. Tree canopy accounts for 16% of the surface area, and much of the vegetation is associated with the Chimney Rock Center, owned by Harris County. Eighty-eight percent of the zone is within the 100-year floodplain. There are opportunities to transform the land around the Chimney Rock Center to create a community asset and effective site for stormwater capture.



# Gulfton Super Neighborhood

## People

DEMOGRAPHICS  
ACS Data 2015-2019

LAND USE  
Urban Footprint, 2021  
H-GAC, Landcover

- Multi-Family Residential
- Civic / Institutional
- Industrial / Commercial
- Religious / Spiritual

CONNECTIVITY

METRO, Public Transit  
H-GAC, Pedestrian  
Infrastructure  
Houston Bike Plan/H-GAC,  
Bicycle Infrastructure

- existing bike paths
- proposed bike paths
- bus routes

SUMMER HEAT  
SNAPSHOT

Houston H3AT Team,  
Measured August 7, 2020  
7:00-8:00pm

SURFACE  
AREA IN  
FLOODPLAIN

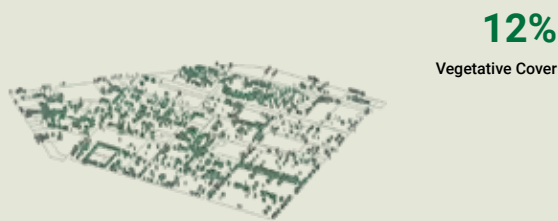
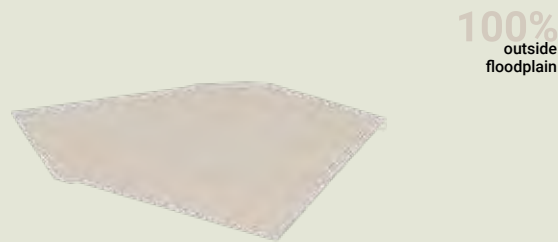
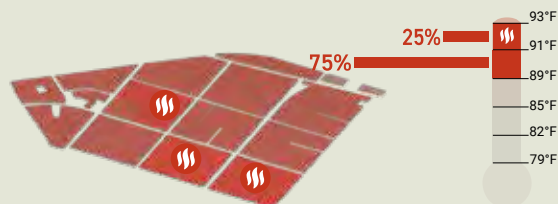
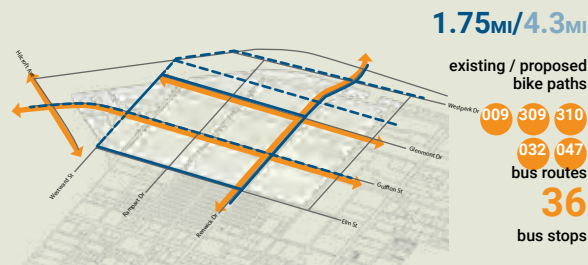
FEMA, Harris County  
Scale, all jurisdictions

TREE CANOPY  
COVERAGE\*

\* Vegetation over 9 feet  
tall  
iNaturalist Download, No-  
vember 23, 2021 & HARC  
Research for Gulfton

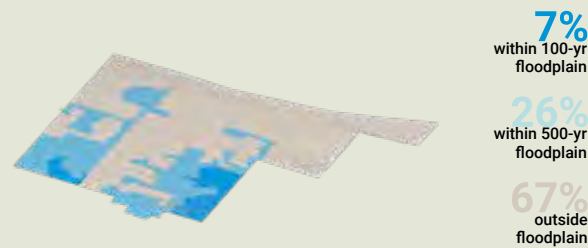
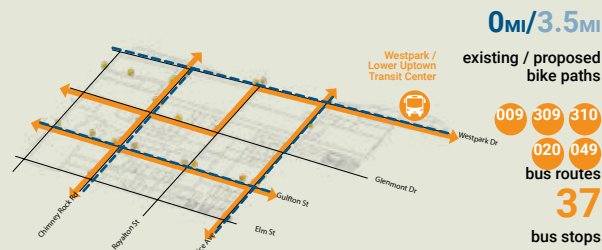
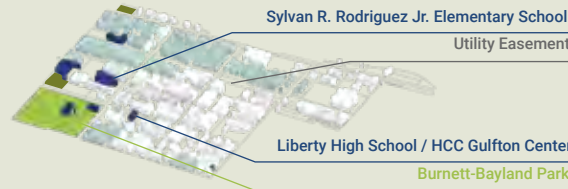
### Zone 1

60% Born outside US  
40% Born in US



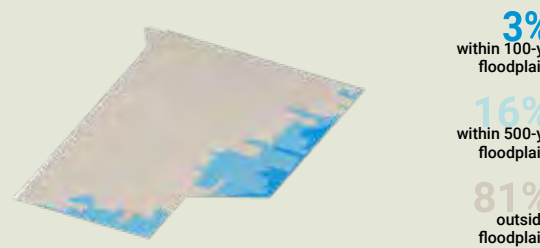
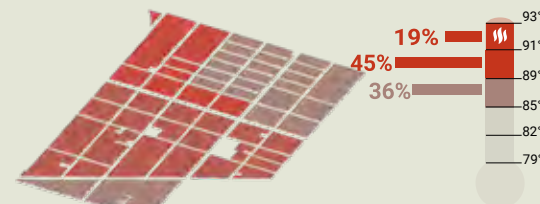
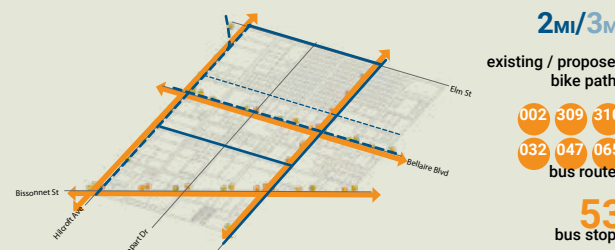
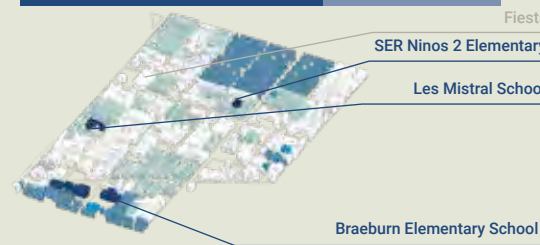
### Zone 2

48% Born outside US  
52% Born in US



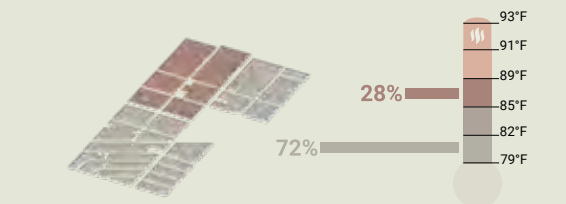
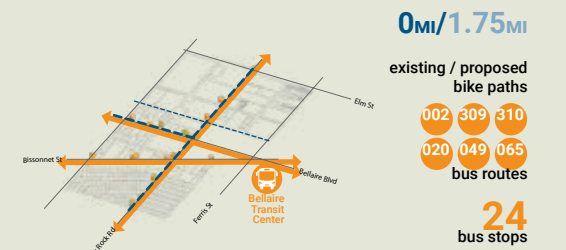
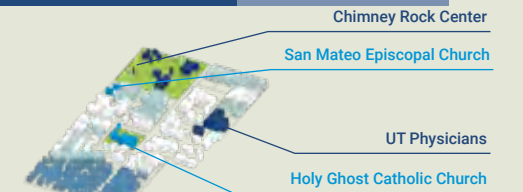
### Zone 3

63% Born outside US  
37% Born in US



### Zone 4

56% Born outside US  
44% Born in US



# What is Going On?

The following provides an overview of existing plans and initiatives that the Gulfton neighborhood and the surrounding area has undertaken, and their relevance to the development of the Greener Gulfton Plan.

## Revitalization Plan for Gulfton-Sharpstown

The Revitalization Plan for Gulfton-Sharpstown was a result of the collaboration across 70 organizations, neighborhood groups, and public agencies to strategize an action plan for Gulfton-Sharpstown. This plan creates a vision that focuses on housing affordability and quality, transportation access and safety, community health and wellness, and education and workforce development.

## Gulfton Complete Communities Action Plan

The Gulfton Action Plan outlines the vision, policies, goals and projects that have been identified through a community planning process to move the neighborhood towards a healthier, more prosperous, resilient, and equitable future. From the priorities identified in the Complete Communities Action plan, Greener Gulfton can focus on expanding parks and open spaces, health, civic engagement, neighborhood character and mobility and infrastructure.

## Houston Climate Action Plan

The Climate Action Plan (CAP) is a community-wide effort that includes strategies and actions that are evidence-based, practical, and cost effective. The CAP consists of four focus areas: Transportation, Energy Transition, Building Optimization and Materials Management. The actions were prioritized based on possible emission reductions, potential to improve community equity and resilience, reduce pollution and waste, and support the local economy.

## Resilient Houston

The Resilient Houston document is a companion document to the Houston Climate Action Plan. The Greener Gulfton planning process is a holistic effort that brings together expertise as it relates to neighborhood scale planning, public health, urban ecology, equity, art, and design. There are opportunities to integrate and embed particular goals set in the Resilient Houston plan in the Greener Gulfton project.

## Houston Bike Plan

The Houston Bike Plan outlines a clear vision to be a Gold-level Bicycle Friendly City by 2027 and establishes a work for how to achieve that vision. For the Greener Gulfton plan, there is an opportunity to focus on off-street facilities that can be complemented with planting and landscape amenities that expand the network of ecosystems in the area.

	Mobility	Stormwater Management	Structural	Community Capacity	Nature
Revitalization Plan for Gulfton-Sharpstown	●	●	●	●	●
Gulfton Complete Communities Action Plan	●			●	●
Houston Climate Action Plan	●	●	●		
Resilient Houston	●	●	●	●	●
Houston Bike Plan	●				●

## Houston Vision Zero Action Plan

The Vision Zero Action Plan is a commitment to safer streets in Houston and identifies 50 actions that the City will take to eliminate traffic deaths and serious injuries by 2030. At the center of this plan is upholding everyone's right to safe, accessible streets and sidewalks. The Greener Gulfton Plan advocates for more connectivity that prioritizes transportation safety for the community.

## Hillcroft Avenue Safety Assessment

The Hillcroft Avenue Safety Assessment recommendations prioritize safety on the main streets in Gulfton. These recommendations include reducing the amount of vehicular lanes, adding buffered bike lanes, installing traffic signals, optimizing accessibility, enhancing the pedestrian realm, and creating a community plaza space.

## Gulfton Pedestrian Bicyclist Special District Study

The Special District Study was conducted using the Gulfton and Woodlake/Briar meadows areas to identify strategic investment areas for pedestrian and bicycle facilities. The study's approach included assessing the area's issues and needs through public engagement, data collection and analysis, and identifying priority projects.

## Cities Connecting Children to Nature

Cities Connecting Children to Nature (CCCN) is a nation-wide initiative promoting the equitable access to nature so that both children and nature can thrive. CCCN provides cities to with guidance for establishing these connections through training on promising practices, access to national experts, and peer learning opportunities.

## Neighborhood Manufacturing Study

The purpose of the Neighborhood Manufacturing Study in Gulfton was to identify unique challenges and opportunities faced by small business owners, manufacturers, and makers in Gulfton. Finding new ways to help these businesses in Gulfton thrive based on precedent studies from around the country is a priority of this study.

## Affordable Multi-Family Housing: Risks and Opportunities

This affordable housing report examines the need for affordable housing in Houston and Harris County. The risks of flooding and the accelerating loss of affordable housing in the area makes understanding the issue imperative so opportunity areas can be identified. The report answers questions such as: where is current affordable housing located, how many units are located in flood-prone areas, what are the challenges to preserving current affordable housing, and what funding strategies can be utilized.

	Mobility	Stormwater Management	Structural	Community Capacity	Nature
Houston Vision Zero Action Plan	●				●
Hillcroft Avenue Safety Assessment	●				●
Gulfton Pedestrian Bicyclist Special District Study	●				●
Cities Connecting Children to Nature		●			●
Neighborhood Manufacturing Study				●	
Affordable Multi-Family Housing: Risks and Opportunities	●				

# What Work Inspires Us?

## Greening toward Community Action!

As part of the efforts towards looking at solutions that heavily center biodiversity, nature, history, community and art, we looked to the examples below for inspiration that help catalyze a Greener Gulfton. The examples below look at various types of installations, murals, and

immersive place activations that bring people to a space, uncover data that is not as easily visible, creatively work with found materials, and look at activating often overlooked and under used spaces. More information about these individual pieces are found in the appendix.



### Stacy Levy, Topo Map

Fayetteville, North Carolina - North America

This installation reveals the layers that are not always visible in cities and neighborhoods. Uncovering facts about a place can bring attention to important themes from this report.

### Ciudad Emergente, Okuplaza

Santiago, Chile - South America

This installation is an effective example of activating places FOR people, and demonstrates the power of community capacity toward encouraging community uses.

### Bordallo II, Recycled Art

Various locations, Europe

Integrating waste and recycled/found material is an excellent way to think about merging ecology and environmental health in a unique way.

### Mexico City, Via Verde

Mexico City, Mexico

This transformation of freeway structures demonstrates how to introduce nature successfully toward more people friendly places.



# 03

# ENVISION: A Greener Gulfton



## A Vision for Gulfton

Where Should These Actions Happen?

What Actions Can We Take?

How Can We Support Our Non-Human Residents?

How Do We Fund These Recommendations?

## Introduction

This section covers content that begins to outline A Vision for Gulfton, informed by community engagement, the Guiding Principles that support our work, and the specific recommendations we are making based on ongoing conversations. In addition, this section gets closer to information toward implementation, whether it's pilot project content, or prioritization criteria. The overall effort is to support and green this neighborhood in a way that considers both people and non-human residents alike.

# A Vision for Gulfton

## Overview of Process

As part of envisioning a Greener Gulfton, our team met with community members, steering committee members, and Gulfton Ambassadors to not only share the data about the neighborhood that is available, but also to hear from them on the benefits that nature provides to their everyday lives, opportunities they imagine in their neighborhood, and ultimately the vision and guiding principles that should be reflected in a plan that hopes to make this neighborhood responsive to the needs of all residents, amidst the reality of the varied conditions found here. To

meet community members and leaders throughout Gulfton, meetings included virtual zoom conversations, a community kick-off held during a community park clean-up event, a walking tour that took place in the Gulfton neighborhood, and a park activation event that revolved around identifying existing biodiversity found in the neighborhood. All of these events provided information that informed a range of options for a concise set of vision statements and guiding principles, as well as direction to envision pilot project opportunities. By summarizing these conversations into vision statements, steering committee members and Green Ambassadors had the opportunity to vote online for their preferred options shaped by their contributions throughout the process. Ultimately, the following vision statement was selected as the top priority for A Greener Gulfton for Nature, Health, and Resilience.



**Greener Gulfton is a DIVERSE and VIBRANT community that is HEALTHY, CLIMATE PREPARED, and CONNECTED to NATURE**

**Gulfton más verde es una comunidad DIVERSA y VIBRANTE que está SANA, CLIMÁTICAMENTE PREPARADA, y CONECTADA a la NATURALEZA**

**SALUD Y BIENESTAR.** Gulfton es un lugar donde las comunidades son apoyadas en sus metas hacia la mejora de la salud y el bienestar y donde las personas y la vida silvestre son apoyadas para vivir vidas largas, felices y saludables

**HONRAR A LOS ANCESTROS.** Gulfton es un lugar en el que todo nuestro ser, nuestras raíces y nuestras historias forman parte de las soluciones para lograr un futuro más saludable y mejorar la salud humana, la salud ecológica y la salud medioambiental.

**SEGURIDAD.** Gulfton es un lugar donde un diseño urbano inteligente puede crear un lugar más seguro, saludable y acogedor para todos los residentes y visitantes.

**PERSEVERANCIA.** Gulfton es un lugar en el que todos los residentes, independientemente de sus ingresos, raza, género o capacidades, reciben todo el apoyo necesario para liderar y poner en práctica soluciones que les beneficien a ellos, a sus familias, a sus vecinos y a su comunidad, así como en la visión que tienen para sus comunidades y que apoya una mejor salud humana, ecológica y medioambiental.

**EQUIDAD.** Gulfton es un lugar donde el aumento de la naturaleza y el acceso implica abordar las injusticias históricas y mejorar las condiciones físicas y sociales de todos los residentes con una visión de justicia y equidad para todos.

**HEALTH & WELLNESS.** Gulfton is a place where communities are supported in their goals toward improved health and wellness and where people and wildlife are supported to live long, happy, healthy lives

**HONORING ANCESTORS.** Gulfton is a place where our full selves, roots, and histories are part of solutions for healthier futures, and improved human health, ecological health, and environmental health.

**SAFETY.** Gulfton is a place where smart urban design can create safer, healthier, and more welcoming place for all residents and visitors.

**PERSEVERANCE.** Gulfton is a place where all residents regardless of income, race, gender, or abilities are fully supported to lead and implement solutions that benefit them, their families, their neighbors, and their community and in the vision that they hold for their communities that supports improved human, ecological, and environmental health.

**EQUITY.** Gulfton is a place where increasing nature and access involves addressing historical injustices and improving the physical and social conditions of all residents with a vision of justice and equity for all.

# Where Should These Actions Happen?

## Introduction

The vision, guiding principles, and community events and meetings resulted in plan recommendations grounded in the Gulfton neighborhood's context. The recommendations for the Gulfton super neighborhood are divided into two sections. The first section focuses on the main, neighborhood-wide recommendations supported by the Green Ambassadors, Steering Committee, and residents we met at community events. The second section outlines, in broad terms different strategy actions that can be taken in the neighborhood. These categories include:

- MOBILITY ACTIONS,
- STORMWATER MANAGEMENT ACTIONS,
- ARCHITECTURAL/STRUCTURAL ACTIONS,
- NATURE-BASED COMMUNITY CAPACITY ACTIONS and,
- COMMUNITY CAPACITY ACTIONS.

Each action within these themes corresponds with the designated colors. The strategies were translated into English, Spanish, and Arabic so that they could be used at community events to engage with residents.

## Neighborhood-Wide Actions - Over the Next 5-10 years

- 1 NATURE-BASED COMMUNITY CAPACITY ACTION: Fund and implement a Burnett Bayland Park Master Plan for improved recreational and nature experiences**

## Initiate and Develop a Master Plan for Burnett Bayland Park - continued

The Gulfton super neighborhood lacks high-quality parks and open space, especially in areas along IH-69 and in Zones 1 and 3. Burnett Bayland park is already a popular destination, but parts of the park need moderate to major improvements including providing safe and accessible ways of getting to and from the space. Below are a few other key things to consider as part of the planning process.

- Consider expanding park space south into Harris County-owned property, consider a long-term plan to relocate the Correction Facilities
- Consider opportunities to expand park space to adjacent undeveloped land east of Chimney Rock Rd and north of Gulfton Street
- Consider access and safe crossings into the park space such as from SER Ninos Middle School to the north and other adjacent facilities
- Provide welcoming and accessible ways into the park by removing the fence and developing mobility systems to get to and around the park
- Consider ways to support fruit trees and community gardens within the park boundary
- Consider improving the multipurpose fields to improve safety and promote more usage
- Evaluate under used areas in the park to propose new amenities

## 2 MOBILITY ACTION: Initiate a cool corridors program to combat climate change and urban heat island impacts

The 2020 Houston-Harris County Heat Watch Campaign found Gulfton as one of the hottest neighborhoods at 17 degrees hotter than cooler neighborhoods in the county. In addition, about 13% of households do not have access to personal vehicles and rely on other transportation types. Developing a Cool Corridors program combines mobility upgrades and improvements with planting trees, and vegetation to develop more comfortable ways to navigate the neighborhood.



## Initiate and Start Cool Corridors Program within Gulfton - continued

- Consider opportunities to collaborate with the Houston Parks Board to support the development of the Gulfton 'T' strategy outlined in the 2018 Beyond the Bayous Report as a Cool Corridor
- Consider opportunities to support non-vehicular strategies that connect to the CenterPoint ROW and down to the Brays Bayou trail system
- In addition to the north-south corridors, develop a strategy to support east-west Cool Corridors to create a network

**Cool Corridors** offer residents of all ages and abilities relief from hot weather through the provisioning of natural and engineered shade, use of green infrastructure and other features that lower daytime air temperature, availability of benches, drinking water foundations, and other features to facilitate rest and recovery. Cool Corridors could have a combination of public and private features that provide shade or reduce extreme heat such as: landscaping in the public right-of-way, landscaping in private property, public art, cool pavement, and misters. The target shade coverage for Cool Corridors is 60%.

Source: City of Phoenix Cool Corridors Program

## Neighborhood-Wide Actions - Over the Next 5-10 years

3

**MOBILITY ACTION:** Support and implement sidewalk improvements and safe crossings to address pedestrian safety and access issues

The Gulfton super neighborhood needs investment in its pedestrian infrastructure. Researchers at the Kinder Institute found that 36% of the 486 street segments had no sidewalk, and 41% of sidewalks had some kind of obstruction such as a gap in the network. Building off this, Gulfton Complete Communities is working on a Resilient Sidewalks Study that is currently underway (2022/23). This study will provide recommendations and prioritize investment.

- Based on the sidewalk study and other relevant Gulfton planning documents, prioritize the pedestrian projects for Gulfton
- Find opportunities to coordinate with the Cool Corridors program to support cooling efforts as it relates to pedestrian spaces
- Emphasize and support efforts to implement sidewalk and crossing improvements to Burnett Bayland Park and other green spaces
- Find opportunities for road diet projects to reduce traffic speed, promote safety and increase space available for pedestrian back or curb improvements that include wider sidewalks, planting areas, and when feasible, green infrastructure strategies such as rain gardens
- Delineate on street parking areas by providing bulb-outs at intersections to reduce pedestrian crossing distance, improve safety and add opportunities for planting

4

**NATURE-BASED COMMUNITY CAPACITY ACTION:** Activate a neighborhood urban forestry strategy to mitigate heat, improve air quality, and support wildlife

The Gulfton super neighborhood lacks a sufficient urban tree canopy, especially in areas along IH-69 in Zones 1 and 2. Tree canopy that makes up approximately 40-60% cover significantly helps to cool the ambient air temperature. Undergoing an Urban Forestry Study can help to determine where trees can be added to fill these gaps and plan for the future.

- Consider coordinating with Trees for Houston which has dedicated 100 trees for the Gulfton area as part of the study
- Coordinate between the Cool Corridors program to prioritize trees along key mobility corridors
- Trees take time and resources to reach mature heights and provide needed shade; consider other ways of creating temporary shade with structures such as green facades

5

**STORMWATER MANAGEMENT ACTION:** Facilitate a green stormwater feasibility study and action plan, in southeast Gulfton, to reduce street-level flooding and add greenspace

The southeastern section of the Gulfton super neighborhood is within the 100 year FEMA Flood Zone, approximately 16% percent of the land area of Gulfton. These areas are primarily in Zones 2, 3, and 4. The area experiences more localized flooding when the stormwater infrastructure is undersized and gets overwhelmed with high-volume rain events.



### Initiate and Undergo a Stormwater Feasibility Study within the southeast sections of Gulfton - continued

- Both grey and green stormwater management techniques will need to be considered in tandem to provide the proper stormwater storage and water quality improvements in the neighborhood
- Consider coordinating with the Master Plan effort for Burnett Bayland Park and explore opportunities of including stormwater management improvements
- Consider opportunities to expand into Harris County-owned property for stormwater management improvements
- Coordinate with the Cool Corridors program to consider stormwater management along the corridors where appropriate



Bioswales are linear stormwater management systems that infiltrate, slow, and clean water when it rains

## Neighborhood-Wide Actions - Over the Next 5-10 years

6

### NATURE-BASED COMMUNITY CAPACITY ACTION: Increase gardens, parks, and natural habitats at schools for improved health and academic achievement

The Gulfton super neighborhood has multiple schools and learning institutions, especially along Gulfton Street. Students who attend schools rich in nature spaces have been shown to have higher academic achievement and better focus.

- Coordinate with the Cool Corridors program to consider non-vehicular mobility improvement along Gulfton Street
- Prioritize protected crossings to parks and open spaces from schools
- Consider making nature-based improvements to schools that could be public and provide needed park space in the neighborhood
- Consider starting improvement efforts at Benavidez Elementary School as there was once a nature garden and pond which could be considered again

7

### COMMUNITY CAPACITY ACTION & NATURE-BASED COMMUNITY CAPACITY ACTION: Create nature-rich civic spaces - including the 'Placita' Pilot Project - for cultural, physical, mental, and biodiversity health

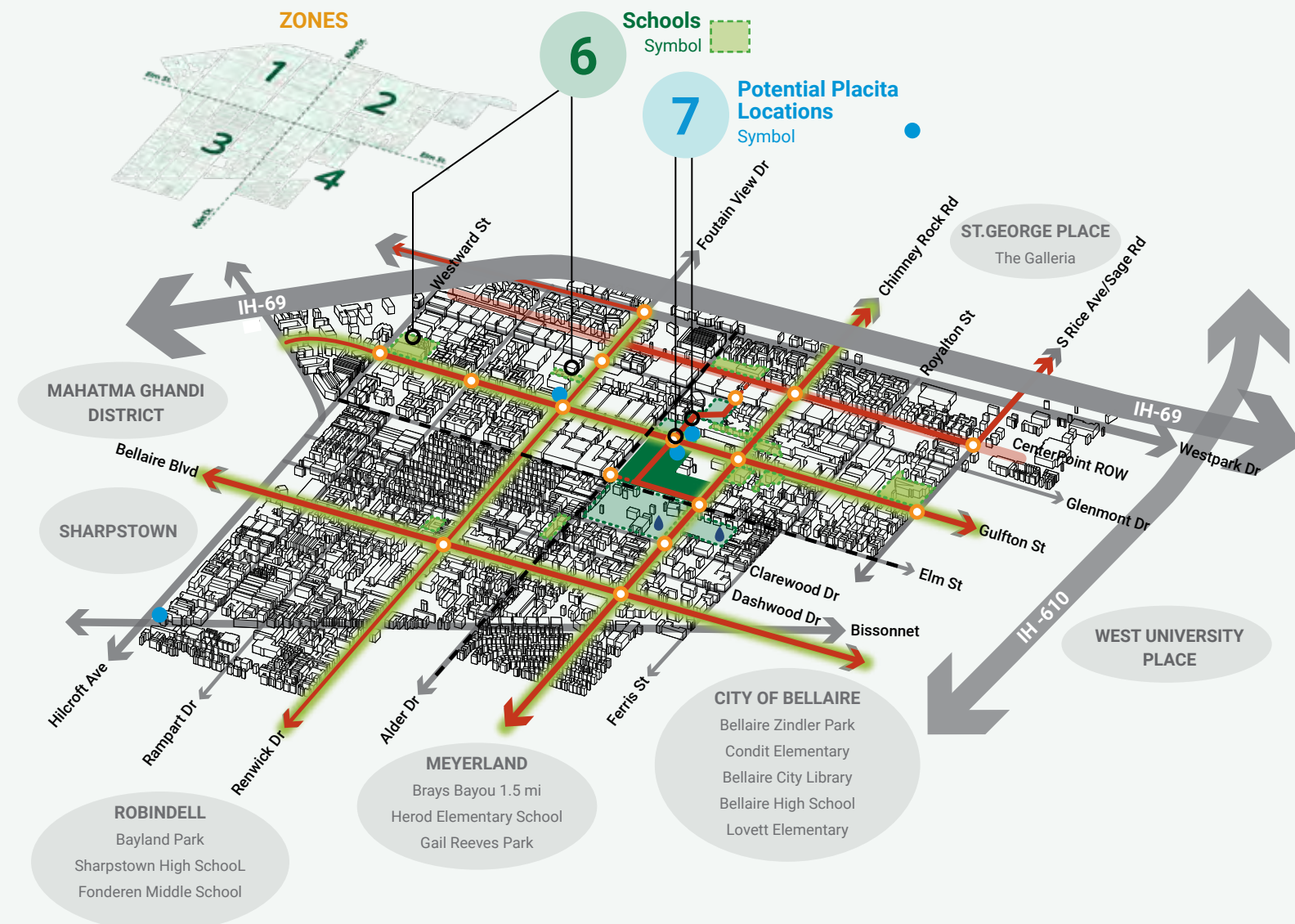
- The Placita Pilot Project serves as a test case for a larger plaza within Gulfton, such as in Burnett Bayland Park as part of the Master Plan process

See ACT Section of this report for more detail.

## Partnerships and Community Capacity

The ambitious recommendations presented here will rely on committed leaders and community capacity to complete projects and maintain those improvements. There may be opportunities to leverage financing for certain projects by encouraging the development of public-private partnerships that support a common goal. This organization strategy can leverage private sector investment and local philanthropy to support the project when public funding is not immediately available. This often allows projects to be completed on a faster time line without the major burdens experienced through a typical government process. That being said, a robust public outreach plan must be a critical component of any partnership strategy. Thus, even in a public-private partnership, the voices of the community will be heard and the process will be kept as transparent as possible. The **Houston Parks Board (HPB)**, for instance, is working on their Beyond the Bayous program and there may be opportunities to leverage HPB's work in Gulfton by aligning goals and prioritizing projects.

In general, parks, trails, and green spaces are essential to health and quality of life by enhancing the physical, mental, and social well-being of the communities they support. With this in mind, many health care organizations and funders are supporting projects that enhance the environmental conditions within our cities. Consider developing or expanding partnerships with the local and regional hospitals, community health centers, and public health agencies, and health care funders, such as **Harris County Public Health** and/or the **City of Houston Health Department**.



## Partnerships and Community Capacity - continued

Beyond direct financial support, partnerships can also provide programming, maintenance, stewardship efforts, and support local businesses. This can take the form of internal departmental partnerships which leverage existing programs to provide opportunities to strengthen programming for the community. In addition, partnerships can be pursued with local non profits to develop creative programming and/or stewardship opportunities including adopt-a-park efforts, park clean-up days, and restoration opportunities. **Las Madres del Parque** is an example of an organization dedicated to stewarding parks and open space in Gulfton.



Burnett Bayland Park clean up event lead by Las Madres del Parque in fall 2021

# What Actions Can We Take?

## Action Strategies for a Greener Gulfton

The following section provides the five themes from our recommendations that promote a Greener Gulfton. Please refer to the Appendix to review the strategy cards and additional information used during the community engagement phases of our effort.

**APPROPRIATE LOCATIONS:** As part of our recommendations, we made suggestions on the general locations that recommendations can be implemented. These are general, so that there is flexibility to where things are installed.

**PLANNING DOCUMENT REFERENCE:** This section demonstrates that strategies are supported and outlined in other documents, and demonstrate that recommendations here are intended to provide additional specificity to get closer to implementation.

**EXAMPLES OF STRATEGY:** These demonstrate precedents for strategy actions recommended. Photos marked with a lightning bolt have opportunities for immediate or near-term and short-term implementation.

**STRATEGY TITLE:** This provides the number and title recommended.

**DESCRIPTION:** This provides a general overview of the strategy presented.

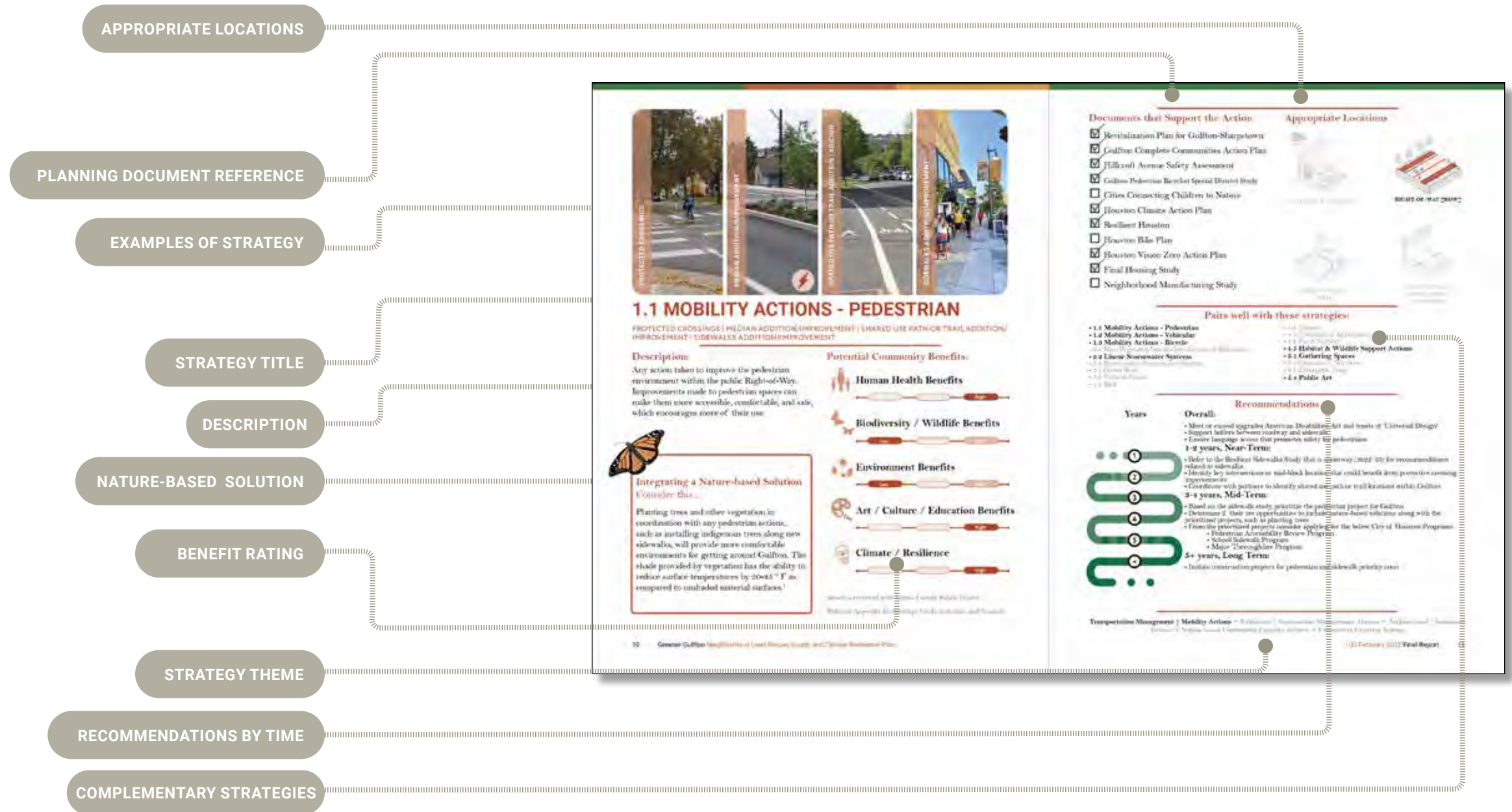
**NATURE-BASED SOLUTION:** This provides research to supplement solutions that incorporate elements of nature.

**BENEFIT RATING:** This provides readers an understanding on the various benefits provided by the strategy

**STRATEGY THEME:** This demonstrates the 5 overarching themes that our recommendations and strategies are aligned to.

**RECOMMENDATIONS BY TIME:** This section provides readers a level of detail on timing to achieve implementation.

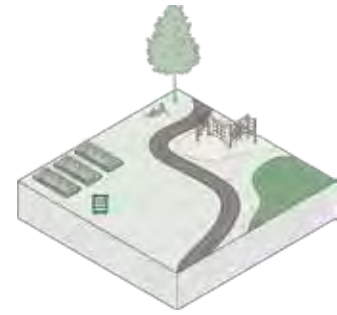
**COMPLEMENTARY STRATEGY:** This section demonstrates how recommendations can be coupled with other items outlined in our list of Strategy Actions.



