



TRENDS IN PARKS AND NATURAL AREAS

Parks and Natural Areas Summit and Annual Awards Celebration 2023



ASAKURA
ROBINSON



ASAKURA ROBINSON

is a Landscape Architecture, Planning and Urban Design firm in Houston and Austin Texas. Our firm seeks to strengthen environments and empower communities through innovation, engagement, stewardship, and an integrated design and planning process.



PROS is a nationally recognized leader in parks and recreation consulting, from Park System Master Planning, Strategic planning among other services.



“ We are moving away from terminology, such as ‘amenities.’ These spaces are not just nice-to-have in communities. They are essential, vital spaces and programs that are social drivers of health, resilience and equity.”

Allison Colman, NRPA’s Director of Health.

TRENDS IN OUR FIELD



**PARKS AS
INFRASTRUCTURE**



HEALTH



**CLIMATE
CHANGE**



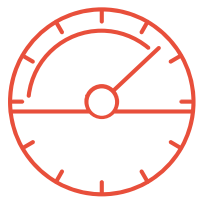
**SPORTS &
OUTDOOR
RECREATION
TRENDS**



**PARKS AS
INFRASTRUCTURE**

City Parks aren't luxuries.
They are critical infrastructure.

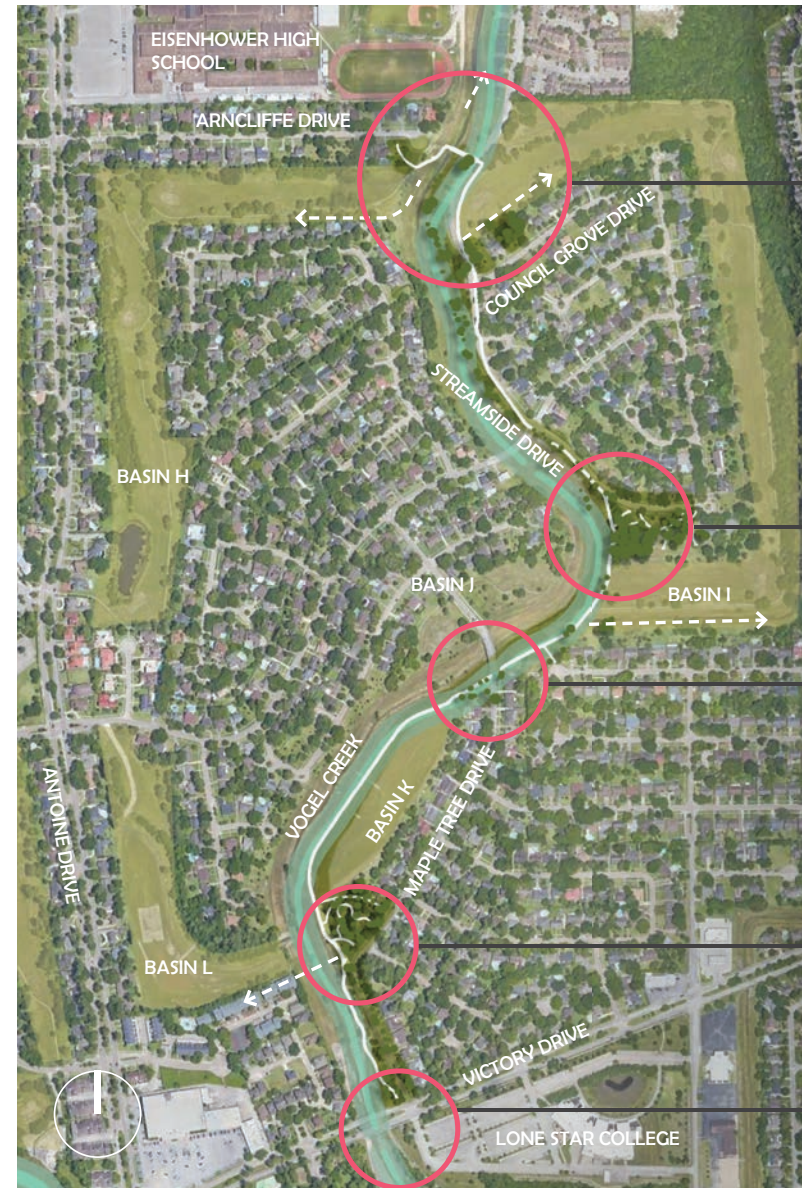
Nearly 80 percent of Americans live in cities and metropolitan areas.



Cities are challenged by aging water and transportation systems.

