



5.0 NEEDS ASSESSMENT



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Introduction

A needs assessment for parkland and recreation programs helps determine the adequacy of a community's parks, recreation and open space system and identifies under-served areas of the community and its residents by detecting gaps in parks service areas and recreational programming. Specifically, a thorough needs assessment helps determine:

- residents' level of satisfaction with existing parks and recreation facilities, programs, and services;
- community needs, priorities, and preferences for various types of parks, open spaces, facilities, and recreational programs;
- community and residents' willingness and preferences to fund needed improvements, facilities, and programs.

An effective needs assessment employs several techniques to gather information on community needs, priorities, and existing conditions of the current parks system. When carried out in conjunction, these techniques help achieve a triangulation of information, in that information is gathered from several sources and from various vantage points to ensure an accurate assessment of the needs and priorities of all residents, stakeholders and community members. To undertake a thorough assessment of need in Pearland, the *Parks, Recreation, and Open Space Master Plan* utilizes qualitative and quantitative methods to gather data and achieve triangulation.



The **QUALITATIVE** methods include:

- Discussions with community stakeholders, including teens, adults, sports leagues, art councils, environmental organizations, and other special interest groups;
- Interviews with Parks and Recreation Department staff, City officials, and advisory groups;
- Discussions with neighborhood residents and community leaders;
- Visual reconnaissance and assessment of City-owned parks, and trail facilities and amenities.



An analysis of **QUANTITATIVE** data from a variety of sources, such as the U.S. Census Bureau, City of Pearland Parks and Recreation Department, Environmental Systems Research Institute (ESRI), the National Recreation and Parks Association (NRPA), and a community survey, further details the need for parks and recreation enhancements in Pearland. This data analysis determines:

- Acreage level of service (number of parkland acres per 1,000 people)
- Facilities level of service (number of facilities per a standard number of people)
- Park/facility service area (number of residents within a standard distance)
- Number of parks staff per acre of parkland
- Annual maintenance and operating budget of parks and recreation facilities per capita
- Community members' preferences and needs through survey research

Needs Assessment Approaches for Parks and Recreation

1 To be comprehensive, the needs assessment for Pearland's *Parks, Recreation, Open Space, and Trails Master Plan* uses five approaches. **First**, it undertakes a **Demand-Based Assessment**, which analyzes community input received through public engagement. Public engagement included interviews and discussions with community leaders and stakeholders, such as homeowners associations, sports associations, sports leagues, City officials, environmental advocacy groups, parks and recreation advisory groups, and nonprofit organizations. Another component of the public engagement was a community needs survey for all of Pearland's community members, including residents. Information obtained through this engagement clarified the demands from the community regarding the types and location of parks and recreation facilities needed.

2 **Second**, a **Standards-Based Assessment** is employed to assess the level of service for park and open space facilities and recreational programs by the City of Pearland. This assessment utilizes National Recreation and Park Association's (NRPA) Areas and Facilities Standards and Park Metrics of peer communities in the 2019 Agency Performance Review to evaluate the level of service of park facilities and recreational programs available to Pearland community members.

3 **Third**, this needs assessment analyzes the operations, budget, capital projects outlay, and annual expenditures of the City of Pearland's Parks and Recreation Department (PAR) as part of an **Operations-Based Assessment**. This approach helps determine the budgetary, operating, and maintenance needs of the Parks and Recreation Department to provide an optimal mix of facilities and services to community members within resource (capital, other) thresholds.

4 **Fourth**, a **Conditions-Based Assessment** identifies the need for improvements to City-owned parks and facilities in Pearland. The conditions-based assessment undertakes a visual assessment of all City-owned parks, trails, and facilities in the park

system, and provides quantifiable scores that help determine the need for improvements in the park system. This assessment also includes a Pedestrian Level of Service (PLOS) analysis which provides quantifiable level of service scores for City-owned trails to help determine the type and location for the improvements needed in Pearland's trail system.

Fifth, a **Resource-Based Assessment** is carried out to identify and describe natural resources and publicly-owned land, such as school district property and drainage channels, which may be utilized to increase the number of parks and facilities available to Pearland's residents.

The results obtained from a comprehensive needs assessment inform the strategies and recommendations within Chapter 2.0, *Pearland Parks Tomorrow*.

The Five Needs Assessment Approaches for Parks and Recreation

1 Demand

Assessment starts on page 5.3



2 Standards

Assessment starts on page 5.17



3 Operations

Assessment starts on page 5.37



4 Conditions

Assessment starts on page 5.47



5 Resources

Assessment starts on page 5.61





Demand-Based Assessment

A community's parks and recreation system should be in alignment with the preferences of the system's users or members of the community. Their input is essential in planning and designing park facilities, open spaces, and recreational programs that are desired by and serve the unique needs of all community members. Community feedback is essential in building consensus and support for changes and additions to public facilities and programs. Therefore, public engagement and outreach to the full array of community groups, leaders, advocates, stakeholders, and residents who represent the community, is critical for understanding community needs.

For this Master Plan, the methods used to gather data and solicit public input comprised of discussions with community members at public open houses; interviews with city officials from the PARD, Public Works and Engineering, Planning, and Police Departments; consultation meetings with the Parks Advisory Board; discussions with various stakeholders; and an online community survey.

Stakeholder Meetings and Listening Sessions

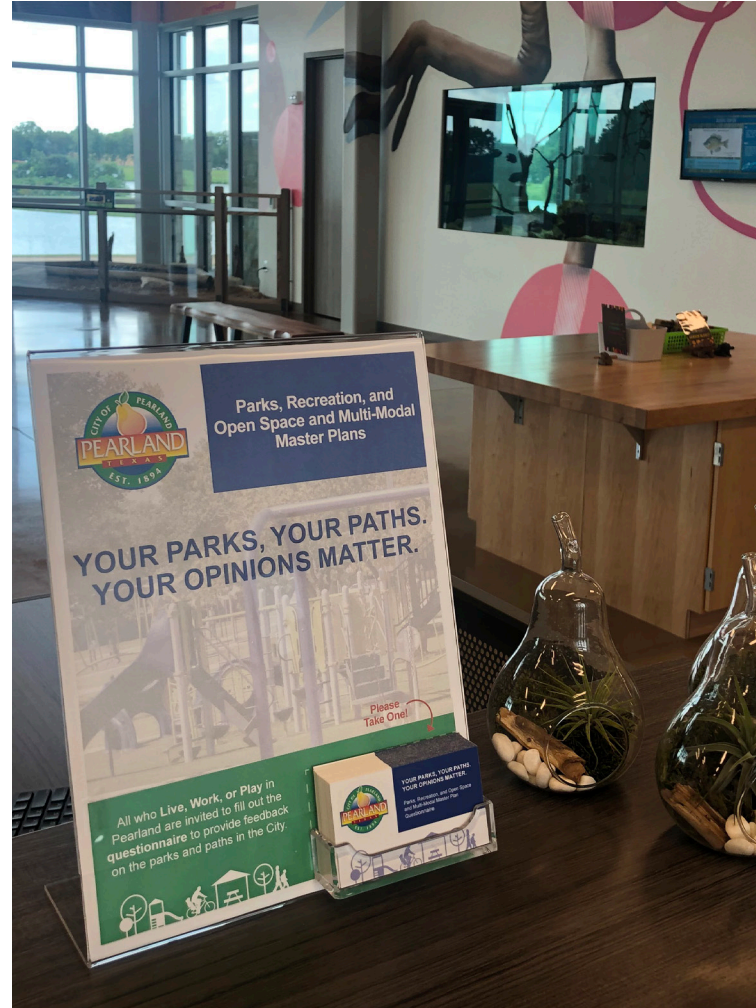
The consultant team held a variety of "listening sessions" and met with stakeholders who represented a cross-section of Pearland's community. Stakeholders and stakeholder groups included:

- the Pearland Parks, Recreation, and Beautification Board
- the City Manager and Assistant City Managers;
- City Council members
- representatives from the Pearland Police Department;
- the City Engineer;
- members of sports organizations
- participants of the PARD's recreational programs
- non-profit organizations whose purpose is to advocate for the environment
- Keep Pearland Beautiful
- Pearland Economic Development Corporation;
- Brazoria County Library system staff
- Pearland Parks and Recreation staff
- Forever Parks Foundation
- Pearland Convention and Visitors Bureau
- the local school district, and
- the Vic Coppinger Family YMCA .

Community Survey Results

A community survey was utilized to gather input from Pearland's residents regarding their needs and priorities for the city's parks, facilities, and recreational programs. Responses to the survey were collected from July through early December 2019. The survey was advertised in a variety of ways to gather input from a large segment of Pearland residents. Business cards with a QR code advertising and providing a link to the survey website were placed at several City of Pearland buildings as well as at PARD Open Houses. Ten thousand (10,000) postcards with the survey website QR code were also placed in grocery deliveries from HEB. The survey website was also advertised on the City of Pearland website, and the PARD website and social media sites. As an incentive to complete the survey, respondents were eligible to win a family membership to the Pearland Recreation Center and Natatorium through a raffle.

Overall, 726 people answered the survey questions. Although the survey was not statistically valid, the responses to the survey questions provide a window into the interests and priorities of the community regarding Pearland's parks system. The following section summarizes the key priorities and interests emerging from the community survey. The actual survey and responses have been included within Appendix B, *Survey Results*.



Survey advertisement displayed at the Delores Fenwick Nature Center. Source: Halff Associates

Figure 5.1, Park and Trail Visitation

Of the survey respondents, over half, or 56 percent, had visited Pearland’s parks or recreational facilities more than three times in the past month. Of these, 28 percent had visited a park or recreational facility over six times in the past month. As indicated in Figure 5.1, 16 percent of the survey respondents had not visited a park in the last month. Additionally, regarding visits to Pearland’s trails, close to 37 percent of the survey respondents had not visited a recreational trail in the past month, though 30 percent had used a recreational trail once or twice in the past month.

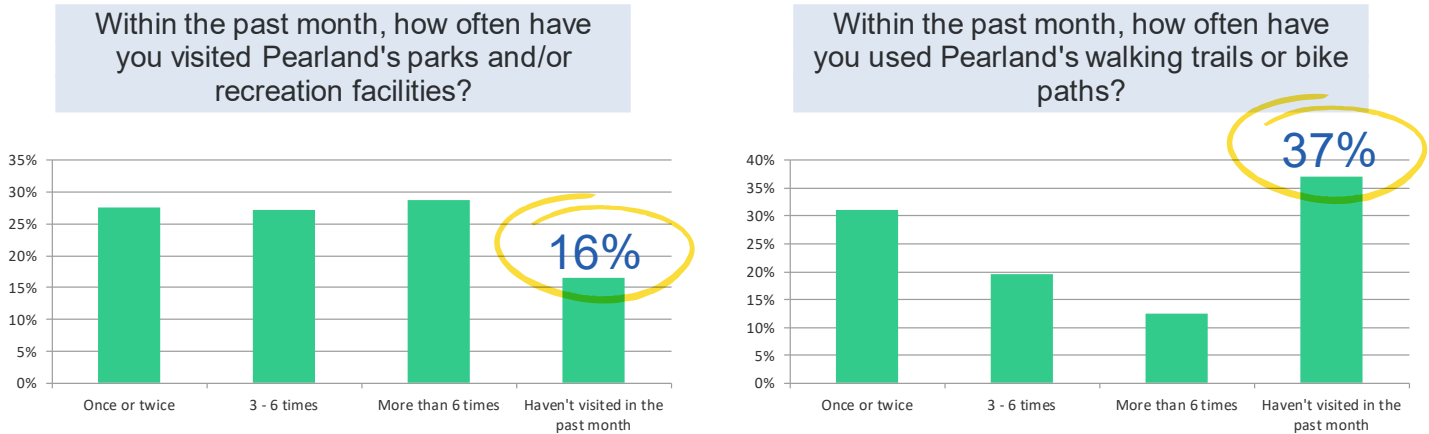


Figure 5.2, Satisfaction with the Current Park Facilities and Amenities

Survey respondents were most satisfied with Pearland’s passive recreation facilities and amenities, including playgrounds, picnic areas, splash pads, and dog parks (refer to Figure 5.2). The park facility or amenity that was ranked as satisfactory by the highest number of survey respondents (47 percent) was playgrounds, followed by landscaping at 46 percent. The Pearland Recreation Center and Natatorium was ranked by 40 percent of the survey takes as satisfactory. Other facilities which were also considered satisfactory by survey respondents included the City’s paved multi-use trails (33 percent of survey responses) and basketball courts (32 percent of survey responses). The park facilities that were considered unsatisfactory by the highest number of survey respondents were shade trees (50 percent of survey responses), indoor swimming pool (49 percent of survey responses), and nature trails (44 percent of survey responses).