Refers to catalytic projects that can be implementable in the near term.

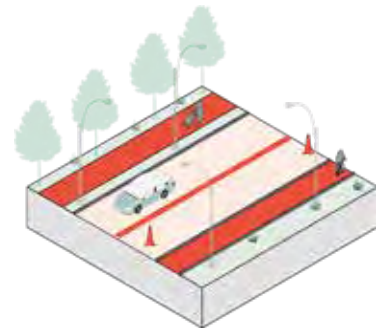
## Action Strategy Cards

As part of the recommendations made for the Strategy Actions, our team wanted to include suggestion based on locations by strategy. Of the total 17 strategy actions used for engagement, these strategy cards included suggestions for implementation along areas such as Building Envelopes, Parks/Vacant Land, Right-of-Way, and Right-of-Way to Building Envelope. The definitions for these typologies found in Gulfton are as follows:



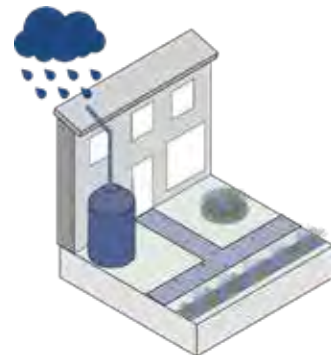
**PARKS/VACANT LAND**

**PARKS / VACANT LAND:** Parks are natural or semi-natural spaces set aside for recreation and enjoyment. Vacant land has no buildings on it and is not currently being used.

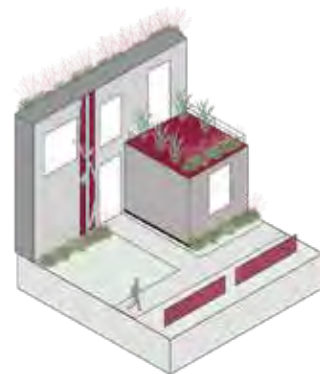


**RIGHT-OF-WAY [ROW]**

**RIGHT-OF-WAY [ROW]:** Right-of-Way are defined as the legal right, established by usage or grant, to pass along a specific route and can include roadways, trails, and utility easements. These spaces can be public or kept private based on use type. Public Right-of-Way are subject for existing or future streets, curbs, planting strips or street trees, utilities, infrastructure or sidewalks.

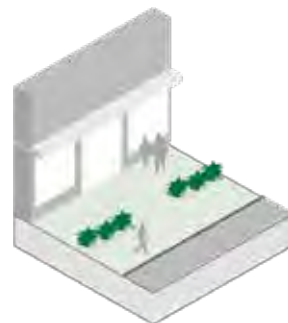


**BUILDING ENVELOPE**



**BUILDING ENVELOPE**

**BUILDING ENVELOPE:** is the maximum space on a lot that a structure can be built as permitted by existing regulations. There are 2 variations, one with a stormwater emphasis, and another with an emphasis on roof coverage.



**RIGHT-OF-WAY TO BUILDING ENVELOPE**

**RIGHT-OF-WAY TO BUILDING ENVELOPE** is the space between a lot's buildable area and the public ROW.





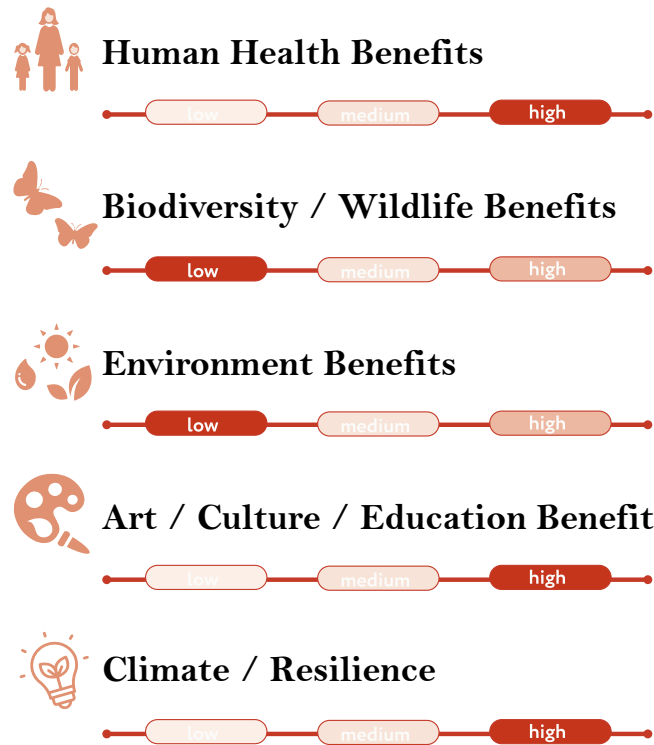
# 1.1 MOBILITY ACTIONS - PEDESTRIAN

PROTECTED CROSSINGS | MEDIAN ADDITION/IMPROVEMENT | SHARED USE PATH OR TRAIL ADDITION/IMPROVEMENT | SIDEWALKS ADDITION/IMPROVEMENT

## Description:

Any action taken to improve the pedestrian environment within the public Right-of-Way. Improvements made to pedestrian spaces can make them more accessible, comfortable, and safe, which encourages more of their use.

## Potential Community Benefits:



Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish



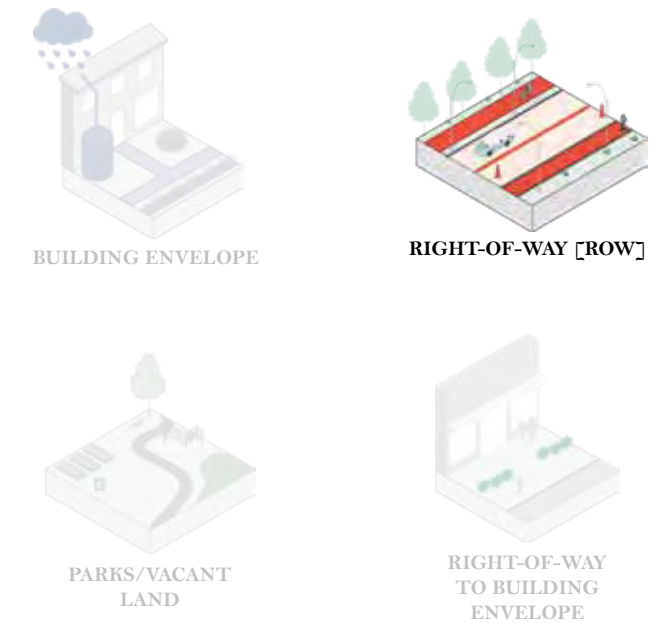
## Integrating a Nature-based Solution Consider this...

Planting trees and other vegetation in coordination with any pedestrian actions, such as installing indigenous trees along new sidewalks, will provide more comfortable environments for getting around Gulfton. The shade provided by vegetation has the ability to reduce surface temperatures by 20-45 ° F as compared to unshaded material surfaces.<sup>7</sup>

## Documents that Support the Action

- Revitalization Plan for Gulfton-Sharpstown
- Gulfton Complete Communities Action Plan
- Hillcroft Avenue Safety Assessment
- Gulfton Pedestrian Bicyclist Special District Study
- Cities Connecting Children to Nature
- Houston Climate Action Plan
- Resilient Houston
- Houston Bike Plan
- Houston Vision Zero Action Plan
- Final Housing Study
- Neighborhood Manufacturing Study

## Appropriate Locations



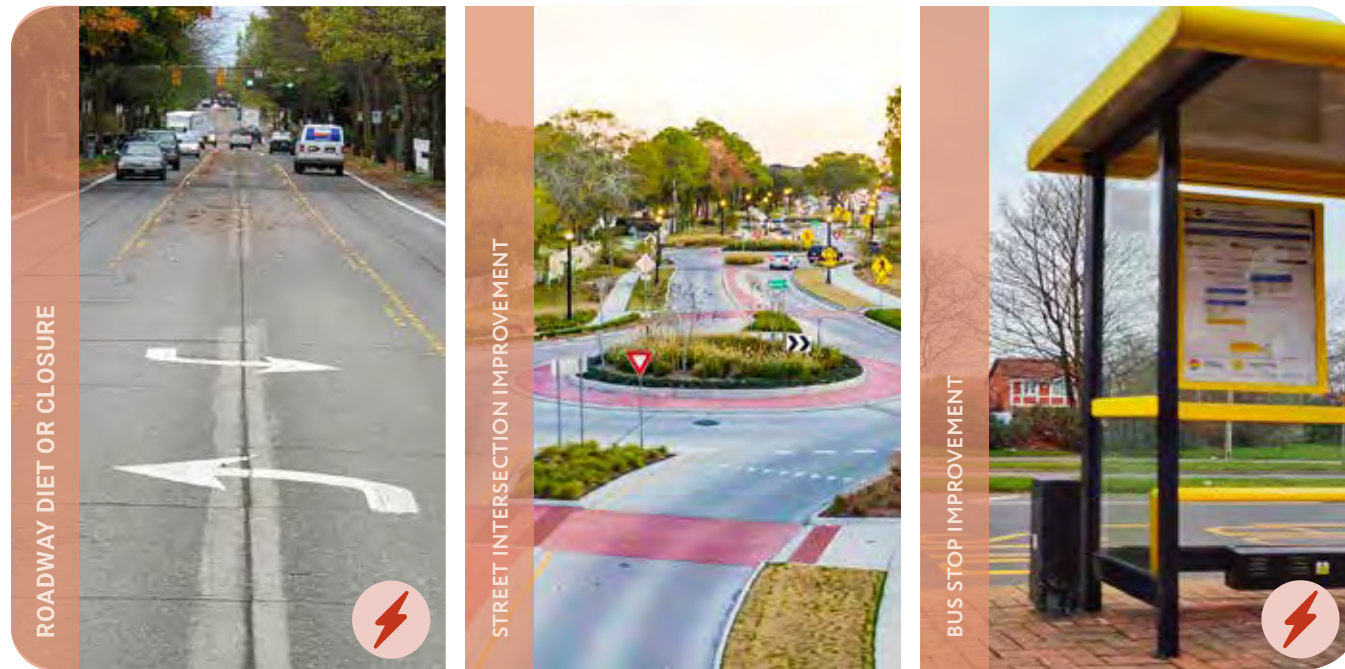
## Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
- 1.2 Mobility Actions - Vehicular
- 1.3 Mobility Actions - Bicycle
- 2.1 Non-Vegetated Stormwater Actions & Rainwater
- 2.2 Linear Stormwater Systems
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- 5.3 Enterprise Zone
- 5.4 Public Art

## Recommendations

Years	Overall:
1	<ul style="list-style-type: none"> <li>•Meet or exceed upgrades American Disabilities Act and tenets of Universal Design<sup>8</sup></li> <li>•Support buffers between roadway and sidewalk</li> <li>•Ensure language access that promotes safety for pedestrians</li> </ul>
1-2 years, Near-Term:	<ul style="list-style-type: none"> <li>•Refer to the Resilient Sidewalks Study that is underway (2022/23) for recommendations related to sidewalks</li> <li>•Identify key intersections or mid-block location that could benefit from protective crossing improvements</li> <li>•Coordinate with partners to identify shared use path or trail locations within Gulfton</li> </ul>
3	<ul style="list-style-type: none"> <li>•Based on the sidewalk study, prioritize the pedestrian project for Gulfton</li> <li>•Determine if there are opportunities to include nature-based solutions along with the prioritized projects, such as planting trees</li> <li>•From the prioritized projects consider applying for the below City of Houston Programs:               <ul style="list-style-type: none"> <li>• Pedestrian Accessibility Review Program</li> <li>• School Sidewalk Program</li> <li>• Major Thoroughfare Program</li> </ul> </li> </ul>
4	
5	
+	
5+ years, Long Term:	<ul style="list-style-type: none"> <li>•Initiate construction projects for pedestrian and sidewalk priority areas</li> </ul>





## 1.2 MOBILITY ACTIONS - VEHICULAR

ROADWAY DIET OR CLOSURE | STREET INTERSECTION IMPROVEMENT | BUS STOP IMPROVEMENT

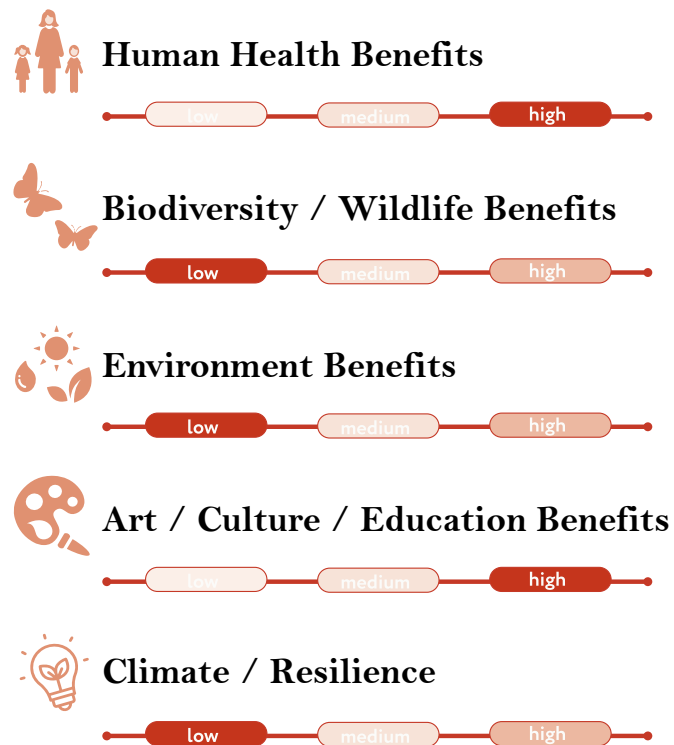
### Description:

Any action taken to improve the vehicular environment within the public Right-of-Way, especially improvements that support multiple mobility uses. Road diets, improvements made to street intersections and bus stops can improve safety for all users while creating a comfortable environment for pedestrians, cyclists, and transit users.

### Integrating a Nature-based Solution Consider this...

Planting trees along roads creates multiple benefits. Studies show lower stress levels of drivers that see natural or tree lined roadsides as opposed to all-built settings<sup>9</sup> and improved driving safety. Placing trees or vegetated planters in urban arterial roadsides can reduce mid-block crashes by 5%-20%.<sup>10</sup>

### Potential Community Benefits:

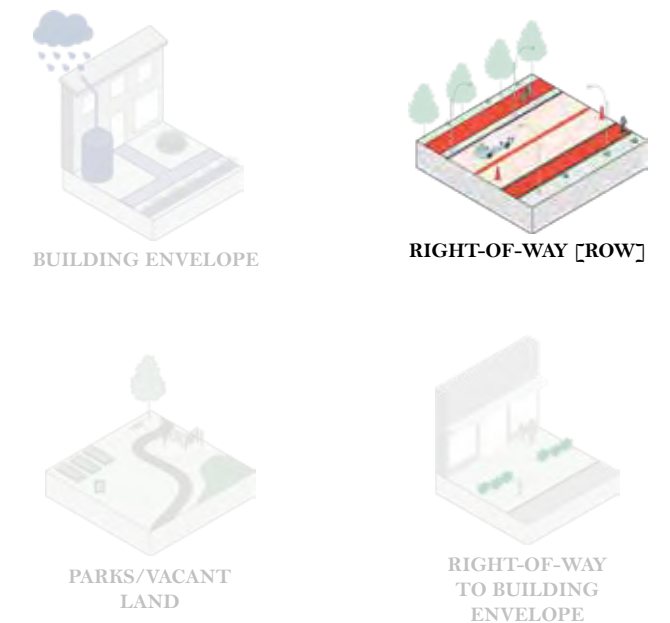


Benefits reviewed with Harris County Public Health  
Refer to Appendix for Strategy Cards in Arabic, and Spanish

### Documents that Support the Action

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- Gulfton Complete Communities Action Plan
- Hillcroft Avenue Safety Assessment
- Gulfton Pedestrian Bicyclist Special District Study
- Cities Connecting Children to Nature
- Houston Climate Action Plan
- Resilient Houston
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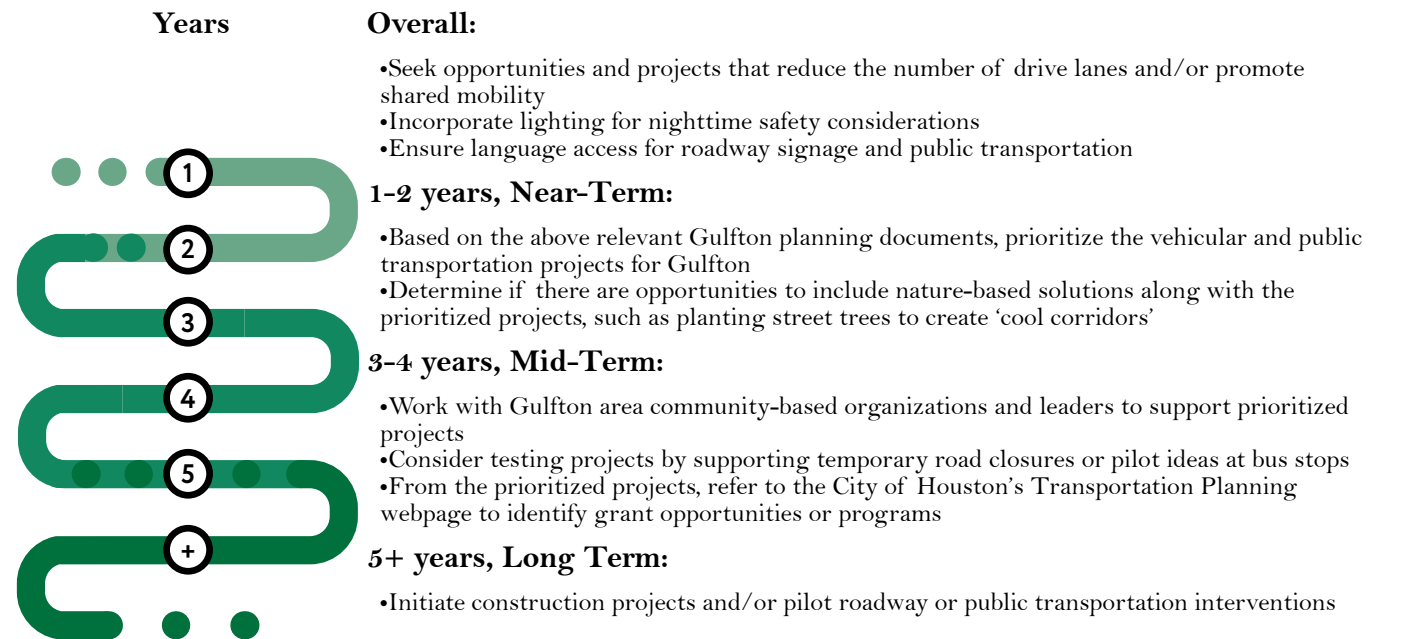
### Appropriate Locations



### Pairs well with these strategies:

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- 5.4 Public Art

### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



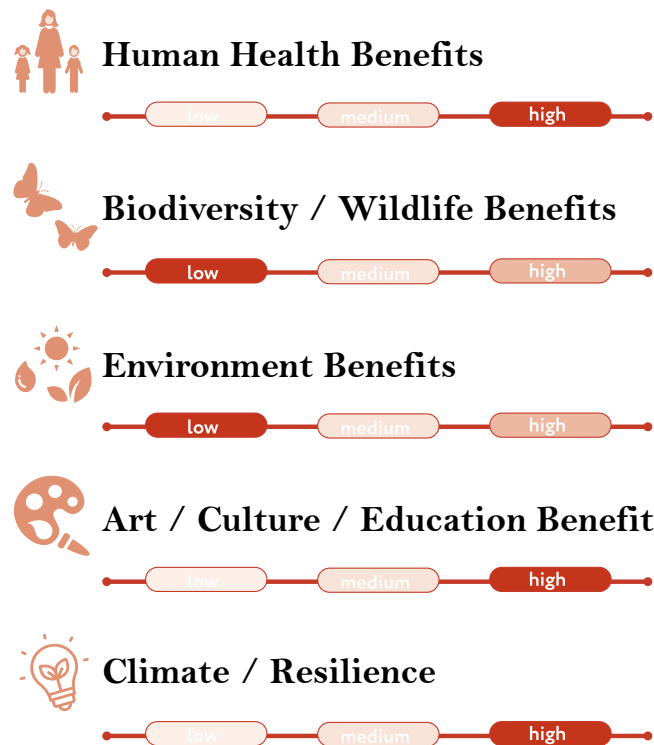
## 1.3 MOBILITY ACTIONS - BICYCLE

BIKE LANES ADDITION/IMPROVEMENT | COVERED/LOCKED BIKE PARKING | BIKE RACKS | SHARED USE PATH OR TRAIL ADDITION/IMPROVEMENT

### Description:

Any action taken to improve the bicycle environment within the public Right-of-Way. Bike lanes are portions of roadways that have been designated by striping, signage, and pavement markings for the use of bicyclists. Adding or improving bike lanes, paths, and bicycling amenities can encourage more cycling by creating a safer and more comfortable environment.

### Potential Community Benefits:



Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

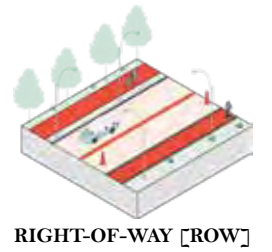
### Integrating a Nature-based Solution Consider this...

Areas of high pedestrian and bike traffic can be designed as 'cool corridors'. Cool corridors are linear green spaces such as tree-lined trails, paths, and streets that help to reduce the hot conditions present in dense urban areas. Planning and planting these corridors now will help the next generation of Gulfton residents.

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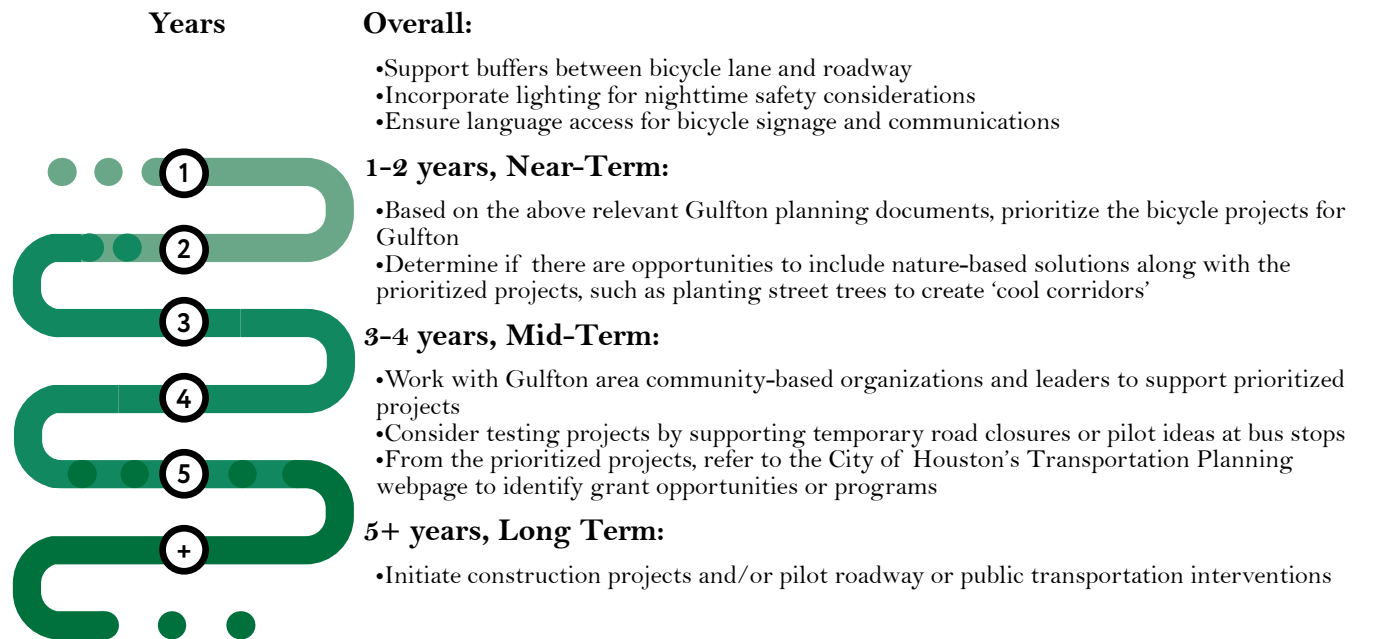
### Appropriate Locations



### Pairs well with these strategies:

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### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



## 2.1 NON VEGETATED STORMWATER ACTIONS & RAINWATER HARVESTING

CISTERN | RAIN TANK | UNDERGROUND STORAGE | STORMWATER DRAIN MARKERS | POROUS PAVEMENT

### Description:

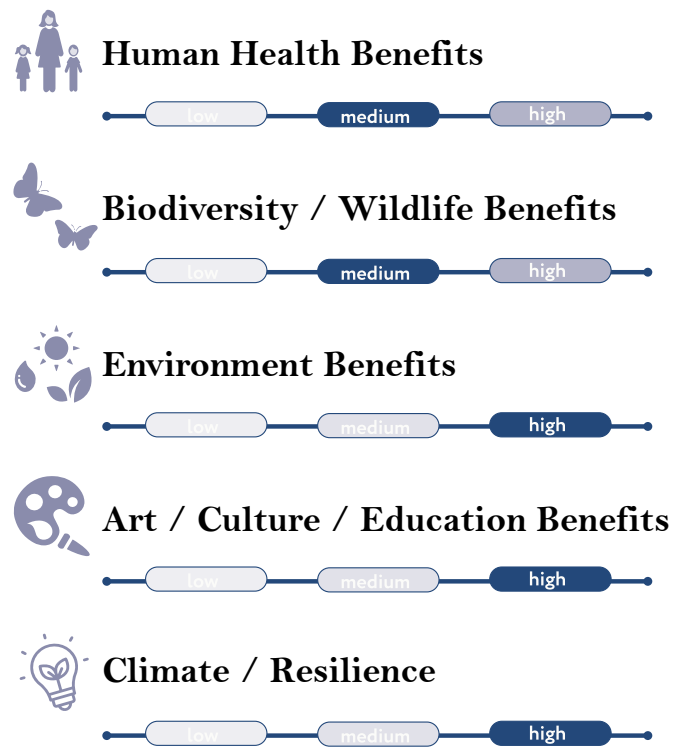
Rainwater or stormwater actions that do not include vegetation. Rainwater harvesting are passive methods of gathering rainwater either with a container (like a cistern or tank) for future use or using pavement that allows water to infiltrate into the soil below. Stormwater drain markers are warning signs placed at storm drains to deter deliberate dumping of pollutants.



### Integrating a Nature-based Solution Consider this...

Pairing the installation of rainwater harvesting systems with vegetation and/or gardens can be an excellent way to reuse captured water. Studies have shown that if installed correctly, the water from cisterns is suitable for watering vegetation, especially roof runoff which is usually free of chemical and dissolved minerals.<sup>11</sup>

### Potential Community Benefits:



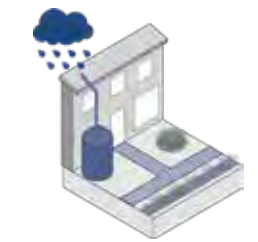
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

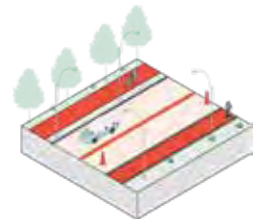
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### Appropriate Locations



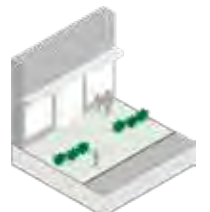
BUILDING ENVELOPE



RIGHT-OF-WAY [ROW]



PARKS/VACANT LAND

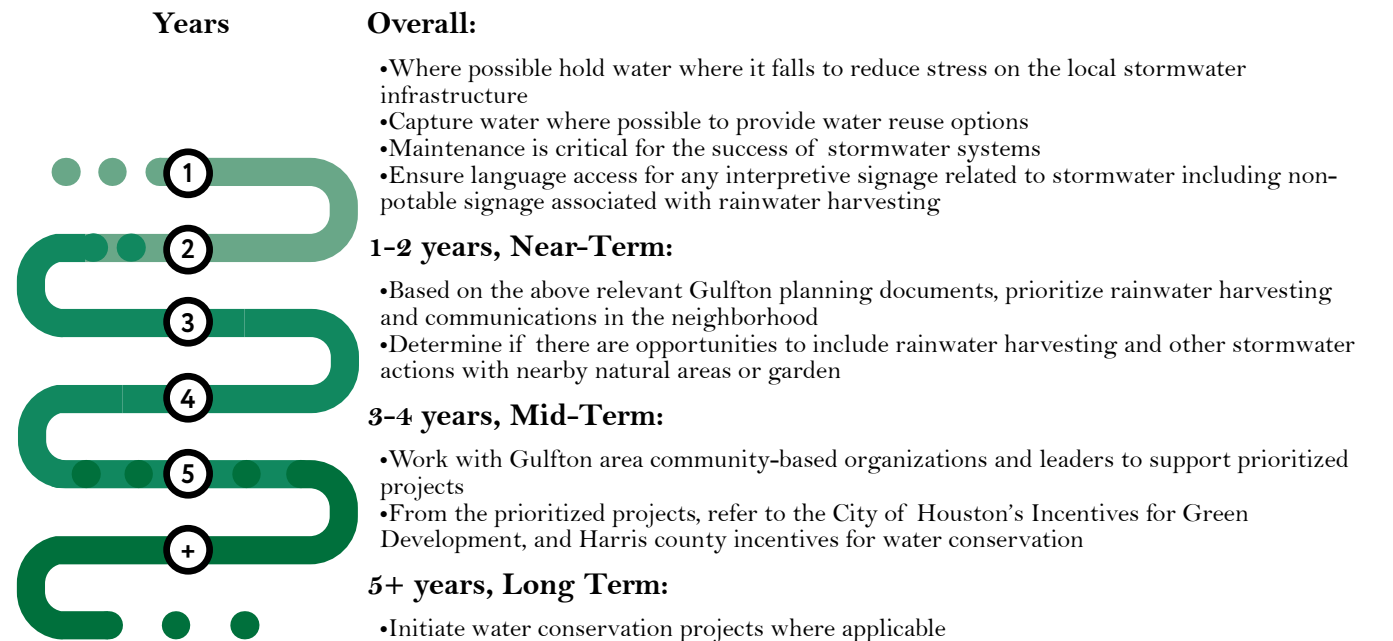


RIGHT-OF-WAY TO BUILDING ENVELOPE

### Pairs well with these strategies:

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### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



## 2.2 LINEAR STORMWATER SYSTEMS

VEGETATED FILTER STRIP | VEGETATED SWALE | VEGETATED BIOSWALE

### Description:

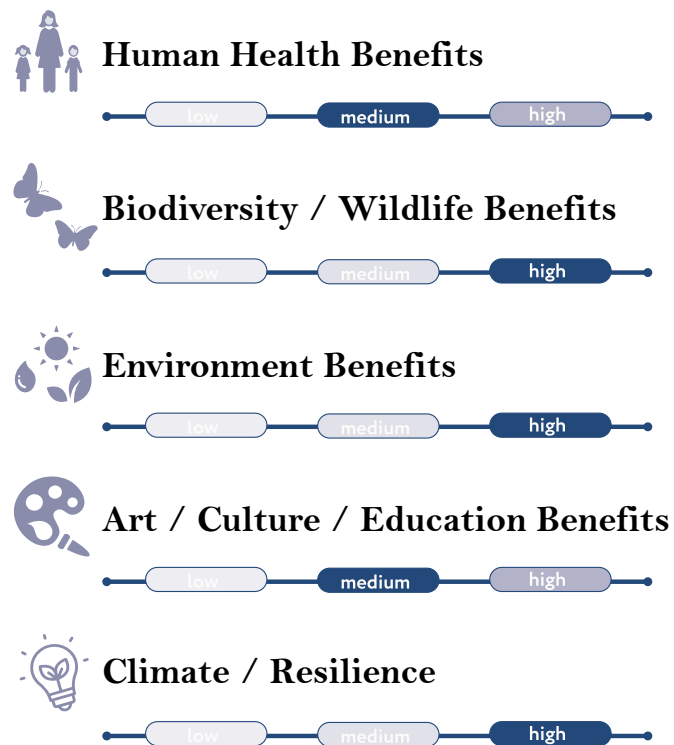
Vegetated filter strips are areas of land placed between sources of pollution and bodies of water. Vegetated swales and bioswales are open, shallow channels designed to direct and infiltrate stormwater. These methods are used to capture rainwater runoff, facilitate infiltration back into the earth, and remove debris and pollution.



### Integrating a Nature-based Solution Consider this...

Linear stormwater systems have the potential of reducing stormwater by 20 to 85% with infiltration by soil and indigenous plant species. These systems are most effective during 80 to 95% annual storm event.<sup>12</sup> It is best to pair this strategy with other stormwater actions to increase the quantity and quality of stormwater treated.