NEW FOCUS

DISASTER RESILIENCE + MIXED-USE INFRASTRUCTURE, INCLUDING PARKS



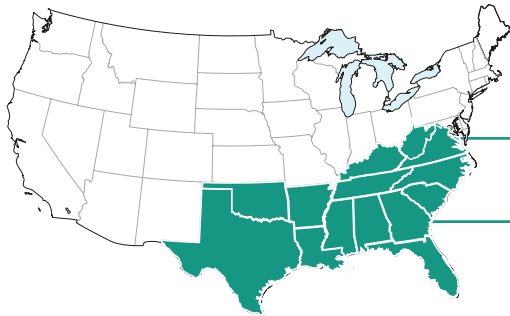
Inwood Detention and Recreation
Houston, TX



City parks can be designed to act like sponges, holding water during rain events and slowly filtering stormwater after the event has passed.

MD Anderson
Houston, TX
Image courtesy of Jaime González

In 2019 the National League of Cities conference, mayors across the country identified parks and recreation as a priority .



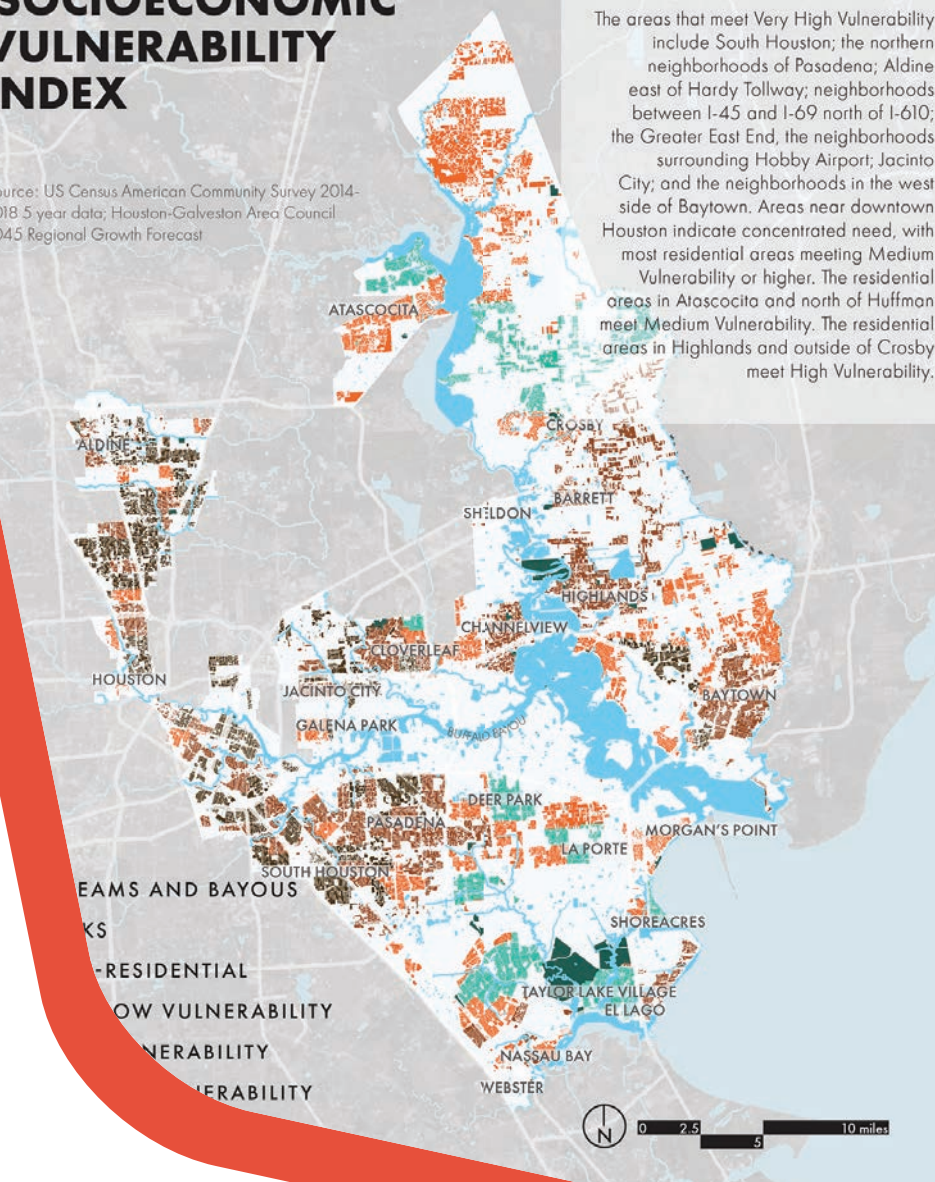
Important sub topics for Southern States