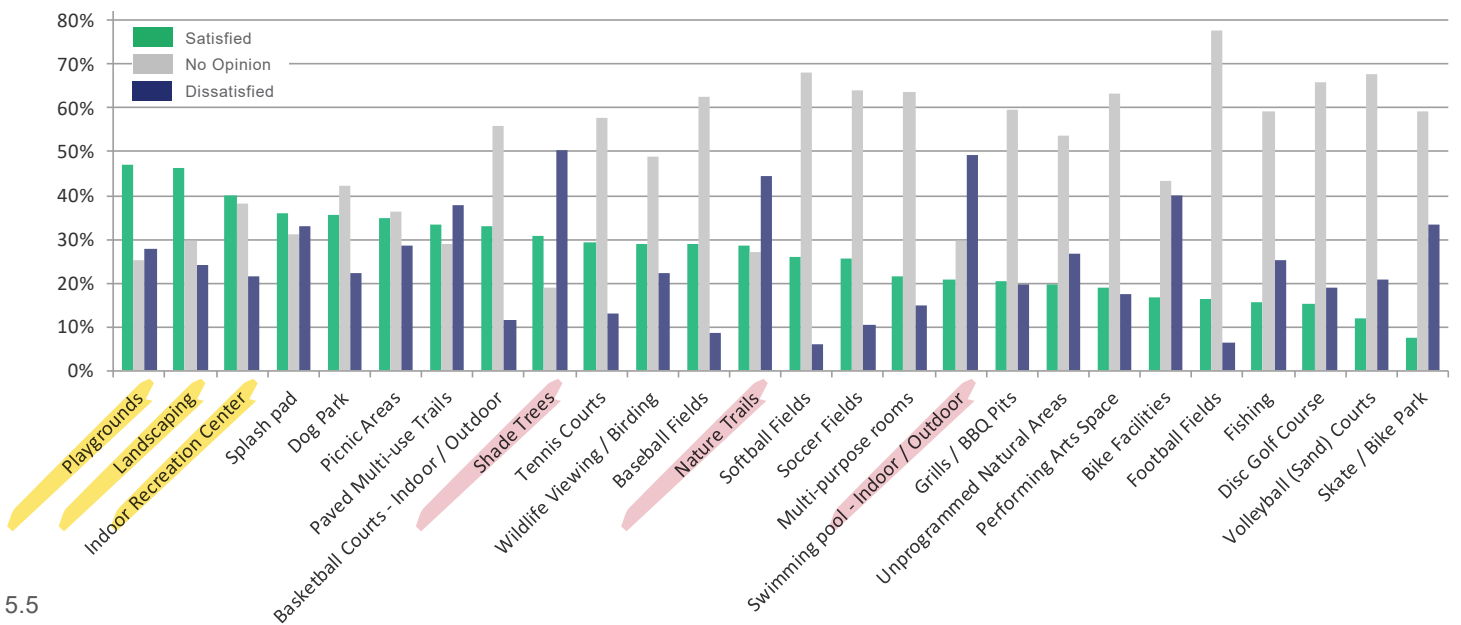


Figure 5.3, Favorite Park in Pearland

Figure 5.3 depicts the names of the favorite parks as stated by the survey respondents in a 'word cloud.' The larger the name of the park, the more frequently it was stated by respondents as their favorite park.

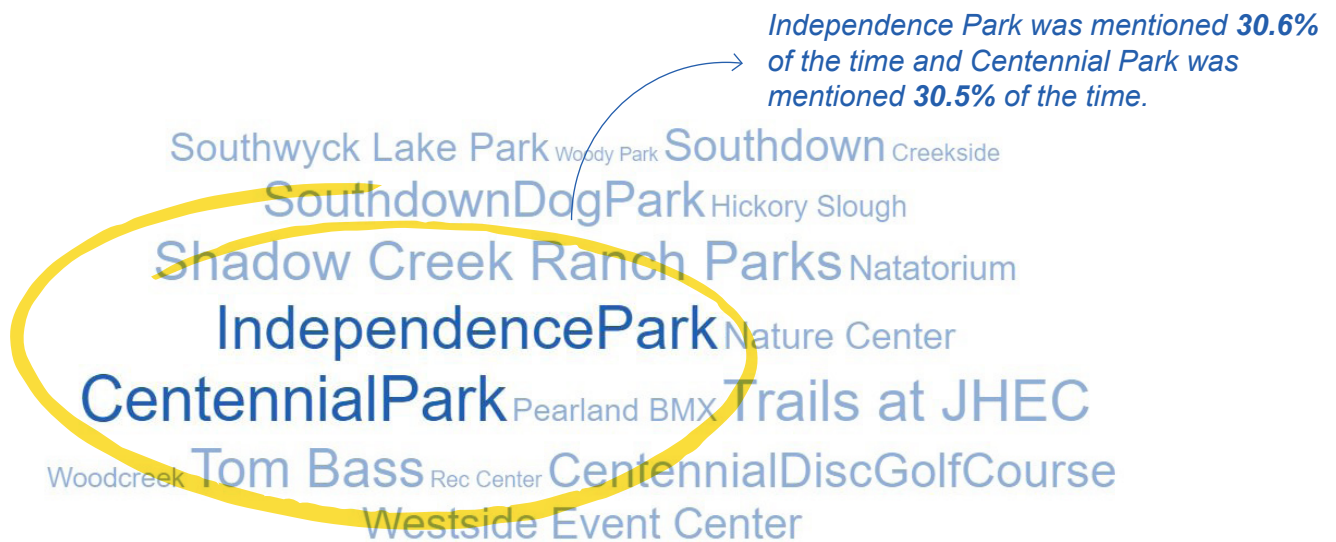
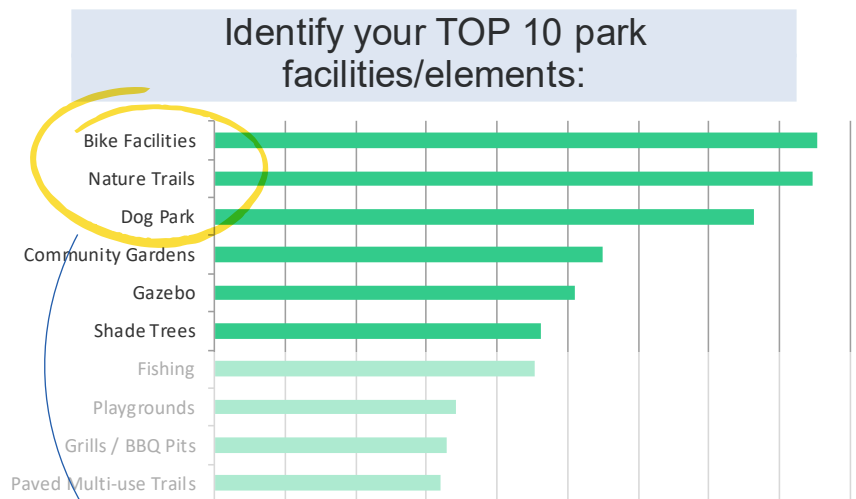


Figure 5.4, Favorite Park Facilities or Amenities

The survey respondents were asked to name 10 park facilities or amenities most important to them. As illustrated in Figure 5.4, the facilities that were among the most favored elements in a park to the highest number of respondents were bicycling facilities, nature trails and dog parks. Also ranked highly as the favorite elements in a park were community gardens, gazebos, and shade trees. Survey respondents also ranked fishing and playgrounds as some of their favorite park elements.



The facilities that were among the most favored elements in the park were bicycling facilities, nature trails, and dog parks.



Figure 5.5, Reasons for Not Utilizing City of Pearland’s Parks

The most frequently cited reasons for not utilizing City of Pearland parks by survey respondents were, lack of adequate restrooms (28 percent of the responses to this question), distance to the park (27 percent of the responses to this question), and not finding facilities that they liked at the parks (26 percent of responses to this question). As described in Figure 5.5, another 22 percent of the respondents also cited the condition of existing facilities as a reason for not utilizing the City’s parks.

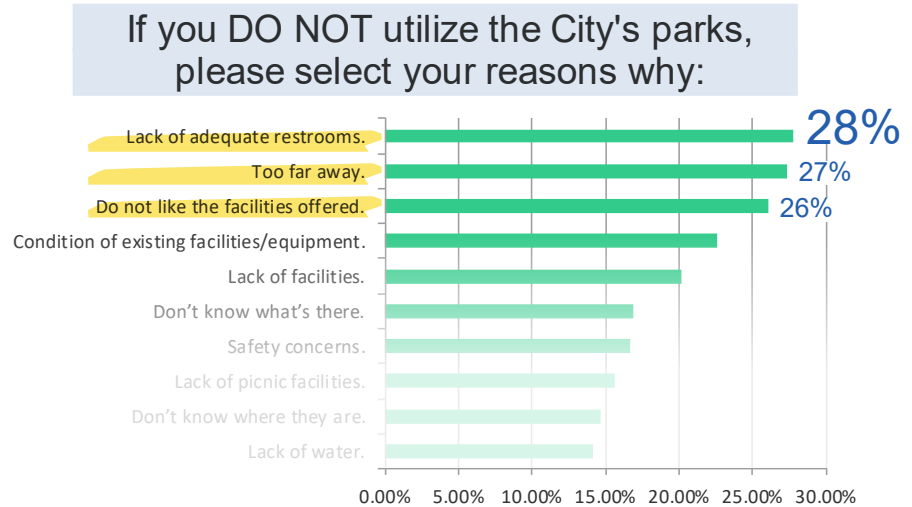


Figure 5.6, Demand for Facilities, Activities, and Programs Not Currently Offered in Pearland

Figure 5.6 indicates the facilities, activities and programs not offered by the City that survey respondents would like to have in Pearland’s parks system. The word cloud is an illustration of responses to this question. Refer to Appendix B, *Survey Results* for the full list of parks, recreation or culture activities that respondents would like to see offered in Pearland.