### Potential Community Benefits:



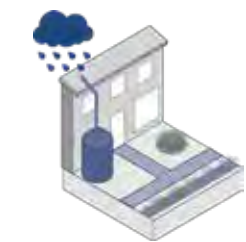
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

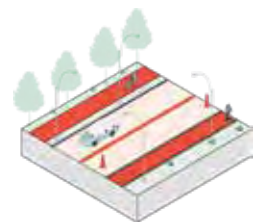
### Documents that Support the Action

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### Appropriate Locations



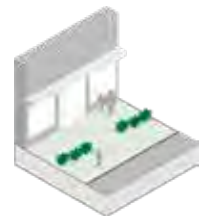
BUILDING ENVELOPE



RIGHT-OF-WAY [ROW]



PARKS/VACANT LAND

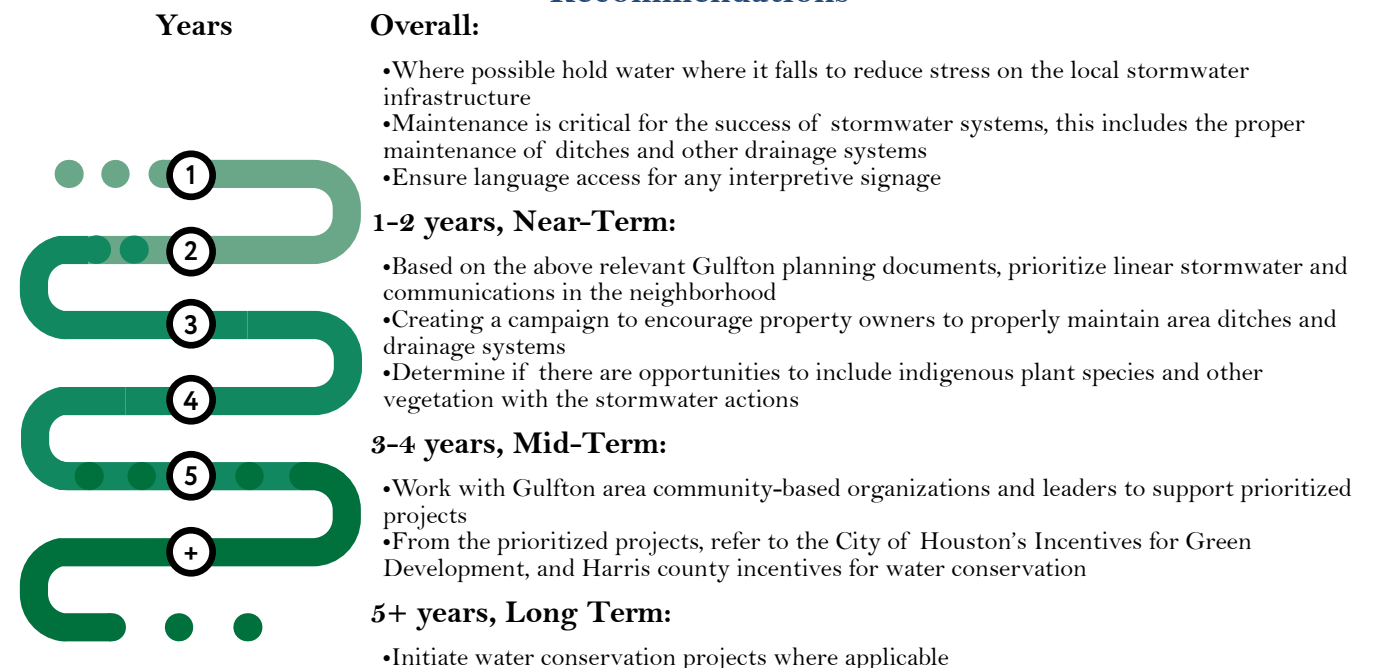


RIGHT-OF-WAY TO BUILDING ENVELOPE

### Pairs well with these strategies:

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### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



## 2.3 BIORETENTION STORMWATER SYSTEMS

RAIN GARDEN | STORMWATER PLANTER BOX

### Description:

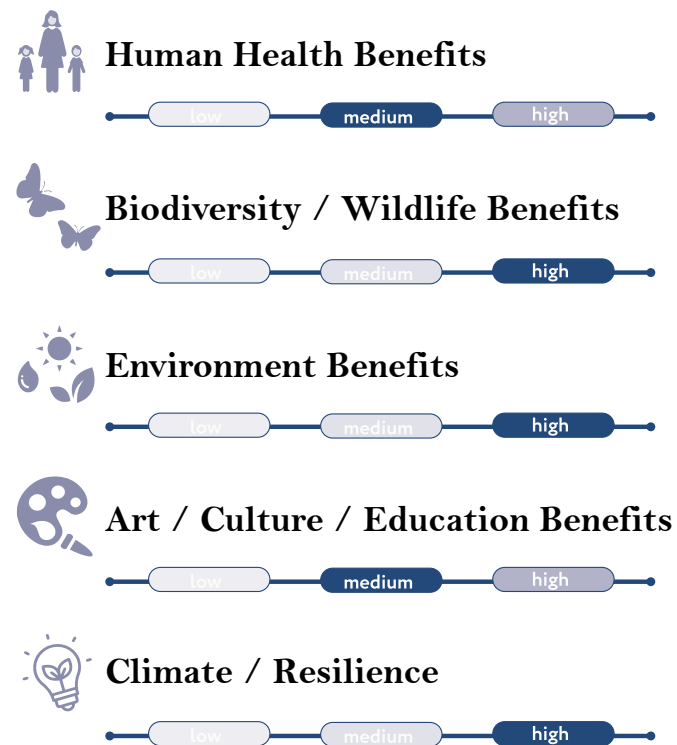
Bioretention systems, such as rain gardens or stormwater planter boxes are shallow, vegetated areas that collect and absorb runoff from rooftops, sidewalks, streets, and other hard surfaces. Stormwater that enters the system either is filtered before continuing downstream or is infiltrated and held in the soil bed.



### Integrating a Nature-based Solution Consider this...

Bioretention stormwater systems can also provide urban wildlife habitat. There are many indigenous plants in the region that can thrive in both wet and dry conditions and have deep fibrous roots to encourage infiltration. Indigenous plant species of the Texas Gulf Coast Prairies ecoregion can be ideal for these systems.

### Potential Community Benefits:

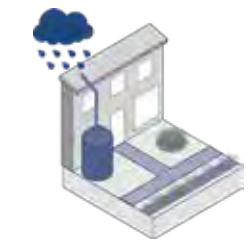


Benefits reviewed with Harris County Public Health  
Refer to Appendix for Strategy Cards in Arabic, and Spanish

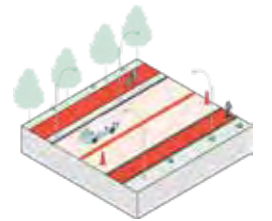
### Documents that Support the Action

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### Appropriate Locations



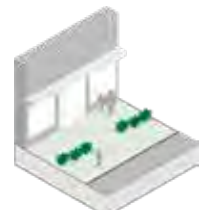
BUILDING ENVELOPE



RIGHT-OF-WAY [ROW]



PARKS/VACANT LAND

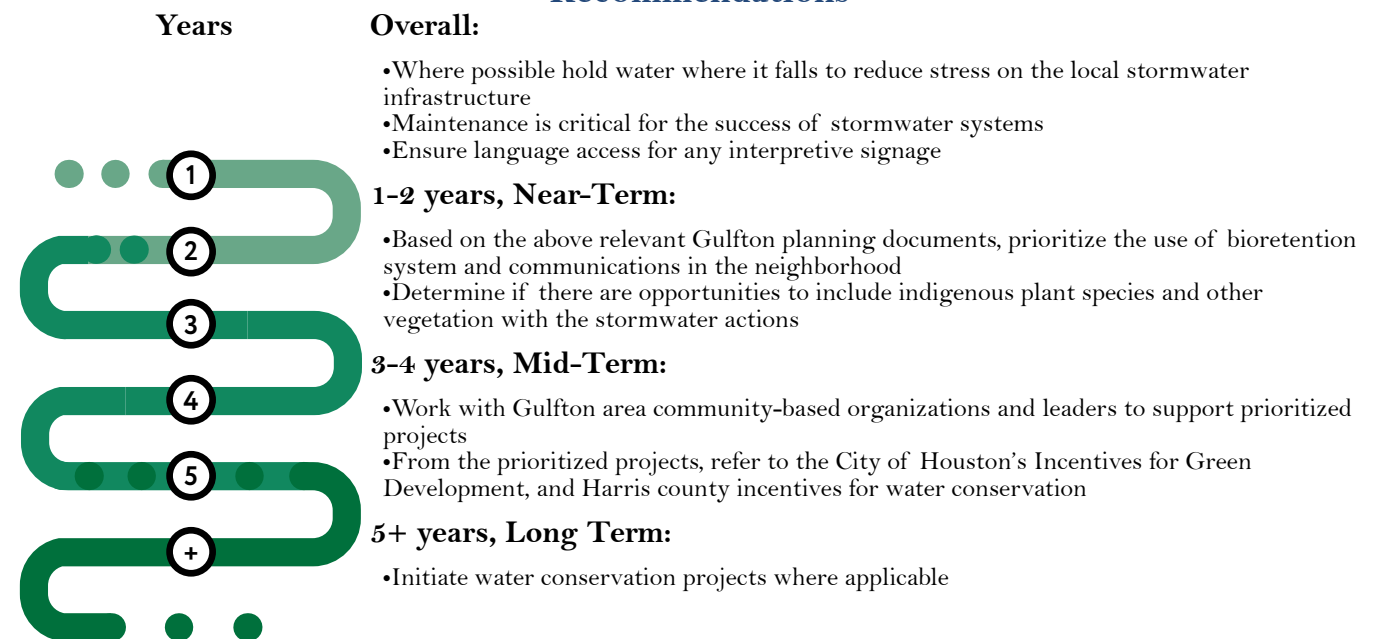


RIGHT-OF-WAY TO BUILDING ENVELOPE

### Pairs well with these strategies:

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• 1.1 Mobility Actions - Pedestrian</li> <li>• 1.2 Mobility Actions - Vehicular</li> <li>• 1.3 Mobility Actions - Bicycle</li> <li>• 2.1 Non-Vegetated Stormwater Actions &amp; Rainwater</li> <li>• 2.2 Linear Stormwater Systems</li> <li>• 2.3 Bioretention Stormwater Systems</li> <li>• 3.1 Green Roof</li> <li>• 3.2 Vertical Green</li> <li>• 4.1 Park</li> </ul> | <ul style="list-style-type: none"> <li>• 4.2 Garden</li> <li>• 4.3 Community Agriculture</li> <li>• 4.4 Plant Nursery</li> <li>• 4.5 Habitat &amp; Wildlife Support Actions</li> <li>• 5.1 Gathering Spaces</li> <li>• 5.2 Community Services</li> <li>• 5.3 Enterprise Zone</li> <li>• 5.4 Public Art</li> </ul> |
|---|---|

### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



## 3.1 GREEN ROOF

### Description:

A green roof system is a layer of vegetation, soil media, and waterproof membrane installed on top of a flat or slightly-sloped roof. The vegetation and soil media can filter stormwater pollution, reduce runoff, and moderate the temperature of a building or home.



### Integrating a Nature-based Solution Consider this...

Green roofs, if designed correctly can reduce the energy use in builds and provide needed green space in dense urban places. Views of nature or green space from hospitals, homes, or other places people are recovering from medical conditions can shorten stays, lessen pain, reduce minor complications, and improve emotional well-being.<sup>13</sup>

### Potential Community Benefits:



#### Human Health Benefits



#### Biodiversity / Wildlife Benefits



#### Environment Benefits



#### Art / Culture / Education Benefits



#### Climate / Resilience



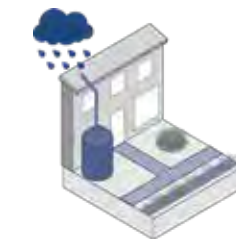
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

### Documents that Support the Action

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### Appropriate Locations



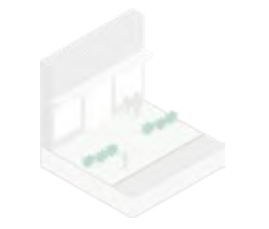
BUILDING ENVELOPE



RIGHT-OF-WAY [ROW]



PARKS/VACANT LAND



RIGHT-OF-WAY TO BUILDING ENVELOPE

### Pairs well with these strategies:

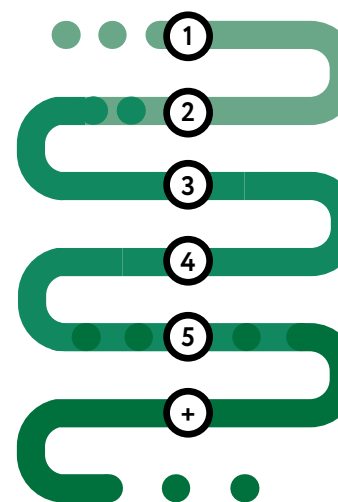
- 1.1 Mobility Actions - Pedestrian
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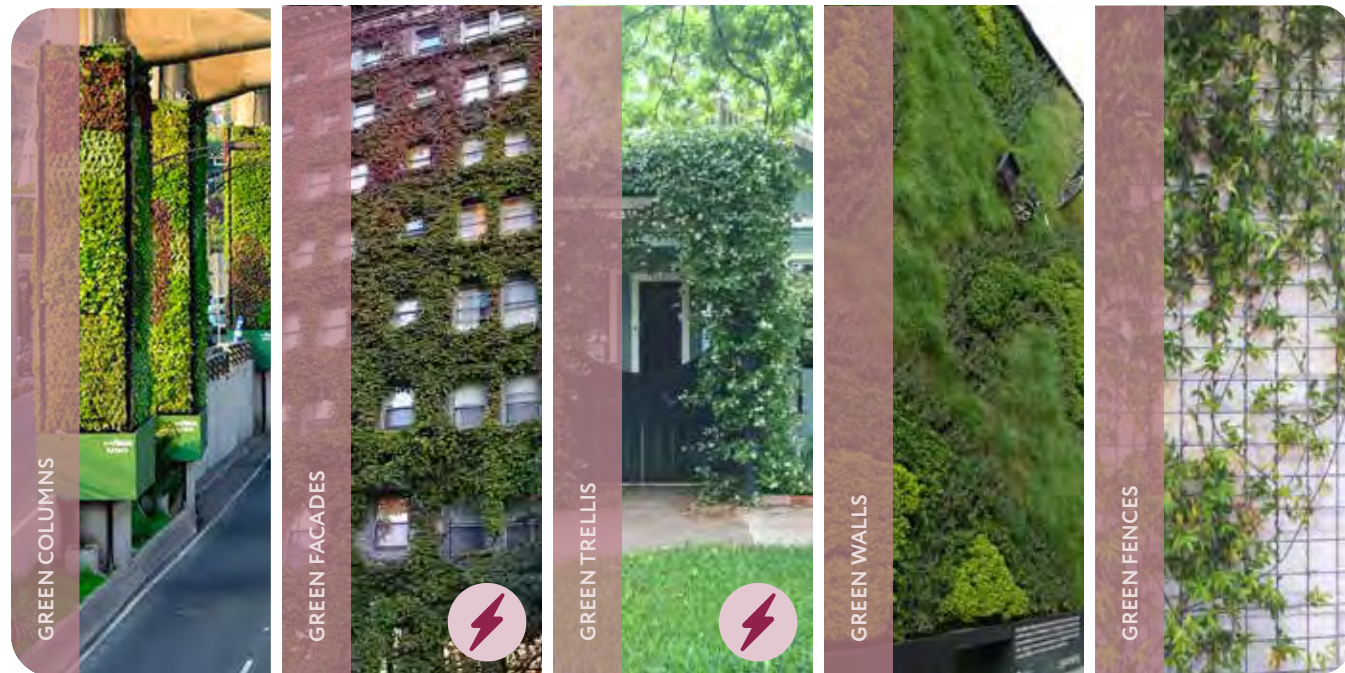
### Recommendations

#### Years

#### Overall:



- Where possible hold water where it falls to reduce stress on the local stormwater infrastructure
  - Maintenance is critical for the success of green roofs
  - Green roofs are heavy and should be considered for proposed buildings, retrofits can be expensive and time-consuming
  - Ensure language access for any interpretive signage
- 1-2 years, Near-Term:**
- Based on the above relevant Gulfton planning documents, prioritize the addition of green roofs and communications in the neighborhood
  - Determine if there are opportunities to include indigenous plant species and if there are views to the roof
- 3-4 years, Mid-Term:**
- Work with Gulfton area community-based organizations and leaders to support prioritized projects
  - From the prioritized projects, refer to the City of Houston's Incentives for Green Development, and Harris county incentives for water conservation
- 5+ years, Long Term:**
- Initiate water conservation projects where applicable



## 3.2 VERTICAL GREEN

GREEN COLUMNS (FREEWAYS) | GREEN FACADES (BUILDINGS) | GREEN TRELLIS | GREEN WALLS | "GREEN FENCES" | PASSIVE COOLING FENCE

### Description:

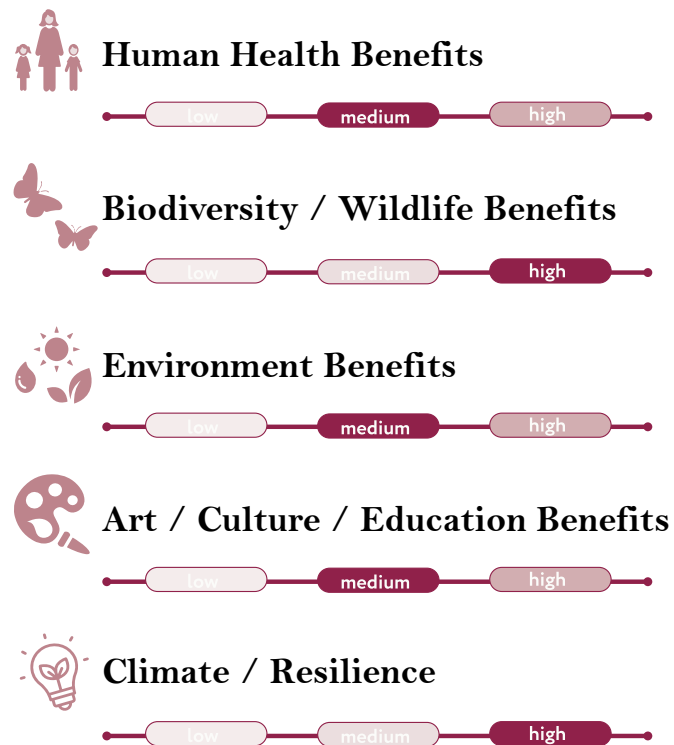
Vertical green systems incorporate plants on vertical surfaces such as freeway columns, walls, and fences. These systems can include both vegetation and soils, such as green walls, or structures that hold vegetation such as green facades or green trellises.



### Integrating a Nature-based Solution Consider this...

Vertical green systems can provide localized cooling of surfaces, with each species performing differently. Plant physiology and leaf area/shape should be considered when installing vertical green solutions. In addition, there are many vine species that are important host plants to butterflies in the region, such as passionflower (*Passiflora* sp.)

### Potential Community Benefits:



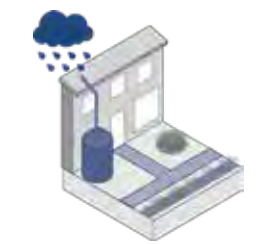
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

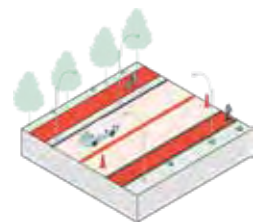
### Documents that Support the Action

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### Appropriate Locations



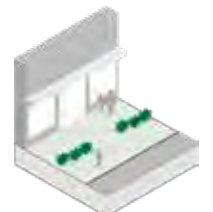
BUILDING ENVELOPE



RIGHT-OF-WAY [ROW]



PARKS/VACANT LAND

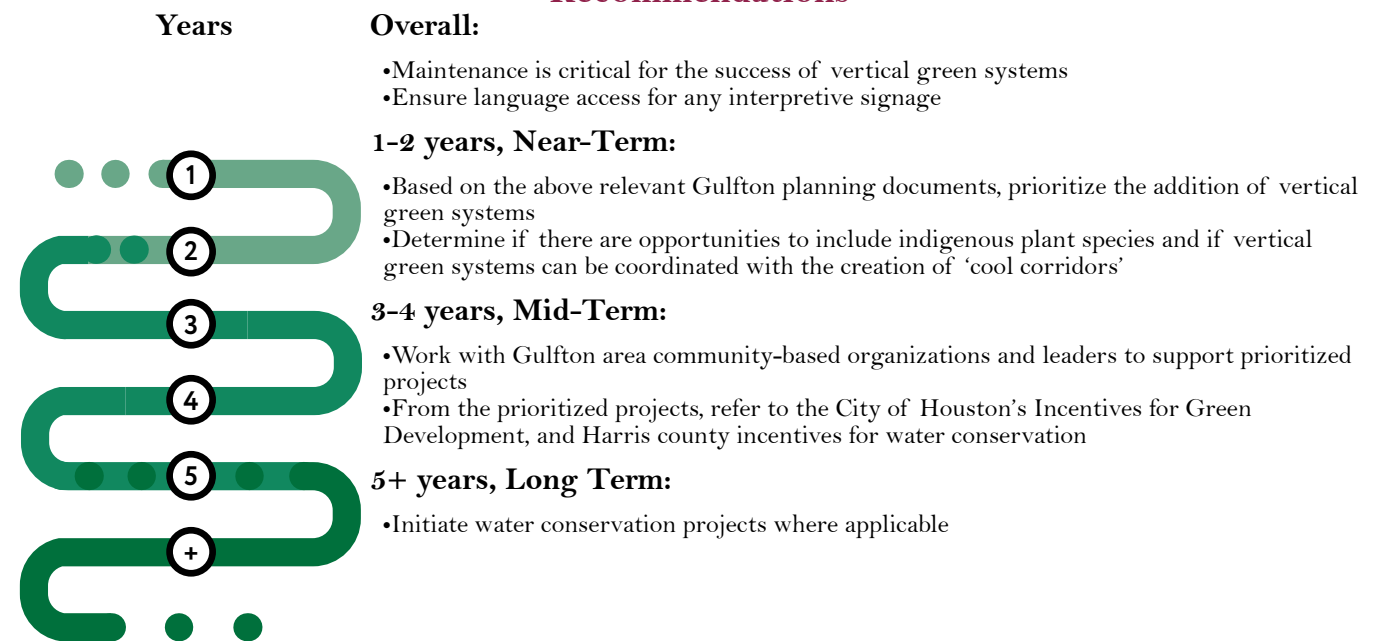


RIGHT-OF-WAY TO BUILDING ENVELOPE

### Pairs well with these strategies:

- |   |   |
|---|---|
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|---|---|

### Recommendations





## 4.1 PARK

LINEAR PARK | GREEN CORRIDOR 'COOL CORRIDOR' | SPARK PARKS | PARKLET | PLAYScape | NATURE PLAY | SPORTS FIELDS

### Description:

Parks are natural or semi-natural spaces set aside for recreation and enjoyment. Some parks include small areas, such as parklets, and some are narrow such as green corridors. Park design can also include space for playscapes, sports fields, walking loops, and nature areas.

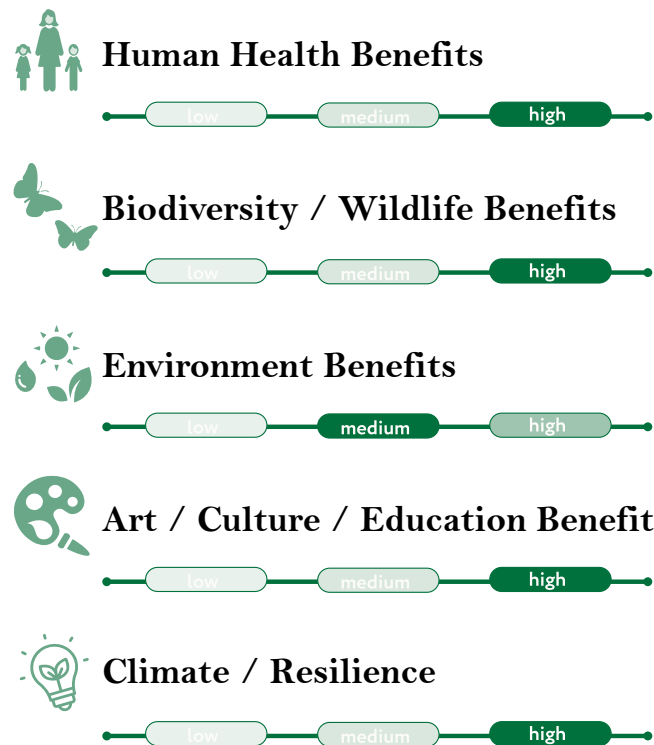


### Integrating a Nature-based Solution

Consider this...

Increasing the amount and quality of green space in urban settings can be a lower cost, holistic wellness strategy that addresses health inequalities and improve overall health outcomes by improving the physical and mental health of residents.<sup>14</sup> New or improved park space should provide a diversity of natural and programmed area(s) for multiple generations to enjoy.

### Potential Community Benefits:



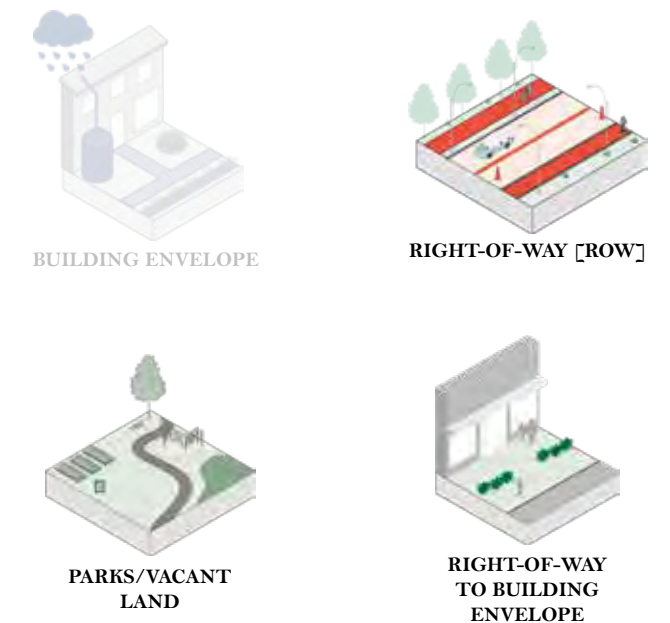
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

### Documents that Support the Action

- Revitalization Plan for Gulfton-Sharpstown
- Gulfton Complete Communities Action Plan
- Hillcroft Avenue Safety Assessment
- Gulfton Pedestrian Bicyclist Special District Study
- Cities Connecting Children to Nature
- Houston Climate Action Plan
- Resilient Houston
- Houston Bike Plan
- Houston Vision Zero Action Plan
- Final Housing Study
- Neighborhood Manufacturing Study

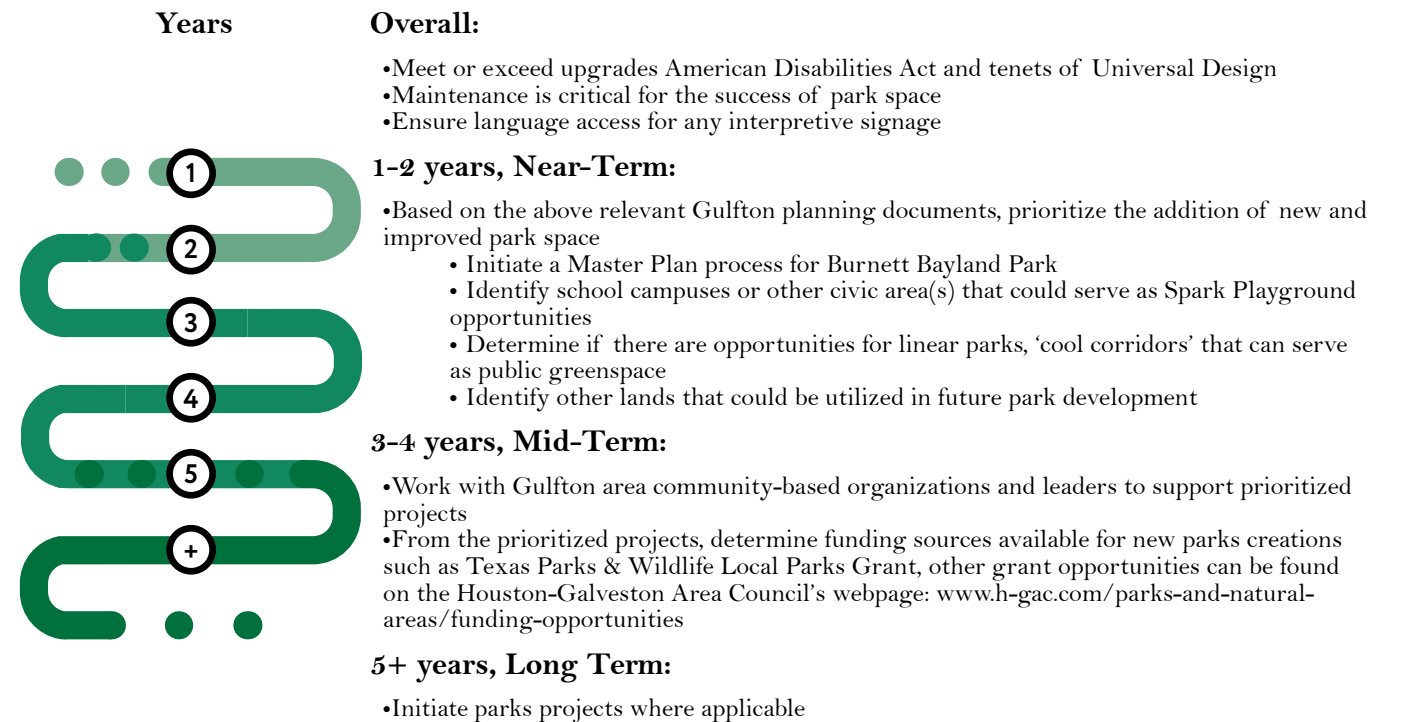
### Appropriate Locations



### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
- 1.2 Mobility Actions - Vehicular
- 1.3 Mobility Actions - Bicycle
- 2.1 Non-Vegetated Stormwater Actions & Rainwater
- 2.2 Linear Stormwater Systems
- 2.3 Bioretention Stormwater Systems
- 3.1 Green Roof
- 3.2 Vertical Green
- 4.1 Park
- 4.2 Garden
- 4.3 Community Agriculture
- 4.4 Plant Nursery
- 4.5 Habitat & Wildlife Support Actions
- 5.1 Gathering Spaces
- 5.2 Community Services
- 5.3 Enterprise Zone
- 5.4 Public Art

### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions





## 4.2 GARDEN

CULTURAL GARDEN (MEDICINAL/SPIRITUAL) | POLLINATOR/WILDLIFE GARDEN | CONTAINER/PATIO GARDEN

### Description:

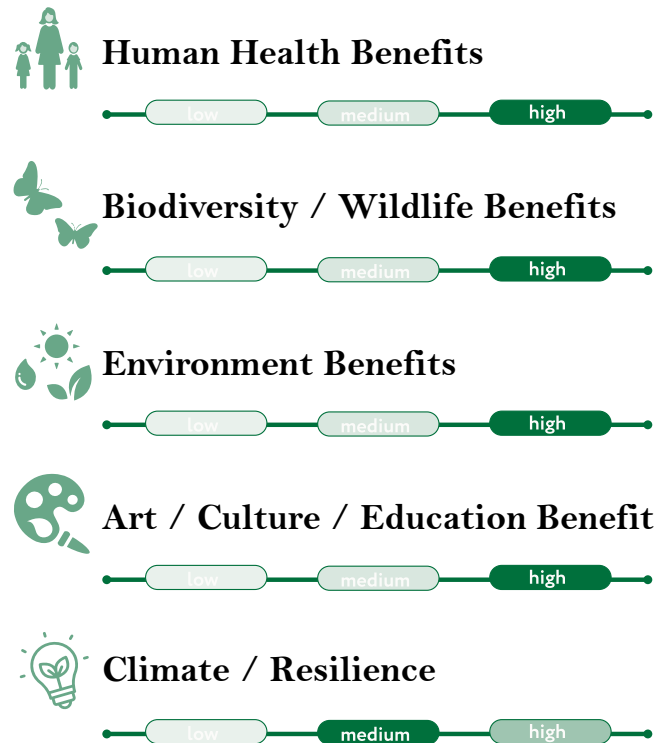
Gardens are spaces set aside for the growth and cultivation of plants and/or wildlife. Garden spaces have higher maintenance needs and rely on community stewards to tend to the area throughout the seasons.



### Integrating a Nature-based Solution Consider this...

Exposure to diverse plant species and types of pollen helps children develop normal immune responses.<sup>15</sup> This can be achieved by planting a diverse mix of plant species in gardens. In addition, working in soil has been shown to boost immune function in child and adults.<sup>16</sup>

### Potential Community Benefits:



Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

### Documents that Support the Action

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- Houston Vision Zero Action Plan
- Final Housing Study
- Neighborhood Manufacturing Study

### Appropriate Locations

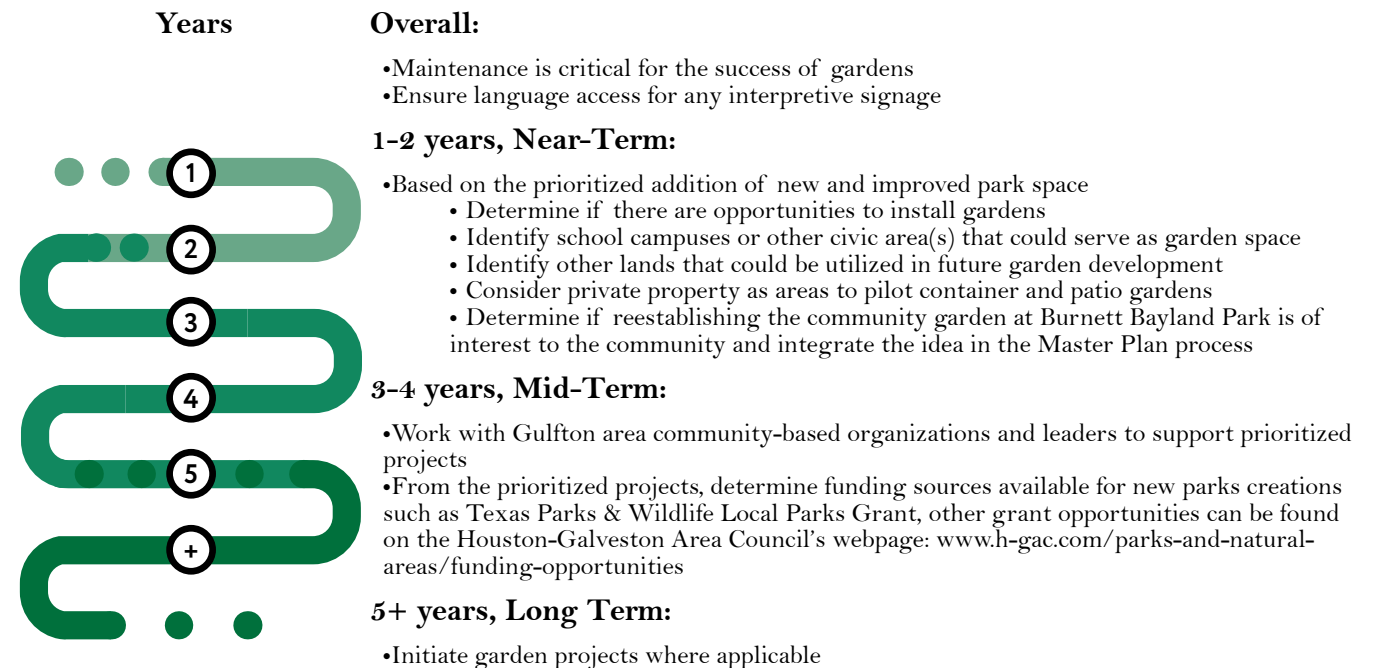


### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
- 1.2 Mobility Actions - Vehicular
- 1.3 Mobility Actions - Bicycle
- 2.1 Non-Vegetated Stormwater Actions & Rainwater
- 2.2 Linear Stormwater Systems
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### Recommendations





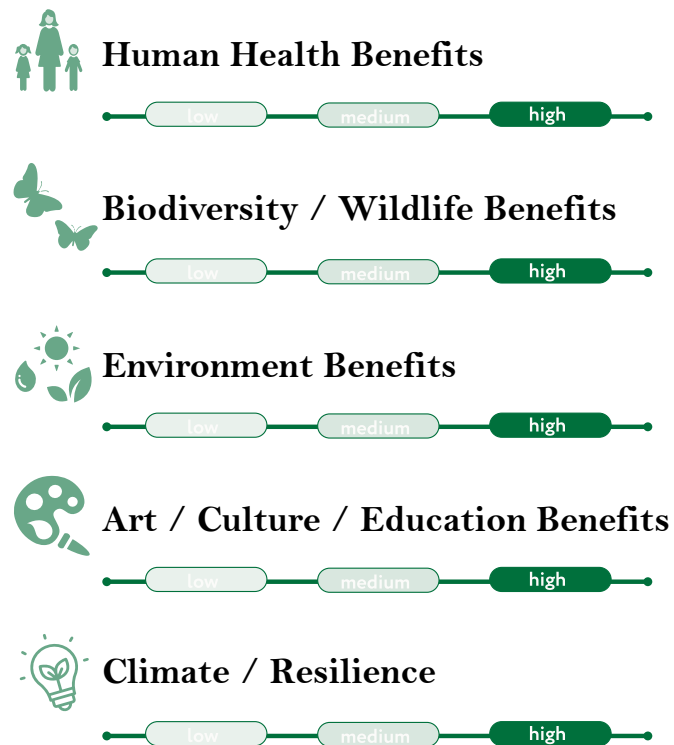
## 4.3 COMMUNITY AGRICULTURE

VEGETABLE/HERB GARDEN | COMMUNITY ORCHARD/FOOD FOREST | AQUACULTURE | BEEKEEPING | CHICKEN KEEPING

### Description:

Community agriculture is small-scale farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, fiber, and other products.