- 1** Parks and Recreation
- 2** Roads, Streets, and Signs
- 3** Police Departments
- 4** Water, Sewer, and Waste Inf.
- 5** Downtown Development

- 6** Pedestrian Infrastructure
- 7** Intergovernmental Relations
- 8** Fire Department
- 9** Civic Engagement
- 10** Infrastructure Funding

SOCIOECONOMIC VULNERABILITY INDEX

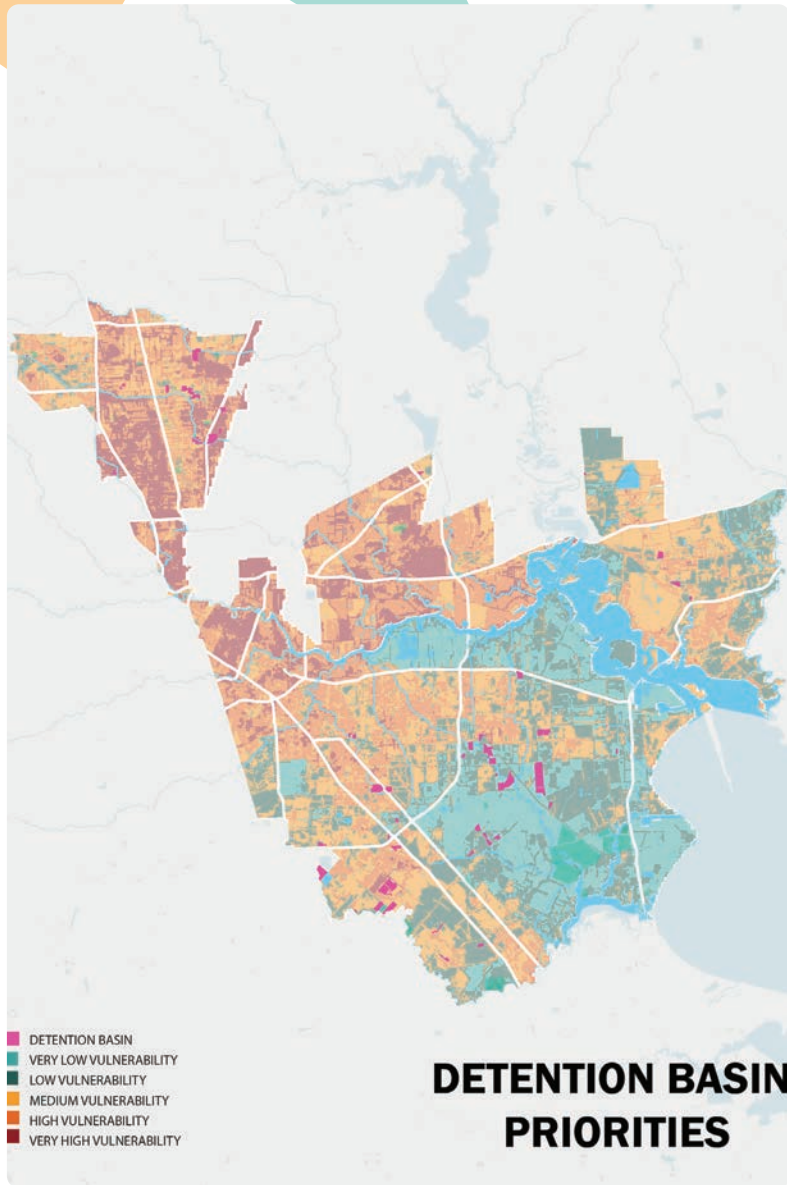
Source: US Census American Community Survey 2014-2018 5 year data; Houston-Galveston Area Council 2045 Regional Growth Forecast



The areas that meet Very High Vulnerability include South Houston; the northern neighborhoods of Pasadena; Aldine east of Hardy Tollway; neighborhoods between I-45 and I-69 north of I-610; the Greater East End, the neighborhoods surrounding Hobby Airport; Jacinto City; and the neighborhoods in the west side of Baytown. Areas near downtown Houston indicate concentrated need, with most residential areas meeting Medium Vulnerability or higher. The residential areas in Atascocita and north of Huffman meet Medium Vulnerability. The residential areas in Highlands and outside of Crosby meet High Vulnerability.