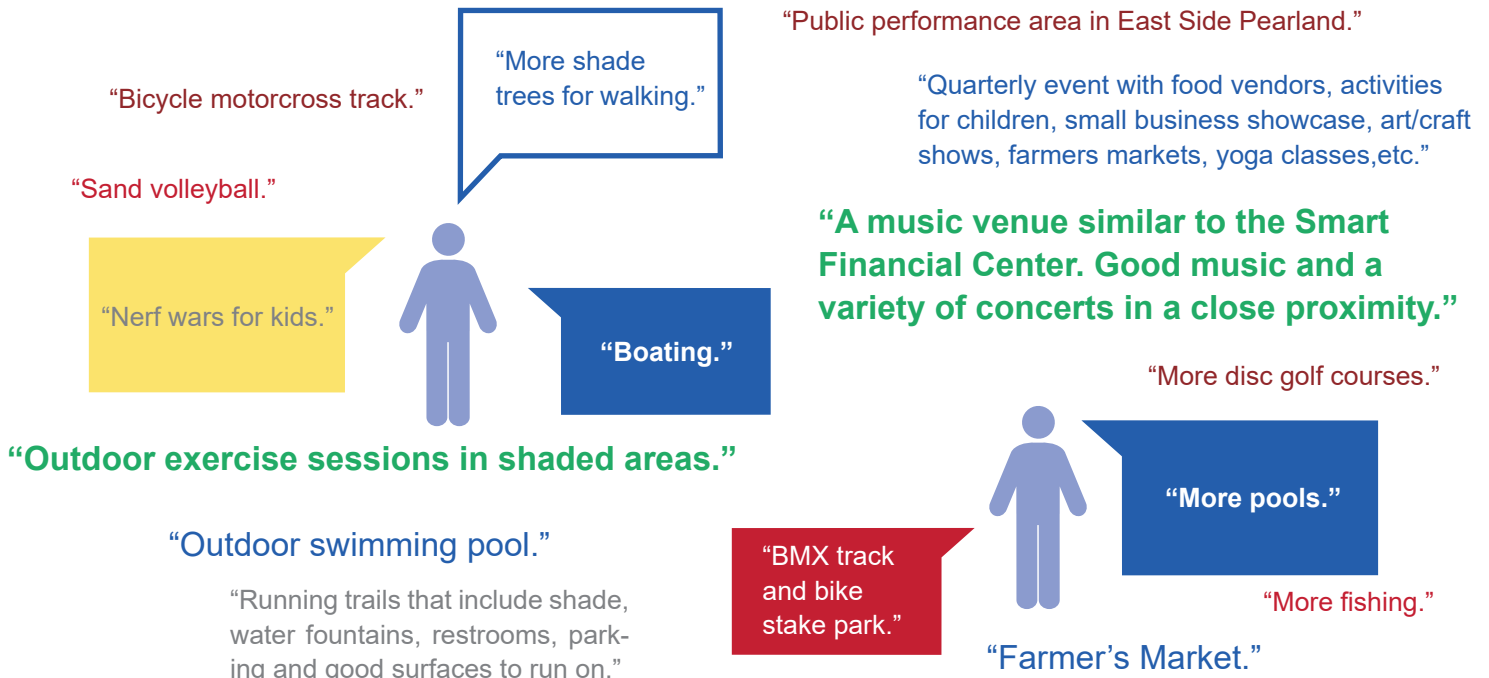


Figure 5.7, Interest in Recreational Programming

The type of recreational programming that survey respondents were most interested in was outdoor recreational programming followed by family-oriented programs, and outdoor educational programs. Specifically, as described in Figure 5.7, over 55 percent of the respondents said that they were interested in outdoor adventure programs; 51 percent of survey respondents said they were interested in family-oriented programs, and 49 percent said they were interested in outdoor educational programs. Other programs that were mentioned by over 40 percent of the respondents were sports programs, arts and crafts and youth programs.

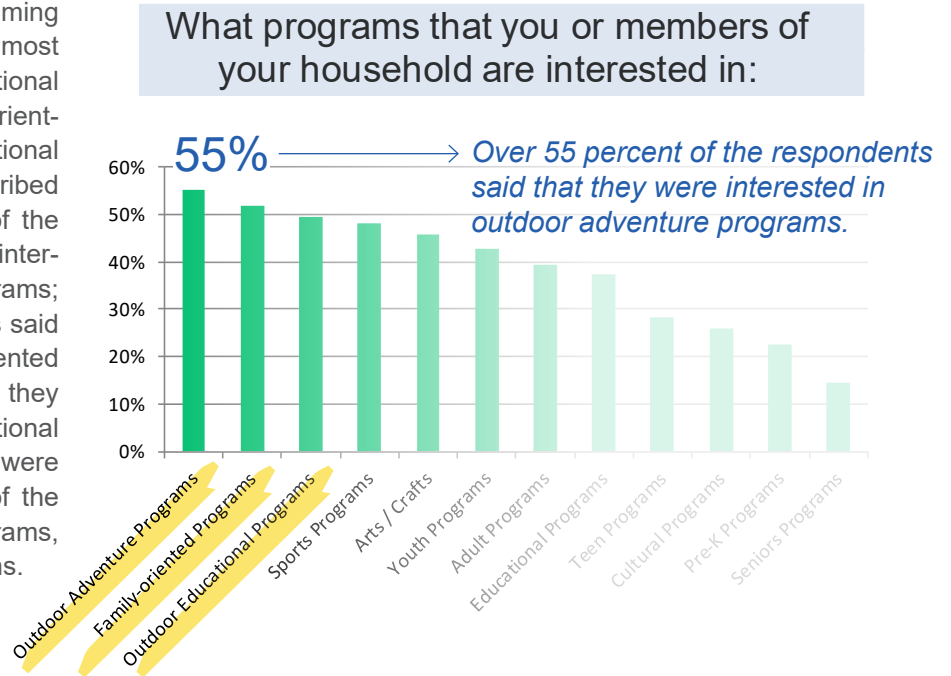


Figure 5.8, Importance of Parks Planning, Development, and Improvement

Survey respondents were asked to rate the importance of specific actions that may be undertaken by the PARD to plan, develop, and improve the parks system in Pearland as 'Important,' 'No Opinion,' or 'Not Important.' Figure 5.8, illustrates a weighted average of the responses to this question with equal weights assigned to the response categories previously mentioned. The most important PARD action identified by survey respondents was the improvement and enhancement of the maintenance activities undertaken by PARD. The second most important PARD action was preservation of environmentally sensitive areas; followed by renovating existing neighborhood parks as the third most important action. The three least important PARD actions were, increasing the number of athletic facilities, renovating existing athletic facilities, and developing additional indoor recreational space.





Figure 5.9, Quality of Operations and Maintenance of Parks Facilities

Survey respondents were asked to rate the quality of operations and maintenance of parks facilities as ‘Excellent,’ ‘No Opinion,’ or ‘Poor.’ Figure 5.9 describes the results to this question as weighted averages of the three response categories previously mentioned. The condition of buildings, natural area stewardship, and mowing/tree trimming were the three maintenance activities that were the highest-rated by survey respondents. The two maintenance activities that received the lowest responses were a lack of security and restroom cleanliness.

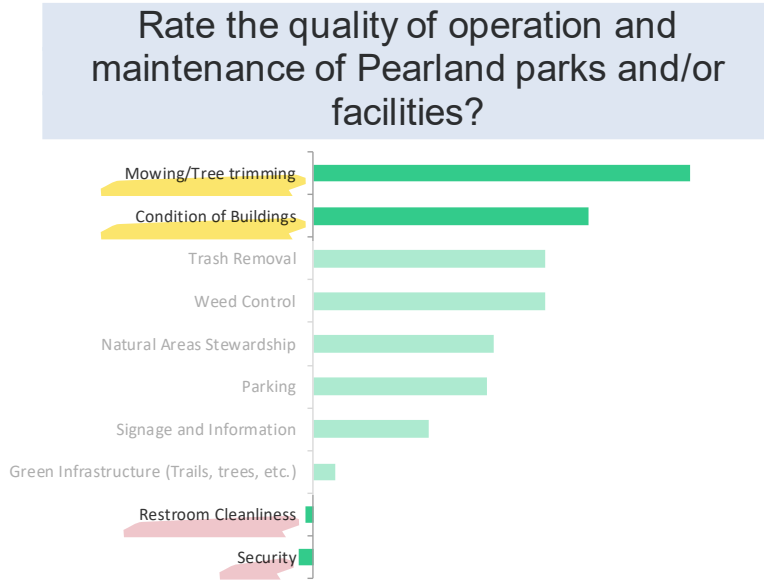


Figure 5.10, Support for Financing Strategies for Parks and Recreation

As illustrated in Figure 5.10, increasing PARD’s budget received the most support from the survey respondents as a financing strategy to increase the funding for parks and recreation in Pearland. The second most-supported financing strategy was a voter approved bond initiative. Results were calculated as a weighted average of the three response categories: ‘Support,’ ‘Undecided,’ ‘Oppose,’ for every financing strategy.

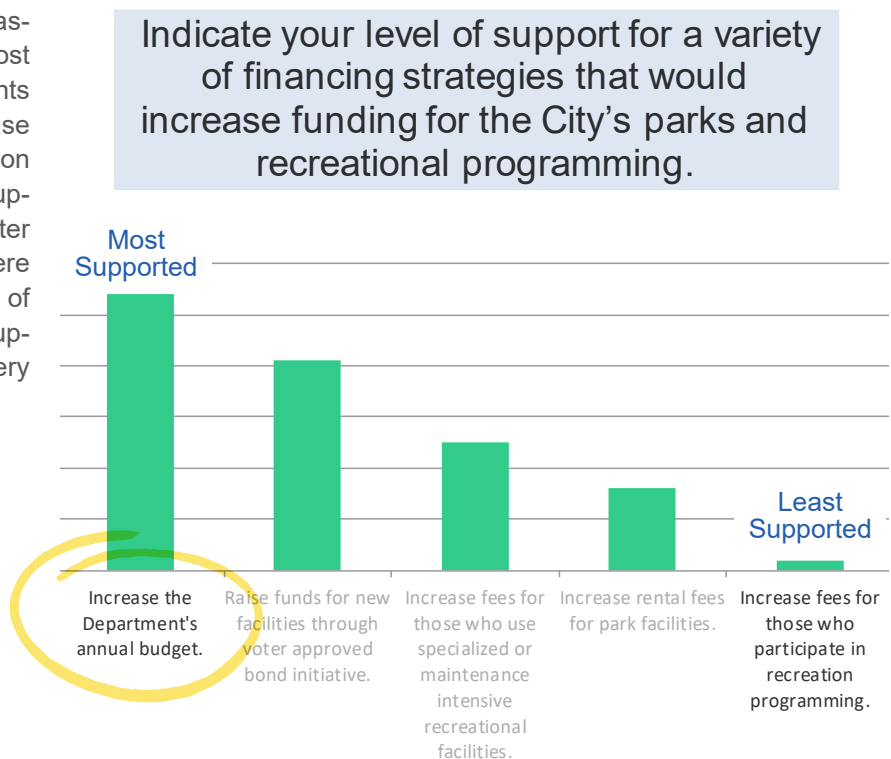


Figure 5.11, Parks Facilities: Improvement of Existing Facilities or Development of New Facilities?

The survey asked respondents about whether they thought there were enough parks facilities in Pearland or if there was a need to expand park facilities. As detailed in Figure 5.11, responses were distributed almost equally between improving the existing parks facilities (41 percent) and expanding parks facilities (40 percent). Approximately 12 percent of the respondents to this question were of the opinion that currently there were enough recreational facilities in Pearland.



Figure 5.12, Priorities for Future Parks Planning and Action

Consistent with their opinion on parks facilities improvements versus additions to park facilities, survey respondents prioritized the development and improvement of existing facilities over other PARD planning and implementation activities. Figure 5.12 describes all the strategies and the associated percentage of responses. The highest percentage of responses (66 percent) was for developing and improving existing facilities. The second highest percentage of responses (51 percent) were for developing more active recreation opportunities followed by developing non-motorized trails (44 percent).

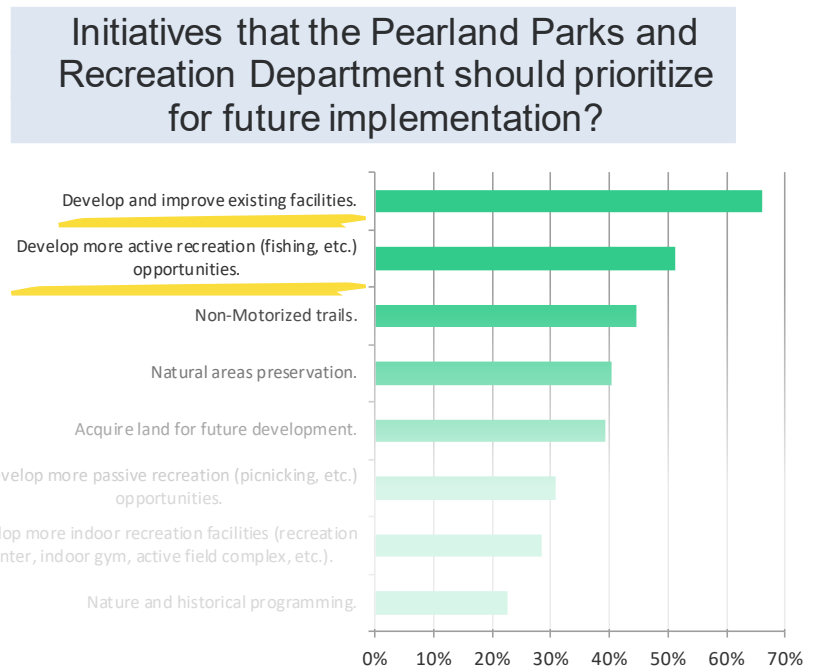
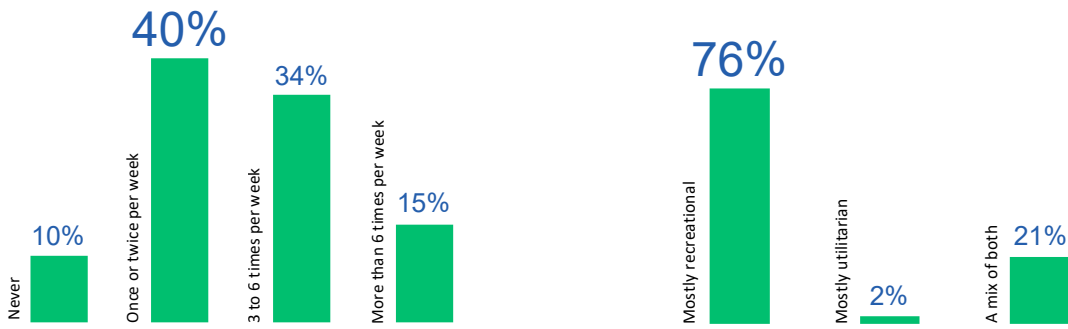




Figure 5.13, Demand and Improvement of Existing Facilities for Walking and Biking

The following survey questions were utilized to understand the demand for bike facilities and active transportation programming in Pearland.