### Potential Community Benefits:



Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

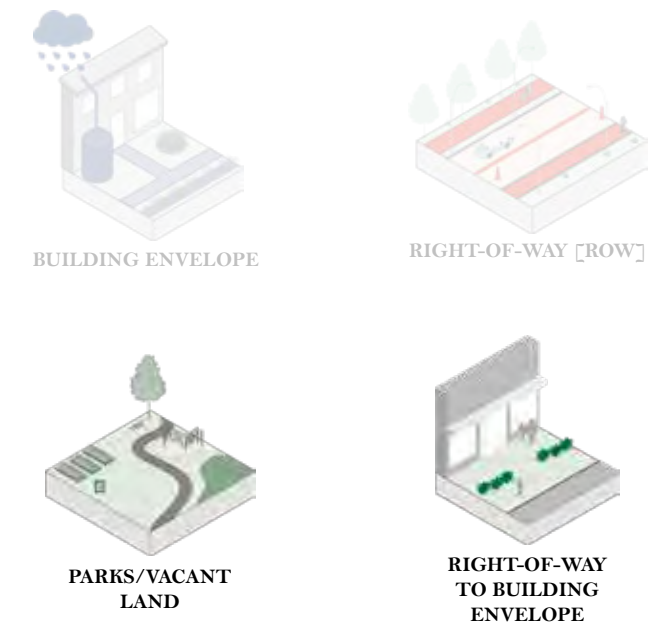
### Integrating a Nature-based Solution Consider this...

Community gardens provide stimulating social connections, produce nutritious food, and create opportunities for recreation, exercise, therapy, and education, thus helping improve overall health and nutrition.<sup>17</sup>

### Documents that Support the Action

- Revitalization Plan for Gulfton-Sharpstown
- Gulfton Complete Communities Action Plan
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- Cities Connecting Children to Nature
- Houston Climate Action Plan
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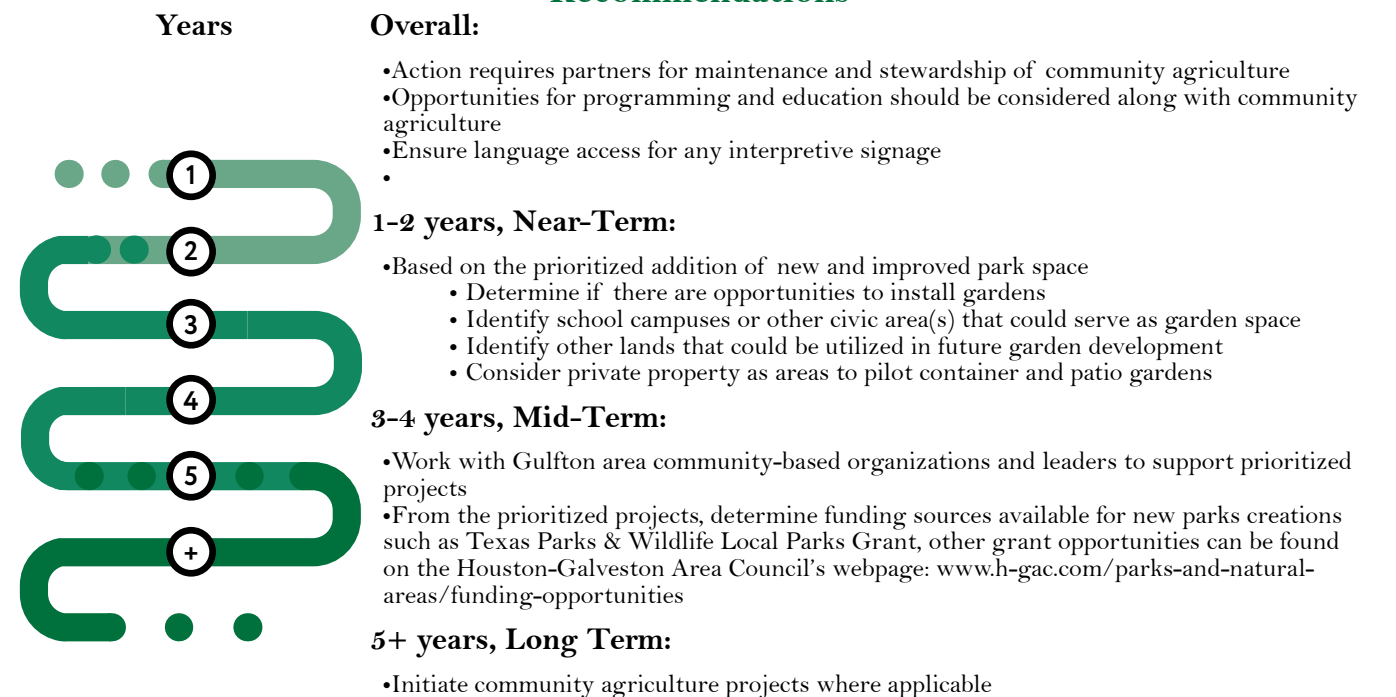
### Appropriate Locations



### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
- 1.2 Mobility Actions - Vehicular
- 1.3 Mobility Actions - Bicycle
- 2.1 Non-Vegetated Stormwater Actions & Rainwater
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### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



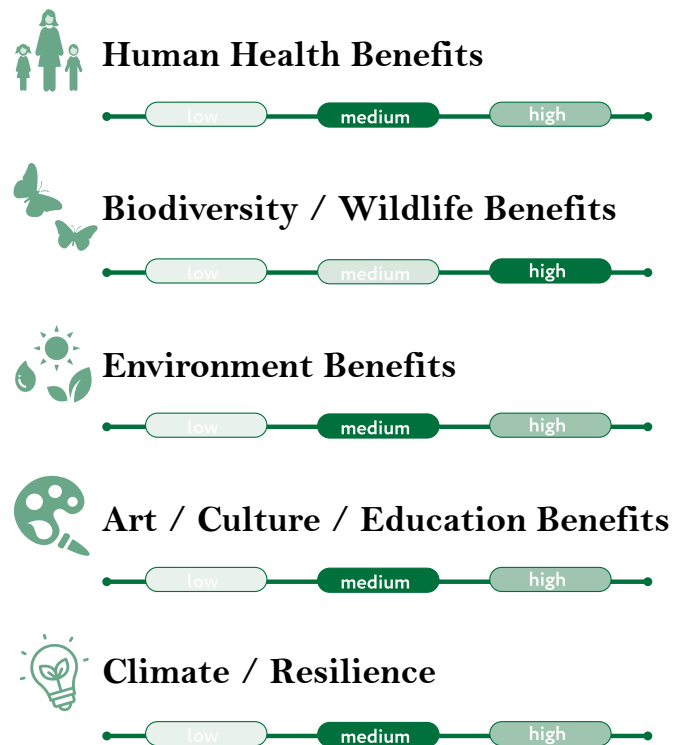
## 4.4 PLANT NURSERY

FRUIT/NUT TREES | NATIVE TREES | OTHER VEGETATION

### Description:

Plant nurseries are spaces where plants are propagated and grown either outside or covered. Typically, these plants are for gardening, agriculture, forestry, or landscaping and are sold to the general public or businesses.

### Potential Community Benefits:



Benefits reviewed with Harris County Public Health  
Refer to Appendix for Strategy Cards in Arabic, and Spanish

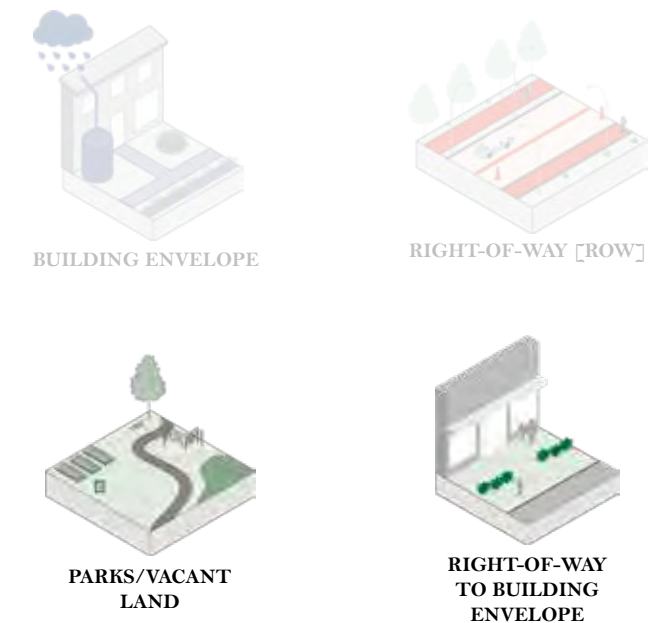
### Integrating a Nature-based Solution Consider this...

Developing a local plant nursery can help to reduce supply issues within the nursery trade, and assure that vegetation is adapted to the local conditions. In addition, there are opportunities for training and education in the nursery practice enhancing green job development.

### Documents that Support the Action

- Revitalization Plan for Gulfton-Sharpstown
- Gulfton Complete Communities Action Plan
- Hillcroft Avenue Safety Assessment
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- Houston Climate Action Plan
- Resilient Houston
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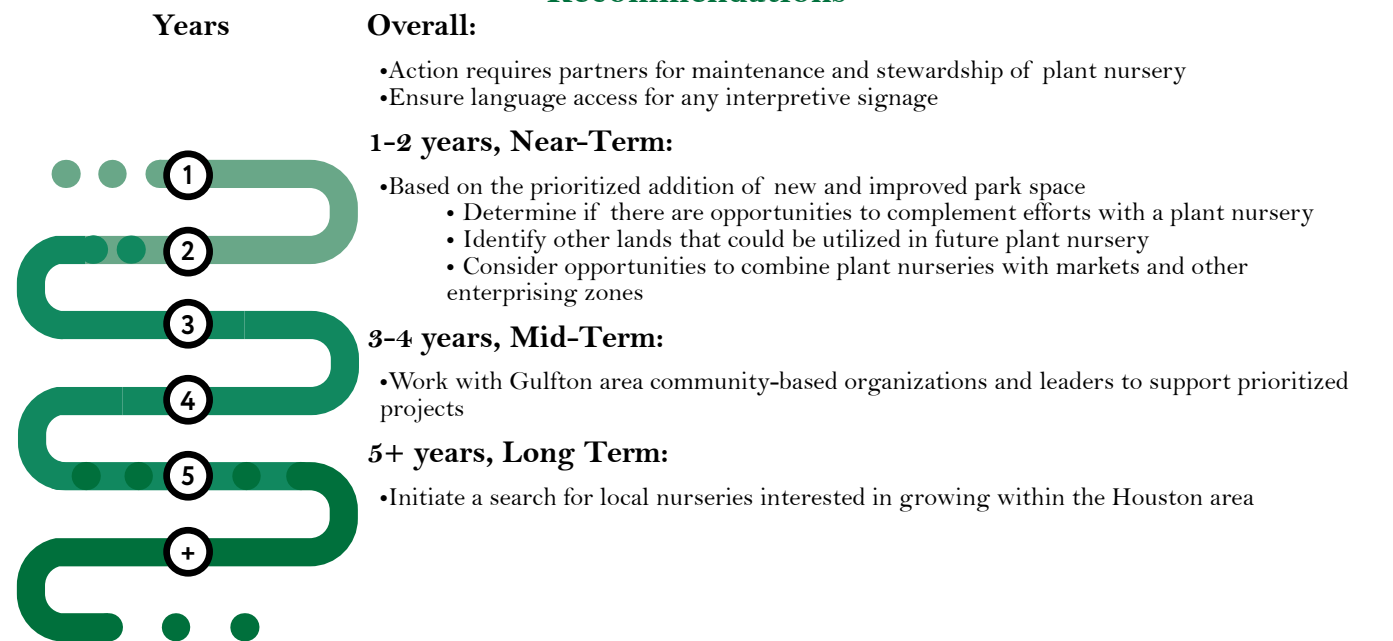
### Appropriate Locations



### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
- 1.2 Mobility Actions - Vehicular
- 1.3 Mobility Actions - Bicycle
- 2.1 Non-Vegetated Stormwater Actions & Rainwater
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- 5.4 Public Art

### Recommendations





## 4.5 HABITAT & WILDLIFE SUPPORT ACTIONS

TREE PLANTING | INDIGENOUS VEGETATION PLANTING

### Description:

Habitat and wildlife support actions include planting trees and native vegetation to restore habitat and make more habitable spaces. This may include planting trees or installing vegetation along streets, in parking lots, around apartments and living areas, and in parks.



### Integrating a Nature-based Solution Consider this...

People in urban areas have a lower risk of psychological distress if they have more trees within a walkable distance of their homes.<sup>18</sup> The use of indigenous trees and vegetation have the added benefit of being adapted to the local conditions and providing habitat for wildlife.

### Potential Community Benefits:



#### Human Health Benefits



#### Biodiversity / Wildlife Benefits



#### Environment Benefits



#### Art / Culture / Education Benefits



#### Climate / Resilience



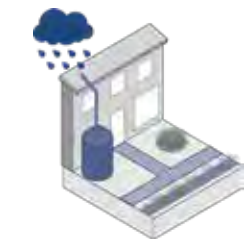
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

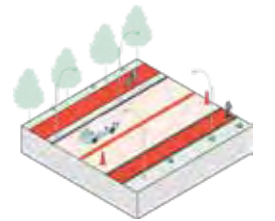
### Documents that Support the Action

- Revitalization Plan for Gulfton-Sharpstown
- Gulfton Complete Communities Action Plan
- Hillcroft Avenue Safety Assessment
- Gulfton Pedestrian Bicyclist Special District Study
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- Neighborhood Manufacturing Study

### Appropriate Locations



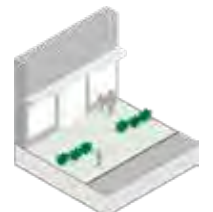
BUILDING ENVELOPE



RIGHT-OF-WAY [ROW]



PARKS/VACANT LAND



RIGHT-OF-WAY TO BUILDING ENVELOPE

### Pairs well with these strategies:

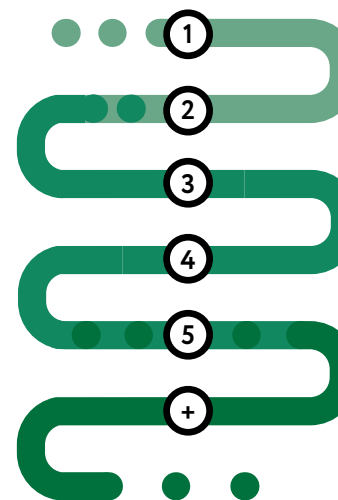
- 1.1 Mobility Actions - Pedestrian
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### Recommendations

#### Years

#### Overall:

- Establishment maintenance is critical for the success of trees and vegetation
- Ensure language access for any interpretive signage



#### 1-2 years, Near-Term:

- Based on the above relevant Gulfton planning documents, prioritize the addition of trees and indigenous vegetation
  - Initiate an urban forestry plan to increase tree canopy in Gulfton
  - Determine if there are opportunities for street trees as 'cool corridors' that can serve as public greenspace
  - Identify other projects that could benefit from trees with the goal of planting 100 new trees by 2023 as recommended in the Gulfton Complete Communities Action Plan

#### 3-4 years, Mid-Term:

- Work with Gulfton area community-based organizations and leaders to support prioritized projects
- From the prioritized projects, determine funding sources available for trees and vegetation through Trees for Houston and other groups

#### 5+ years, Long Term:

- Initiate tree and vegetation installation where applicable



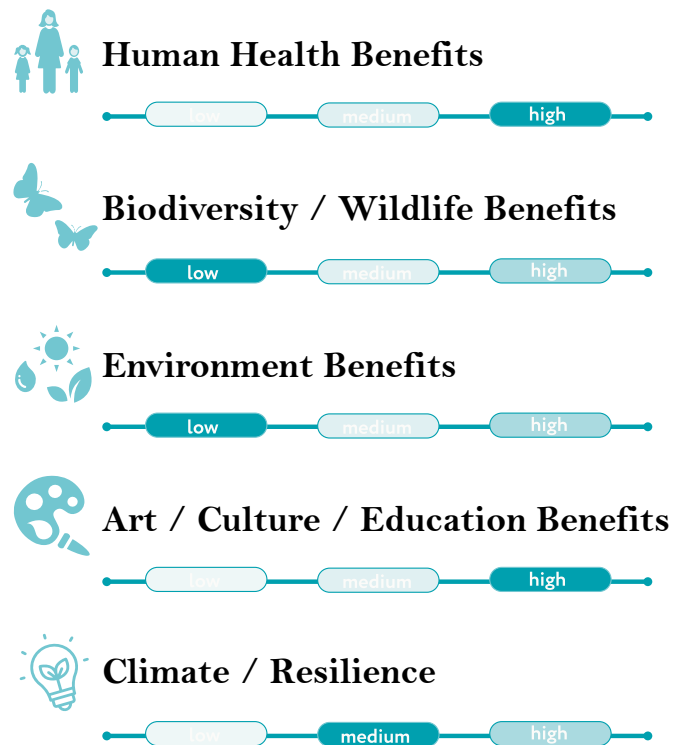
## 5.1 GATHERING SPACES

COURTYARD | PLAZA [PLACITA] | PICNIC AREA | MAILBOX AREA

### Description:

Gathering spaces are any public places where people are able to congregate and connect. These areas can be large or small, but support community cohesion which benefits mental health.

### Potential Community Benefits



Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

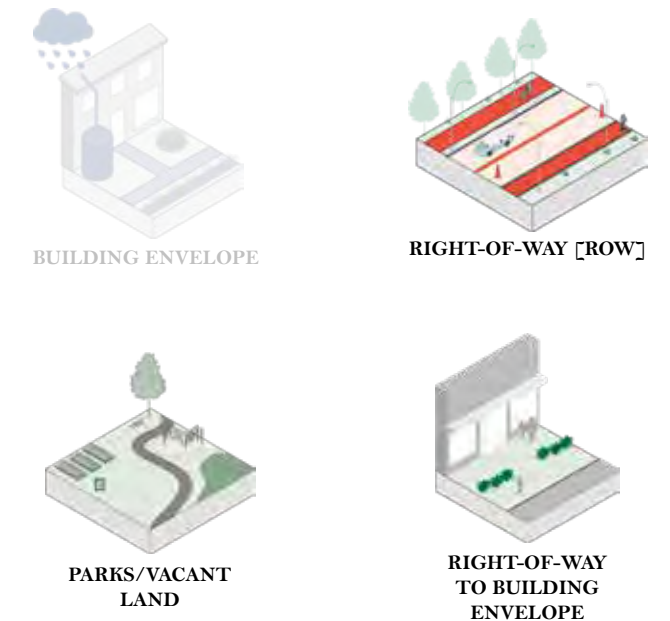
### Integrating a Nature-based Solution Consider this...

Tree cover in gathering spaces has been shown to improve social cohesion.<sup>19</sup> Trees and urban nature, thus serve an important role in improving holistic population health in our cities.

### Documents that Support the Action

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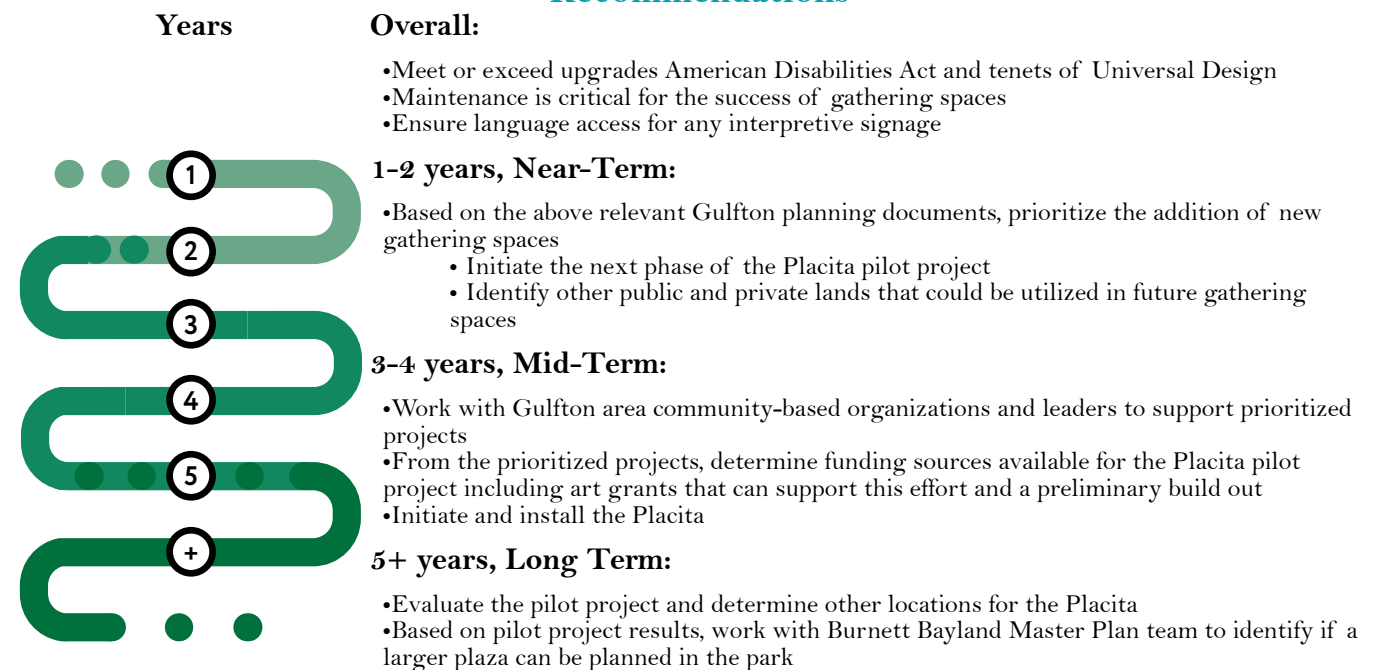
### Appropriate Locations



### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
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### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



## 5.2 COMMUNITY SERVICES

COMMUNITY RESOURCE CENTER | WIFI HUB

### Description:

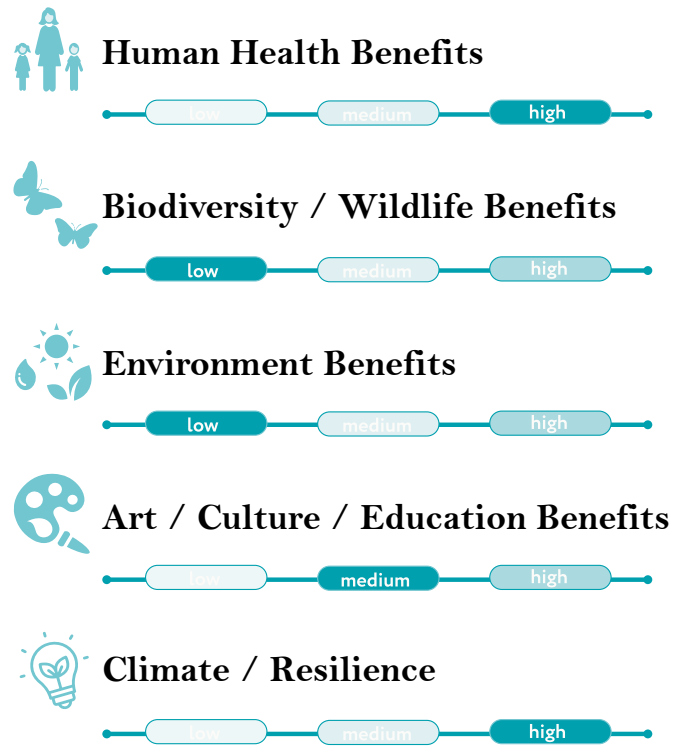
Community services provide assets in a neighborhood that helps meet certain needs for those around them. This can include shelter, wifi, legal services, training, critical resources during disaster scenarios, and other important resources.



### Integrating a Nature-based Solution Consider this...

People in communities having strong social ties show greater resilience and ability to cope with change. Social events help prevent depression and physical social activities can support heart health.<sup>20</sup> Community services can increase the health related benefits of programs by providing green space for community members to meet.

### Potential Community Benefits



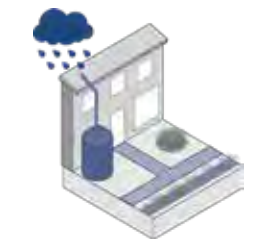
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

### Documents that Support the Action

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### Appropriate Locations



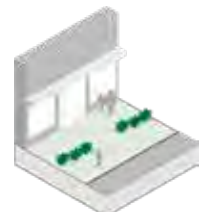
BUILDING ENVELOPE



RIGHT-OF-WAY [ROW]



PARKS/VACANT LAND

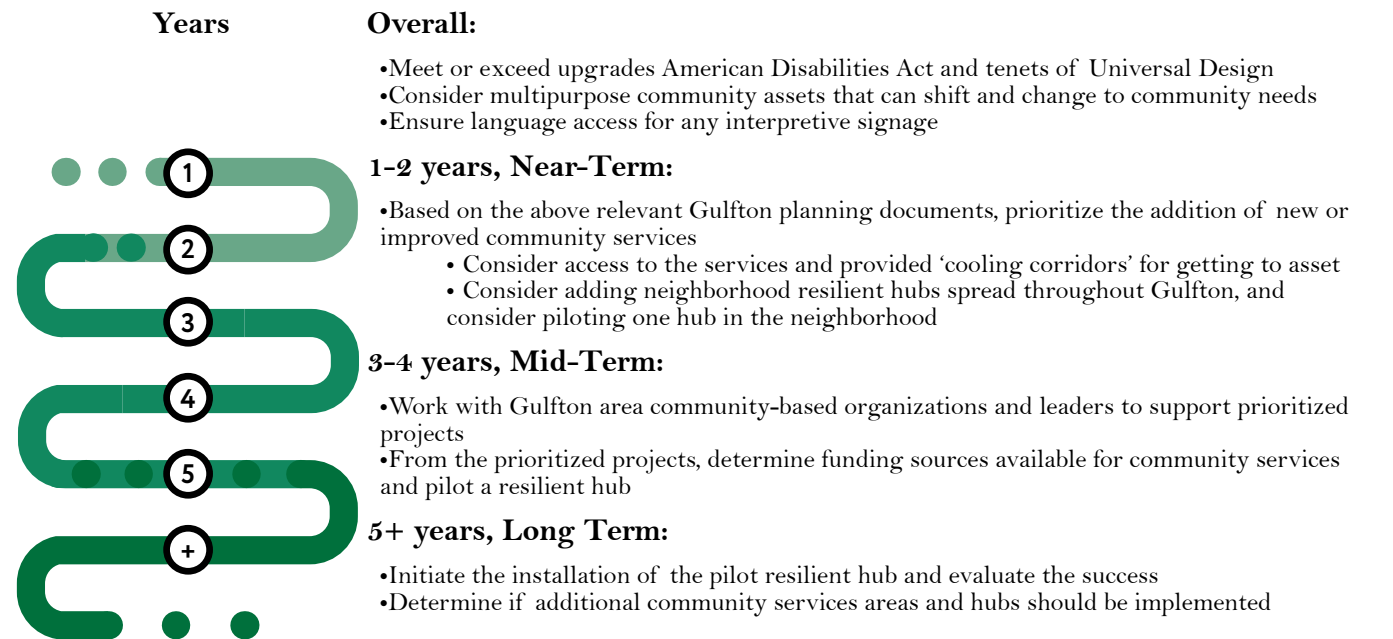


RIGHT-OF-WAY TO BUILDING ENVELOPE

### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
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- 1.3 Mobility Actions - Bicycle
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### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



## 5.3 ENTERPRISE ZONE

ECO/BIO-INNOVATION | MAKERSPACES | PUBLIC MARKET/VENDOR SPACE, OPEN-AIR FLEA MARKET STALLS | CAREER PATHWAYS/GREEN JOB DEVELOPMENT

### Description:

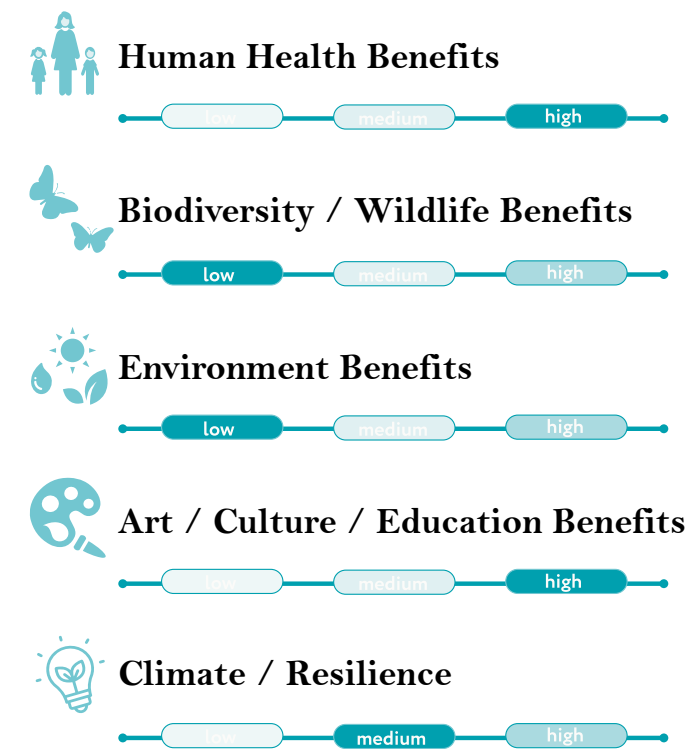
Enterprise zones are areas that are granted tax or regulatory incentives to encourage private economic development, job creation, and community cohesion.



### Integrating a Nature-based Solution Consider this...

Green job programs and training can provide multiple benefits to the community and the employee. Individuals participating in green jobs work in New York reported positive environmental attitudes and behaviors as a result of green job training and employment.<sup>21</sup> It is important to emphasize that these programs can be difficult to initiate and steward, but there are many precedent examples of these programs working in certain contexts.

### Potential Community Benefits



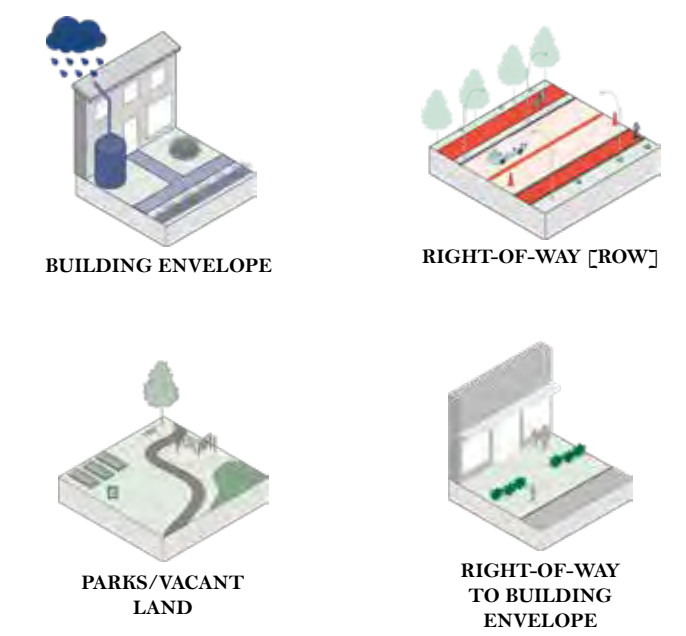
Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

### Documents that Support the Action

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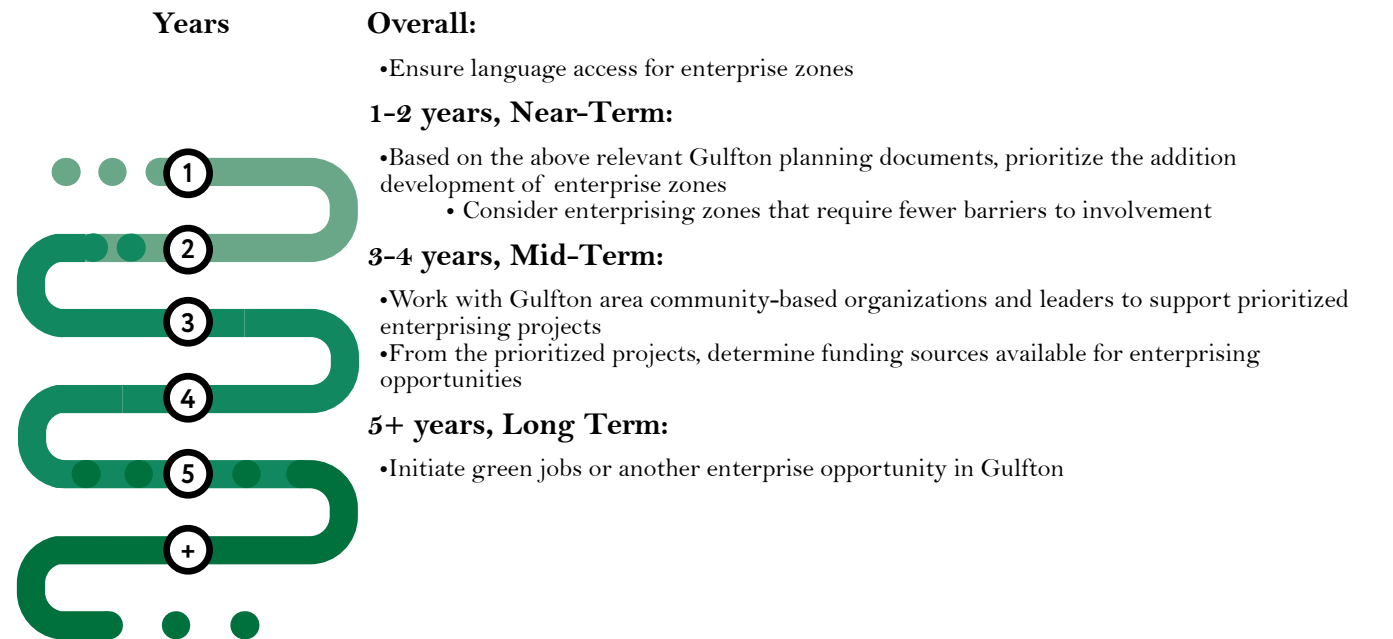
### Appropriate Locations



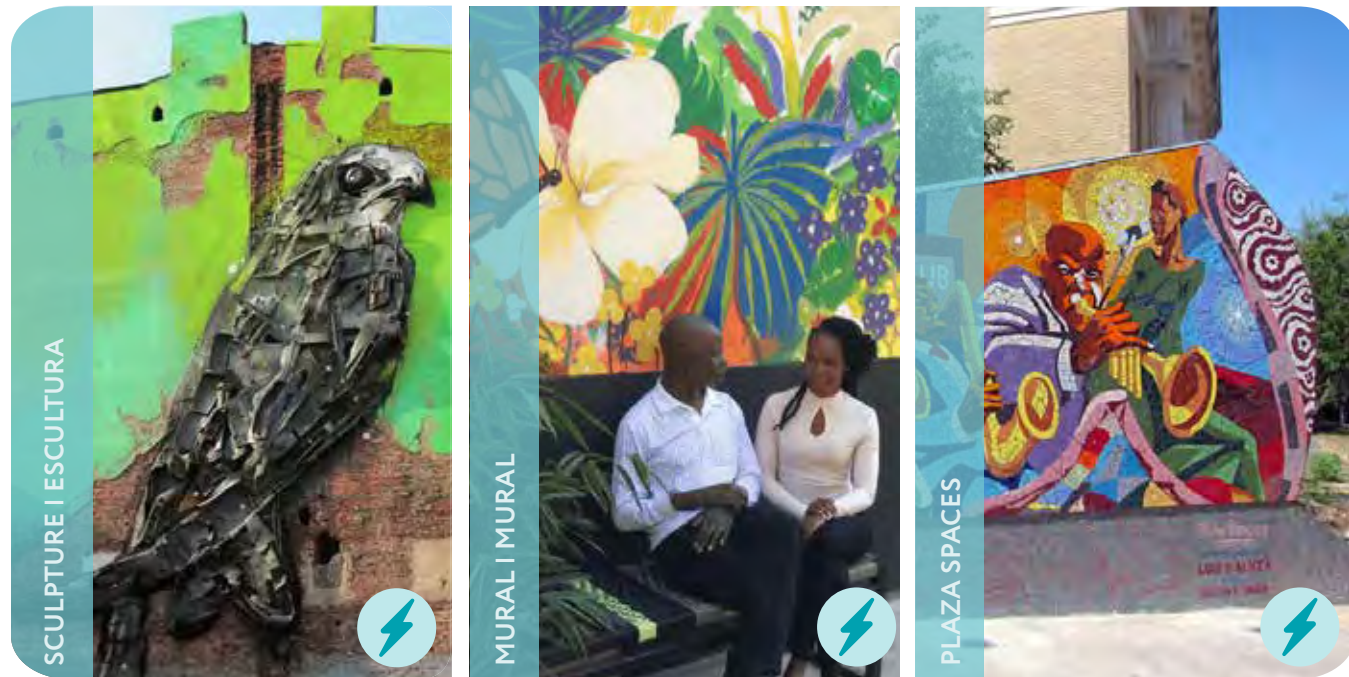
### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
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### Recommendations



Transportation Management | Mobility Actions • Rainwater | Storm-water Management Actions • Architectural | Structural Actions • Nature-based Community Capacity Actions • Community Capacity Actions



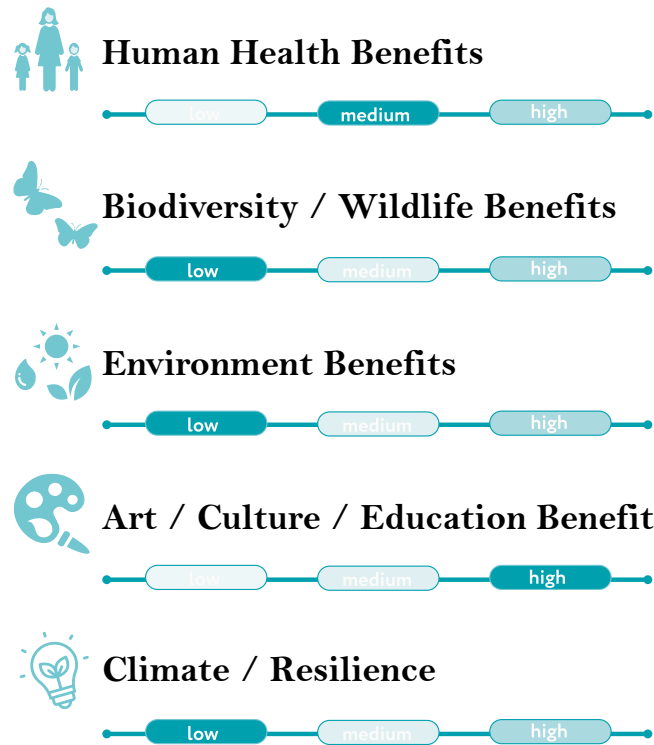
## 5.4 PUBLIC ART

SCULPTURE, MURALS, PLAZA SPACES

### Description:

Public art is works made through the use of imagination and creative skills by artists in any form that is visually and physically accessible to the general public.