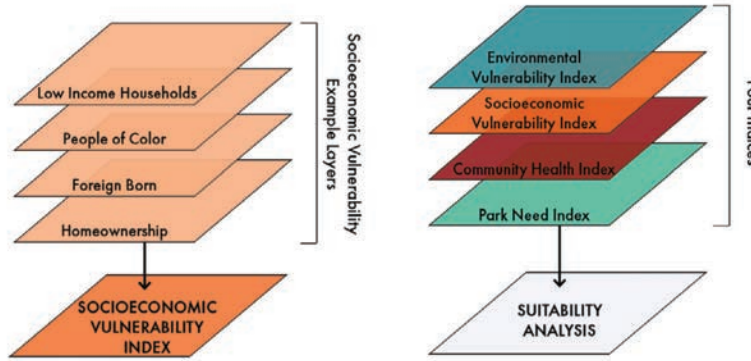


DRAFT OCTOBER 2021



Park Name	Score
Halls Bayou Hike & Bike Trail	2.13
Pinewood Village Park	1.9
Betshire Park	Not Scored
Mary Withers Park	Not Scored
Baytown Soccer Park	1.63
North Shore Park	2.84

STACKING PROCESS



Harris County Precinct 2 Parks and Trails Plan

Data-Informed Decision Making

- Robust suitability analysis
- Comprehensive park assessments
- Tiered park hierarchy for prioritized implementation

Multilingual

PARKS EVERYWHERE

The advent of **green roofs** is offering new opportunities to site innovative parks. The trend is best exemplified in the Dutch city of Rotterdam, which built DakPark, a rooftop park that adorns a 4,000-foot-long building complete with play courts, gardens, a kiosk selling refreshments and even sheep that graze contentedly. Parks will be everywhere humans can find a spot for peaceful reflection – underground, underwater and on the tops of buildings.

DakPark
Dutch city of Rotterdam



PARKS AS INFRASTRUCTURE

The American Society of Civil Engineers rates the state of the nation's infrastructure in its quadrennial report to Congress and the president.

The 2021 report states that parks support

- economic prosperity
- prevent damage from stormwater
- build healthy communities

Deferred Maintenance Backlog

State parks
**\$5.6
billion**

Local parks
**\$60
billion**

A Golden Age of Park and Recreation Infrastructure?

With the passage of the **Great American Outdoors Act** in 2020 that permanently funds the Land and Water Conservation Act at **\$900 million annually**, and the **INVEST in America Act**, there are opportunities for

- land acquisition
- park and recreation planning
- infrastructure maintenance
- repair and development

Agencies that are prepared will be able to tap into funding for

- roads and bridges
- climate change resiliency, renewable energy utilization
- waste reduction
- recycling
- "tree equity"



HEALTH

U.S. adults visiting open spaces for mental & physical health



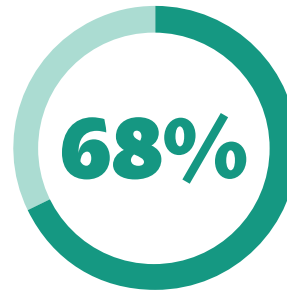
1 of 5 agree amenities are very or extremely essential to mental and physical health



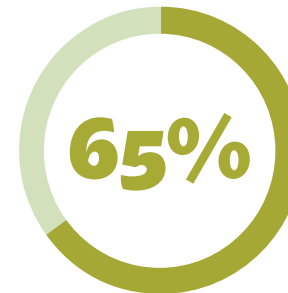
Parents are more likely than non-parents to find parks, trails and open spaces very or extremely essential



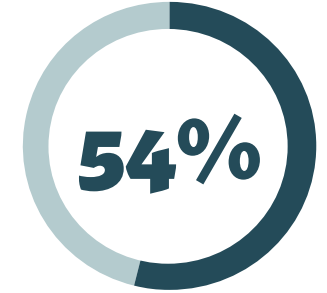
Say it is very or extremely essential to do physical activities at their local parks, trails, and open spaces to maintain their mental and physical health



Millennials



Gen Z



Baby Boomers

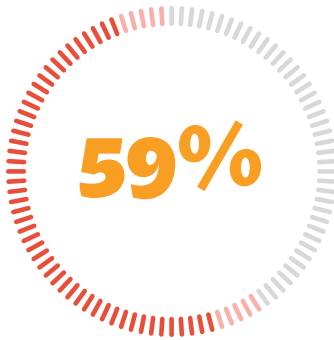
IMPACT OF THE COVID 19 PANDEMIC

(2020-Present)

An overwhelming majority of adults in the United States find exercising at their local parks, trails, and open spaces essential to maintaining their mental and physical health during the COVID-19 pandemic.

PARKS ARE CRITICAL TO THE COVID-19 RESPONSE!

Percentage of Adults
very or extremely essential



walk



hike




bike





Pavilions

Pavilions provide sheltered spaces, which help to combat heat-related illnesses and depression by encouraging socializing outdoors with reprieve from sunburn and heat.



- Help prevent depression by supporting socialization.
- Help prevent sickness from heat exposure.