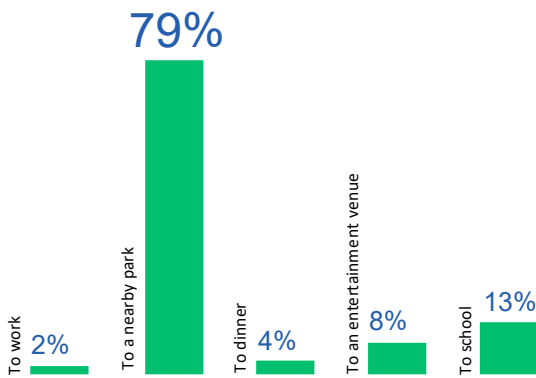


How often do you and/or your family walk or bike?

40 percent of the respondents said that they walked or biked once or twice per week; followed by 34 percent of the respondents who said they walked or biked three to six times every week.

Are walking or biking trips recreational (i.e., fun, fitness, etc.) or utilitarian (i.e., to work, school, stores, etc.)?

Over 75 percent of the responses to this question were from Pearland residents who walked or biked for recreational reasons.



What are your typical walking or biking destinations?

Over 79 percent of the respondents said that their walking or biking destination was a nearby park.



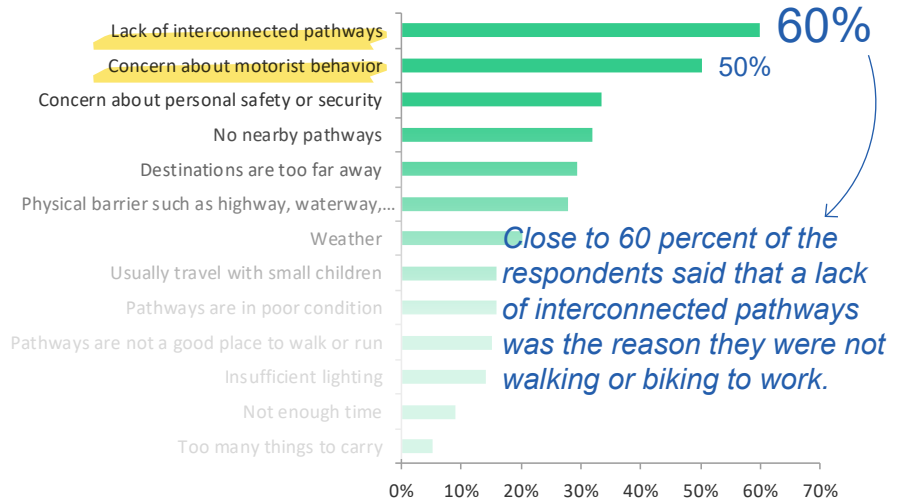
What destination(s) would you like to be able to walk or bike to?

The word cloud is an illustration of responses to this question. Refer to Appendix B, *Survey Results* for the full list of destinations people would like to be able to walk and bike to.

Figure 5.13 Continued

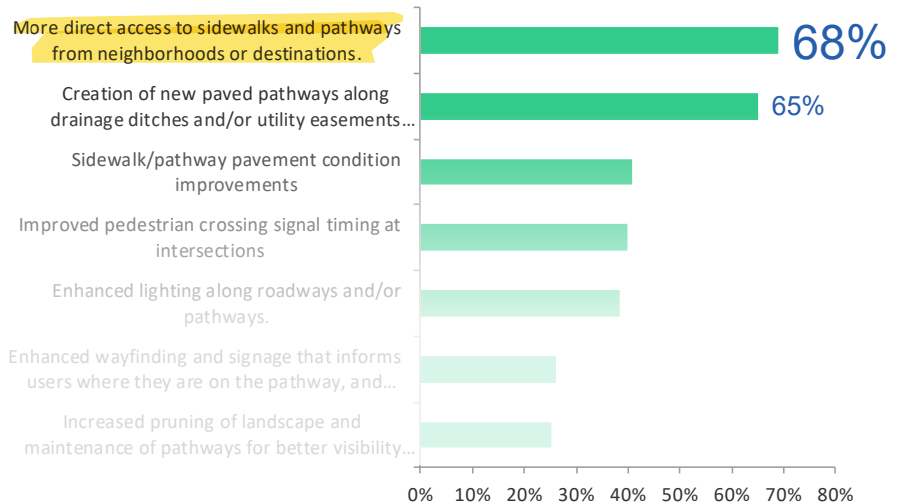
If you do NOT walk or bike, please select your reasons why.

This chart describes the reasons why survey respondents were not choosing to walk or bike to a destination. Close to 60 percent of the respondents said that a lack of interconnected pathways was the reason they were not walking or biking to work. Furthermore, 50 percent of the respondents cited concern about motorist behavior for not walking or biking.



Which of these recommendations would improve walking and/or biking conditions in Pearland?

This figure indicates that 68 percent of the respondents said that more direct access to sidewalks and pathways from neighborhoods or destinations would improve walking or biking conditions in Pearland. This was followed by the recommendation of creating new paved pathways along drainage ditches and/or utility easements that connect to existing pathways (65 percent of responses to this question).



Public Open Houses

Two public open houses were held during the development of this Master Plan as part of the public engagement process. Public opinion was solicited through 'preference boards' where participants voted on their preferences for parks strategies and actions; comment cards; and 'survey stations' where participants could take the community survey.

Open House I July 9, 2019 Delores Fenwick Nature Center

This open house was attended by residents, bike club organizations, including Greater Houston Off Road Biking Association (GHORBA); Forever Parks Foundation; private business owners; and City of Pearland staff. Open house attendees:

- wanted to have more skateparks in the community;
- expressed a need for sidewalks on both sides of the street around Pearland High School, Independence Park, Broadway Street, and The Center at Pearland Parkway Area; in order to access land uses, increase walkability, and make the area “feel more like a center;”
- wanted to add a pump track in the very northeast corner of Pearland, around the detention ponds that flank Pearland Parkway on either side;
- wanted to improve and expand trails along Clear Creek in east / northeast Pearland
 - To make a connection to El Franco Lee Park trails and wetland area;
 - To make a connection The Center at Pearland Parkway shopping area;
- said that the main road through Southdown Subdivision, Southdown Drive, needs sidewalks;
- said that Kirby Drive in Shadow Creek needs a sidewalk on both sides of street;
- expressed a need for a foot bridge / bike connection along Broadway Street where it bridges over Mary’s Creek Bypass at the eastern boundary of Pearland. The roadway and bridge crossing is very dangerous for cyclists and pedestrians;
- said more parking is needed at key points along Pearland’s trail system. Specifically along Clear Creek Trail, and “much more impetus is needed” on Downtown District.
- the divide between west and east Pearland is significant, i.e., very different places with different services and benefits, and it is difficult to go from one end to the other.
- SH 35 and the railroad tracks also act as a divider and are difficult to cross.



Open House II August 14, 2019
Police Department Community Room

- This open house was attended by residents, Pearland BMX, Disc Golf members, Forever Parks Foundation, and City of Pearland staff.
- Interest expressed in an reopening an existing pool and/or adding more outdoor pools.
- More indoor pool space is needed. Natatorium is booked and closed every August for maintenance. Residents use various ISD pools for clubs, teams, etc.
- Interest in using lakes and/or detention ponds for water sports (i.e., water skiing). The long, north-south water body between Pearland Recreation Center and the railroad tracks off Bailey Avenue was specifically pointed out.
- Concern about road crossings to schools, specially when a neighborhood is adjacent to a school or across the street from a school, the neighbors have to drive to the school and wait in carpool line because there are no crosswalks (Safe Routes to School issue).
- Some roadways are owned and maintained by TxDOT, which makes it difficult to make pedestrian/bike improvements.
- Need to find area for a larger disc golf park (18 acres)
 - comparable to the disc golf course in Alvin.
 - 18- to 21-hole course preferred (need 1-acre per hole).
 - The Friendswood Disc Golf course was recently demolished and so there is opportunity for Pearland to open one.
 - Flood areas / FEMA properties do not work for cement tees.
 - There is a large following of disc golf enthusiasts on the local Facebook disc club pages.
 - Opportunity for tournaments and mini tournaments
- A park / sports complex similar to Alvin Community College area is ideal because it is adjacent to a YMCA, two large parks with lighted athletic fields, and a dog park.



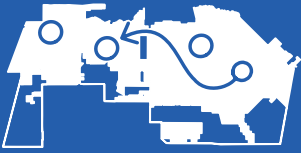


Demand-based Assessment Summary

- Results from public engagement carried out through a community needs survey, stakeholder meetings, and open houses indicate that Pearland residents are most satisfied with the passive recreation facilities and amenities, such as playgrounds, picnic areas, splash pads, and dog parks, offered at City-owned parks. The park amenities and facilities that are considered unsatisfactory or need improvement include the need for additional shade trees, indoor swimming pool, and nature trails. A lack of adequate restrooms and longer travel distance to parks were also frequently cited reasons by residents for not utilizing City-owned parks. This may underscore a general reliance on neighborhood homeowners association (HOA) parks.
- Regarding recreational programming, survey respondents were most interested in outdoor recreational programming, family-oriented programming, and outdoor educational programs for youth and adults.
- Pearland residents identified the improvement and enhancement of maintenance activities, preservation of environmentally sensitive areas, and renovating existing neighborhood parks as important actions by PARD for the planning, development, and improvement of City-owned parks.
- A significant number of survey respondents (68 percent) said that greater connectivity and more direct access to sidewalks and pathways from neighborhoods or destinations would improve walking or biking conditions in Pearland. Attendees of the open houses emphasized the need to improve and expand the trails along Clear Creek in the east and northeast of Pearland.

NEEDS ASSESSMENT





Standards-Based Assessment

The Standards-Based approach to assessing parks and recreation needs in the community utilizes the National Recreation and Park Association (NRPA) standards to determine the level of service for parkland, park facilities and park equipment, as well as the level of service for recreational facilities, services and programs. A high level of service for a park or recreational facility means that it is adequately meeting the needs of the community. Conversely, a low level of service signifies inadequacy or gaps in the parks system such that it is not fully meeting the needs of the community. While level of service targets for a community's parks and recreational facilities are primarily aspirational and may not be met fully, they do serve as important measures of performance which can help direct funding and resources for improvements and development in the community's park system.

The Standards-Based Assessment also utilizes the NRPA *Park Metrics, Agency Performance Review* to compare Pearland's parkland acreage and service area to similar information from benchmark communities. Benchmark communities are counties, municipalities, special districts, and regional agencies in the country that, 1) provide parks and recreation services for a similar-sized population to Pearland (between 80,000 and 200,000); and 2) have submitted an agency performance survey for the NRPA in 2019. This comparative analysis helps reveal the performance of a 'typical' parks system, the variations in park acreage, and the provision of facilities by population size, agency size, and other metrics. Incorporating benchmark metrics from peer communities with the NRPA level of service analysis provides a defensible standard with which to plan for an optimal and customized mix of parks facilities and services for Pearland.

The determination of the level of service (LOS) is based upon the quantity and distribution of parkland and recreational facilities offered to Pearland residents by the City of Pearland and private homeowners associations. Specifically, the Standards-Based Assessment determines per capita parkland acreage level of service (number of parkland acres per 1,000 people), per capita facility

level of service (number of facilities per 1,000 people), and service area (number of residents within a NRPA-standard distance) for each public park and facility in the community.