### Potential Community Benefits



Benefits reviewed with Harris County Public Health

Refer to Appendix for Strategy Cards in Arabic, and Spanish

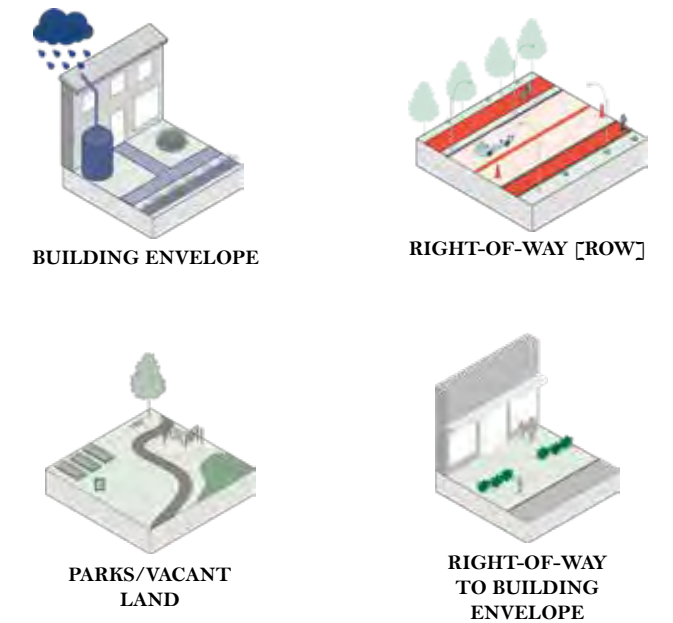
### Integrating a Nature-based Solution Consider this...

Combining nature and public art can spark imagination, catalyze placemaking, stimulate spatial thinking, forge new connections about urban nature, and bring people together. Art has a way of breaking down barriers and meeting people where they are in life.

### Documents that Support the Action

- Revitalization Plan for Gulfton-Sharpstown
- Gulfton Complete Communities Action Plan
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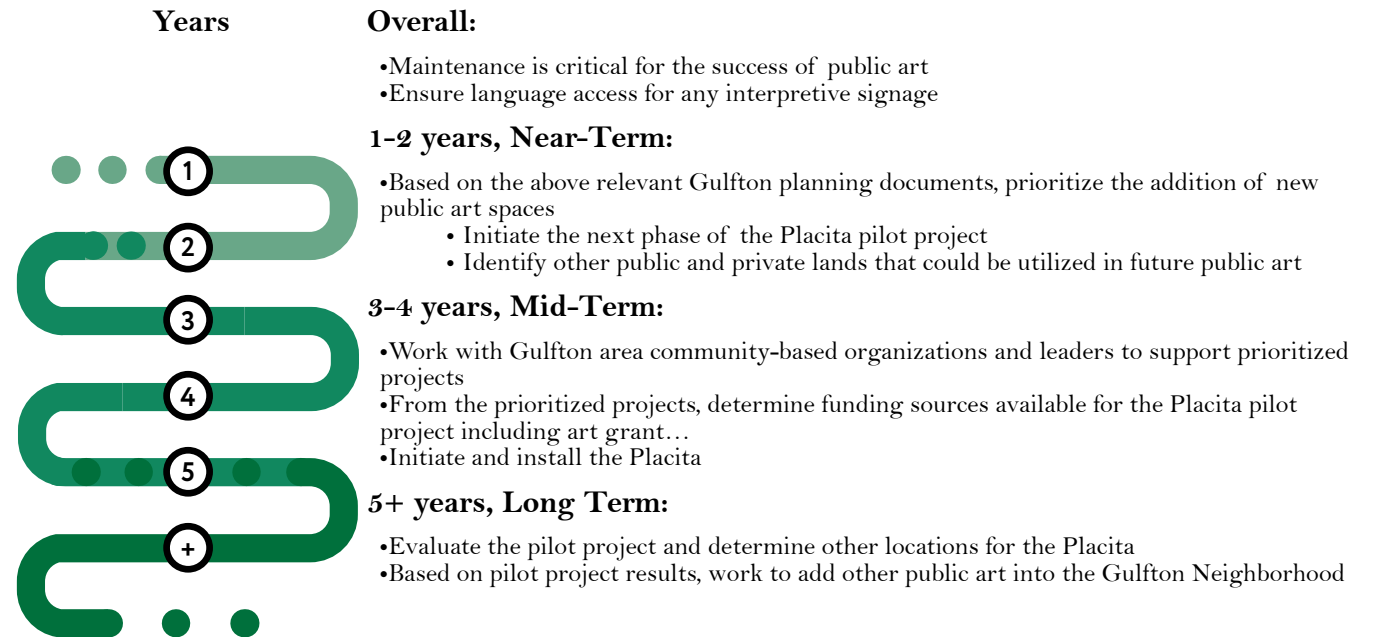
### Appropriate Locations



### Pairs well with these strategies:

- 1.1 Mobility Actions - Pedestrian
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### Recommendations





# How Can We Support Our Non-Human Neighbors?

## A More Wildlife-friendly Gulfton

Wildlife in urban areas face tremendous stress as we chop down trees, plant yards with exotic species, drain wetlands, install stormwater systems, erect buildings, and pave roads. However, against these major odds, non-human living organisms still persist in our cities. For long-term stability in the face of environmental fluctuations, broad-scale resistance to pests and pathogens, and the ability to continue to evolve, diversity in plant and animal populations is essential.<sup>22</sup> This biodiversity creates a system that can actively adapt to changing climatic conditions, and has the ability to rebound after stress. **Biodiversity is the variety and number of living things on Earth and includes all species**, from the fungi living on the roots of a maple tree, to the owl that lives in its branches, to the tree itself. It includes diversity within species, between species, and among ecosystems. Just as species rely on each other for food and shelter, so do people rely on biodiversity for food, building materials, medicine, protection from the weather, and much more.

The Gulfton Super Neighborhood is situated in the U.S. Environmental Protection Agency Level IV **Northern Humid Gulf Coastal Prairie Ecoregion**.<sup>23</sup> This gently sloping coastal plain historically was mostly grassland with a few clusters of oaks and other woodland

communities associated with waterways. In addition, the Houston region is also the focal point of one of the great bird migrations in North America, the **Central Flyway, and a key corridor for the culturally-important monarch butterfly (*Danaus plexippus*)**. This migration route includes not only shorebirds, which can be observed in the hundreds of thousands at the Bolivar Flats, but birds of prey, songbirds, and hummingbirds. Also butterflies, moths, and bats rely on Texas as a key migration route. Natural areas provide important refuge, and replenishing areas for migratory species. Recognizing the important role Houston plays in these natural cycles, the city was recognized as a **Bird City by the Texas Parks and Wildlife Department**, and the city leadership signed the **Mayors' Monarch Pledge with the National Wildlife Federation**.



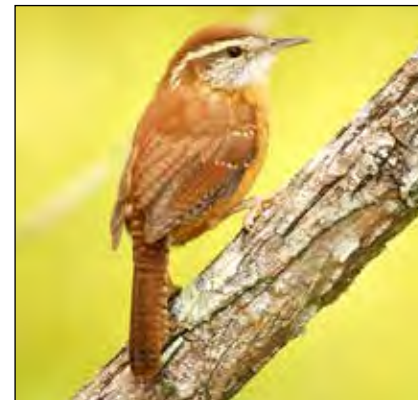
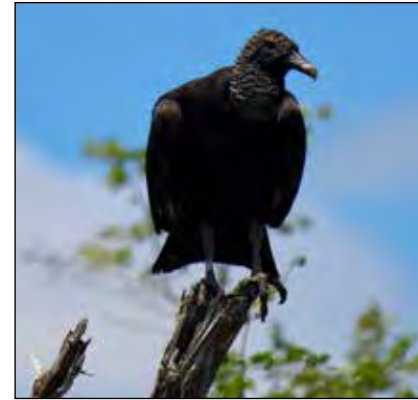
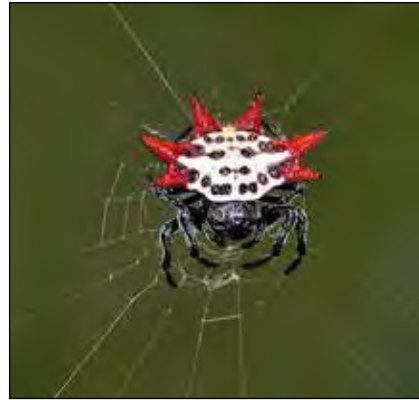
**BIODIVERSITY:** Nature-based projects incorporating Indigenous plant species bolster neighborhood beauty, provide a sense of place, and are more climate-resilient while supporting local wildlife. Vegetation that is adapted to site conditions, and climate, and chosen based on the design intent needs fewer resources and less maintenance to thrive. Selecting regionally appropriate vegetation can reduce mowing, conserve water, reduce soil erosion, reduce the use of fertilizers and pesticides, and ultimately save money allocated for landscape maintenance.

## Data | Trends

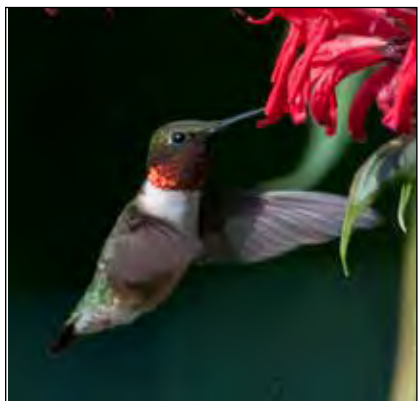
- iNaturalist, a citizen science platform for collecting information about plant and animal species, was used to record different species in Gulfton. 852 observations were taken.
- There are not many 'natural areas' within Gulfton and thus vegetation observed is primarily street or yard trees, and yard or landscape understory and ground cover.
- In addition to vegetation, insects such as bees, butterflies, moths, slugs, and other invertebrates, different types of fungus, and a handful of birds were observed.
- Historically the coastal prairie covered 6.5 million acres in Texas, now less than one percent of these systems remain.<sup>24</sup>
- Prairies may appear to be an endless monoculture of mid-to-tall grasses, but healthy prairie systems are biologically diverse and include a complicated web of organisms, from seasonal wildflowers, insects, birds, and small mammals.
- There are approximately 615 documented bird species in Texas and about half migrate, and through the course of a season millions of birds pass through the state.<sup>25</sup>
- Migration for some species is a huge effort; the Ruby-throated Hummingbird (*Archilochus colubris*) flies nonstop over the Gulf of Mexico, about 600 miles of open water.<sup>26</sup>
- The Monarch Butterfly (*Danaus plexippus*) migration occurs in fall and spring when thousands of butterflies travel from the mountains of Mexico to their breeding grounds north of Texas.

## Recommendations

- Vegetation is the easiest way to start increasing diversity in an area that can then support other organisms. There is a great opportunity to add to the plant diversity in this neighborhood. Refer to the table following this section for species recommendations for the neighborhood.
- Vegetation can be added to the area to increase green cover, even in dense urban environments. Vertical greening strategies could be considered in areas with limited spaces through green walls or green facades.
- Some migratory animal species do not need large expanses of natural areas to provide refuge and resources. For example, patches of flowering plants can provide nectar to butterflies, moths, and hummingbirds that may stop in for a recharge. Indigenous species can be selected to increase the habitat values and sense of place in Gulfton.
- Gulfton leaders and residents can design and develop natural habitat areas in the neighborhood by working to get certified with the National Wildlife Federation on an individual yard habitat and/or a community wildlife habitat.
- Gulfton residents can be involved in helping to keep water cleaner by taking action at their homes and around the neighborhood. The Bayou Preservation Association has ways to take action in your particular watershed.



**BIODIVERSITY:** Houston, Texas is part of the National Wildlife Federation's (NWF) Community Wildlife Habitat™ Program. The NWF Community Wildlife Habitat™ program partners with cities, towns, counties, neighborhoods, and communities of all kinds to become healthier, greener, and more wildlife-friendly. Community Wildlife Habitats garden and landscaping with wildlife in mind, promoting the use of indigenous trees and plants, work to reduce or eliminate the use of pesticides and chemicals, and integrate wildlife-friendly practices into sustainability plans and park master plans.



# A Planting Palette for a Greener Gulfton

\*Key-- IS: Indigenous species ES: Edible species CS: Cultural species HN: Hardy natural





HABIT	SCIENTIFIC NAME	COMMON NAME	HEIGHT	TYPE*	SOIL MOISTURE	LIGHT	WATER USE
HERB	<i>Anethum graveolens</i>	Dill	3-5 ft	ES	DRY - MOIST	●	■
	<i>Capsicum annuum</i>	Chili pepper	1-4 ft	ES	DRY - MOIST	●	■ ■
	<i>Monarda citriodora</i>	Lemon beebalm	1-3 ft	IS	DRY	● ●	■
	<i>Ocimum</i>	Basils	1-3 ft	ES	DRY - MOIST	●	■
	<i>Oenothera speciosa</i>	Pinkladies	1-3 ft	IS	DRY - MOIST	●	■ ■
	<i>Phyla nodiflora</i>	Frogfruits	0-1 ft	IS	DRY - MOIST	● ● ●	■ ■
	<i>Rudbeckia hirta</i>	Black-eyed susan	1-3 ft	IS	DRY - MOIST	●	■ ■
	<i>Rudbeckia texana</i>	Texas coneflower	3-6 ft	IS	MOIST	●	■ ■
	<i>Salvia coccinea</i>	Tropical sage	1-3 ft	IS	DRY - MOIST	● ●	■ ■
	<i>Centaurea americana</i>	American basket-flower	3-6 ft	IS	DRY	● ●	■
	<i>Eryngium yuccifolium</i>	Rattlesnake master	3-6 ft	IS	MOIST	●	■ ■
	<i>Chamaecrista fasciculata</i>	Patridge pea	0-1 ft	IS	DRY - MOIST	● ●	■ ■
	<i>Ratibida column</i>	Prairie coneflower	1-3 ft	IS	DRY - MOIST	●	■ ■
	<i>Helianthus angustifolius</i>	Swamp sunflower	1-3 ft	IS	MOIST	● ●	■ ■
	<i>Capsicum annuum</i>	Texas chili pequin	1-3 ft	IS	MOIST	● ● ●	■
	<i>Lycopersicon esculentum</i>	Patio tomatoes	2-3 ft	ES	DRY - MOIST	●	■ ■
	<i>Silphium gracile</i>	Slender rosinweed	1-3 ft	IS	DRY - MOIST	● ● ●	■
	<i>Iris virginica</i>	Southern blue flag iris	3-6 ft	IS	MOIST	●	■ ■ ■
	<i>Liatris acidota</i>	Sharp gayfeather	1-3 ft	IS	MOIST	●	■ ■
	<i>Saururus cemuus</i>	Lizard's tail	1-3 ft	IS	MOIST	● ●	■ ■ ■
<i>Hymenocallis liriosme</i>	Spring spider lily	1-3 ft	IS	MOIST	● ●	■ ■	
<i>Origanum</i>	Oregano	.5-7.5 ft	ES	DRY - MOIST	●	■ ■	
<i>Pontederia cordata</i>	Pickrel plant	1-3 ft	IS	MOIST	● ● ●	■ ■ ■	
<i>Sagittaria platyphylla</i>	Delta arrowhead	1-3 ft	IS	MOIST	● ●	■ ■ ■	
<i>Canna</i>	Canna lilies	6-8 ft	CS	DRY - MOIST	● ●	■ ■	
CACTUS	<i>Agave americana</i>	American century plant	6-12 ft	IS	DRY	●	■
	<i>Hesperaloe parviflora</i>	Red yucca	1-3 ft	HN	DRY	●	■
	<i>Opuntia</i>	Pricklypears	.5-1 ft	CS	DRY	●	■
GRASS	<i>Asclepias curassavica</i>	Tropical milkweed	3-4 ft	CS	MOIST	●	■ ■ ■
	<i>Bothriochloa laguroides</i>	Silver bluestem	1-3 ft	IS	DRY	●	■ ■
	<i>Schoenoplectus pungens</i>	Three square rush	2-4 ft	IS	MOIST	●	■ ■ ■
	<i>Muhlenbergia capillaris</i>	Gulf coast muhly	1-3 ft	IS	DRY - MOIST	●	■
	<i>Schizachyrium scoparium</i>	Little bluestem	3-6 ft	IS	DRY	● ●	■

\*Key-- IS: Indigenous species ES: Edible species CS: Cultural species HN: Hardy natural

HABIT	SCIENTIFIC NAME	COMMON NAME	HEIGHT	TYPE*	SOIL MOISTURE	LIGHT	WATER USE	
TREE	<i>Musa</i>	Bananas	12-20 ft	IS	DRY - MOIST	●	■ ■	
	<i>Callicarpa americana</i>	American beauty berry	3-6 ft	IS	MOIST	● ● ●	■	
	<i>Ilex vomitoria</i>	Yaupon holly	12-25 ft	IS	DRY - MOIST	● ● ●	■	
	<i>Carica papaya</i>	Papaya	6-20 ft	ES	DRY - MOIST	●	■ ■	
	<i>Carya ilinoensis</i>	Pecan	70-100 ft	IS	MOIST	●	■ ■ ■	
	<i>Cercis canadensis</i>	Eastern redbud	12-36 ft	IS	MOIST	●	■	
	<i>Eriobotrya japonica</i>	Loquat	10-25 ft	ES	DRY - MOIST	● ●	■ ■	
	<i>Ficus carica</i>	Common fig	10-20 ft	ES	MOIST	● ●	■ ■	
	<i>Fraxinus pennsylvanica</i>	Green ash	36-72 ft	IS	DRY - MOIST	● ●	■ ■	
	<i>Juniperus virginiana</i>	Eastern redcedar	36-72 ft	IS	DRY	● ●	■	
	<i>Magnolia grandiflora</i>	Southern magnolia	50-75 ft	IS	DRY	●	■ ■ ■	
	<i>Pinus taeda</i>	Loblolly pine	72-100 ft	IS	DRY	●	■ ■ ■	
	<i>Populus deltoides</i>	Eastern cottonwood	12-36 ft	IS	DRY - MOIST	● ●	■ ■ ■	
	<i>Psidium guajava</i>	Common guava	4-20 ft	ES	DRY - MOIST	●	■ ■	
	<i>Quercus falcata</i>	Southern red oak	100-150 ft	IS	DRY	●	■ ■	
	<i>Quercus nigra</i>	Water oak	72-100 ft	IS	MOIST	●	■ ■ ■	
	<i>Quercus virginiana</i>	Southern live oak	36-72 ft	IS	MOIST	● ●	■ ■	
	<i>Ulmus crassifolia</i>	Cedar elm	36-72 ft	IS	MOIST	● ● ●	■ ■	
	<i>Celtis laevigata</i>	Sugar hackberry	36-72 ft	IS	DRY	●	■ ■ ■	
	<i>Platanus occidentalis</i>	Sycamore	36-72 ft	IS	MOIST	● ●	■ ■ ■	
	<i>Cinnamomum camphora</i>	Camphor tree	20-65 ft	HN	MOIST	●	■ ■	
	<i>Citrus x meyeri</i>	Meyer lemon	6-10 ft	ES	DRY	● ●	■ ■	
	<i>Citrus x sinensis</i>	Navel orange	5-25 ft	ES	MOIST	●	■ ■	
	<i>Citrus x paradisi 'Rio Red'</i>	Red Rio grapefruit	10-15 ft	ES	MOIST	● ●	■ ■	
	VINE	<i>Campsis radicans</i>	American trumpet vine	25-35 ft	IS	DRY - MOIST	●	■
		<i>Cissis trifoliata</i>	Sorrelvine	12-36 ft	IS	DRY - MOIST	●	■ ■
		<i>Passiflora incarnata</i>	Passionflower vine	12-36 ft	IS	DRY - MOIST	● ●	■ ■
<i>Bignonia capreolata</i>		Crossvine	36-72 ft	IS	DRY - MOIST	● ● ●	■ ■	
<i>Ipomoea cordatotriloba</i>		Tievine	3-15 ft	IS	DRY - MOIST	●	■ ■	
<i>Asclepias curassavica</i>		Tropical milkweed	3-4 ft	CS	MOIST	●	■ ■ ■	
<i>Bothriochloa laguroides</i>		Silver bluestem	1-3 ft	IS	DRY	●	■ ■	
<i>Schoenoplectus pungens</i>		Three square rush	2-4 ft	IS	MOIST	●	■ ■ ■	

# How Do We Fund These Recommendations?

Many different approaches and financing types are available depending on the projects Gulfton organizations and citizens prioritize. Some of the more conventional financing strategies include options such as leveraging sales tax, developing a municipal management district, creating tax increment reinvestment zones (TIRZ), and utilizing grants such as the City of Houston's School Sidewalk Program and the SPARK Schoolyard Park Program. Some of the stronger park financing options for the Super neighborhood are outlined below in more detail and include these main categories:

-  Parks, Recreation, Trails, and Nature Funding
-  Mobility Improvement Funding
-  Stormwater Management Funding
-  Civic Space and Art in Public Place Funding

This is not an exhaustive list and programs may be subject to change depending on the current financial climate.

Parks, Recreation, Trails, Nature  
 Mobility Improvement  
 Stormwater Management  
 Civic Space and Art in Public Place

## Local Park Grant Program: Urban Recreation (population >500,000)

**Offered By:** Texas Parks and Wildlife Department (TPWD)

**Eligible Entities:** Local governments, river authorities, municipal utility districts (MUDs), other special districts

**Total Program Funding:** \$4,000,000

## Community Outdoor Outreach Program (Co-Op)

**Offered By:** Texas Parks and Wildlife Department (TPWD)

**Eligible Entities:** Non-traditional constituents to TPWD related outdoor recreation, conservation, and environmental education programs; local governments; tax exempt organizations

**Total Program Funding:** \$1,500,000

## Recreational Trails Fund

**Offered By:** Texas Parks and Wildlife Department (TPWD)

**Eligible Entities:** Local governments, river authorities, municipal utility districts (MUDs), other special districts, federal land managers, nonprofits

**Total Program Funding:** \$3,900,000

## Stronger Region

**Offered By:** Houston Endowment

**Eligible Entities:** Harris County and its contiguous counties (Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, and Waller counties), nonprofits

**Total Program Funding:** N/A

## National Urban and Community Forestry Challenge Cost Share Program

**Offered By:** USDA Forest Service

**Eligible Entities:** Public schools, nonprofits, state and county governments, higher education institutes

**Total Program Funding:** \$1,000,000

## Five Star and Urban Waters Restoration Grant Program

**Offered By:** National Fish and Wildlife Foundation

**Eligible Entities:** Non-profit 501(c) organizations, state government agencies, local governments, municipal governments, Tribal Governments and Organizations and educational institutions.

**Total Program Funding:** \$2,600,000

## SPARK School Park Program

**Offered By:** SPARK School Park Program

**Eligible Entities:** Schools

**Total Program Funding:** N/A

## Shade Structure Grant Program

**Offered By:** American Academy of Dermatology

**Eligible Entities:** Public schools, nonprofits

**Total Program Funding:** N/A

## Kaboom! Grants Program

**Offered By:** Kaboom!

**Eligible Entities:** City and county governments, schools, child serving nonprofits, particularly in the Houston area

**Total Program Funding:** N/A

Parks, Recreation, Trails, Nature  
 Mobility Improvement  
 Stormwater Management  
 Civic Space and Art in Public Place

Parks, Recreation,  
Trails, Nature  
Mobility Improvement  
Stormwater Management  
Civic Space and Art in  
Public Place



**Nonpoint Source Grant Program**

**Offered By:** Texas State Soil and Water Conservation Board

**Eligible Entities:** Nonprofits, state agencies, cities, counties, school districts, state universities, and special districts.

**Total Program Funding:** N/A

**Hazard Mitigation Grant Program**

**Offered By:** Texas Division of Emergency Management (TDEM)

**Eligible Entities:** Local governments and communities, state agencies, and private non profits may act as sub applicants.

**Total Program Funding:** \$1,500,000

**Clean Water State Revolving Fund**

**Offered By:** Texas Water Development Board

**Eligible Entities:** Cities, counties, districts, river authorities, designated management agencies, authorized Indian tribal organizations, and public and private entities proposing nonpoint source or estuary management projects.

**Total Program Funding:** \$250,000,000

**Pedestrian Accessibility Review Program**

**Offered By:** Mayor’s Office for People with Disabilities (MOPD)

**Eligible Entities:** Citizen with a disability or mobility impairment

**Total Program Funding:** N/A

**Major Thoroughfare Program**

**Offered By:** Houston Public Works

**Eligible Entities:** City of Houston residents

**Total Program Funding:** N/A

**Sidewalk Program**

**Offered By:** Houston Public Works

**Eligible Entities:** City of Houston residents

**Total Program Funding:** N/A

**Reconnecting Communities Pilot (RCP) Discretionary Grant Program**

**Offered By:** Department of Transportation

**Eligible Entities:** State, unit of local government, Federally recognized Tribal government, Metropolitan Planning Organization, non-profit organization.

**Total Program Funding:** \$195,000,000



**Our Town**

**Offered By:** National Endowment for the Arts

**Eligible Entities:** Partnership between a nonprofit organization and a local government entity, with one of the partners being a cultural organization.

**Total Program Funding:** N/A



**Open Spaces Program**

**Offered By:** Kenneth Rainin Foundation

**Eligible Entities:** Nonprofits collaborating with artists

**Total Program Funding:** N/A



**Cultural District Grant**

**Offered By:** Texas Commission on the Arts

**Eligible Entities:** Cities, counties.

**Total Program Funding:** N/A



**City’s Initiative Grant Program**

**Offered By:** Houston Arts Alliance

**Eligible Entities:** City of Houston residents

**Total Program Funding:** N/A



**Festival Program**

**Offered By:** Houston Arts Alliance

**Eligible Entities:** Have a physical address in the city of Houston limits, SMU DataArt profile, must be tax-exempt under IRS Section 501(c)(3)

**Total Program Funding:** up to \$10,000

**Source(s):** <https://www.houstonartsalliance.com/funding-and-services/grant-opportunities>



**Let Creativity Happen Grant**

**Offered By:** Houston Arts Alliance

**Eligible Entities:** Have a physical address in the city of Houston limits, must be tax-exempt under IRS Section 501(c)(3)

**Total Program Funding:** \$N/A

**Our Town**

**Offered By:** National Endowment for the Arts

**Eligible Entities:** Partnership between a nonprofit organization and a local government entity, with one of the partners being a cultural organization.

**Total Program Funding:** N/A

**Community Development Block Grants**

**Offered By:** Housing and Community Development Department

**Eligible Entities:** Principal cities of Metropolitan Statistical Areas (MSAs), other metropolitan cities with populations of at least 50,000, qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities), states and insular areas

**Total Program Funding:** N/A

**Public Art Challenge**

**Offered By:** Bloomberg Philanthropies

**Eligible Entities:** Mayor or chief official of a city

**Total Program Funding:** \$1,000,000

**AARP Community Challenge**

**Offered By:** AARP Community Challenge

**Eligible Entities:** 501(C)(3), 501(C)(4) and 501(c)(6) non profits, government entities

**Total Program Funding:** \$3,400,000

**Texas Travel Industry Recovery Program**

**Offered By:** Texas Economic Development

**Eligible Entities:** Operate in the State of Texas, privately-owned for profit business or non-profit organization, business or organization in the eligible NAICS codes listed for the travel, tourism and hospitality industries (NAICS codes 71 , 722 , 7211 , 7212 , 5615 , 561920 , 312120 , 312130 , 312140 )

**Total Program Funding:** \$20,000

Parks, Recreation,  
Trails, Nature  
Mobility Improvement  
Stormwater Management  
Civic Space and Art in  
Public Place

			●
			●
●	●		●
			●
			●
			●



Strategic partnerships can help shape and support recommendations throughout this report. Identifying partners for the previous list of grant funding can help drive the success of implementation that is well-resourced.

04

# ACT: Moving toward Action!



What can we do now?

'La Placita' Pilot Project

## Introduction

The Green Ambassador Team and community members repeatedly expressed the desire to create nature-rich gathering spaces that are artful, biodiverse, and culturally-rich. These spaces should also help mitigate the accelerating impacts of urban heat and climate change. The 'La Placita' Pilot Project is a tangible demonstration of this intersected community vision.

# What Can We Do Now?

## 'La Placita' Pilot Project

Gulfton's need to increase biodiversity and open space opportunities for its residents will require developing strategies at multiple scales. As stated in previous sections, these range from large street reconstruction projects to smaller interventions.

Since many of these strategies will take a number of years to implement, it is important to develop smaller, more tactical interventions in the short term. These interventions can provide opportunities for residents to enjoy the outdoor space while increasing social and nature access opportunities. As part of the public engagement process multiple strategies were presented from which providing social interaction opportunities was selected as one of the top priorities for a pilot project.

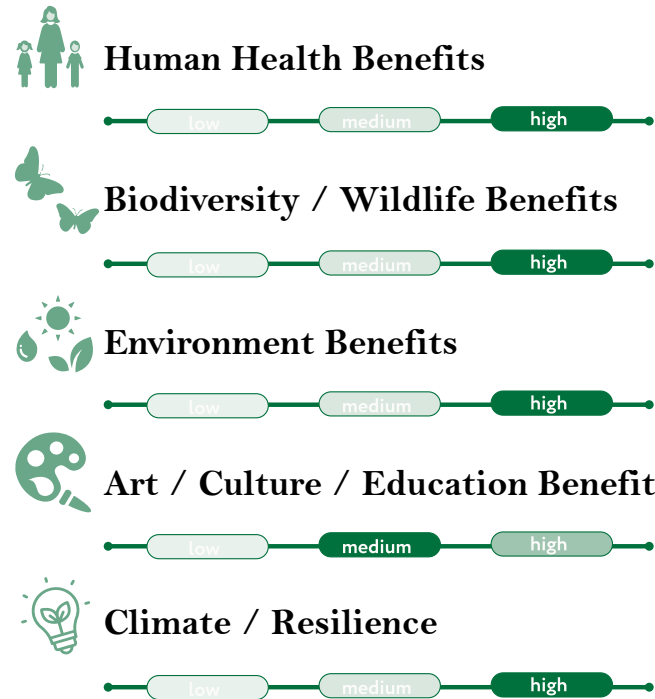
The pilot project developed brings the idea of a "Placita" (small plaza) that can be used by residents to socialize, enjoy nature and in some cases, promote economic development by supporting businesses such as food trucks or street vendors. The pilot project's conceptual design intends to create a semi- temporary installation that can be located at any location with a large pavement area such as a parking lot and can be moved to different locations as needed.

The Green Ambassador team was instrumental in identifying these locations for the pilot project, as well as suggesting areas of interest. The chosen locations below are split up into two categories, and can shift in their goals based on where they are installed.