Health Benefits:
Sheltered spaces can provide a shaded place for people to gather, increasing social opportunities which help prevent depression and heat-related illness from exposure to the elements.¹⁴¹

Scale:
Pavilions range in size. A smaller pavilion may be appropriate in a smaller park, but a larger one or multiple smaller pavilions can be placed in a larger park.

Potential Costs:
Pavilions \$SS

What We Heard:
Spending time with friends and family is the most common reason for using parks according to the Community Survey

Place-based Considerations:

- Heat Exposure
- Mental Health
- Disconnected Youth
- Tree Canopy



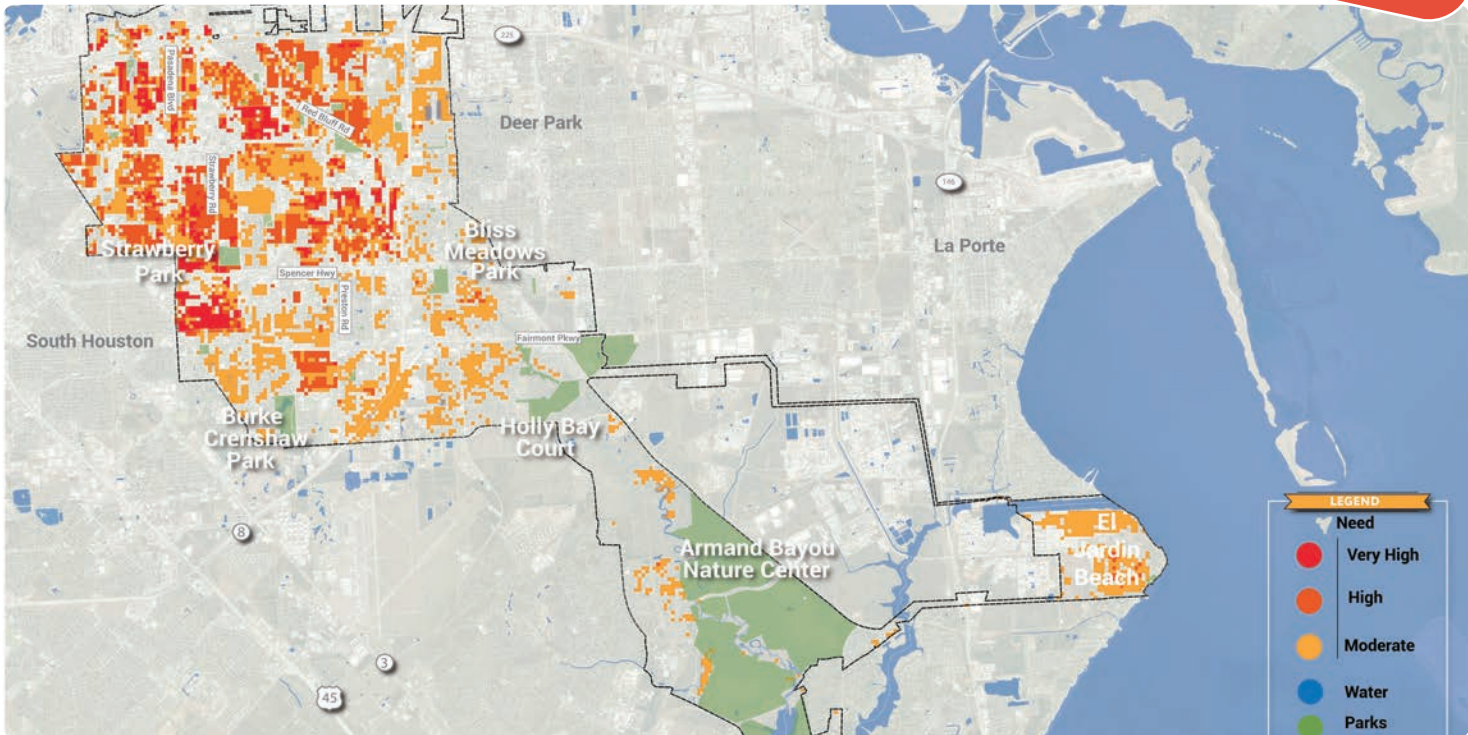
Diverse engagement context

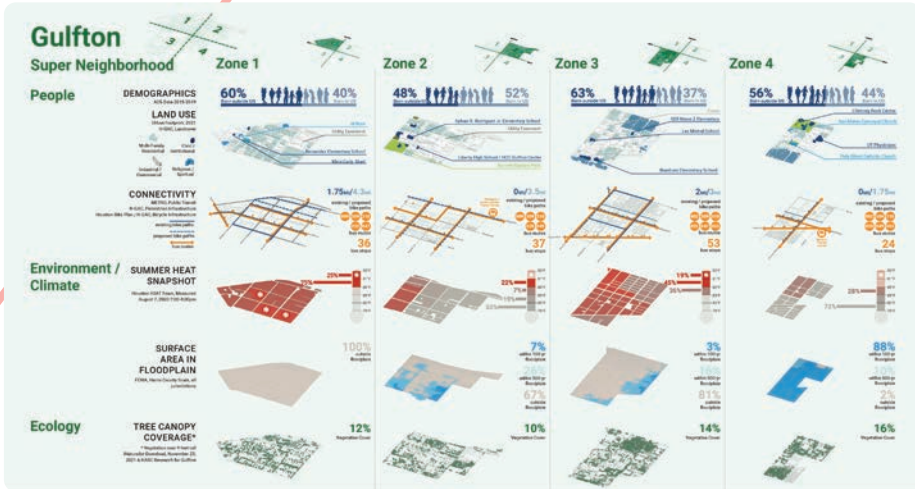
Pasadena Healthy Parks Plan

Leveraging Community Assets for Community Health

- Analytical mapping
- Robust and equitable engagement
- Creative implementation and strategic partnerships

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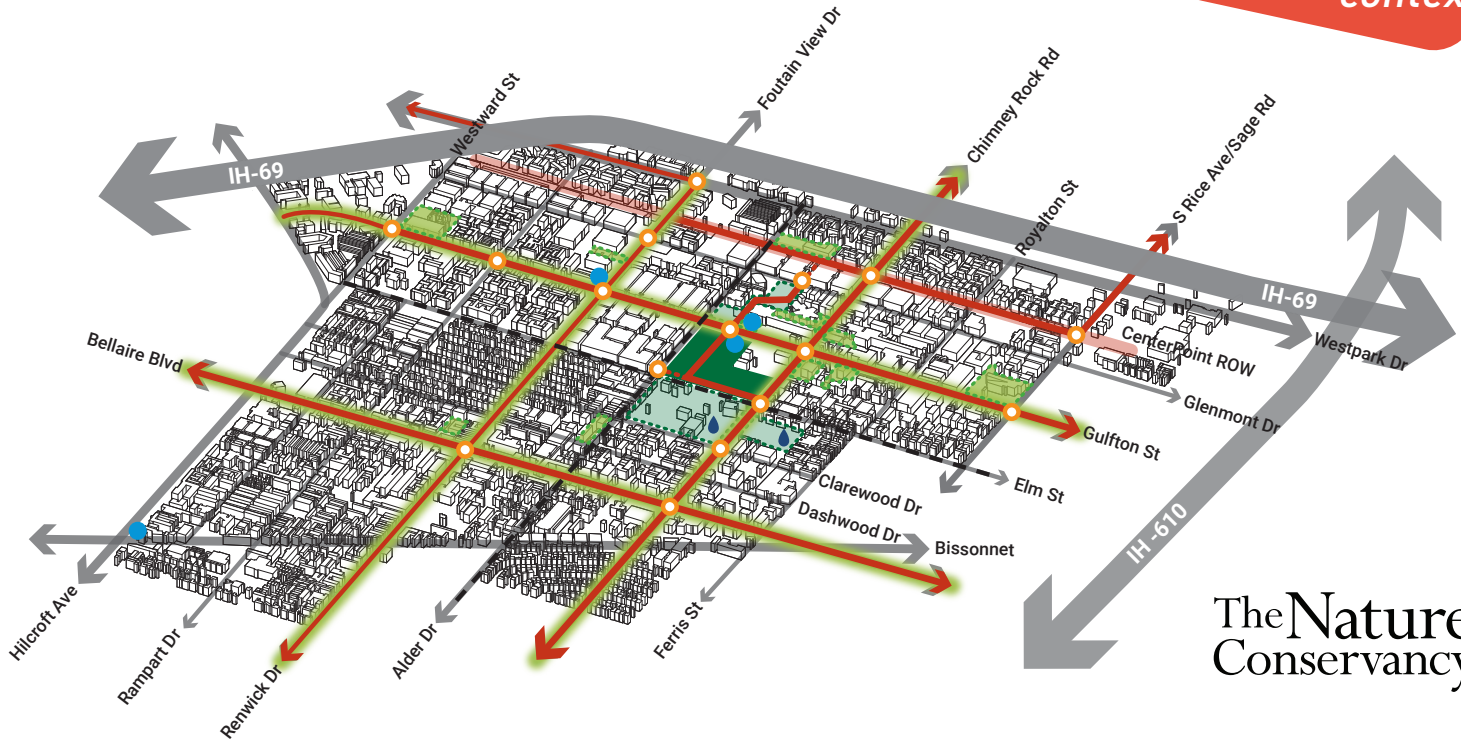
Diverse engagement context