Acreage Level of Service

The NRPA has recommended standards for parks and recreational facilities that have been widely utilized as performance measures by communities across the country. The acreage level of service standards for community, neighborhood, and pocket parks, as described in Table 5.1, *NRPA Parkland Level of Service by Park Classification*, help determine the adequate number of parkland acres needed to meet the community's needs in 2020 as well as needs of Pearland's projected population in 2040. According to the NRPA standards, for a parks system to function adequately and fulfill the needs of the community, for every 1,000 residents, it should have five to eight acres of community parkland; one to two acres of neighborhood parkland; and one to two acres of pocket parkland.

Current Acreage Level of Service

In Pearland, the existing parkland acreage for all parks cumulatively is 1,965.3 acres with a current level of service value of 16.7. In other words, there are close to 17 acres of parkland available for every 1,000 residents of Pearland.

There are 17 acres of parkland available for every 1,000 residents of Pearland.

Table 5.2, *2020 Current Acreage LOS in Pearland*, provides the current LOS by park classification. As

noted, the parkland level of service for City-owned neighborhood parks in Pearland is 0.2 acres per 1,000 residents, which is substantially lower than the one-acre NRPA recommendation. However, with additional subdivision (HOA) neighborhood park acreage of close to 400 acres, the overall neighborhood park acreage LOS increases to 3.4, which is well above the NRPA recommended LOS standard of one acre per 1,000 residents. The existing pocket park acreage LOS for City-owned parks is zero since the City of Pearland does not offer any pocket parks. However, the additional Subdivision pocket parks add 53 acres to the pocket park acreage with a level of service of half-acre per 1,000 residents, which is on par with NRPA recommended standards.

With regard to community park level of service, the NRPA recommended standard is five to eight acres of parkland per 1,000 people. Pearland's parks system provides over one and a one-half acres of community park acres per 1,000 residents. Since Pearland does not have a regional park, the regional park acreage LOS is zero, although the recommended per capita standard is five acres. This indicates a significant lack of regional parkland in Pearland's parks system. Cumulatively, there is nearly 547 acres of City-owned parkland, including neighborhood, community, and special-use parks, as well as trails and natural spaces, with a total parkland acreage level of service of 4.6 acres for every 1,000 residents in Pearland. This is drastically lower than Pearland's comparison communities

Table 5.2, 2020 Current Acreage LOS in Pearland

	Existing LOS		Recommended LOS Standard NRPA (acres available per 1,000 persons)
	Existing Acreage	Current LOS (based on 2018 population) ¹	
Pocket Parks (City-owned)	0	0.0	0.5
Pocket Parks (Subdivision)	53.5	0.5	
ALL Pocket Parks (City-owned + Subdivision)	53.5	0.5	
Neighborhood Parks (City-owned)	23.2	0.2	1
Neighborhood Parks (Subdivision)	376.6	3.2	
ALL Neighborhood Parks (City-owned + Subdivision)	399.8	3.4	
ALL Community Parks (City-owned) ²	187.4	1.6	2
ALL Regional Parks (City-owned) ²	0	0.0	5
Special Use Parks (City-owned) ³	201.8	1.7	N/A
Special Use Parks (Subdivision)	197.5	1.7	
ALL Special Use Parks (City-owned + Subdivision)	399.3	3.4	
Linear Parks or Trails and Natural Spaces (City-owned)	134.4	1.1	N/A
Linear Parks or Trails and Natural Spaces (Subdivision)	790.6	6.7	
ALL Linear Parks or Trails and Natural Spaces (City-owned + Subdivision)	925.0	7.8	
Cumulative Existing Acreage (City-owned)	546.9	4.6	
Cumulative Existing Acreage (Subdivision)	1,418.3	12.0	
Total Existing Acreage (City-owned + Subdivision)	1,965.3	16.7	

¹ 2018 population for Pearland is 117,867 people.

² There are no Subdivisions Parks that have Community or Regional Classification. Refer to Table 4.2a-c, Subdivision Parks and Recreation Facilities Summary Inventory.

³ Special Use Parks is the total of City of Pearland's "Facilities" parks (17.9 acres total); "Athletic Complexes" (178.8 acres total); and Old Settlers Cemetery (5.1 acres total). Refer to Table 4.2, Existing Park and Recreation Facility Summary Inventory.



and the NRPA benchmark communities (Table 5.2, *2020 Current Acreage LOS in Pearland* and Table 5.3, *Current Acreage LOS in Comparison Communities*). The total acreage with additional Subdivision (HOA) parkland increases to 1,965 acres, which translates to just under 17 acres of parkland for every 1,000 residents in Pearland. A current LOS of 17 acres is on par with the existing parkland acreage of Pearland’s comparison and benchmark communities.

Pearland’s current acreage LOS (City-owned and Subdivision parks), at 16.7, is the third highest among the comparison communities, as detailed in Table 5.3. Round Rock has the highest acreage LOS, at 18.5 and Cary has the second highest, at 16.8.

According to the 2019 NRPA Agency Performance Review, of the 80 benchmark communities that have reported parks acreage to NRPA, the median acreage LOS is 10.7, and the LOS acreage for communities at the 75th percentile is 20. This means that Pearland, with a current acreage LOS of 16.7, has more acres per 1,000 residents than over half of the benchmark communities; and has an acreage LOS that is closer to the top 25 percent of the benchmark communities than those at the median value (Table 5.4, *Current Acreage LOS for Benchmark Communities*). Notably, when considering only City-owned park acreage, the LOS is 4.6 acres, which places Pearland in the 25th percentile, or the bottom 25 percent of benchmark communities.

Target Acreage Level of Service

Currently, Pearland’s park system is bolstered by approximately 1,418 acres of Subdivision (HOA) parkland, primarily in the neighborhood parks category and includes over 790 acres of trails and open spaces. This provides a substantial boost to the level of service acreage both for existing needs as well as the future needs of the community. As detailed in Table 5.5, *Current and Future Acreage*, there is a surplus of 282 acres of neighborhood parks which

Table 5.3, Current Acreage LOS in Comparison Communities

	Existing Parkland Acreage	Current LOS (based on 2018 population)
Pearland	1,971	16.7
Baytown	1,083	13.9
Cary	2,688	16.8
Frisco	1,369	7.7
League City	858	8.2
McKinney	2,309	12.7
Olathe	2,000	14.9
Round Rock	2,285	18.5
Sugar Land	1,070	12.1

Table 5.4, Current Acreage LOS for Benchmark Communities

	Pearland	Lower Quartile	Median	Upper Quartile
Acres of Parks per 1,000 Residents	16.7	5.8	10.7	20

exceeds Pearland’s current needs as well as the community’s needs in 2040.

Without the additional Subdivision (HOA) park acreage in the community’s park system, the City-owned existing acreage of 547 acres falls short of the NRPA recommended acreage (1,002 acres) by 455 acres in 2020 and 872 acres in 2040. Furthermore, with regard to community and regional parks, Pearland’s current LOS acreage and future LOS acreage lags in comparison with the NRPA recommended standards. This signifies a need in the community for larger parks, such as community and regional parks, that offer more variety of sports and other recreational facilities. With regard to pocket park level of service acreage, the Subdivision (HOA) pocket parks equip the community’s parks system with adequate acreage of pocket parks to meet the community’s existing needs. However, as

Table 5.5, Current and Future Acreage

	Existing LOS		Recommended Current Acreage (2020)		Recommended Future Acreage (2040) ²	
	Existing Acreage	Current LOS (based on 2018 population) ¹	Recommended Acreage ³	Surplus/Deficit Acreage	Recommended Acreage ³	Surplus/Deficit Acreage
Pocket Parks (City-owned)	0.0	0.0	59	(58.9)	83.5	(83.5)
Pocket Parks (Subdivision)	53.5	0.5	N/A	-	N/A	-
ALL Pocket Parks (City-owned + Subdivision)	53.5	0.5	59	(5.4)	83.5	(30.0)
Neighborhood Parks (City-owned)	23.2	0.2	118	(94.7)	166.9	(143.7)
Neighborhood Parks (Subdivision)	376.6	3.2	N/A	-	N/A	-
ALL Neighborhood Parks (City-owned + Subdivision)	399.8	3.4	118	282	166.9	232.9
ALL Community Parks (City-owned)⁴	187.4	1.6	235.7	(48.0)	333.9	(146.5)
ALL Regional Parks (City-owned)⁴	0.0	0.0	589.3	(568.5)	834.7	(834.7)
Special Use Parks (City-owned) ⁵	201.8	1.7	N/A	N/A	N/A	N/A
Special Use Parks (Subdivision)	197.5	1.7				
ALL Special Use Parks (City-owned + Subdivision)	399.3	3.4				
Linear Parks or Trails and Natural Spaces (City-owned)	134.4	1.1	N/A	N/A	N/A	N/A
Linear Parks or Trails and Natural Spaces (Subdivision)	790.6	6.7				
ALL Linear Parks or Trails and Natural Spaces (City-owned + Subdivision)	925.0	7.8				
Cumulative Existing Acreage (City-owned)	546.9	4.6	1,002	(455.0)	1,419.0	(872.1)
Cumulative Existing Acreage (Subdivision)	1,418.3	12.0	N/A	N/A	N/A	N/A
Total Existing Acreage (City-owned + Subdivision)	1,965.3	16.7	1,002	963.4	1,419.0	546.3

1 2018 population for Pearland is 117,867 people.

2 2040 projected population of Pearland is 166,943. Refer to Figure 1.3, Population Projections for Pearland to 2040.

3 'Recommended Acreage' is calculated using the 'Recommended LOS Standard NRPA (acres available per 1,000 persons)' in Table 5.2, 2020 Current Acreage LOS in Pearland.

4 There are no Subdivisions Parks that have Community or Regional Classification. Refer to Table 4.2a-c, Subdivision Parks and Recreation Facilities Summary Inventory.

5 Special Use Parks (City-owned) is the total of City of Pearland's "Facilities" parks (17.9 acres total); "Athletic Complexes" (178.8 acres total); and Old Settlers Cemetery (5.1 acres total). Refer to Table 4.2, Existing Park and Recreation Facility Summary Inventory.



the community grows there will be a need to meet the future needs of the community through an additional 5 acres of pocket parks.

Park Service Area and Accessibility

A park's service area is determined by its 'walkshed,' or the average distance users are willing to travel to access it. For neighborhood and pocket parks, which are primarily located in residential areas and utilized by families and children who typically walk to park facilities, the recommended walkshed is one-quarter to one-half of a mile, or a five to 10-minute walking distance. For a community park, which is often accessed by way of driving to the park, the service area is three to five miles. Analyzing service areas for parks helps understand the distribution of parks in a community. Specifical-