If installed at any of the four locations they will support:

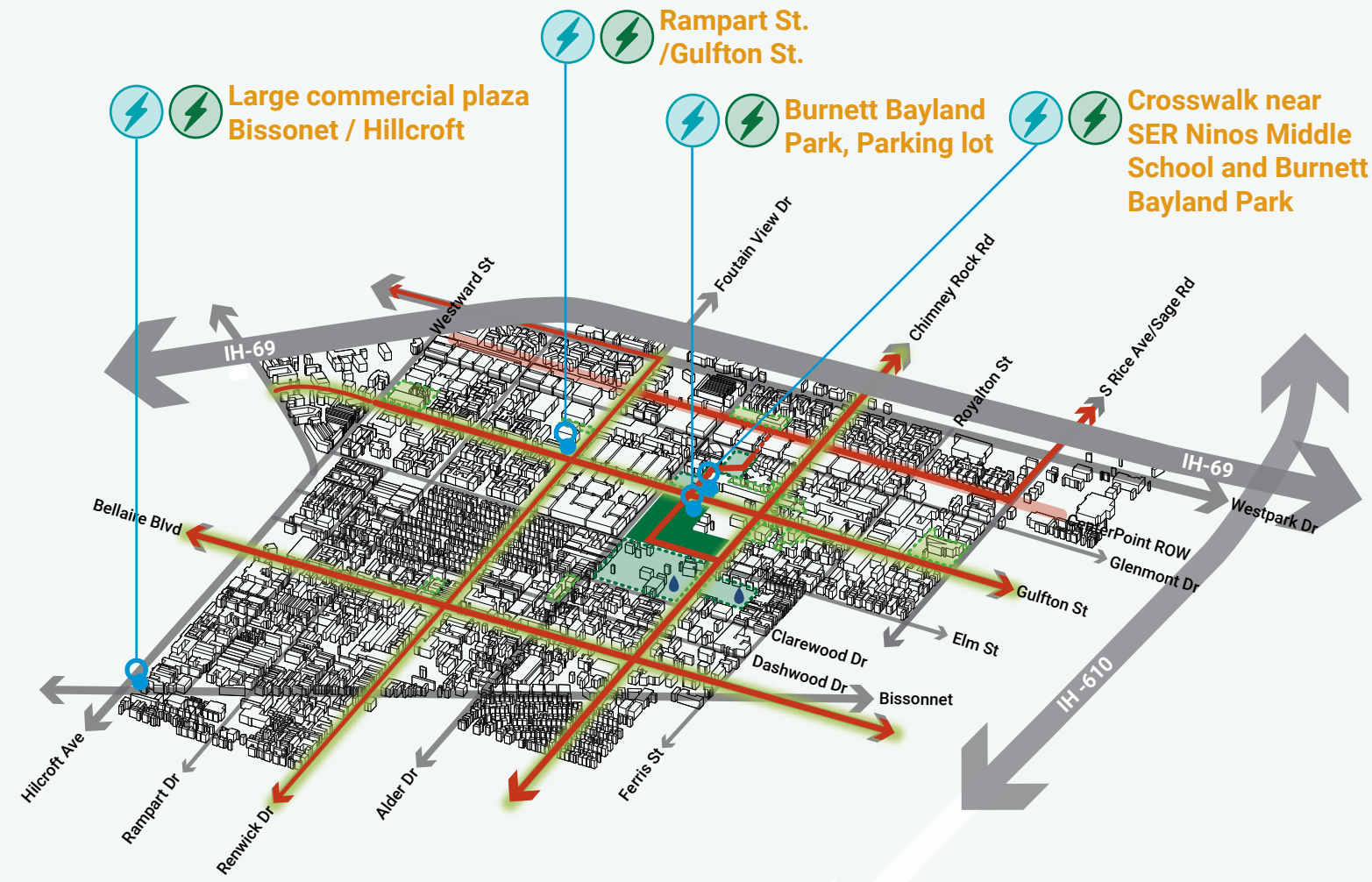
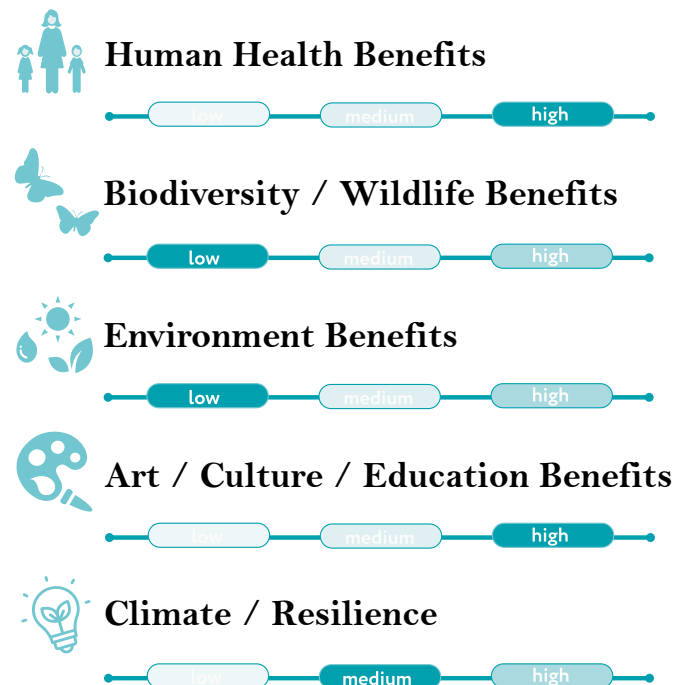
### 4.5 HABITAT & WILDLIFE SUPPORT ACTIONS

The placita will create an opportunity to learn about and host flora and fauna that can thrive in Gulfton.



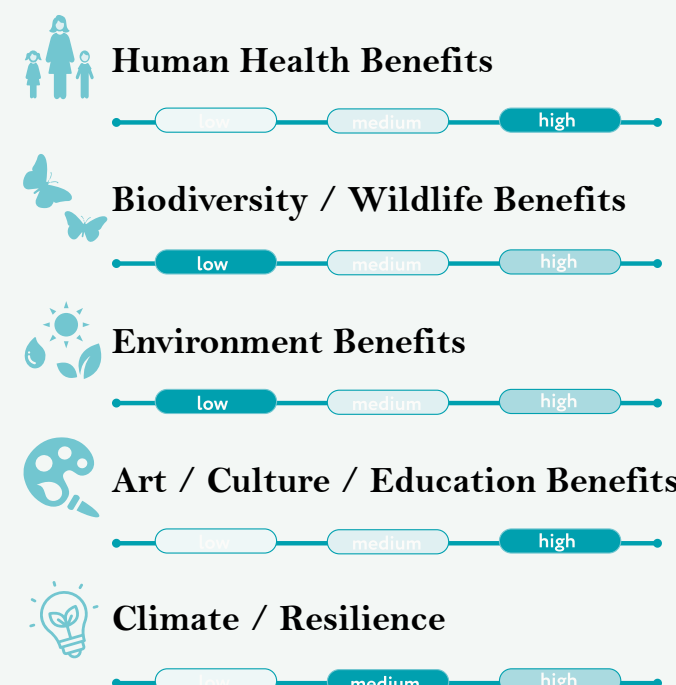
### 5.1 GATHERING SPACES

The placita will be an important gathering space and meeting point for the community.



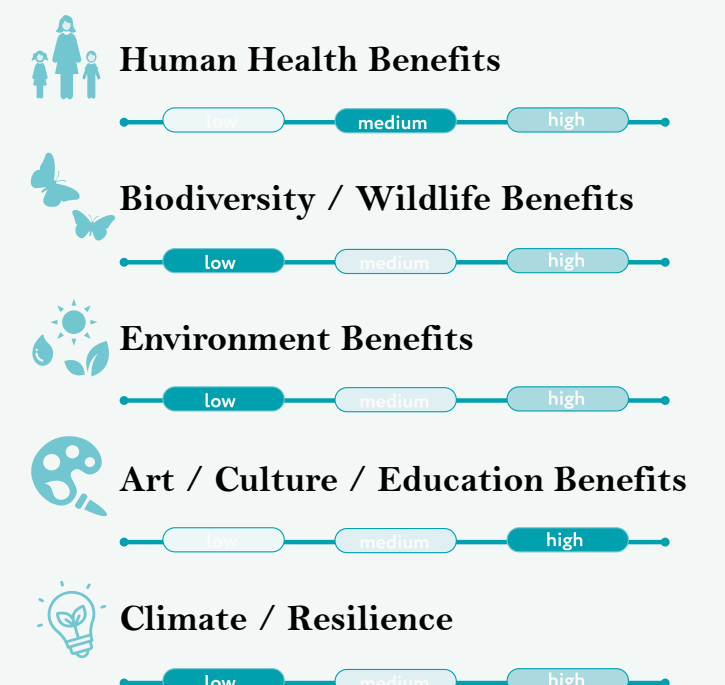
### 5.3 ENTERPRIZE ZONE

The placita will be an important gathering space and meeting point for the community.



### 5.4 PUBLIC ART

The placita will host unique elements for art that can unravel and reveal unique information about Gulfton.





# What Can We Do Now?

## 'La Placita' Pilot Project Details

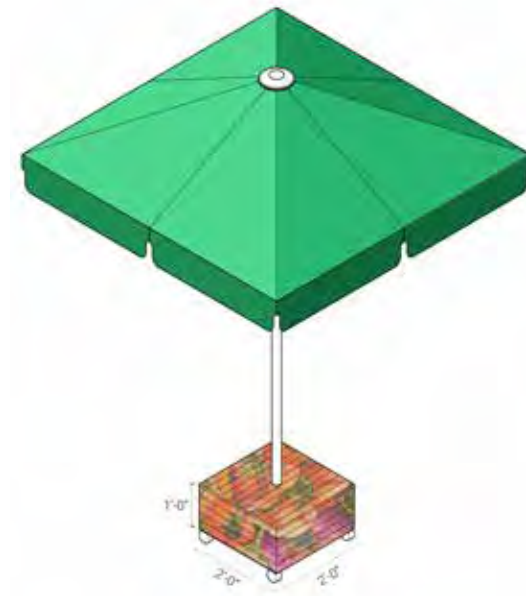
The pilot project consists of a simple modular system of planters and seating elements that can be arranged as needed to promote social gathering, planting, or even art interventions. The modular system selected is derived from the dimensions of a parking space so that it can be arranged within the limits of any surface parking area in Gulfton. The modules can be made out of wood and be movable with casters. Although location can be in any surface parking or large pavement area it is recommended to be located where there is already an established use such as a food truck or a street vendor, or even a school parking lot.

In addition to planting and seating, art is considered an important element to express the diversity of cultures in Gulfton, serve as an educational opportunity, or bring nature to the community in a more artistic way.

Other iterations of the module were done with local artists to bring dynamism to the space and additional artistic opportunities, see following pages.

### Implementation Steps

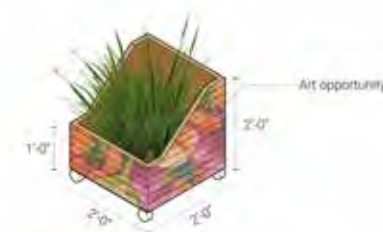
- Build modules in collaboration with UP Art Studio and local artists
- Select location in Gulfton and storage partner (school as a potential)
- Identify planting with assistance of TNC, the community or Ambassadors
- Plant modules at an event with the community



Shade Block



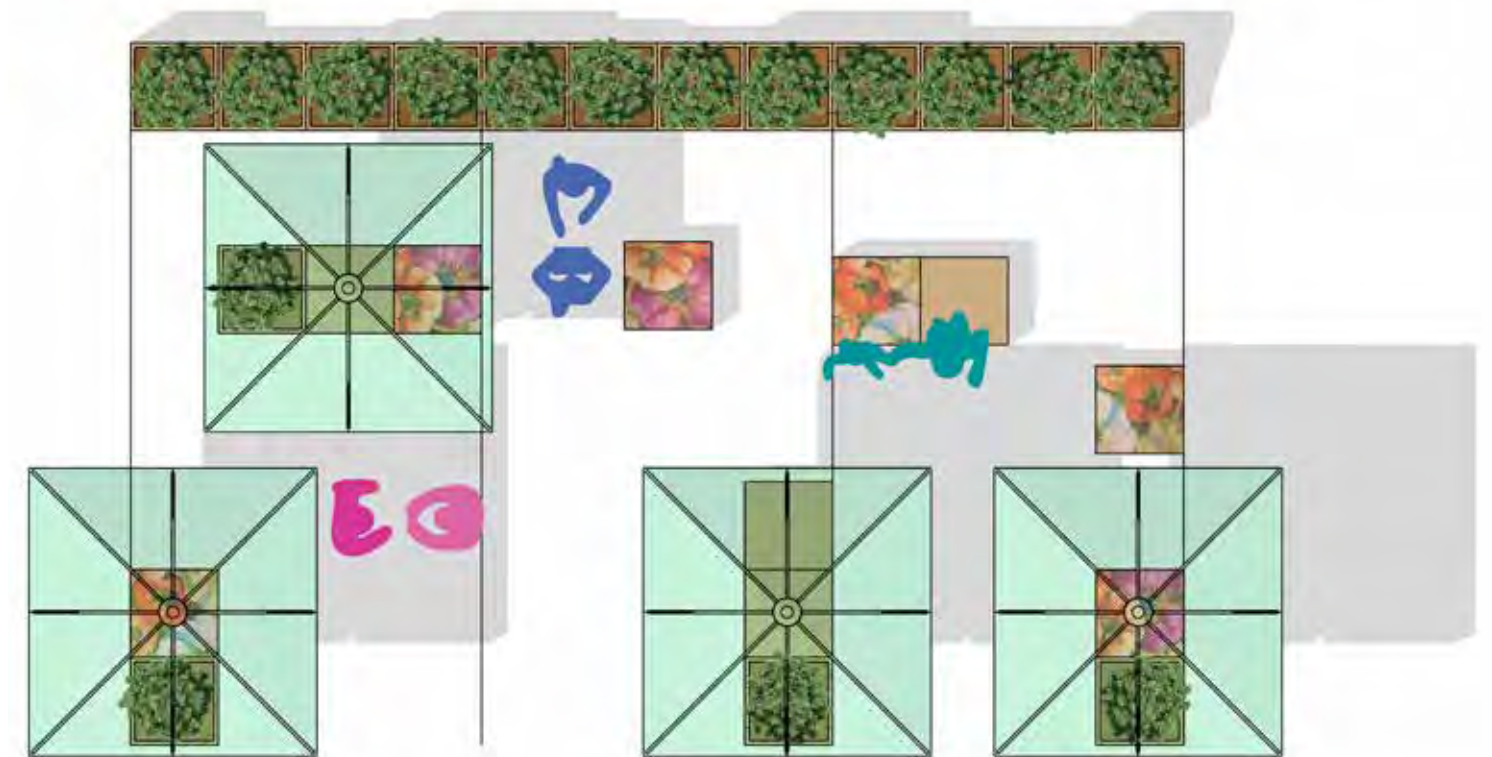
Planter Block



Planter Block-large

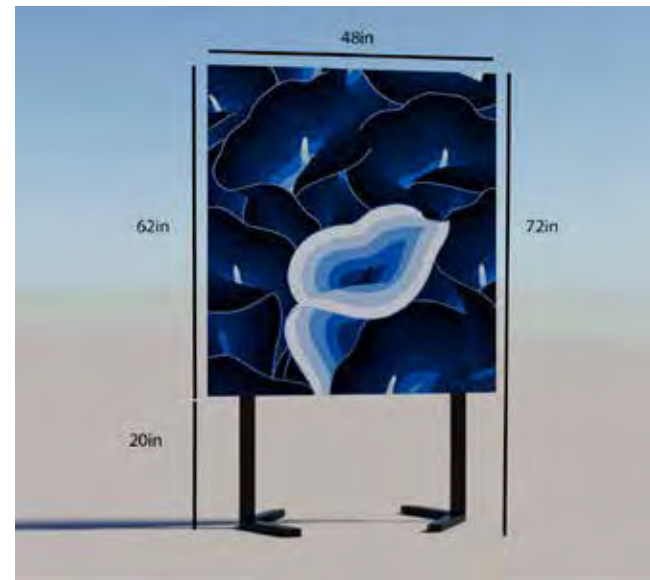


Planter Block Section



## 'La Placita' Pilot Project Process

These preliminary pilot project renderings (shown on the previous two pages) were shared with UP Art Studio and developed further. These renderings are shown here. The art in the current renderings is a placeholder for the final artwork, which will be finalized with community stakeholder input. As part of the implementation process, UP Art Studio will present two or more artwork concepts to be considered. Each of these concepts will be tailored around different themes that arose from the Greener Gulfton plan such as plants native to Houston and Gulfton, the diverse cultures of the residents of Gulfton, honoring the indigenous ancestors before us, climate impact, urban heat, etc.



Source: UP Art Studio's process rendering

**Seating block** has a trapezoidal shape and a sitting height. It could incorporate a simple bluetooth speaker system, to play relaxing natural sounds, a narrative, or just music depending on the pop ups event.

**Planter block**, like the seating block it has a trapezoidal shape and the same height.

**Tower planter** is square and taller (43in). It is fitted with a pipe in its center to allow the insertion of a pole or an umbrella.

**Recycle planter** combines a recycle trash and a planter on top. It has the same dimensions as the tower planter

**Panels** can display information or artwork. Their placement impacts the flow of visitors, their safety (separation with the road) as well as the shade they provide to sitting block on its other side or at proximity.

**Poles** are necessary to have a shading structure covering the whole booth. Without the main shading structure, they could be fitted with flags to attract attention, banners or lights between poles, or they could be replaced by umbrellas.

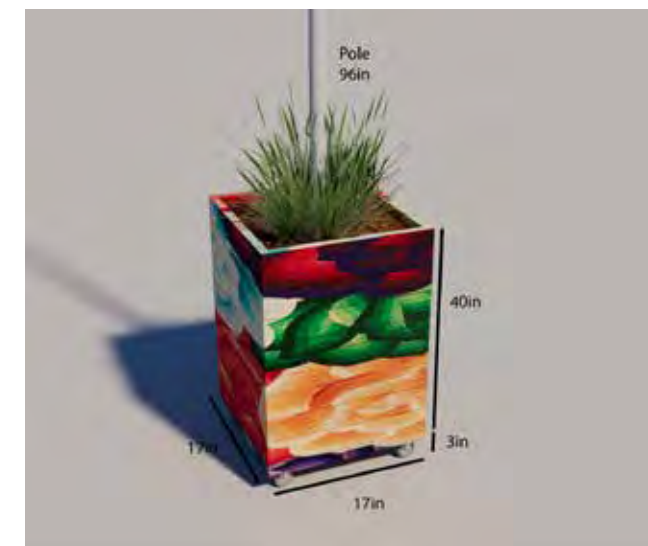
**Shading structure (tarp)** creates maximum shade over the booth. It would be decorated with artwork and hanging off 3 or 4 poles. For added practicality and flexibility it would be best to have identical triangular tarp to cover a rectangular area, instead of a single twice larger and twice heavier rectangular tarp.



**Vegetation** suggested for the pilot project is a reflection of the ecoregion including indigenous species that support and host pollinators that either live in the area permanently or migrate through.



Source: UP Art Studio's process rendering



Source: UP Art Studio's process rendering





Source: UP Art Studio's process renderings

Source: UP Art Studio's process renderings

Endnotes

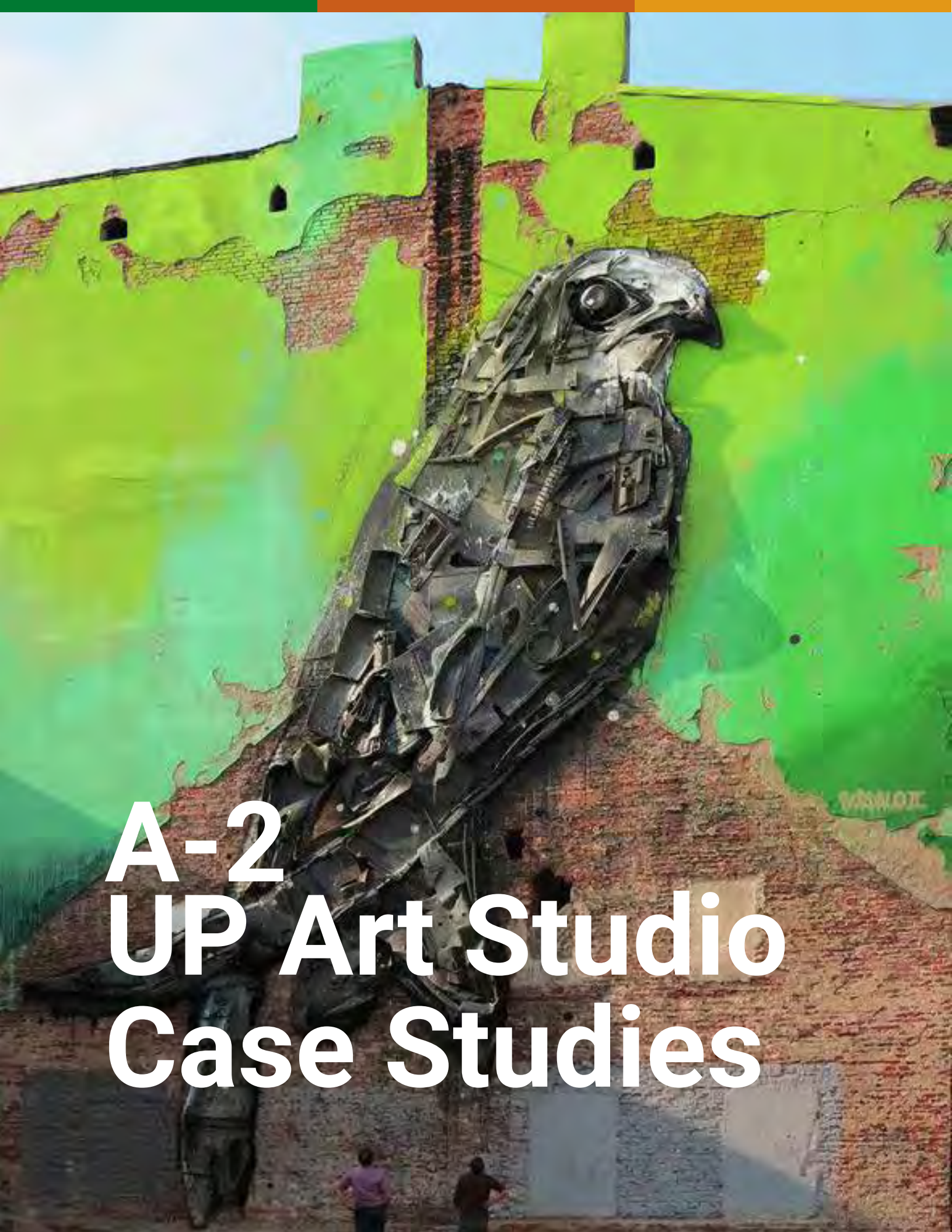
- 1 ACS 5-year Estimate 2015-2019
- 2 ACS 5-year Estimate 2015-2019
- 3 Greater Houston Flood Mitigation Consortium, Affordable Multi Family Housing: Risks and Opportunities. (March 2019) p.53-63
- 4 Bakacs, M. (n.d.). Rain barrels part iv: Testing and applying harvested water to irrigate a vegetable garden. FS1218: Rain Barrels Part IV: Testing and Applying Harvested Water to Irrigate a Vegetable Garden (Rutgers NJAES). Retrieved June 23, 2022, from <https://njaes.rutgers.edu/fs1218/>
- 5 City of Houston, 2020. Resilient Houston.
- 6 "About Ecoregions," Houston Wilderness, accessed October 18, 2021, <http://houstonwilderness.org/about-ecoregions>.
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05

# Appendix



UP Art Studio Case Studies  
Boards Used for Engagement  
Action Strategy Cards  
-English, Spanish & Arabic



# A-2 UP Art Studio Case Studies



# Greener Gulfton

Art & Nature:

Case Studies and Visual Idea Book



**UP**  
ART STUDIO

# Case Studies





## “Conservation Conversation Corners”

### DESCRIPTION

Greenpop—a social and environmental NGO working across sub-Saharan Africa—was recently funded by the United Nations Educational, Scientific and Cultural Organization-International Fund for the Promotion of Culture (UNESCO-IFPC) to undertake their dream of an art and environment project aptly coined, “Conservation Conversation Corners”. Here, disused public corners in two African cities—Livingstone, Zambia and Johannesburg, South Africa—were transformed using public participation, mural art, public seating, sculpture and indigenous plants—into spaces of connection and of conversation around the incredible biodiversity that makes each city so unique and special.

### SOURCE

The Nature of Public Art: Connecting People to People and People to Nature

Source: <https://www.thenatureofcities.com/2018/03/08/nature-public-art-connecting-people-people-people-nature/>



*The final Livingstone Trees for Bees mural and up-cycled tree sculpture*



*Mural closeup*



*Child creating a heron between the graffiti.*



*Tree Sculpture from recycled materials*

## “Topo Map”

### DESCRIPTION

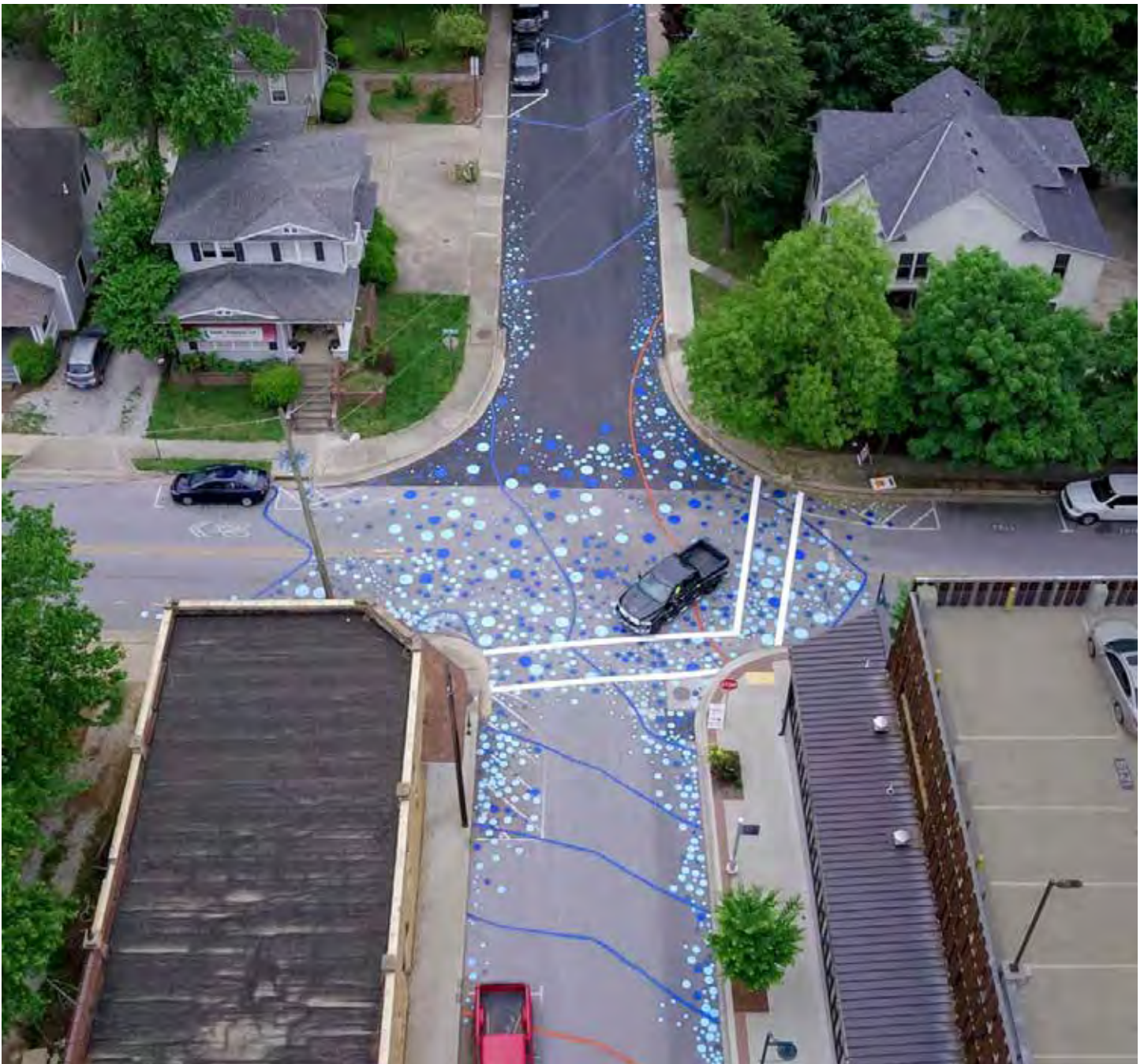
Topo Map tells an ecological story directly on the pavement of Fayetteville’s busy School Avenue. Rendered in vivid blue and orange lines, this life-size topographical map runs across the avenue and highlights the often-overlooked presence of urban nature.

The long, steep climb between two of Fayetteville’s most important cultural institutions, the award-winning Fayetteville Public Library and the Walton Arts Center, is enlivened by a three-block-long lesson in ecological literacy.

### SOURCE

Stacy Levy

Source: <https://www.stacylevy.com/projects/topo-map>



## “Passage of Rain”

### DESCRIPTION

Passage of Rain traces a path of rain and runoff along a half mile stretch from the street down in the storm drains to the final destination of Irwin Creek. This project creates a full scale planting plan for the buffer zone along a daylighted portion of the creek. Each stake is color coded to correspond to different native plants, which will prevent the stream banks from erosion. After the initial installation, the stakes were replaced with native shrubs, planted according to their respective color. Charlotte-Mecklenburg Storm Water Services did the planting as part of their stream buffer initiative.

### SOURCE

Okuplaza – Pavement to Plaza in Santiago

Source: <https://www.stacylevy.com/projects/passage-of-rain>



## “Pavement to Plaza”

### DESCRIPTION

The first “pavement to plaza” project in Santiago turned an informal parking lot to a people-friendly plaza. The idea for the pop-up plaza was inspired by the closure of San Diego Street (a major arterial road that crosses the city) due to the development of new subway lines into the downtown core. Once the road was closed this past summer, people started using the vacant space as a parking lot. This prompted a collaboration between many stakeholders to reclaim the space for people in the area to sit, stay and enjoy. The result was Okuplaza, born from a mix of upcycled materials, a few coats of paint and a lot of elbow grease. The plaza was completed in a 12 hour period with the help of 300+ students from Universidad del Desarrollo School of Architecture.

### SOURCE

Okuplaza – Pavement to Plaza in Santiago

Source: <https://www.morethangreen.es/en/pavement-to-plaza-in-chile/>



## “Big Trash Animals”

### DESCRIPTION

Artur Bordalo, known as Bordalo II (Segundo), was born in 1987 in Lisbon. He paints his own interpretations of city landscapes in a fresh, lively, and movement-filled take. Strongly connected with the idea of ecology and recycling. He creates, processes, collects, and develops ideas which make use of materials the life cycle of which has ended, trash and other recyclable products, at the same time trying to increase social awareness and leave the ecological balance undisturbed. The artistic use of trash is also a type of criticism of the world which we have come to live in, as the artist is making a world in which things once precious and important quickly turn into rubbish. Bordalo II never buys materials for his projects but obtains them by looking through junkyards and garbage dumps. The international project “Big Trash Animals” is a collection of installations placed, among others, on the walls of Lisbon, Barcelona, Dresden, Hamburg and Tallinn, presenting enormous images of animals created from waste, which is supposed to turn the viewer’s attention towards the issue of waste and contamination of the environment.

The mural in Łódź, “The Swift” /Apus Apus, came into being at the turn of August and September 2015 during the City Energy Festival (which was a continuation of the Urban Forms Gallery Festival). It is the first installation in the series called “Big Trash Animals” in Eastern and Central Europe.

### SOURCE

BORDALO II

Source: <https://www.urbanforms.org/foundation/artists/bordalo-ii-en-gb/>



# Visual Idea Book: Art and Nature



**Visual Idea Book: Art and Nature**  
**NATURE THEME MURALS**



**Visual Idea Book: Art and Nature**  
**TREES AS "NATURAL HAIR"**





**Visual Idea Book: Art and Nature**  
**DRAIN ART**



**Visual Idea Book: Art and Nature**  
**CROSSWALKS / STREETS**



**Visual Idea Book: Art and Nature**  
**TACTICAL URBANISM**



# Visual Idea Book: Art and Nature

## TACTICAL URBANISM



**Visual Idea Book: Art and Nature**  
**RAIN ACTIVATED ART**



**Visual Idea Book: Art and Nature**  
**REVERSE GRAFFITI**



**Visual Idea Book: Art and Nature**  
**ENVIRONMENTAL ART**



# Visual Idea Book: Art and Nature FRAMES





**Visual Idea Book: Art and Nature**

**FRAMES**



**Visual Idea Book: Art and Nature**  
**LARGE SCULPTURES**



**Visual Idea Book: Art and Nature**  
**LIGHTING**

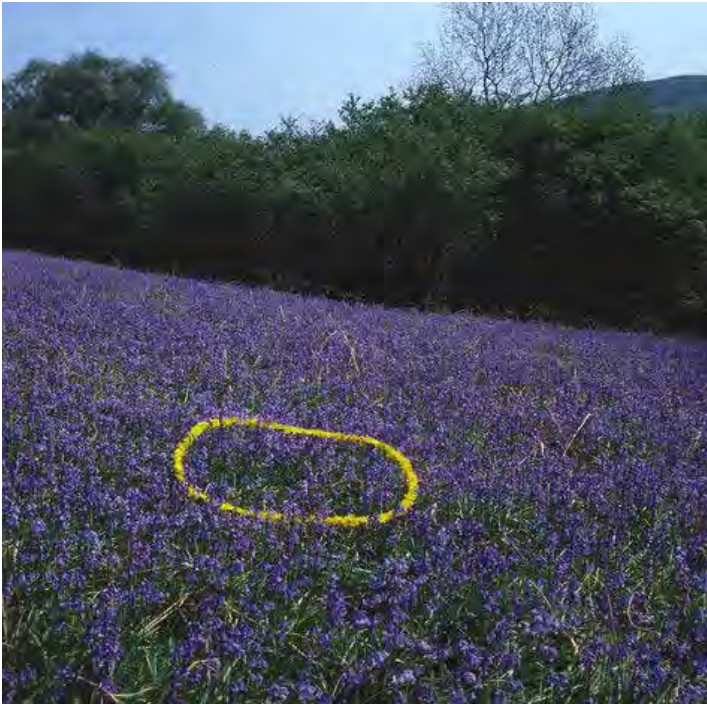


**Visual Idea Book: Art and Nature**

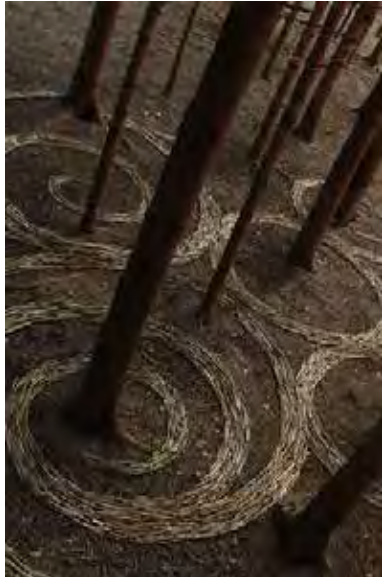
**PORTALS**



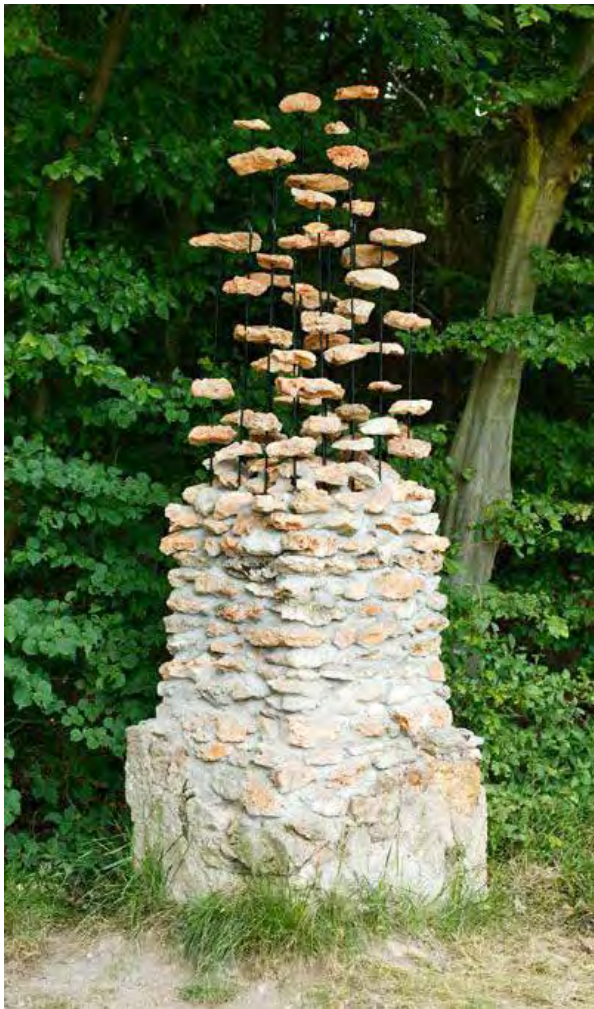
**Visual Idea Book: Art and Nature**  
**ART WITH FLOWERS**