A Greener Gulfton for Nature Health and Resilience

Leveraging Community Assets for Resiliency

- Analytical mapping
- Diverse engagement and long-term community capacity
- Creative implementation and strategic partnerships

Multilingual





**SPORTS & OUTDOOR
RECREATION**

PARTICIPATION BY GENERATION

Generationally, fitness sports continue to be the go-to means of exercise for Boomers, Gen X, and Millennials. Over half of the Gen X, Millennials, and Gen Z generation participated in one type of outdoor activity. Team sports were heavily dominated by generation Gen Z.

Boomers 1945 –1964

	2019	2020	2021
Fitness Sports	58.9%	59.9%	64.4%
Individual Sports	23.1%	22.3%	22.9%
Outdoor Sports	39.4%	39.5%	41.9%
Raquet Sports	5.5%	6.4%	6.8%
Team Sports	4.3%	4.9%	5.1%
Water Sports	7.4%	7.8%	8.2%
Winter Sports	3.9%	3.5%	3.7%

Gen X 1965 –1979

	2019	2020	2021
Fitness Sports	61.1%	66.0%	64.2%
Individual Sports	29.9%	31.5%	29.6%
Outdoor Sports	50.4%	52.2%	50.4%
Raquet Sports	10.1%	12.2%	11.8%
Team Sports	12.0%	15.5%	15.2%
Water Sports	10.9%	13.0%	12.3%
Winter Sports	8.6%	8.7%	8.2%

Millennials 1980 –1999

	2019	2020	2021
Fitness Sports	68.3%	68.7%	70.0%
Individual Sports	39.8%	41.5%	41.3%
Outdoor Sports	57.5%	59.4%	60.5%
Raquet Sports	17.6%	19.9%	19.3%
Team Sports	27.2%	30.4%	30.0%
Water Sports	15.0%	17.1%	17.2%
Winter Sports	14.9%	14.5%	14.0%

Gen Z 2000+

	2019	2020	2021
Fitness Sports	53.5%	55.2%	55.8%
Individual Sports	42.0%	44.3%	44.0%
Outdoor Sports	59.1%	60.6%	60.8%
Raquet Sports	18.1%	22.4%	22.6%
Team Sports	56.3%	56.6%	55.8%
Water Sports	12.9%	16.3%	15.8%
Winter Sports	18.9%	19.4%	19.1%

NATIONAL TRENDS

GENERAL SPORTS



Pickleball

71.2%/6yrs

4 million/yr

Pros:

1. Universality, (anyone can play!)
2. Simple to learn
3. Can be played outdoors or indoors.
4. Social

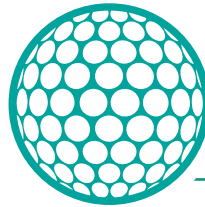
Challenges:

1. Heavy pressure to expand availability on recreation agencies
2. Noise complaints
3. Competition with other sports like Tennis



Basketball

27.1 Million



Golf

25.1 Million



Tennis

22.6 Million



Baseball

15.6 Million



Soccer

12.6 Million



NATIONAL TRENDS

GENERAL FITNESS

*Numbers reflected by the millions

Fitness Walking



114

Dumbbell Free Weight



53.3

Running/Jogging



50.7

Treadmill



49.8

Yoga



32.8

OUTDOOR RECREATION

Hiking



57.8

Bicycling (Road)



44.5

Fishing (freshwater)