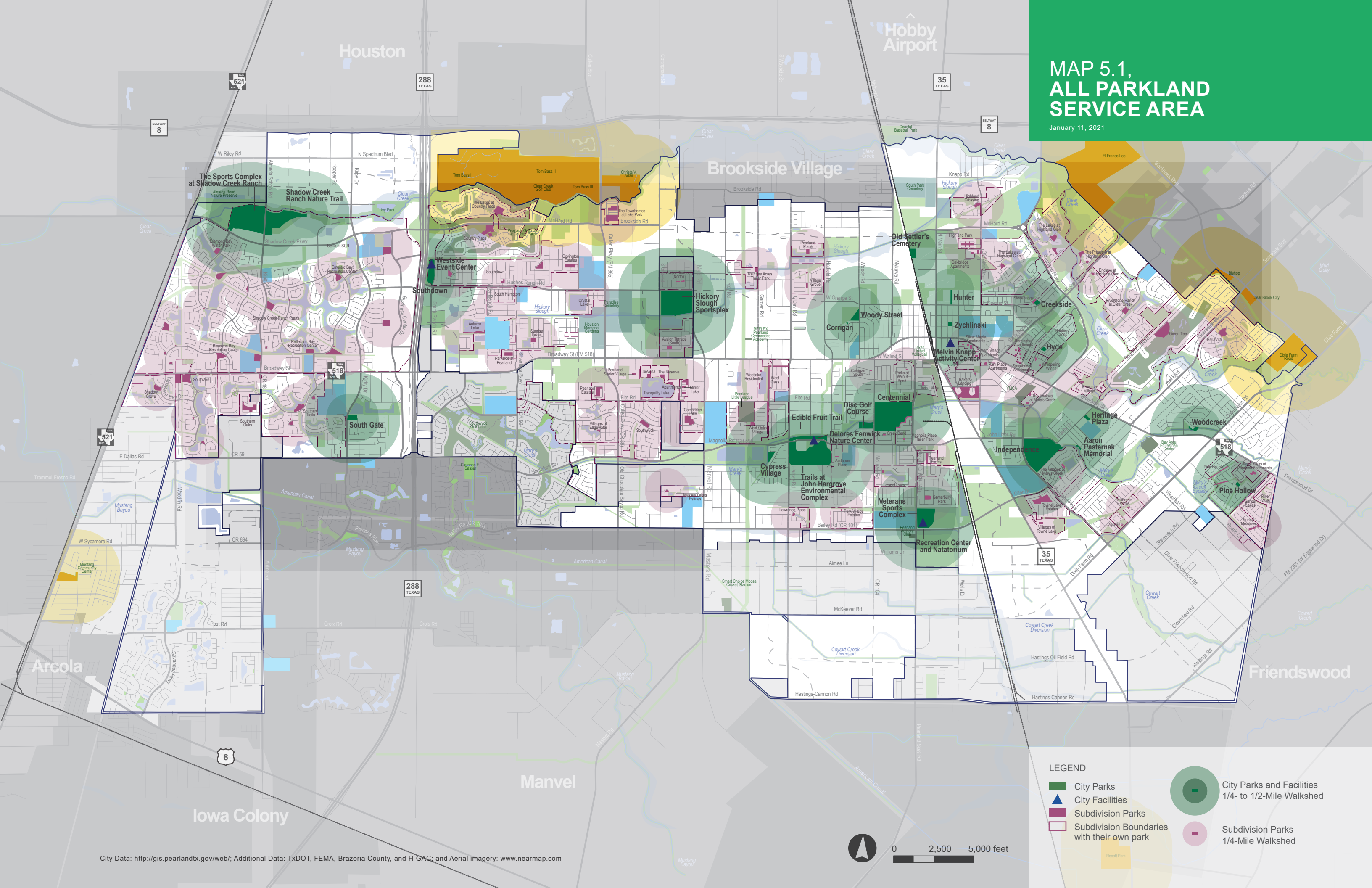
ly, it identifies the neighborhoods or areas that are underserved, or do not have convenient access to a park.

A park service area analysis for Pearland helps identify areas served by the various types of parks in the city as well as the underserved areas where residents may have to walk or drive longer distances to access parks and recreational facilities. This analysis includes detailing service areas for City-owned parks, Subdivision (HOA) parks, and school open space areas (sports fields, playgrounds, etc.).

Since the City of Pearland's community parks may also serve the daily-use neighborhood park needs of residents in the parks' surrounding neighborhoods, for this level of analysis they are included in the 10-minute walkshed service area, as illustrated in Map 5.1, *All Parkland Service Area*.

MAP 5.1, ALL PARKLAND SERVICE AREA

January 11, 2021



LEGEND

- City Parks
- City Facilities
- Subdivision Parks
- Subdivision Boundaries with their own park
- City Parks and Facilities 1/4- to 1/2-Mile Walkshed
- Subdivision Parks 1/4-Mile Walkshed

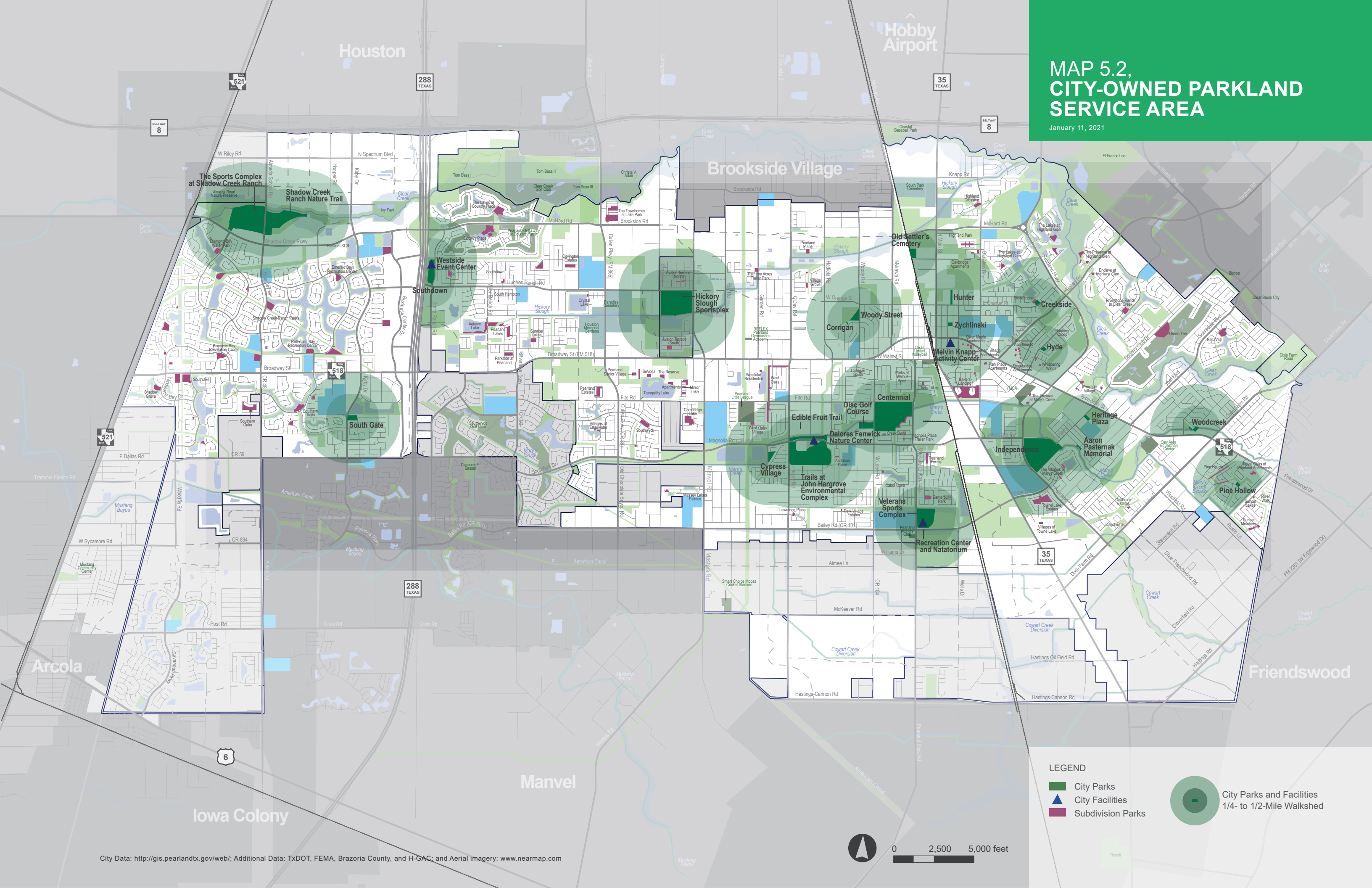




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MAP 5.2, CITY-OWNED PARKLAND SERVICE AREA

January 11, 2021



LEGEND

- City Parks
- City Facilities
- Subdivision Parks
- City Parks and Facilities 1/4- to 1/2-Mile Walkshed



Neighborhood and Pocket Park Accessibility

Map 5.2, *City-owned Parkland Service Area*, shows the areas in Pearland that are within a one-quarter to one-half mile walking distance of a City-owned park or community park.

As described in Chapter 4.0, *Pearland Parks Today*, Pearland has 60 neighborhood parks and 47 pocket parks, of which a substantial number of neighborhood parks (51) and all the pocket parks are subdivision-owned and managed. Cumulatively, the city-owned and privately-owned Subdivision neighborhood and pocket parks have an area of 453 acres.

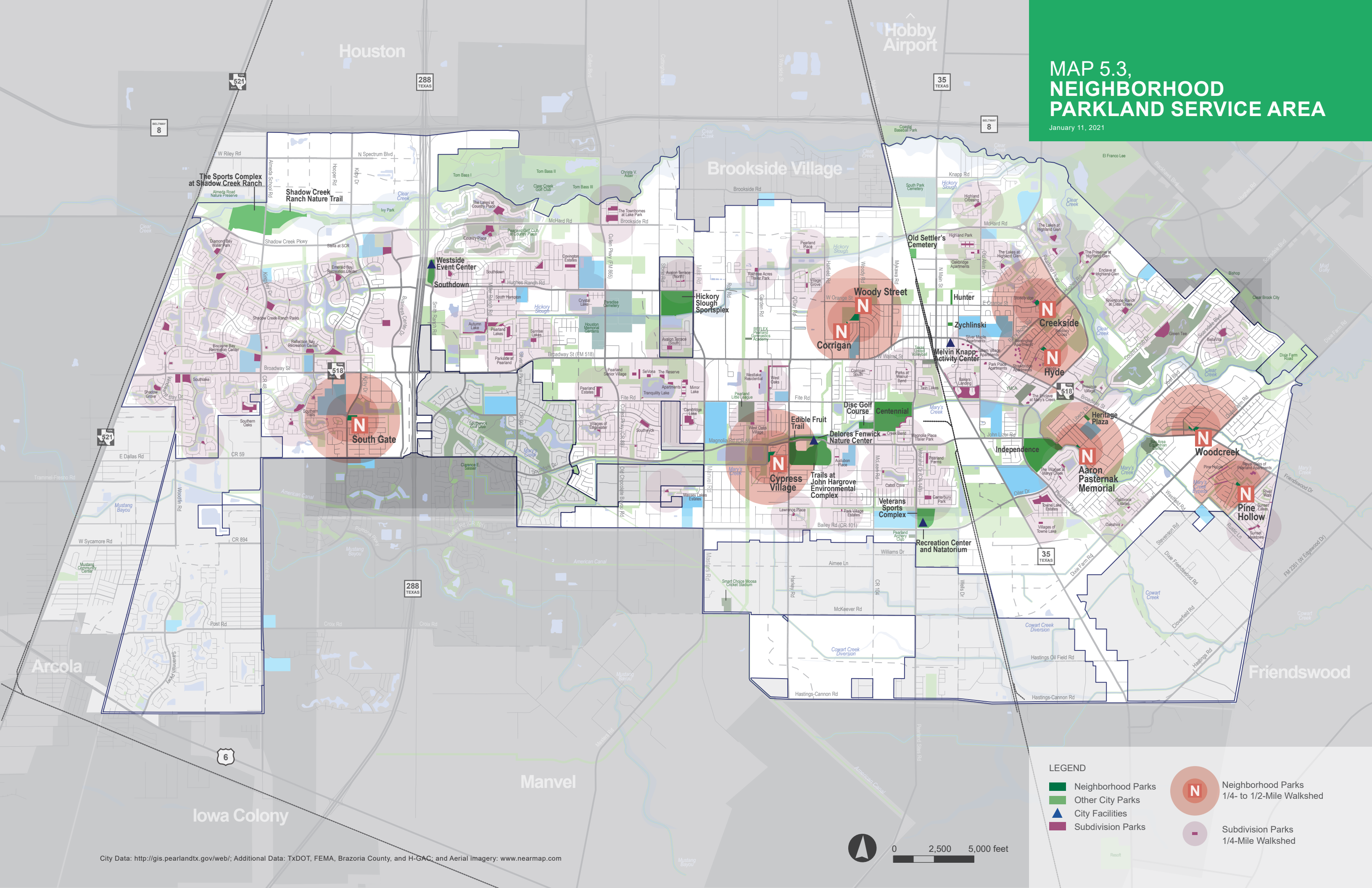
Even though the type and availability of facilities differ in the two types of parks, both neighborhood and pocket parks have a recommended walkshed of one-quarter mile to half-mile and, primarily, cater

to the needs of their surrounding neighborhoods. For these reasons, neighborhood and pocket park service areas may be evaluated in a combined accessibility analysis.