**Visual Idea Book: Art and Nature**  
**NATURAL MATERIALS**



**Visual Idea Book: Art and Nature**  
**NATURAL MATERIALS FLOATING**



**Visual Idea Book: Art and Nature**  
**MIRRORS**





**Visual Idea Book: Art and Nature**

**SHADOWS**



**Visual Idea Book: Art and Nature**

**SEATING**



**Visual Idea Book: Art and Nature**  
**PLAY WITH TREES**



**Visual Idea Book: Art and Nature**  
**REFLECTIONS**





[www.upartstudio.org](http://www.upartstudio.org)

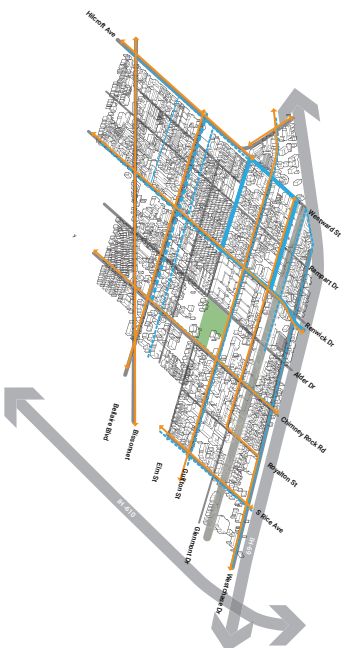


# A-3 Engagement Boards

# Gulfton

## Opportunities for Action

### Oportunidades para Acción



Architectural Actions   Structural	Acciones Arquitectónicas   Estructurales	
<p><b>VERTICAL GREEN</b> LABORIOS VERTICALES</p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>GREEN ROOF</b> TECHOS VERDES</p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	
<p><b>RAINWATER   Stormwater Management Actions</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>BIORETENTION STORMWATER SYSTEMS</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	
<p><b>NON-VEGETATED STORMWATER ACTIONS &amp; RAINWATER HARVESTING</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>LINEAR STORMWATER SYSTEMS</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	



# Gulfton

## Opportunities for Action

### Oportunidades para Acción

Community Capacity Actions	Acciones de Capacidad Comunitaria	
<p><b>PUBLIC ART</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>ENTERPRISE ZONE</b> ZONA EMPRESARIAL</p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	
<p><b>TRANSPORTATION MANAGEMENT   MOBILITY ACTIONS</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>GATHERING SPACES</b> ESPACIOS DE CONVENCION</p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	
<p><b>MOBILITY ACTIONS - BICYCLE</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>MOBILITY ACTIONS - PEDESTRIAN</b> ACCIONES DE MOVILIDAD PEATONAL</p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	
<p><b>MOBILITY ACTIONS - VEHICULAR</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>PLANT NURSERY</b> VIVERO DE PLANTAS</p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	
<p><b>HABITAT &amp; WILDLIFE SUPPORT ACTIONS</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>PARK</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	
<p><b>COMMUNITY AGRICULTURE</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	<p><b>COMMUNITY SERVICES</b> SERVICIOS COMUNITARIOS</p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p> <p><b>APPOINTMENT LOCATION</b></p>	





# A-4 Action Strategy Cards: English, Spanish Arabic





PROTECTED CROSSINGS | CRUCES PROTEGIDOS

MEDIAN ADDITION/IMPROVEMENT | ADICIÓN/MEJORA DEL CAMELLÓN

SHARED USE PATH OR TRAIL ADDITION | ADICIÓN/MEJORA DE CAMINOS DE USO COMPARTIDO O SENDEROS

SIDEWALKS ADDITION/IMPROVEMENT | ADICIÓN/MEJORA DE ACERAS

# MOBILITY ACTIONS - PEDESTRIAN

PROTECTED CROSSINGS | MEDIAN ADDITION/IMPROVEMENT | SHARED USE PATH OR TRAIL ADDITION/IMPROVEMENT | SIDEWALKS ADDITION/IMPROVEMENT

## ACCIONES DE MOVILIDAD - PEATONAL

CRUCES PROTEGIDOS | ADICIÓN/MEJORA DEL CAMELLÓN | ADICIÓN/MEJORA DE CAMINOS DE USO COMPARTIDO O SENDEROS | ADICIÓN/MEJORA DE ACERAS

Any action taken to improve the pedestrian environment within the public Right-of-Way. Improvements made to pedestrian spaces can make them more accessible, comfortable, and safe, which encourages more of their use.

cualquier acción realizada para mejorar el entorno peatonal dentro del derecho de paso público. Las mejoras realizadas en los espacios peatonales pueden hacerlos más accesibles, cómodos y seguros, lo que fomenta su uso.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



HUMAN HEALTH BENEFITS  
Beneficios para la salud humana



BIODIVERSITY / WILDLIFE BENEFITS  
Beneficios para la biodiversidad/vida silvestre



ENVIRONMENT BENEFITS  
Beneficios para el medio ambiente



ART / CULTURE / EDUCATION  
Artes/Cultura/Educación



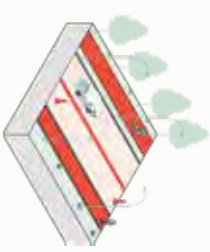
CLIMATE / RESILIENCE POTENTIAL  
Potencial de construcción adaptada/resiliente al clima



### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

LANDSCAPE TYPE  
Tipología de paisaje



RIGHT-OF-WAY (ROW)  
DERECHO DE PASO [ROW]





معايير محمية | PROTECTED CROSSINGS

إضافة /تحسين الفاصل الأوسط | MEDIAN ADDITION/IMPROVEMENT

إضافة /تحسين طريق | SHARED USE PATH OR TRAIL ADDITION  
الاستخدام المشترك أو ممر المشاة

إضافة /تحسين الأرصفة | SIDEWALKS ADDITION/IMPROVEMENT

# MOBILITY ACTIONS - PEDESTRIAN

PROTECTED CROSSINGS | MEDIAN ADDITION/IMPROVEMENT | SHARED USE PATH OR TRAIL ADDITION/  
IMPROVEMENT | SIDEWALKS ADDITION/IMPROVEMENT

## إجراءات التنقل – المشاة

معايير محمية | الفاصل الأوسط | إضافة /تحسين طريق الاستخدام المشترك أو ممر المشاة | الأرصفة

**A**ny action taken to improve the pedestrian environment within the public Right-of-Way. Improvements made to pedestrian spaces can make them more accessible, comfortable, and safe, which encourages more of their use.

أي إجراء يتم اتخاذه لتحسين بيئة المشاة داخل حق الطريق العام، يمكن للتصميمات التي تم إقرارها على مساحات المشاة أن تجعل الوصول إليها أكثر راحة وأمانًا، مما يشجع على المزيد من استخدامها.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان

high



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية

low



ENVIRONMENT BENEFITS  
فوائد البيئة

low



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم

high



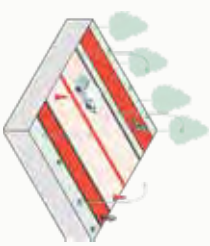
CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة المكانية

high

## APPROPRIATE LOCATIONS

الموقع/الوحدات المناسبة

LANDSCAPE TYPE  
تصنيف المناظر الطبيعية



RIGHT-OF-WAY [ROW]  
حق الطريق





ROADWAY DIET OR CLOSURE | DIETA O CIERRE DE CARRETERA



STREET INTERSECTION IMPROVEMENT | MEJORA DE LA INTERSECCIÓN DE CALLES



BUS STOP IMPROVEMENT | MEJORA DE LAS PARADAS DE AUTOBÚS

# MOBILITY ACTIONS - VEHICULAR

ROADWAY DIET OR CLOSURE | STREET INTERSECTIN IMPROVEMENT | BUS STOP IMPROVEMENT

## ACCIONES DE MOVILIDAD - VEHICULAR

DIETA O CIERRE DE CARRETERA | MEJORA DE LA INTERSECCIÓN DE CALLES | MEJORA DE LAS PARADAS DE AUTOBÚS

**A**ny action taken to improve the vehicular environment within the public Right-of-Way, especially improvements that support multiple mobility uses. Road diets, improvements made to street intersections and bus stops can improve safety for all users while creating a comfortable environment for pedestrians, cyclists, and transit users.

**C**ualquier acción realizada para mejorar el entorno vehicular dentro del derecho de paso público, especialmente las mejoras que apoyan los usos de movilidad múltiple. Las dietas de carretera, las mejoras realizadas en las intersecciones de las calles y las paradas de autobús pueden mejorar la seguridad de todos los usuarios y crear al mismo tiempo un entorno cómodo para los peatones, los ciclistas y los usuarios del transporte público.



**HUMAN HEALTH & WELLNESS BENEFITS**  
Beneficios para la salud y el bienestar humano



**BIODIVERSITY / WILDLIFE BENEFITS**  
Beneficios para la biodiversidad/vida silvestre



**ENVIRONMENT BENEFITS**  
Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
Artes/Cultura/Educación



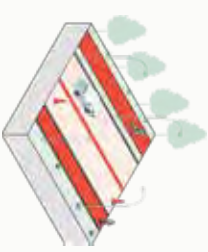
**CLIMATE / RESILIENCE POTENTIAL**  
Potencial de construcción adaptada/resiliente al clima



## APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

**LANDSCAPE TYPE**  
Tipología de paisaje



RIGHT-OF-WAY (ROW)  
DERECHO DE PASO (ROW)





# MOBILITY ACTIONS - VEHICULAR

ROADWAY DIET OR CLOSURE | STREET INTERSECTION IMPROVEMENT | BUS STOP IMPROVEMENT

## إجراءات التنقل - المركبات

تقليل الطريق أو الإغلاق | تحسين تقاطع الشارع | تحسين موقف الباص

My action taken to improve the vehicular environment within the public Right-of-Way, especially improvements that support multiple mobility uses. Road diets, improvements made to street intersections and bus stops can improve safety for all users while creating a comfortable environment for pedestrians, cyclists, and transit users.

في إجراء يتم اتخاذه لتحسين بيئة المركبات داخل حق الطريق وخاصة الحسيينات التي تدعم استخدامات التنقل المتعددة. يمكن الانظمة especially improvements that support multiple mobility uses. Road diets, improvements made to street intersections and bus stops can improve safety for all users while creating a comfortable environment for pedestrians, cyclists, and transit users. تقليل طرق القيادة والتحسينات التي تم إجراؤها على تقاطعات الشوارع ومحطات الباصات أن تحسن السلامة لجميع المستخدمين مع خلق بيئة مريحة للمشاة وراكبي الدراجات ومستخدمي النقل

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والرفاهية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



high



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية



low



ENVIRONMENT BENEFITS  
فوائد البيئة



low



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم



high



CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء الدونة امكانية



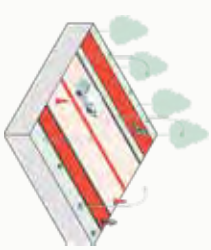
low

## APPROPRIATE LOCATIONS

المواقع/المواقع المناسبة

LANDSCAPE TYPE

تصنيف المناظر الطبيعية



RIGHT-OF-WAY [ROW]  
حق الطريق





BIKE LANES ADDITION/IMPROVEMENT | ADICIÓN/MEJORA DE CICLOVÍAS



COVERED/LOCKED BIKE PARKING | ESTACIONAMIENTO CUBIERTO PARA BICICLETAS



SHARED USE PATH ADDITION/IMPROVEMENT | ADICIÓN/MEJORA DE CAMINOS DE USO COMPARTIDO O SENDEROS

# MOBILITY ACTIONS - BICYCLE

BIKE LANES ADDITION/IMPROVEMENT | COVERED/LOCKED BIKE PARKING | BIKE RACKS | SHARED USE PATH OR TRAIL ADDITION/IMPROVEMENT

## ACCIONES DE MOVILIDAD - CICLISTA

ADICIÓN/MEJORA DE CICLOVÍAS | ESTACIONAMIENTO CUBIERTO/CON LLAVE PARA BICICLETAS | APARCABICICLETAS | ADICIÓN/MEJORA DE CAMINOS DE USO COMPARTIDO O SENDEROS

Any action taken to improve the bicycle environment within the public Right-of-Way. Bike lanes are portions of roadways that have been designated by striping, signage, and pavement markings for the use of bicyclists. Adding or improving bike lanes, paths, and bicycling amenities can encourage more cycling by creating a safer and more comfortable environment.

Cualquier acción realizada para mejorar el entorno de la bicicleta dentro del derecho de paso público. Las ciclovías son porciones de las carreteras que han sido designadas por medio de franjas, señalización y marcas en el pavimento para el uso de los ciclistas. Añadir o mejorar ciclovías, los caminos y los servicios para ciclistas puede fomentar el uso de la bicicleta al crear un entorno más seguro y cómodo.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



HUMAN HEALTH BENEFITS  
Beneficios para la salud humana



BIODIVERSITY / WILDLIFE BENEFITS  
Beneficios para la biodiversidad/vida silvestre



ENVIRONMENT BENEFITS  
Beneficios para el medio ambiente



ART / CULTURE / EDUCATION  
Arte/Cultura/Educación



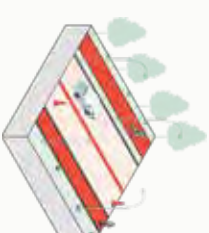
CLIMATE / RESILIENCE POTENTIAL  
Potencial de construcción adaptada/resiliente al clima



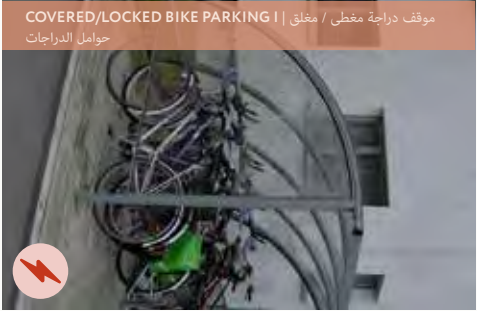
### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

LANDSCAPE TYPE  
Tipología de paisaje



RIGHT-OF-WAY [ROW]  
DERECHO DE PASO [ROW]



# MOBILITY ACTIONS - BICYCLE

BIKE LANES ADDITION/IMPROVEMENT | COVERED/LOCKED BIKE PARKING | BIKE RACKS | SHARED USE PATH OR TRAIL ADDITION/IMPROVEMENT

## إجراءات التنقل - الدراجة

إضافة / تحسين حارات الدراجة | مغطى / مغلق | حوامل الدراجات | إضافة / تحسين مسار الاستخدام المشترك أو المشفى

**A**ny action taken to improve the bicycle environment within the public Right-of-Way. Bike lanes are portions of roadways that have been designated by striping, signage, and pavement markings for the use of bicyclists. Adding or improving bike lanes, paths, and bicycling amenities can encourage more cycling by creating a safer and more comfortable environment.

أي إجراء يتم اتخاذه لتحسين بيئة الدراجات في حق الطريق العام، ممرات الدراجات هي أجزاء من الطرق التي تم تصديدها بواسطة خطوط وعلامات وعلامات الرصيف لاستخدام راكبي الدراجات. يمكن أن تؤدي إضافة أو تحسين ممرات الدراجات والمسارات ووسائل راحة ركوب الدراجات إلى تشجيع المزيد من ركوب الدراجات من خلال خلق بيئة أكثر أمانًا وراحة.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والرفاهية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



high



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية



low



ENVIRONMENT BENEFITS  
فوائد البيئة



low



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم



high



CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / إمكانية بناء المرونة المكانية

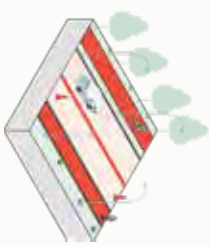


high

## APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

LANDSCAPE TYPE  
تصنيف المناظر الطبيعية



RIGHT-OF-WAY [ROW]  
حق الطريق



CISTERN I RAIN TANK I CISTERNA I TANQUE DE LLUUVIA



STORMWATER DRAIN MARKERS I MARCADORES DE DESAGÜE DE AGUAS PLUVIALES



POROUS PAVEMENT I PAVIMENTO POROSO



# NON VEGETATED STORMWATER ACTIONS & RAINWATER HARVESTING

## CISTERN I RAIN TANK I STORMWATER DRAIN MARKERS I POROUS PAVEMENT ACCIONES PLUVIALES NO VEGETADAS Y RECOLECCIÓN DE AGUAS DE LLUVIA

CISTERN I TANQUE DE LLUUVIA I ALMACENAMIENTO SUBTERRÀNEO I MARCADORES DE DESAGÜE DE AGUAS PLUVIALES I PAVIMENTO POROSO

These actions include stormwater management improvements that do not include vegetation. Rainwater harvesting are passive methods of gathering rainwater either with a container (like a cistern or tank) for future use or using pavement that allows water to infiltrate into the soil below. Stormwater drain markers are warning signs placed at storm drains to deter deliberate dumping of pollutants.

Acciones de aguas pluviales o de lluvia que no incluyen la vegetación. La recolección de aguas de lluvia son métodos pasivos para recolectar el agua de lluvia ya sea con un recipiente (como una cisterna o un tanque) para su uso futuro o utilizando un pavimento que permita que el agua se infiltre en el suelo de abajo. Los marcadores de desagüe de aguas pluviales son señales de advertencia colocadas en los desagües pluviales para disuadir del vertido deliberado de contaminantes.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



HUMAN HEALTH BENEFITS

Beneficios para la salud humana



BIODIVERSITY / WILDLIFE BENEFITS

Beneficios para la biodiversidad/vida silvestre



ENVIRONMENT BENEFITS

Beneficios para el medio ambiente



ART / CULTURE / EDUCATION

Artes/Cultura/Educación



CLIMATE / RESILIENCE POTENTIAL

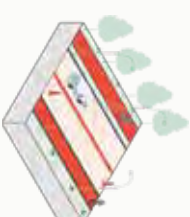
Potencial de construcción adaptada/resiliente al clima



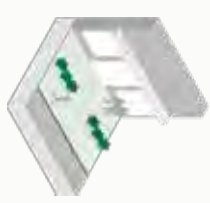
### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

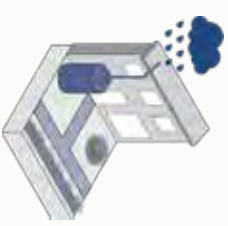
LANDSCAPE TYPES  
Tipología de paisaje



RIGHT-OF-WAY [ROW] DERECHO DE PASO



RIGHT-OF-WAY TO BUILDING ENVELOPE DERECHO DE PASO A CERRAMIENTO EXTERIOR



BUILDING ENVELOPE CERRAMIENTO EXTERIOR





صهريج | خزان المطر | التخزين تحت الأرض | CISTERN | RAIN TANK

علامات تصريف مياه الأمطار | Stormwater Drain Markers

رصيف مسامي | Porous Pavement

# NON VEGETATED STORMWATER ACTIONS & RAINWATER HARVESTING

CISTERN | RAIN TANK | POROUS PAVEMENT | STORMWATER DRAIN MARKERS | POROUS PAVEMENT

## إجراءات مياه مطر غير نباتية و حصاد مياه المطر

صهريج | خزان المطر | التخزين تحت الأرض | علامات تصريف مياه الأمطار | رصيف مسامي

**T**hese actions include stormwater management improvements that do not include vegetation. Rainwater harvesting are passive methods of gathering rainwater either with a container (like a cistern or tank) for future use or using pavement that allows water to infiltrate into the soil below. Stormwater drain markers are warning signs placed at storm drains to deter deliberate dumping of pollutants.

ياه الأمطار أو مياه الأمطار التي لا تشمل الغطاء النباتي، بعد حصاد مياه الأمطار طرقًا سلبية لتجميع مياه الأمطار إما باستخدام حاوية (مثل الخزان أو الخزان) للاستخدام المستقبلي أو باستخدام الرصيف الذي يسمح للماء بالتسرب إلى التربة أدناه. علامات تصريف مياه الأمطار هي علامات تحذيرية أو الحذر) للاستخدام المستقبلي أو باستخدام الرصيف الذي يسمح للماء بالتسرب إلى التربة أدناه. علامات تصريف مياه الأمطار لربح الملوّثات بشكل متعمد. توضح في مصارف مياه الأمطار لربح الملوّثات بشكل متعمد.

### HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



### BIODIVERSITY / WILDLIFE BENEFITS

فوائد التنوع البيولوجي / الحياة البرية



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية



### ENVIRONMENT BENEFITS

فوائد البيئة



ENVIRONMENT BENEFITS  
فوائد البيئة



### ART / CULTURE / EDUCATION

فنون / ثقافة / تعليم



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم



### CLIMATE / RESILIENCE POTENTIAL

التكيف المناخي / احتمالية بناء المرونة المناخية



CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة المناخية

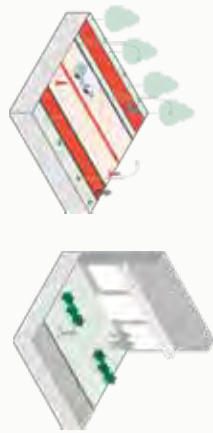


### APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

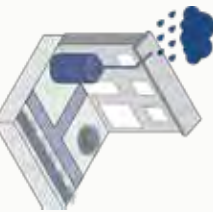
#### LANDSCAPE TYPES

تصنيف المناطق الطبيعية



حق الطريق

حق الطريق للعلاف الواقى للمبنى



BUILDING ENVELOPE

غلاف المبنى







VEGETATED FILTER STRIP | FRANJA FILTRANTE CON VEGETACIÓN



VEGETATED SWALE | BIOSWALE | BARRANCO CON VEGETACIÓN | DRENAJE SOSTENIBLE CON VEGETACIÓN

# LINEAR STORMWATER SYSTEMS

VEGETATED FILTER STRIP | VEGETATED SWALE | VEGETATED BIOSWALE

## SISTEMAS LINEALES DE AGUAS PLUVIALES

FRANJA FILTRANTE CON VEGETACIÓN | BARRANCO CON VEGETACIÓN | DRENAJE SOSTENIBLE CON VEGETACIÓN

Vegetated filter strips are areas of land placed between sources of pollution and bodies of water. Vegetated swales and bioswales are open, shallow channels designed to direct and infiltrate stormwater. These methods are used to capture rainwater runoff, facilitate infiltration back into the earth, and remove debris and pollution.

Las Franjas filtrantes con vegetación son áreas de tierra situadas entre fuentes de contaminación y masas de agua. Los barrancos vegetados y Los drenajes sostenibles son canales abiertos y poco profundos diseñados para dirigir e infiltrar las aguas pluviales. Estos métodos se utilizan para captar la escorrentía de las aguas de lluvia, facilitar la infiltración en la tierra y eliminar los residuos y la contaminación.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



**HUMAN HEALTH BENEFITS**  
Beneficios para la salud humana



**BIODIVERSITY / WILDLIFE BENEFITS**  
Beneficios para la biodiversidad/vida silvestre



**ENVIRONMENT BENEFITS**  
Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
Artes/Cultura/Educación



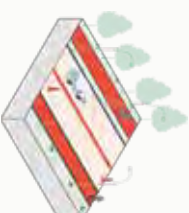
**CLIMATE / RESILIENCE POTENTIAL**  
Potencial de construcción adaptada/resiliente al clima



### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

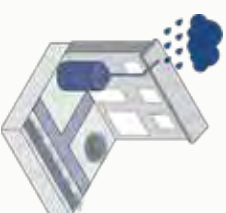
LANDSCAPE TYPES  
Tipología de paisaje



RIGHT-OF-WAY [ROW]  
DERECHO DE PASO



RIGHT-OF-WAY TO BUILDING ENVELOPE  
DERECHO DE PASO A CERRAMIENTO EXTERIOR



BUILDING ENVELOPE  
TRANSLATION



PARKS/MACANT LAND  
PARQUES / TERRENOS  
BALDIOS





شريط تباتي للتصفية | VEGETATED FILTER STRIP



منطقة مبنية منقضة | تبتيت حيوي | VEGETATED SWALE | BIOSWALE

# LINEAR STORMWATER SYSTEMS

VEGETATED FILTER STRIP | VEGETATED SWALE | VEGETATED BIOSWALE

## أنظمة مياه الفيضانات الخطية

شريط تباتي للتصفية | منطقة مبنية منقضة | تبتيت حيوي

Vegetated filter strips are areas of land placed between sources of pollution and bodies of water. Vegetated swales and bioswales are open, shallow channels designed to direct and infiltrate stormwater. These methods are used to capture rainwater runoff, facilitate infiltration back into the earth, and remove debris and pollution.

شراخج التوشيح النباتية عبارة عن مناطق من الأرض موضوعة بين مصادر التلوث والمسطحات المائية. المستنقعات النباتية والأخوض الحيوية هي عبارة عن قنوات فضلة مفتوحة ومصممة لتوجيه مياه العواصف وتسللها، تُستخدم هذه الطرق لالتقاط جريان مياه الأمطار وتسهيل التسلسل مرة أخرى إلى الأرض وإزالة التلوث و الرواسب.

### HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



BIODIVERSITY / WILDLIFE BENEFITS

فوائد التنوع البيولوجي / الحياة البرية



ENVIRONMENT BENEFITS

فوائد البيئة



ART / CULTURE / EDUCATION

فنون / ترفيه / تعليم



CLIMATE / RESILIENCE POTENTIAL

التكيف المناخي / احتمالية بناء المرونة امكانية

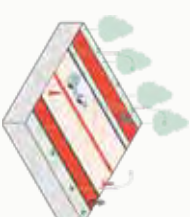


### APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

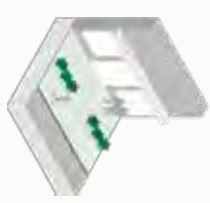
LANDSCAPE TYPES

تصنيف المناظر الطبيعية



RIGHT-OF-WAY [ROW]

حق الطريق



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق للطاق المبنى



BUILDING ENVELOPE

غلاف المبنى



PARKS/MACANT LAND

متنزهات/أرض شاغرة





# BIORETENTION STORMWATER SYSTEMS

RAIN GARDEN | STORMWATER PLANTER BOX

## SISTEMAS DE BIORETENCIÓN DE AGUAS PLUVIALES

JARDÍN DE LLUVIA | JARDINERA PARA AGUAS PLUVIALES

**B**ioretention systems, such as rain gardens or stormwater planter boxes are shallow, vegetated areas that collect and absorb runoff from rooftops, sidewalks, streets, and other hard surfaces. Stormwater that enters the system either is filtered before continuing downstream or is infiltrated and held in the soil bed.

Los sistemas de bio-retención, como los jardines de lluvia o las jardineras para aguas pluviales, son zonas poco profundas con vegetación que recogen y absorben la escorrentía de los techos, las aceras, las calles y otras superficies duras. Las aguas pluviales que entran en el sistema se filtran antes de continuar río abajo o se infiltran y se retienen en el lecho del suelo.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



**HUMAN HEALTH BENEFITS**  
Beneficios para la salud humana



**BIODIVERSITY / WILDLIFE BENEFITS**  
Beneficios para la biodiversidad/vida silvestre



**ENVIRONMENT BENEFITS**  
Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
Artes/Cultura/Educación



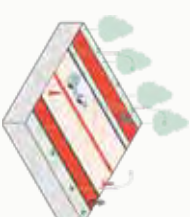
**CLIMATE / RESILIENCE POTENTIAL**  
Potencial de construcción adaptada/resiliente al clima



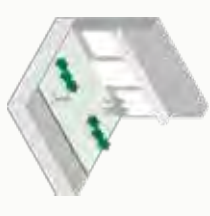
### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

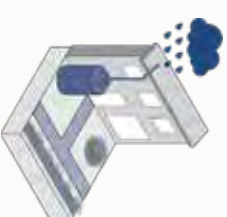
LANDSCAPE TYPES  
Tipología de paisaje



**RIGHT-OF-WAY [ROW] BUILDING ENVELOPE**  
DERECHO DE PASO [ROW]



**RIGHT-OF-WAY TO BUILDING ENVELOPE**  
DERECHO DE PASO A CERRAMIENTO EXTERIOR



**BUILDING ENVELOPE**  
CERRAMIENTO EXTERIOR



**PARKSVACANT LAND**  
PARQUES / TERRENOS BALDÍOS





## BIORETENTION STORMWATER SYSTEMS

RAIN GARDEN | STORMWATER PLANTER BOX

### نظام احتفاظ حيوي بمياه الفيضانات

الحدائق المطيرة | صندوق زراعة مياه الأمطار

**B**ioretention systems, such as rain gardens or stormwater planter boxes are shallow, vegetated areas that collect and absorb runoff from rooftops, sidewalks, streets, and other hard surfaces. Stormwater that enters the system either is filtered before continuing downstream or is infiltrated and held in the soil bed.

نظرة الاحتباس البيولوجي مثل حدائق المطر أو صناديق زراعة مياه الأمطار هي مناطق نباتية ضحلة تصنع وتحتض الجريان السطحي من أسطح المنازل والأرصفة والشوارع والأسطح الصلبة الأخرى. مياه العواصف التي تدخل النظام إما يتم تصفيتها قبل الاستمرار في الاتجاه مجرى النهر أو يتم اختراقها والاحتفاظ بها في قاع التربة.

### HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية



ENVIRONMENT BENEFITS  
فوائد البيئة



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم



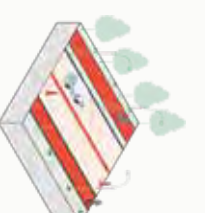
CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة المكانية



### APPROPRIATE LOCATIONS

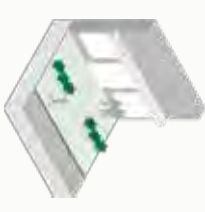
الموقع/المواقع المناسبة

LANDSCAPE TYPES  
تصنيف المناظر الطبيعية



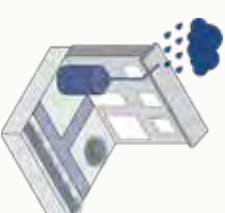
RIGHT-OF-WAY [ROW]

حق الطريق



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق للعلاف الوافي للمبنى



BUILDING ENVELOPE

غلاف المبنى



PARKS/VACANT LAND

متنزهات/أرض شاغرة





GREEN ROOF | TECHOS VERDES

# GREEN ROOF

## TECHOS VERDES

**A** green roof system is a layer of vegetation, soil media, and waterproof membrane installed on top of a flat or slightly-sloped roof. The vegetation and soil media can filter stormwater pollution, reduce runoff, and moderate the temperature of a building or home.

**U**n sistema de techo verde es una capa de vegetación, un medio de tierra y una membrana impermeable instalados sobre un techo plano o ligeramente inclinado. La vegetación y los medios de tierra pueden filtrar la contaminación de las aguas pluviales, reducir la escorrentía y moderar la temperatura de un edificio o casa.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



**HUMAN HEALTH BENEFITS**  
Beneficios para la salud humana



**BIODIVERSITY / WILDLIFE BENEFITS**  
Beneficios para la biodiversidad/vida silvestre



**ENVIRONMENT BENEFITS**  
Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
Artes/Cultura/Educación



**CLIMATE / RESILIENCE POTENTIAL**  
Potencial de construcción adaptada/resiliente al clima



### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

**LANDSCAPE TYPE**  
Tipología de paisaje



**BUILDING ENVELOPE**  
CERRAMIENTO EXTERIOR





# GREEN ROOF

## السقف الصديق للبيئة

A green roof system is a layer of vegetation, soil media, and waterproof membrane installed on top of a flat or slightly-sloped roof. The vegetation and soil media can filter stormwater pollution, reduce runoff, and moderate the temperature of a building or home.

لوصف: نظام السقف الصديق للبيئة هو عبارة عن طبقة من الغطاء النباتي و وسائط التربة وغطاء مقاوم للماء مركب فوق سطح مستوي أو مائل قليلاً. يمكن لوسائط الغطاء النباتي والتربة تصفية تلوّث مياه الأمطار وتقليل الجريان السطحي وتخفيف درجة حرارة المبني أو المنزل.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والرفاهية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الصحة البرية



ENVIRONMENT BENEFITS  
فوائد البيئة



ART / CULTURE / EDUCATION  
فنون / ترفيه / تعليم



CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / إمكانية بناء المرونة المكانية



## APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

LANDSCAPE TYPE  
تصنيف المناظر الطبيعية



BUILDING ENVELOPE  
غلاف المبني



# VERTICAL GREEN

GREEN COLUMNS (FREEWAYS) | GREEN FACADES (BUILDINGS) | GREEN TRELLIS | GREEN WALLS | GREEN FENCES | PASSIVE COOLING FENCE

## JARDINES VERTICALES

COLUMNAS VERDES (AUTOPISTAS) | FACHADAS VERDES (EDIFICIOS) | ENREJADO VERDE | MUROS VERDES | "CERCAS VERDES" | CERCA DE REFRIGERACIÓN PASIVA

Vertical green systems incorporate plants on vertical surfaces such as freeway columns, walls, and fences. These systems can include both vegetation and soils, such as green walls, or structures that hold vegetation such as green facades or green trellises.

Los sistemas verdes verticales incorporan plantas en superficies verticales como columnas de autopistas, muros y cercas. Estos sistemas pueden incluir tanto la vegetación como los suelos, como los muros verdes, o las estructuras que sostienen la vegetación, como las fachadas verdes o los enrejados verdes.

### HUMAN HEALTH & WELLNESS BENEFITS



Beneficios para la salud humana



Beneficios para la biodiversidad/vida silvestre



Beneficios para el medio ambiente



Arte/Cultura/Educación



Potencial de construcción adaptada/resiliente al clima

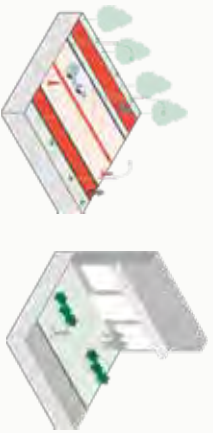


### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

### LANDSCAPE TYPES

Tipología de paisaje



RIGHT-OF-WAY [ROW]  
DERECHO DE PASO [ROW]

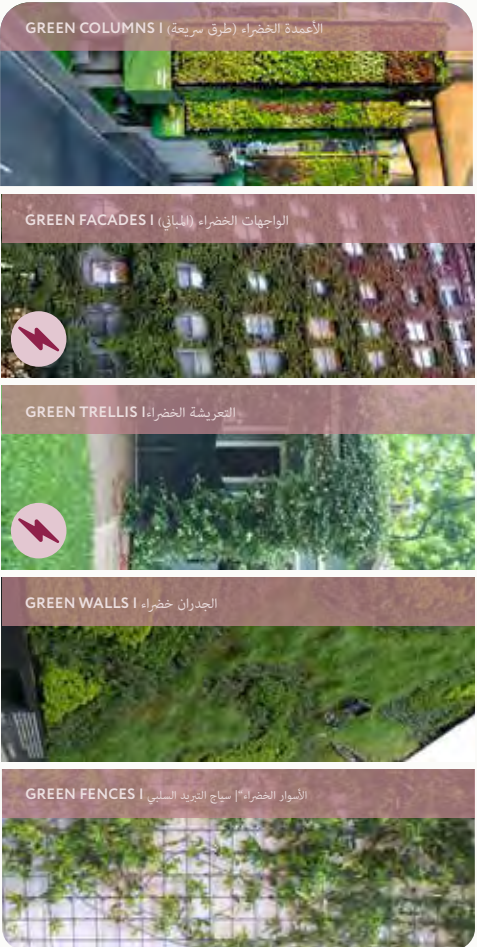
RIGHT-OF-WAY TO BUILDING ENVELOPE  
DERECHO DE PASO A CERRAMIENTO EXTERIOR



BUILDING ENVELOPE  
CERRAMIENTO EXTERIOR

PARKS/MACANT LAND  
PARQUES / TERRENOS BALDIOS





# VERTICAL GREEN

GREEN COLUMNS (FREEWAYS) | GREEN FACADES (BUILDINGS) | GREEN TRELLIS | GREEN WALLS | GREEN FENCES | PASSIVE COOLING FENCE

## الحوائط الخضراء

الأمدة الخضراء (طرق سريعة) | الواجهات الخضراء (المباني) | التعريشة الخضراء (الجدران الخضراء) | الأسوار الخضراء (التريد السلي)

Vertical green systems incorporate plants on vertical surfaces such as freeway columns, walls, and fences. These systems can include both vegetation and soils, such as green walls, or structures that hold vegetation such as green facades or green trellises.