42.67

Camping



36.1

Camping Recreational Vehicle



17.8

WATER SPORTS / ACTIVITIES

Kayaking



13.3

Canoeing



9.2

Snorkeling



7.3

Jet skiing



5.1

Sailing



3.5



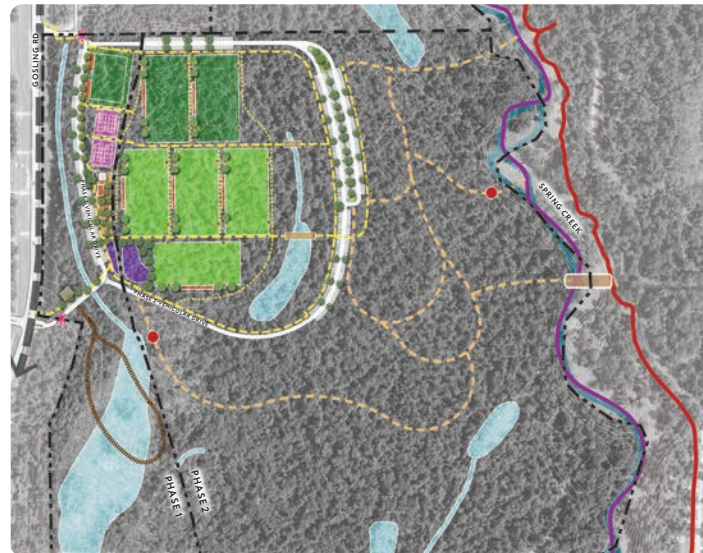
National Participatory Trends - General Sports					
Activity	Participation Levels			% Change	
	2016	2020	2021	5-Year Trend	1-Year Trend
Basketball	22,343	27,753	27,135	21.4%	-2.2%
Golf (9 or 18-Hole Course)	23,815	24,804	25,111	5.4%	1.2%
Tennis	18,079	21,642	22,617	25.1%	4.5%
Baseball	14,760	15,731	15,587	5.6%	-0.9%
Soccer (Outdoor)	11,932	12,444	12,556	5.2%	0.9%
Golf (Entertainment Venue)	8,173	12,057	12,362	51.3%	2.5%
Softball (Slow Pitch)	7,690	6,349	6,008	-21.9%	-5.4%
Football (Flag)	6,173	7,001	6,889	11.6%	-1.6%
Volleyball (Court)	6,216	5,410	5,849	-5.9%	8.1%
Badminton	7,354	5,862	6,061	-17.6%	3.4%
Soccer (Indoor)	5,117	5,440	5,408	5.7%	-0.6%
Football (Touch)	5,686	4,846	4,884	-14.1%	0.8%
Football (Tackle)	5,481	5,054	5,228	-4.6%	3.4%
Gymnastics	5,381	3,848	4,268	-20.7%	10.9%
Volleyball (Sand/Beach)	5,489	4,320	4,184	-23.8%	-3.1%
Track and Field	4,116	3,636	3,587	-12.9%	-1.3%
Cheerleading	4,029	3,308	3,465	-14.0%	4.7%
Pickleball	2,815	4,199	4,819	71.2%	14.8%
Racquetball	3,579	3,426	3,260	-8.9%	-4.8%
Ice Hockey	2,697	2,270	2,306	-14.5%	1.6%
Ultimate Frisbee	3,673	2,325	2,190	-40.4%	-5.8%
Softball (Fast Pitch)	2,467	1,811	2,088	-15.4%	15.3%
Lacrosse	2,090	1,884	1,892	-9.5%	0.4%
Wrestling	1,922	1,931	1,937	0.8%	0.3%
Roller Hockey	1,929	1,500	1,425	-26.1%	-5.0%
Boxing for Competition	1,210	1,361	1,460	20.7%	7.3%
Rugby	1,550	1,242	1,238	-20.1%	-0.3%
Squash	1,549	1,163	1,185	-23.5%	1.9%

NOTE: Participation figures are in 000's for the US population ages 6 and over

Legend:	Large Increase (greater than 25%)	Moderate Increase (0% to 25%)	Moderate Decrease (0% to -25%)	Large Decrease (less than -25%)
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FIELD	HOURS UTILIZED	BEST PRACTICE MAX HOURS	(OVER) UNDER MAX HOURS	PERCENTAGE OF MAX
Bear Branch Soccer 1 Artificial Turf	1,874	1,900	26	99%
Bear Branch Soccer 5 Artificial Turf	1,810	1,900	91	95%
Bear Branch Soccer 3 Artificial Turf	1,803	1,900	98	95%
Gosling Sports Field Multi #1 - Turf	1,759	1,900	142	93%
AB Sports Park Multi #1 Artificial Turf	1,755	1,900	145	92%
Bear Branch Soccer 4 Artificial Turf	1,738	1,900	162	91%
Gosling Sports Field Multi #2 - Turf	1,717	1,900	183	90%
Gosling Sports Field Multi #3 - Turf	1,682	1,900	219	89%
AB Sports Park Multi #2 Artificial Turf	1,439	1,900	461	76%
SUBTOTAL ARTIFICIAL TURF	15,575	17,100	1,525	91%
Gosling Sports Field Multi #4 - Grass	1,017	600	(417)	169%
Gosling Sports Field Multi #5 - Grass	920	600	(320)	153%
Bear Branch Soccer 6	767	600	(167)	128%



The Woodlands Parks And Needs Assessment

Benchmarking, Trends Analysis, Utilization Analysis

- Understand local and national usage and trends
- Identify current and future needs of the community
- Develop conceptual designs that respond to long term goals
- Foster economic Development



THANK YOU!

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