Map 5.3, *Neighborhood Parkland Service Area*, illustrates that, despite a higher acreage of parkland per 1,000 people, Pearland has notable gaps in the neighborhood park service areas. In the southeastern quadrant of the city, some neighborhoods in the vicinity of Country Club Drive and Dixie Farm Road are outside the half-mile walkshed of neighborhood parks; and a low-density residential area east of Pearland Regional Airport and west of Rustic Lane is outside the neighborhood park service area. In central Pearland, the subdivision north of Bailey Road and east of Manvel Road is also outside the neighborhood park service area.

MAP 5.3, NEIGHBORHOOD PARKLAND SERVICE AREA

January 11, 2021



LEGEND

- Neighborhood Parks
- Other City Parks
- ▲ City Facilities
- Subdivision Parks
- N Neighborhood Parks 1/4- to 1/2-Mile Walkshed
- Subdivision Parks 1/4-Mile Walkshed



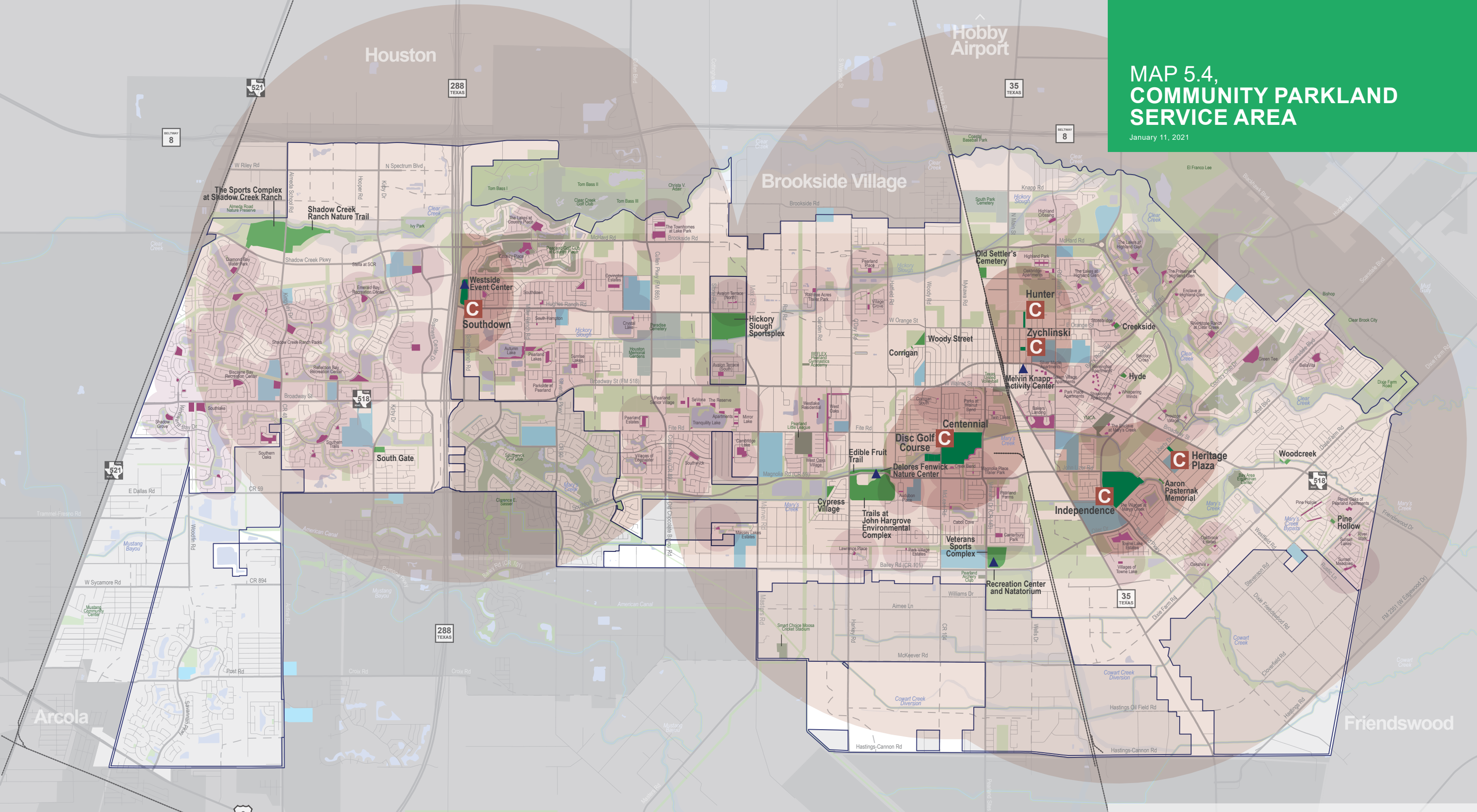
Community Park Accessibility

There are six community parks in Pearland with a combined area of 187 acres. Due to the variety of recreational facilities offered at community parks, like Centennial Park, Independence Park, and Zychlinski Park, they attract visitors not just from the neighborhoods in their immediate surroundings but also from other areas of Pearland. Consequently, the watershed for community parks ranges from one half-mile for visitors within a walking distance to the park to three miles for visitors who drive to the park. Map 5.4, *Community Park Service Area*, illustrates the community park service area in Pearland.

As depicted in Map 5.4, all residential areas in Pearland are within an adequate driving distance to a community park. While there are fewer neighborhoods within a walking distance to a community park, that does not necessarily indicate a gap in the community park service area since the variety of facilities at community parks are meant to serve the wider community instead of the neighborhoods immediately surrounding a community park.

MAP 5.4, COMMUNITY PARKLAND SERVICE AREA

January 11, 2021



LEGEND

- Community Parks
- Other City Parks
- City Facilities
- Subdivision Parks
- Community Parks 1/2- to 3-Mile Walkshed
- Subdivision Parks 1/4-Mile Walkshed



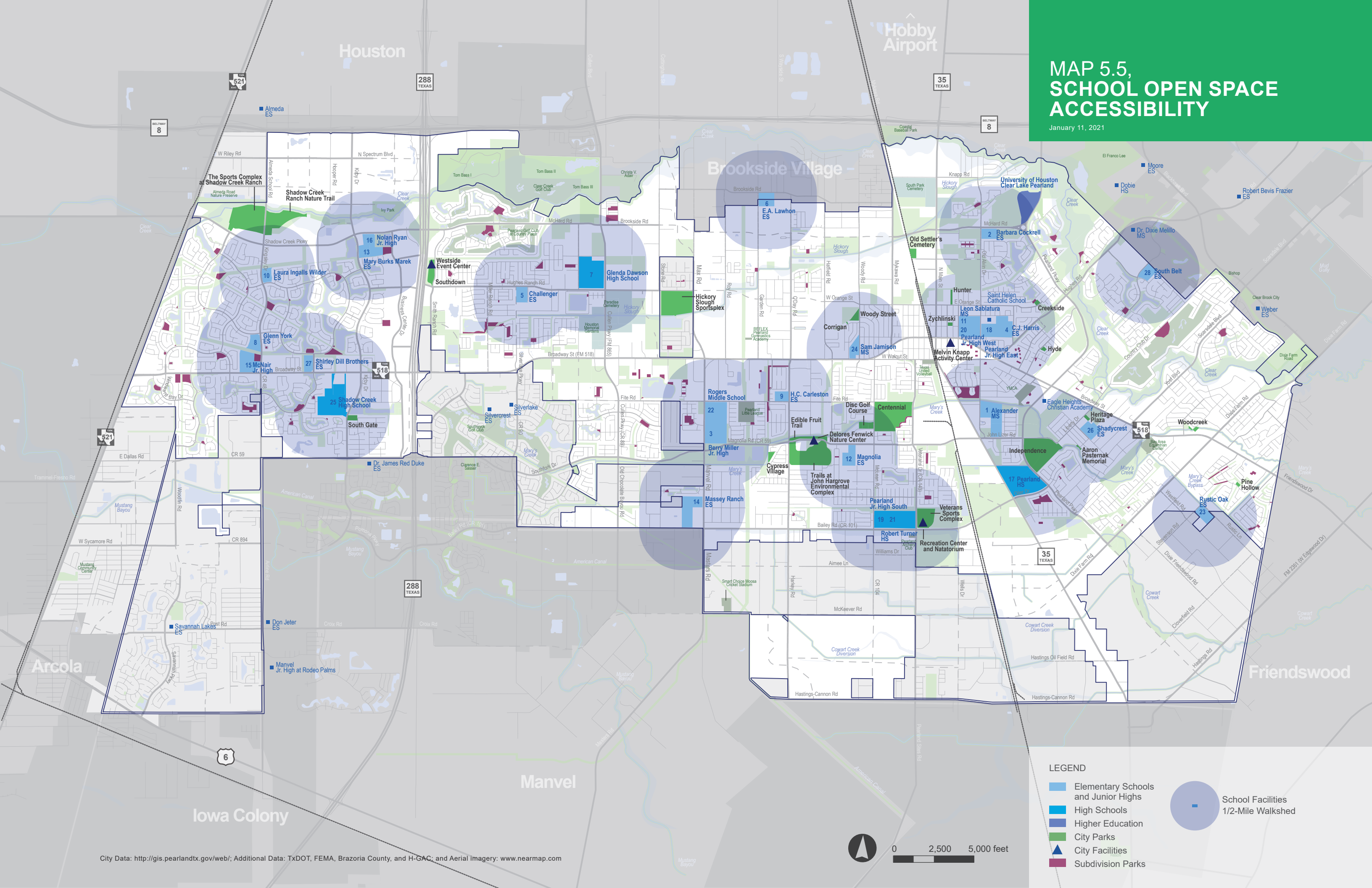
School Open Space Accessibility

Schools can offer a variety of recreational facilities to the community ranging from trails and playgrounds to sports courts and athletic fields. There are 28 schools in Pearland with a combined area of 968 acres (includes the school and surrounding open space). As was discussed in Chapter 2.0, *Pearland Parks Tomorrow*, through executing an interlocal agreement with the local Independent School Districts (ISDs), the City of Pearland can include school grounds within Pearland's park system to increase the park service area and provide residents with increased access to recreational facilities and open space.

Map 5.5, *School Open Space Accessibility*, shows the areas that are within a one-half mile park service area for school parks, which includes the south eastern quadrant and the central area of the city that are outside the half-mile walking distance to a City or Subdivision park. Including school open space areas in Pearland's park system will provide residents in neighborhoods outside the park service area with access to parks that are within a walking distance from their homes.

MAP 5.5, SCHOOL OPEN SPACE ACCESSIBILITY

January 11, 2021



LEGEND

- Elementary Schools and Junior Highs
- High Schools
- Higher Education
- City Parks
- ▲ City Facilities
- Subdivision Parks

● School Facilities 1/2-Mile Walkshed



Facility Level of Service

The determination of park facility and amenity level of service for Pearland's park system helps to determine whether facilities and amenities currently available to the community are adequately serving its needs. Similar to the parkland acreage LOS analysis, the facility LOS analysis employs quantifying the number of core recreational facilities available in Pearland as well as the number of residents per facility to compute the facility LOS. Table 5.6, *Current Facility LOS*, lays out the NRPA-recommended number of residents per facility and for the various sports and recreational facilities in Pearland's parks system, as well as the current level of service for each facility. It also gives the median number of facilities available in benchmark communities with similar population size to Pearland, as reported in the 2019 NRPA Agency Performance Review.

Table 5.6, *Current Facility LOS*

	City	Subdivisions	Existing Number of Facilities	Current LOS Residents per Facility (2018 population)	NRPA Recommended LOS Residents per Facility	Median for Benchmark Communities
Sports Courts						
Basketball	7	7	14	1 per 8,419	1 per 5,000	1 per 8,149
Tennis	8	18	37	1 per 3,186	1 per 2,000	1 per 5,666
Volleyball	3	7	10	1 per 11,787	1 per 5,000	1 per 26,924
Recreational Facilities						
Picnic Shelter	9	36	45	1 per 2,619	1 per 2,000	N/A
Playgrounds	22	73	95	1 per 1,241	1 per 1,000	1 per 3,666
Recreation Center	2	11	13	1 per 9,067	1 per 20,000	1 per 51,068
Gymnasium	1	0	1	1 per 117,867	1 per 20,000	1 per 44,933
Golf Course	1	3	4	1 per 29,467	1 per 25,000	N/A
Trails						
Hike and Bike Trails	18 miles	58 miles	76 miles	1 trail per 1,553	1 per 10,000	N/A
Aquatics						
Outdoor Pool	0	60	60	1 per 1,964	1 per 20,000	1 per 57,250
Indoor Pool	1	0	1	1 per 117,867	1 per 50,000	1 per 99,177
Spray Pad	2	0	2	1 per 58,934	N/A	N/A

The current and future level of service computation reveals that there is a deficit of sports courts, most recreational facilities, and indoor pools and spray pads, as detailed in Table 5.7, *Current and Target Facility Need*. As mentioned previously, to meet the sports and passive recreational needs of the community, the City of Pearland may consider executing an interlocal agreement with the independent school districts, which will improve the facility deficit for the community's current and future needs.