تتضمن الأنظمة الرأسية الخضراء على نباتات على الأسطح الرأسية مثل أمدة الطرق السريعة والجدران والأنوار. يمكن أن تشمل هذه الأنظمة كلًا من النباتات والتربة، مثل الجدران الخضراء أو الهياكل التي تحتوي على نباتات مثل الواجهات الخضراء أو التعريشات الخضراء.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان

medium



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية

high



ENVIRONMENT BENEFITS  
فوائد البيئة

medium



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم

medium



CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة امكانية

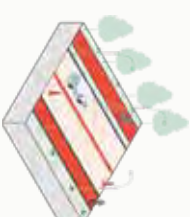
high

## APPROPRIATE LOCATIONS

الموقع/الوفاق المناسبة

LANDSCAPE TYPES

تصنيف المناظر الطبيعية



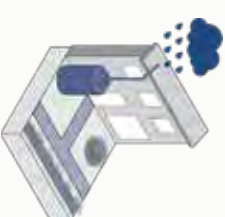
RIGHT-OF-WAY [ROW]



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق

حق الطريق للعلاق الواقى للمبنى



BUILDING ENVELOPE

غلاف المبنى



PARKSMACANT LAND

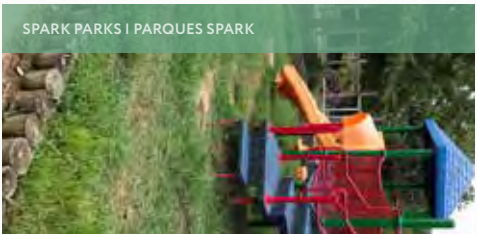
متنزهات/أرض شاعرة







LINEAR PARKS | GREEN CORRIDOR | PARQUE LINEAL | CORREDOR VERDE



SPARK PARKS | PARQUES SPARK



PARKLET | PARKLET



PLAYSCAPE | NATURE PLAY | PAISAJE DE JUEGO | JUEGO EN LA NATURALEZA

# PARK

LINEAR PARKS | GREEN CORRIDOR | SPARK PARKS | PARKLET | PLAYScape | NATURE PLAY | SPORT FIELDS

## PARQUE

PARQUE LINEAL | CORREDOR VERDE | PARQUES SPARK | PARKLET | PAISAJE DE JUEGO | JUEGO EN LA NATURALEZA | CAMPOS DEPORTIVOS

**P**arks are natural or semi-natural spaces set aside for recreation and enjoyment. Some parks include small areas, such as parklets, and some are narrow such as green corridors. Park design can also include space for playscapes, sports fields, walking loops, and nature areas.

Los parques son espacios naturales o seminaturales reservados para el recreo y el placer. Algunos parques incluyen áreas pequeñas, como los parklets, y otros son estrechos, como los corredores verdes. El diseño de los parques puede incluir también espacio para paisajes de juego, campos deportivos, circuitos de paseo y espacios naturales.



**HUMAN HEALTH & WELLNESS BENEFITS**  
Beneficios para la salud y el bienestar humano



**BIODIVERSITY / WILDLIFE BENEFITS**  
Beneficios para la biodiversidad/vida silvestre



**ENVIRONMENT BENEFITS**  
Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
Artes/Cultura/Educación



**CLIMATE / RESILIENCE POTENTIAL**  
Potencial de construcción adaptada/resiliente al clima



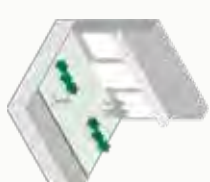
## APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

LANDSCAPE TYPES  
Tipología de paisaje



RIGHT-OF-WAY [ROW]  
DERECHO DE PASO



RIGHT-OF-WAY TO BUILDING ENVELOPE  
DERECHO DE PASO A CERRAMIENTO EXTERIOR



PARKS/ACANT LAND  
PARQUES / TERRENOS BALDIOS



حديقة خطية/طولية | عمر أخضر | LINEAR PARKS | GREEN CORRIDOR



حدائق مدرسية (حدائق سبارك) | SPARK PARKS



جلسات في مناطق مخضرة | PARKLET



مسرح | اللعب في الطبيعة | ملاعب رياضية | NATURE PLAY | PLAYSCAPE



## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS

فوائد صحة الإنسان

high

BIODIVERSITY / WILDLIFE BENEFITS

فوائد التنوع البيولوجي / الحياة البرية



high

ENVIRONMENT BENEFITS

فوائد البيئة



medium

ART / CULTURE / EDUCATION

فنون / ثقافة / تعليم



high

CLIMATE / RESILIENCE POTENTIAL

التكيف المناخي / احتمالية بناء المرونة مكانية



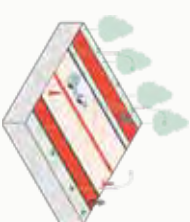
high

## APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

LANDSCAPE TYPES

تصنيف المناظر الطبيعية



RIGHT-OF-WAY [ROW]



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق

حق الطريق للطاقب الوافي للمبنى



PARKS/ACCANT LAND

ممتلكات/الارض شاذرة



# PARK

LINEAR PARKS | GREEN CORRIDOR | SPARK PARKS | PARKLET | PLAYSCAPE | NATURE PLAY | SPORT FIELDS

متره

حديقة خطية/طولية | عمر أخضر | حدائق مدرسية (حدائق سبارك) | جلسات في مناطق مخضرة | مساح | اللعب في الطبيعة | رياضية

Parks are natural or semi-natural spaces set aside for recreation and enjoyment. Some parks include small areas, such as parklets, and some are narrow such as green corridors. Park design can also include space for playscapes, sports fields, walking loops, and nature areas.

المناطق هي مساحات طبيعية أو شبه طبيعية مخصصة للترفيه والاستمتاع. تضم بعض المنتزهات مساحات صغيرة مثل المنتزهات وبعضها ضيق الحدائق هي مساحات طبيعية أو شبه طبيعية مخصصة للترفيه على مساحة بناظر اللعب والملاعب الرياضية وحدائق المبنى والمناطق الطبيعية. مثل الممرات الخضراء. يمكن أيضًا أن يشمل التصميم المنتزه على مساحة بناظر اللعب والملاعب الرياضية وحدائق المبنى والمناطق الطبيعية.



# GARDEN

CULTURAL GARDEN (MEDICINAL/SPIRITUAL) | POLLINATOR/WILDLIFE GARDEN | CONTAINER/PATIO GARDEN  
**JARDÍN**  
 JARDÍN CULTURAL (MEDICINAL/ESPIRITUAL) | JARDÍN DE POLINIZADORES/VIDA SILVESTRE | JARDÍN EN  
 CONTENEDOR/PATIO

**G**ardens are spaces set aside for the growth and cultivation of plants and/or wildlife. Garden spaces rely on higher maintenance needs and rely on community stewards to tend to the area throughout the seasons.

Los jardines son espacios reservados para el crecimiento y el cultivo de plantas y/o vida silvestre. Los espacios ajardinados tienen mayores necesidades de mantenimiento y dependen de los cuidadores comunitarios para atender la zona a lo largo de las estaciones.

## HUMAN HEALTH & WELLNESS BENEFITS



Beneficios para la salud humana



Beneficios para la biodiversidad/vida silvestre



Beneficios para el medio ambiente



Arte/Cultura/Educación



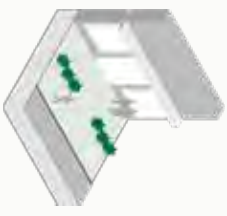
Potencial de construcción adaptada/resiliente al clima



## APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

LANDSCAPE TYPES  
 Tipología de paisaje



RIGHT-OF-WAY TO BUILDING ENVELOPE  
 DERECHO DE PASO A CERRAMIENTO EXTERIOR



PARKS / VACANT LAND  
 PARQUES / TERRENOS BALDIOS





## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان

high



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية

high



ENVIRONMENT BENEFITS  
فوائد البيئة

high



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم

high



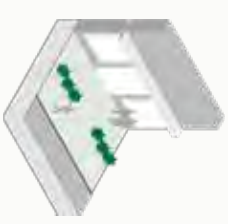
CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة امكانية

medium

## APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

LANDSCAPE TYPES  
تصنيف المناظر الطبيعية



RIGHT-OF-WAY TO BUILDING ENVELOPE  
حق الطرق للغطاء الوافي للمبنى



PARKS / VACANT LAND  
متنزهات/ارض خالصة



# GARDEN

CULTURAL GARDEN (MEDICINAL/SPIRITUAL) | POLLINATOR/WILDLIFE GARDEN | CONTAINER/PATIO GARDEN

## حديقة

حديقة ثقافية (طبية) / روحية | الملقحات / حديقة الحياة البرية | صهرج / فناء الحديقة

Gardens are spaces set aside for the growth and cultivation of plants and/or wildlife. Garden spaces rely on higher maintenance needs and relay on community stewards to tend to the area throughout the seasons.

لحدائق هي مساحات مخصصة لنمو وزراعة النباتات و / أو الحياة البرية. تعتمد مساحات الحدائق على احتياجات صيانة أعلى وتعتمد على الحدائق من المجتمع للاهتمام بالمنطقة طوال الموسم.



# COMMUNITY AGRICULTURE

VEGETABLE/HERB GARDEN | COMMUNITY ORCHARD/FOOD FOREST | AQUACULTURE | BEEKEEPING | CHICKEN KEEPING

## AGRICULTURA COMUNITARIA

HUERTO/HORTALIZA | HUERTO COMUNITARIO/BOSQUE ALIMENTARIO | ACUICULTURA | APICULTURA | CRÍA DE POLLOS

Community agriculture is small-scale farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, fiber, and other products. A agricultura comunitaria es un cultivo a pequeña escala, que incluye la cultivación de la tierra para el crecimiento de los cultivos y la cría de animales para proporcionar alimentos, fibras y otros productos.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



HUMAN HEALTH BENEFITS  
Beneficios para la salud humana



BIODIVERSITY / WILDLIFE BENEFITS  
Beneficios para la biodiversidad/vida silvestre



ENVIRONMENT BENEFITS  
Beneficios para el medio ambiente



ART / CULTURE / EDUCATION  
Artes/Cultura/Educación



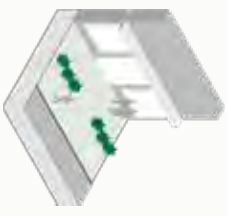
CLIMATE / RESILIENCE POTENTIAL  
Potencial de construcción adaptada/resiliente al clima



### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

LANDSCAPE TYPES  
Tipología de paisaje



RIGHT-OF-WAY TO BUILDING ENVELOPE  
DERECHO DE PASO A CERRAMIENTO EXTERIOR



PARKS / VACANT LAND  
PARQUES / TERRENOS BALDIOS





# COMMUNITY AGRICULTURE

VEGETABLE/HERB GARDEN | COMMUNITY ORCHARD/FOOD FOREST | AQUACULTURE | BEEKEEPING | CHICKEN KEEPING

## الزراعة المجتمعية

خضروات / حديقة أعشاب | بستان المجتمع / غابة الغذاء | تربية النحل / تربية الدجاج

Community agriculture is small-scale farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, fiber, and other products. الزراعة المجتمعية هي زراعة على نطاق صغير، بما في ذلك زراعة التربة لزراعة المحاصيل وتربية الحيوانات لتوفير الغذاء والألياف وغيرها من المنتجات.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان

high



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية

high



ENVIRONMENT BENEFITS  
فوائد البيئة

high



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم

high



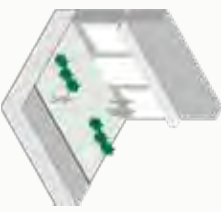
CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة امكانية

medium

## APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

LANDSCAPE TYPES  
تصنيف المناظر الطبيعية



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطرق للغطاء الوافي للمبنى



PARKS / VACANT LAND

متنزهات/أرض خالصة





# PLANT NURSERY

FRUIT/NUT TREES | NATIVE TREES | OTHER VEGETATION  
**VIVERO DE PLANTAS**  
 ÁRBOLES FRUTALES/DE NUECES | ÁRBOLES NATIVOS | OTRA VEGETACIÓN

**P**lant nurseries are spaces where plants are propagated and grown either outside or covered. Typically, these plants are for gardening, agriculture, forestry, or landscaping and sold to the general public or businesses.

Los viveros son espacios en los que se propagan y cultivan plantas al aire libre o a cubierto. Normalmente, estas plantas son para la jardinería, la agricultura, la silvicultura o el paisajismo y se venden al público en general o a las empresas.

**HUMAN HEALTH & WELLNESS BENEFITS**  
 Beneficios para la salud y el bienestar humano



**HUMAN HEALTH BENEFITS**  
 Beneficios para la salud humana



**BIODIVERSITY / WILDLIFE BENEFITS**  
 Beneficios para la biodiversidad/Vida silvestre



**ENVIRONMENT BENEFITS**  
 Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
 Artes/Cultura/Educación



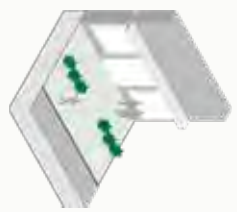
**CLIMATE / RESILIENCE POTENTIAL**  
 Potencial de construcción adaptada/resiliente al clima



## APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

**LANDSCAPE TYPES**  
 Tipo(s) de paisaje



**RIGHT-OF-WAY TO BUILDING ENVELOPE**  
 DERECHO DE PASO A CERRAMIENTO EXTERIOR



**PARKS / VACANT LAND**  
 PARQUES / TERRENOS BALDIOS





# PLANT NURSERY

FRUIT/NUT TREES | NATIVE TREES | OTHER VEGETATION

## العناية بالنباتات

أشجار الفاكهة / الجوز | الأشجار الأصلية | النباتات الاخرى

**P**lant nurseries are spaces where plants are propagated and grown either outside or covered. Typically, these plants are for gardening, agriculture, forestry, or landscaping and sold to the general public or businesses.

شمال النباتات هي أماكن تتكاثر فيها النباتات وتتمو إما بالخارج أو معطاة. عادة ما تكون هذه النباتات مخصصة للبيستنة أو الزراعة أو العناية أو تنسيق الحدائق و يتم بيعها العامة الناس أو الشركات.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



**HUMAN HEALTH BENEFITS**  
فوائد صحة الإنسان

low



**BIODIVERSITY / WILDLIFE BENEFITS**  
فوائد التنوع البيولوجي / الحياة البرية

medium



**ENVIRONMENT BENEFITS**  
فوائد البيئة

low



**ART / CULTURE / EDUCATION**  
فنون / ثقافة / تعلم

low



**CLIMATE / RESILIENCE POTENTIAL**  
التكيف المناخي / احتمالية بناء المرونة امكانية

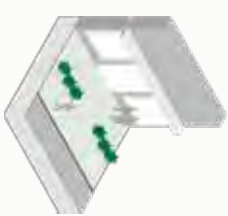
medium

## APPROPRIATE LOCATIONS

الموقع / المواقع المناسبة

### LANDSCAPE TYPES

تصنيف المناظر الطبيعية



**RIGHT-OF-WAY TO BUILDING ENVELOPE**  
حق الطريق للعلف الواقى للمبنى



**PARKS / VACANT LAND**  
متنزهات/ارض خالصة







TREE PLANTING | PLANTACIÓN DE ÁRBOLES



NATIVE VEGETATION PLANTING | PLANTACIÓN DE VEGETACIÓN NATIVA

# HABITAT & WILDLIFE SUPPORT ACTIONS

TREE PLANTS (STREET TREES, PARKING LOT TREES, PARK TREES) | NATIVE VEGETATION PLANTING

ACCIONES DE APOYO AL HÁBITAT Y LA VIDA SILVESTRE  
 PLANTACIÓN DE ÁRBOLES (ÁRBOLES PARA LA CALLE, ÁRBOLES PARA EL ESTACIONAMIENTO, ÁRBOLES PARA PARQUES) | PLANTACIÓN DE VEGETACIÓN NATIVA

**H**abitat and wildlife support actions include planting trees and native vegetation to restore habitat and make more habitable spaces. This may include planting trees or installing vegetation along streets, in parking lots, around apartments and living areas, and in parks. As acciones de apoyo al hábitat y a la vida silvestre incluyen la plantación de árboles y vegetación nativa para restaurar el hábitat y hacer más habitables los espacios. Esto puede incluir la plantación de árboles o la instalación de vegetación a lo largo de las calles, en los estacionamientos, alrededor de los apartamentos y las áreas habitables, y en los parques.

## HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



**HUMAN HEALTH BENEFITS**  
Beneficios para la salud humana



**BIODIVERSITY / WILDLIFE BENEFITS**  
Beneficios para la biodiversidad/vida silvestre



**ENVIRONMENT BENEFITS**  
Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
Artes/Cultura/Educación



**CLIMATE / RESILIENCE POTENTIAL**  
Potencial de construcción adaptada/resiliente al clima



## APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

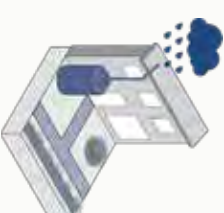
LANDSCAPE TYPES  
Tipología de paisaje



RIGHT-OF-WAY [ROW]  
DERECHO DE PASO



RIGHT-OF-WAY TO BUILDING ENVELOPE  
DERECHO DE PASO A CERRAMIENTO EXTERIOR



BUILDING ENVELOPE  
CERRAMIENTO EXTERIOR



PARKS/MACANT LAND  
PARQUES / TERRENOS BALDIOS





## HUMAN HEALTH & WELLNESS BENEFITS

قوانء صءءة الإءسان والعاقبة



**HUMAN HEALTH BENEFITS**  
قوانء صءءة الإءسان



**BIODIVERSITY / WILDLIFE BENEFITS**  
قوانء التنوع البيولوجي / الصءة البرية



**ENVIRONMENT BENEFITS**  
قوانء البئءة



**ART / CULTURE / EDUCATION**  
قون / ثقافة / تعلم



**CLIMATE / RESILIENCE POTENTIAL**  
الكئف المناخي / اءءمالة بءءة المروءة امءالة

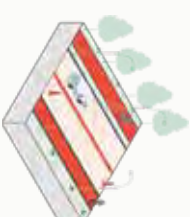


## APPROPRIATE LOCATIONS

الموقء/المواقء الملاءمة

LANDSCAPE TYPES

ءصئف المناظر الطبيعية



RIGHT-OF-WAY [ROW]



RIGHT-OF-WAY TO BUILDING ENVELOPE

ءق الطرئق

ءق الطرئق للءلاف الواقف المبئى



BUILDING ENVELOPE



PARKS/MACANT LAND

ءلاف المبئى

مئءوءءاء/ارءء شافءرة



## HABITAT & WILDLIFE SUPPORT ACTIONS

TREE PLANTS (STREET TREES, PARKING LOT TREES, PARK TREES) | NATIVE VEGETATION PLANTING

### أءراءءاء ءءم البئءة والءءاة البرية

زراعة الأشجار | زراعة الخضار المءلية

Habitat and wildlife support actions include planting trees and native vegetation to restore habitat and make more habitable spaces. This may include planting trees or installing vegetation along streets, in parking lots, around apartments and living areas, and in parks.

أءراءءاء ءءم البئءة والءءاة البرية و ءءمءل زراعة الأءجار والبئاءاء المءلية لاءءءاءة البئءة وائءشاء المءزءء من المساءءاء الصاءءة للسءكن. قء ىءمءل ءلك ءرس الأءءجار أو ءءبب بئاءاء على طول المءواءء ءوفى مواقف السءاءاء ، وءول الشءق ومئااطق المءءبءة وفى الصءاق.



# GATHERING SPACES

COURTYARD | PLAZA | PICNIC AREA | MAILBOX AREA  
**ESPACIOS DE CONVIVENCIA**  
 PATIO | PLAZA | ÁREA DE PICNIC | ÁREA DE BUZONES DE CORREO

**G**athering spaces are any public places where people are able to congregate and connect. These areas can be large or small, but support community cohesion which benefits mental health.  
 Los espacios de convivencia son todos los lugares públicos en los que la gente puede reunirse y conectarse. Estos espacios pueden ser grandes o pequeños, pero favorecen la cohesión de la comunidad, lo que beneficia a la salud mental.

## HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



**HUMAN HEALTH BENEFITS**  
 Beneficios para la salud humana



**BIODIVERSITY / WILDLIFE BENEFITS**  
 Beneficios para la biodiversidad/vida silvestre



**ENVIRONMENT BENEFITS**  
 Beneficios para el medio ambiente



**ART / CULTURE / EDUCATION**  
 Arte/Cultura/Educación



**CLIMATE / RESILIENCE POTENTIAL**  
 Potencial de construcción adaptada/resiliente al clima

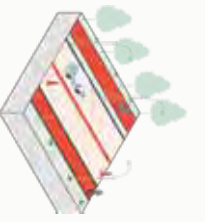


## APPROPRIATE LOCATIONS

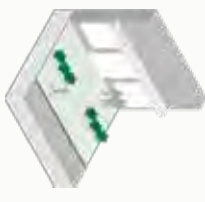
Ubicación(s) apropiada(s)

### LANDSCAPE TYPES

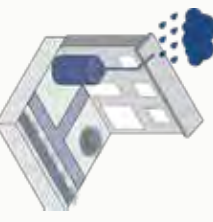
Tipología de paisaje



**RIGHT-OF-WAY ROW]**  
 DERECHO DE PASO



**RIGHT-OF-WAY TO BUILDING ENVELOPE**  
 DERECHO DE PASO A CERRAMIENTO EXTERIOR



**BUILDING ENVELOPE**  
 CERRAMIENTO EXTERIOR



**PARKS/MACANT LAND**  
 PARQUES / TERRENOS BALDIOS





# GATHERING SPACES

COURTYARD | PLAZA | PICNIC AREA | MAILBOX AREA

## مساحات للتجمع

فناء | ساحة | منطقة الزرمة | منطقة صندوق البريد

**G**athering spaces are any public places where people are able to congregate and connect. These areas can be large or small, but support community cohesion which benefits mental health.

ماكن التجمع هي أي أماكن عامة يمكن للناس التجمع فيها والتواصل. يمكن أن تكون هذه المناطق كبيرة أو صغيرة ، لكنها تدعم التماسك المجتمعي الذي يفيد الصحة العقلية.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان ورفاهية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية



ENVIRONMENT BENEFITS  
فوائد البيئة



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم



CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة المكانية

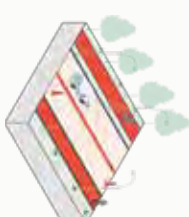


## APPROPRIATE LOCATIONS

الموقع المناسب للمناسبة

### LANDSCAPE TYPES

تصنيف المناظر الطبيعية



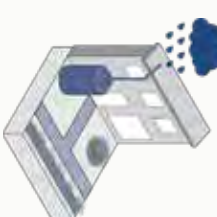
RIGHT-OF-WAY [ROW]

حق الطريق



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق للعلاف الواقف للمبنى



BUILDING ENVELOPE

غلاف المبنى



PARKS/VACANT LAND

متنزهات/أرض شاغرة





# COMMUNITY SERVICES

COMMUNITY RESOURCE CENTER | WIFI HUB  
SERVICIOS COMUNITARIOS

CENTRO DE RECURSOS COMUNITARIOS | CENTRO WIFI

Community services provide assets in a neighborhood that helps meet certain needs for those around them. This can include shelter, wifi, legal services, training, critical resources during disaster scenarios, and other important resources.

Los servicios comunitarios proporcionan recursos en un vecindario que ayudan a satisfacer ciertas necesidades de quienes los rodean. Esto puede incluir refugio, wifi, servicios legales, capacitación, recursos críticos durante escenarios de desastre y otros recursos importantes.

## HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



HUMAN HEALTH BENEFITS



## BIODIVERSITY / WILDLIFE BENEFITS

Beneficios para la biodiversidad/vida silvestre



BIODIVERSITY / WILDLIFE BENEFITS



## ENVIRONMENT BENEFITS

Beneficios para el medio ambiente



ENVIRONMENT BENEFITS



ART / CULTURE / EDUCATION

Arte/Cultura/Educación



CLIMATE / RESILIENCE POTENTIAL

Potencial de construcción adaptada/resiliente al clima

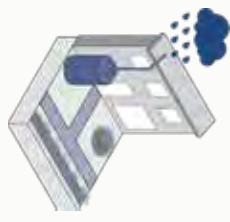


## APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

LANDSCAPE TYPES

Tipología de paisaje



BUILDING ENVELOPE  
CERRAMIENTO EXTERIOR



RIGHT-OF-WAY TO  
BUILDING ENVELOPE  
DERECHO DE PASO A  
CERRAMIENTO EXTERIOR



PARKS/MARGINAL LAND  
PARQUES /TERRENOS  
BALDIOS





## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والرفاهية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية



ENVIRONMENT BENEFITS  
فوائد البيئة



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم



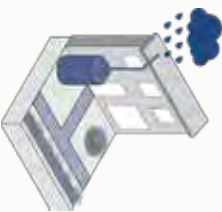
CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / إمكانية بناء المرونة المكانية



## APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

LANDSCAPE TYPES  
تصنيف المناظر الطبيعية



BUILDING ENVELOPE

غلاف المبنى



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق لغلاف الوفاق للمبنى



PARKS/VACANT LAND

متنزهات/أرض شاغرة



ASAKURA ROBINSON



# COMMUNITY SERVICES

COMMUNITY RESOURCE CENTER | WIFI HUB

## خدمات المجتمع

مركز الموارد المجتمع | مركز شبكة الانترنت لاسلكية (واي فاي)

Community services provide assets in a neighborhood that helps meet certain needs for those around them. This can include shelter, wifi, legal services, training, critical resources during disaster scenarios, and other important resources.

، (wifi) وفر خدمات المجتمع أصولاً في الحي تساعد في تلبية احتياجات معينة لمن حولهم، يمكن أن تشمل ذلك المأوى ، وشبكة الانترنت ، والخدمات القانونية ، والتدريب ، والموارد الهامة أثناء سيناريوهات الكوارث ، وغيرها من الموارد الهامة .

ECO/BIO-INNOVATION | ECO / BIOINNOVACIÓN



MAKERSPACES | TALLERES DE CREACIÓN/TRABAJO COLABORATIVO



PUBLIC MARKET | MERCADO PÚBLICO



CAREER PATHWAYS / GREEN JOB DEVELOPMENT | CAMINOS PROFESIONALES / DESARROLLO DE EMPLEOS ECOLÓGICOS



# ENTERPRISE ZONE

ECO/BIO-INNOVATION | MAKERSPACES | PUBLIC MARKET/VENDOR SPACE, OPEN-AIR FLEA MARKET STALLS | CAREER PATHWAYS/GREEN JOB DEVELOPMENT

## ZONA EMPRESARIAL

ECO / BIOINNOVACIÓN | TALLERES DE CREACIÓN/TRABAJO COLABORATIVO | MERCADO PÚBLICO / ESPACIO PARA VENDEDORES, PUESTOS DE MERCADO DE PULGAS AL AIRE LIBRE | CAMINOS PROFESIONALES / DESARROLLO DE EMPLEOS ECOLÓGICOS

Enterprise zones are areas that are granted tax or regulatory incentives to encourage private economic development, job creation, and community cohesion.

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### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



HUMAN HEALTH BENEFITS

Beneficios para la salud humana

high

### BIODIVERSITY / WILDLIFE BENEFITS

Beneficios para la biodiversidad/vida silvestre



low

### ENVIRONMENT BENEFITS

Beneficios para el medio ambiente



low

### ART / CULTURE / EDUCATION

Arte/Cultura/Educación



high

### CLIMATE / RESILIENCE POTENTIAL

Potencial de construcción adaptada/resiliente al clima



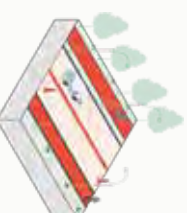
medium

### APPROPRIATE LOCATIONS

Ubicación(es) apropiada(s)

LANDSCAPE TYPES

Tipología de paisaje



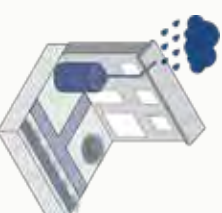
RIGHT-OF-WAY [ROW] BUILDING ENVELOPE

DERECHO DE PASO A CERRAMIENTO EXTERIOR



RIGHT-OF-WAY TO BUILDING ENVELOPE

DERECHO DE PASO A CERRAMIENTO EXTERIOR



BUILDING ENVELOPE CERRAMIENTO EXTERIOR



PARKS/VACANT LAND PARQUES / TERRENOS BALDIOS



الابتكار الحيوي/البيئي | ECO/BIO-INNOVATION



مساحات تصنيع | MAKERSPACES



السوق العام / مساحة للبائع، أكشاك السوق المفتوحة في الهواء طلق | PUBLIC MARKET



مسارات مهنية/ مسارات مهنية | CAREER PATHWAYS / GREEN JOB DEVELOPMENT | تطوير الوظائف الخضراء



# ENTERPRISE ZONE

ECO/BIO-INNOVATION | MAKERSPACES | PUBLIC MARKET/VENDOR SPACE, OPEN-AIR FLEA MARKET STALLS | CAREER PATHWAYS/GREEN JOB DEVELOPMENT

## منطقة الشركات

الابتكار الحيوي/البيئي | مساحات تصنيع | السوق العام / مساحة للبائع، أكشاك السوق المفتوحة في الهواء طلق | مسارات مهنية/ تطوير الوظائف الخضراء

Enterprise zones are areas that are granted tax or regulatory incentives to encourage private economic development, job creation, and community cohesion.

ناطق المؤسسات هي المناطق التي تُمنح حوافز ضريبية أو تنظيمية لتشجيع التنمية الاقتصادية الخاصة وخلق فرص العمل والتماسك المجتمعي.



## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان ورفاهية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان

low medium high



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية

low medium high



ENVIRONMENT BENEFITS  
فوائد البيئة

low medium high



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم

low medium high



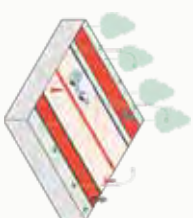
CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / احتمالية بناء المرونة المناخية

low medium high

## APPROPRIATE LOCATIONS

الموقع/ المواقع المناسبة

LANDSCAPE TYPES  
تصنيف المناظر الطبيعية



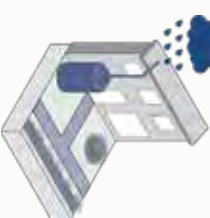
RIGHT-OF-WAY [ROW]

حق الطريق



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق للعنلق الواجهي للمبنى



BUILDING ENVELOPE

غلاف المبنى



PARKS/VACANT LAND

متنزهات/أرض شاغرة





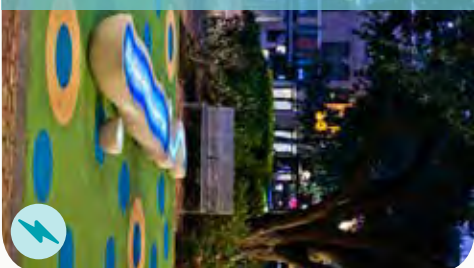
SCULPTURE | ESCULTURA



MURAL | MURAL



SPACES | ESPACIOS



# PUBLIC ART

SCULPTURE | MURAL | SPACES

## ARTE PÚBLICO

ESCULTURA | MURAL | ESPACIOS

Public art is works made through the use of imagination and creative skills by artists in any form that is visually and physically accessible to the general public.

El arte público son obras realizadas mediante el uso de la imaginación y las habilidades creativas de los artistas en cualquier forma que sea visual y físicamente accesible para el público en general.

### HUMAN HEALTH & WELLNESS BENEFITS

Beneficios para la salud y el bienestar humano



HUMAN HEALTH BENEFITS

Beneficios para la salud humana

medium



BIODIVERSITY / WILDLIFE BENEFITS

Beneficios para la biodiversidad/vida silvestre

low



ENVIRONMENT BENEFITS

Beneficios para el medio ambiente

low



ART / CULTURE / EDUCATION

Artes/Cultura/Educación

high



CLIMATE / RESILIENCE POTENTIAL

Potencial de construcción adaptada/resiliente al clima

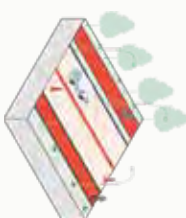
low

### APPROPRIATE LOCATIONS

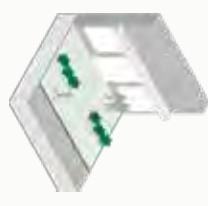
Ubicación(es) apropiada(s)

LANDSCAPE TYPES

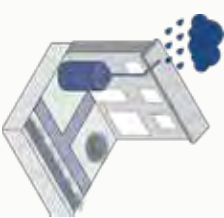
Tipología de paisaje



RIGHT-OF-WAY [ROW]  
DERECHO DE PASO [ROW]



RIGHT-OF-WAY TO BUILDING ENVELOPE  
DERECHO DE PASO A CERRAMIENTO EXTERIOR



BUILDING ENVELOPE  
CERRAMIENTO EXTERIOR



PARKSMACANT LAND  
PARQUES / TERRENOS BALDIOS





# PUBLIC ART

SCULPTURE | MURAL | SPACES

## الفن العام

المنحوت | رسم جداري | المساحات

Public art is works made through the use of imagination and creative skills by artists in any form that is visually and physically accessible to the general public.

الفن العام هو الأعمال التي يتم صنعها من خلال استخدام الخيال والمهارات الإبداعية من قبل الفنانين بأي شكل يكون في متناول عامة الناس بمرئياً وجسدياً.

## HUMAN HEALTH & WELLNESS BENEFITS

فوائد صحة الإنسان والعافية



HUMAN HEALTH BENEFITS  
فوائد صحة الإنسان



BIODIVERSITY / WILDLIFE BENEFITS  
فوائد التنوع البيولوجي / الحياة البرية



ENVIRONMENT BENEFITS  
فوائد البيئة



ART / CULTURE / EDUCATION  
فنون / ثقافة / تعليم



CLIMATE / RESILIENCE POTENTIAL  
التكيف المناخي / إمكانية بناء المرونة المناخية

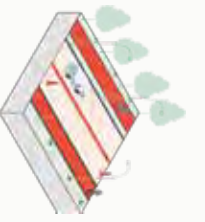


## APPROPRIATE LOCATIONS

الموقع/المواقع المناسبة

### LANDSCAPE TYPES

تصنيف المناظر الطبيعية



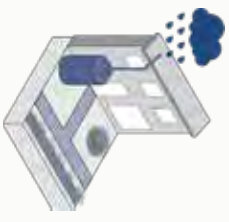
RIGHT-OF-WAY [ROW]

حق الطريق



RIGHT-OF-WAY TO BUILDING ENVELOPE

حق الطريق للعلاف الوافي للمبنى



BUILDING ENVELOPE

غلاف المبنى



PARKS/MACANT LAND

متنزهات/أرض شاغرة