Table 5.7, *Current and Target Facility Need*

	Existing Number of Facilities ¹	Current Need (for 2020 population)	2040 Need (for 2040 population)	Current Facility Deficit or Surplus	2040 Facility Deficit or Surplus
Sports Courts					
Basketball	14	24	33	(10)	(19)
Tennis	37	59	83	(22)	(46)
Volleyball	10	24	33	(14)	(23)
Recreational Facilities					
Picnic Shelter	45	59	83	(14)	(38)
Playgrounds	95	118	167	(23)	(72)
Recreation Center	13	6	8	7	5
Gymnasium	1	6	8	(5)	(7)
Golf Course	4	5	7	(1)	(3)
Trails					
Hike and Bike Trails	76 miles	12 miles	17 miles	64 miles	59 miles
Aquatics					
Outdoor Pool	60	6	8	54	52
Indoor Pool	1	2	8	(1)	(7)
Spray Pad	2	12	17	(10)	(15)

¹ Includes City-owned + Subdivision facilities

Athletic Field Level of Service

There are six athletic associations which utilize City-owned and independent school district-owned fields in Pearland for practice, games, and tournaments, as detailed in Table 5.8, *Pearland Sports Associations*. A level of service analysis that utilizes the NRPA recommended standards for athletic facilities indicates that currently, in 2020, there are unmet needs in the community for softball, youth baseball, and football fields in the community, while there are adequate baseball fields and rectangle fields for soccer to fulfill current needs.

Table 5.8, *Pearland Sports Associations*

Sports Facility	Sports Association	Diamond, Baseball (Teen/Adult)	Diamond, Softball (Practice/Game)	Diamond, Youth (Practice)	Football Fields	Rectangle Fields (Practice)
City of Pearland						
Centennial Park	Pearland Girls Softball Association		6			3
Southdown Park	-					1
Hickory Slough Sportsplex	Pearland Youth Lacrosse Pearland Archery Club					6
The Sports Complex at Shadow Creek Ranch	Shadow Creek Soccer Shadow Creek Little League Shadow Creek Girls Softball Adult Men's Co-ed Softball	4	1	3	1	3
Veterans Sports Complex	-	1	1			1
Independent School District						
Glenn York Elementary	(Alvin ISD) Shadow Creek Little League / T-ball			1		
Total Athletic Field Inventory		5	8	4	1	14

However, as detailed in Table 5.9, *Athletic Field LOS*, athletic field needs are projected to increase by 2040 as Pearland's population continues to grow. The community faces a deficit in all athletic field categories, with the highest need for youth baseball and adult softball fields. While the athletic fields level of service analysis indicates current and future needs for more athletic fields, it is important to note that private facilities such as the Pearland Area Dad's Club and school facilities under the ownership of Pearland and Alvin ISDs are key resources that fulfill community needs for baseball and softball fields. The

Table 5.9, *Athletic Field LOS*

	Number of Facilities	Current Service Level	NRPA Recommended Service Level	Recommended Number of Facilities (2020)	Additional Facilities Needed (2020)	Recommended Number of Facilities (2040)	Additional Facilities Needed (2040)
Diamond, Baseball (Teen/Adult)	5	1 Field Per 23,573	1 Field per 30,000	4 Fields	Meet Standards	6 Fields	(1 Field)
Diamond, Softball (Practice/Game)	8	1 Field Per 14,733	1 Field per 5,000	23 Fields	(15) Fields	34 Fields	(26 Fields)
Diamond, Youth (Practice)	4	1 Field Per 29,467	1 Field per 5,000	23 Fields	(19) Fields	34 Fields	(30 Fields)
Football Fields	1	1 Field Per 117,867	1 Field per 20,000	6 Fields	(5) Fields	9 Fields	(8 Fields)
Rectangle Fields (Practice)	14	1 Field Per 8,419	1 Field per 10,000	12 Fields	Meet Standards	17 Fields	(3 Fields)

Recreational Programming Attendance

The PARD offers a variety of recreational programs for youth, adults, and seniors at venues such as the Recreation Center and Natatorium, Westside Event Center, Delores Fenwick Nature Center, and the Melvin Knapp Senior Center. While Chapter 4.0, *Pearland Parks Today*, describes the form, types, and public attendance of programs offered by the PARD, it is important to identify the gaps in program participation and evaluate the possible reasons for the decrease in attendance to certain events over the last few years. Table 5.10, *Percent Change in Recreational Programs*, illustrates that in the years FY 2015 through FY 2019 there has been a 26 percent decrease in the total participation for all recreational programs offered by PARD. Youth athletics has experienced the sharpest decline (53 percent) with participation falling from 699 participants in FY 2015 to 329 participants in FY 2019. Furthermore, youth development and camp programs have also experienced declining participation rates, at 15 and 14 percent, respectively.

The primary reason for the decrease in recreational program attendance is staff turnover at PARD, which reduced the department’s capacity to continue to offer youth athletic programs at a high level of attendance. Contract termination with a third-party contractor also impacted a popular tumbling program for children and the overall participation rate for youth athletics. Operational issues at the Recreation Center and Natatorium swimming pool have led to extended pool closures, which have forced the PARD to reduce its aquatics program offerings. Furthermore, reduced facility capacity at the local school venue for camp offerings also led to decreased camp programming in 2016 and 2017. Overall, staffing and facility capacity impediments at the PARD have led to a reduction in youth program attendance.

Table 5.10, *Percent Change in Recreational Programs*

	Percent Change (FY 2015-2019)
AQUATICS	
Total Participants from Winter/Spring; Summer; and Fall Seasons	(13%)
ADAPTIVE RECREATION	
Total Participants from Winter/Spring; Summer; and Fall Seasons	55%
ADULT ATHLETICS	
Total Participants from Winter/Spring; Summer; and Fall Seasons	(7%)
YOUTH ATHLETICS	
Total Participants from Winter/Spring; Summer; and Fall Seasons	(53%)
YOUTH DEVELOPMENT	
Total Participants from Winter/Spring; Summer; and Fall Seasons	(15%)^{1,2}
MINI CAMPS	
Total Participants from Winter/Spring; Summer; and Fall Seasons	N/A³
CAMPS	
Total Participants from Winter/Spring; Summer; and Fall Seasons	(14%)
TOTAL for all Recreation Types	
Participants	(26%)

Notes:

1 Previous recreation types of “Early Childhood” and “Youth” were reorganized and the “Youth Development” recreation type was created for the Winter/Spring 2015 season. This total participant number for FY 2015 “Youth Development” is elevated due to the reorganization of recreation programs. The percent change for this recreation type is FY 2016-2019, see note #2 below.

2 Percent change is from FY 2016-2019 to account for the FY 2015 elevated “Youth Development” number due to recreation program reorganization

3 Percent change is not applicable because no mini-camps were offered FY 2019. The percent change from FY 2015-2018 is negative 18%.



Standards-Based Assessment Summary

- Pearland’s park system is bolstered by approximately 1,418 acres of subdivision parkland, primarily in the neighborhood parks category and includes over 790 acres of trails and open spaces. This provides a substantial boost to the level of service acreage both for existing needs as well as the future needs of the community. The total acreage with additional subdivision (HOA) parkland increases to 1,965 acres, which translates to just under 17 acres of parkland for every 1,000 residents in Pearland. A current level of service of 17 acres is on par with the existing parkland acreage of Pearland’s comparison and benchmark communities.
- For the City-owned and Subdivision (HOA) neighborhood parks, there is surplus acreage of over 280 acres to exceed Pearland’s current needs as well as the community’s needs in 2040. However, with regard to community and regional parks, Pearland’s current level of service acreage and future level of service acreage lags in comparison with the NRPA recommended standards. This signifies a need in the community for larger parks, such as community and regional parks, that offer more variety of sports and other recreational facilities.
- The facilities level of service analysis reveals that there is a deficit of sports courts, most recreational facilities, and indoor pools and spray pads currently in 2020 and in 2040. In 2040, the community faces a deficit in all athletic field categories, with the highest need for youth baseball and adult softball fields. However, private facilities such as the Pearland Area Dad’s Club and school facilities under the ownership of Pearland and Alvin ISDs are key resources that can partially fulfill community need for certain athletic facilities.



HOME OF THE HAWKS
University of Houston - Clear Lake
Pulsifer Center

HOME		PERIOD		GUEST	
FOULS	T.O.L.	PLAYER	FOUL	T.O.L.	FOULS
SCORE		MATCH			SCORE



Operations-Based Assessment

The operations analysis of the Parks and Recreation Department (PARD) attempts to determine the Department's effectiveness in meeting the community's recreational needs through the provision of a high-quality parks system and recreational program offerings. It examines the operations of the Parks Department to help determine the adequacy of available funding, staffing and capacity, and the overall performance. The information utilized to evaluate Departmental operations includes operating expenditures, revenue, and funding sources.

Operating expenditures for an agency includes all costs of providing parks and recreation services to the community, including equipment, materials, agency employee salaries and benefits, and utilities. Revenue for an agency includes all the monies or earnings generated directly from the parks and recreations programs, events, concessions, permits, fees, rentals, memberships, and other nontax sources. Operating costs vary between communities due to differences in types and topography of parkland, degree of maintenance required, types of equipment, and level of use by community members. Similarly, revenues vary between communities based on policy decisions by elected officials and planners on fees for recreation programs, facilities, and parkland. Unless a parks department administers enterprise funds, whereby revenues generated by a particular program or activity are funneled back to pay the cost of operations and staffing of that program, the revenues generated are included in the community's general fund.

Purpose and Calculation of Metrics

Metrics for operating expenditures assess whether the PARD is adequately funded to manage, operate, and maintain its parks and recreation system. This Operations-Based Assessment utilizes the following metrics on expenditures:

- Operating expenditures per acre managed;
- Operating expenditures per capita.

Operating expenditures per acre managed is calculated by dividing total operating expenditures by total parkland acres managed, and the operating expenditures per capita is calculated by dividing total operating expenditures by the population of the community.

Analyzing metrics on revenue helps to clarify whether the Parks and Recreation Department is recovering enough costs to balance competing community needs with existing resources. Two important metrics to evaluate the Department's revenue generation are:

- Revenue per capita;
- Revenue as a percentage of total operating expenditures, also known as cost recovery.

Revenue per capita is determined by dividing total revenue generated by the department by the population of the community, and the revenue as a percentage of total operating expenditures, also known as cost recovery, is calculated by dividing the total revenues generated by the parks department by its total operating expenditures..

Comparison and Benchmark Communities

Expenditures and revenue vary between communities due to distinctive characteristics. However, a comparative analysis of peer communities provides the typical range of variation on important performance indicators. As mentioned previously in this chapter, peer communities are municipalities that are similar in total population and geographical size. A comparative analysis of Pearland and peer communities allows for decision making that is informed, robust, and responsive to best practices.

The operations analysis for Pearland analyzes information from two sets of peer communities: comparison communities and benchmark communities. Pearland has selected eight communities for comparison. Information on these comparison communities has been provided in Chapter 1.0, *Introduction*.

Pearland's benchmark communities include all counties, municipalities, special districts, and regional agencies that i) provide parks and recreation services for a population between 80,000 and 200,000; and ii) have submitted an agency performance survey for the NRPA. Based on these criteria, there are 80 benchmark communities for Pearland, as reported in the 2019 NRPA Park Metrics, Agency Performance Review. When analyzed in conjunction, comparison communities and benchmark communities provide the range of, and variation in, operational practices and help determine a standard of performance for a parks and recreation department.

Operating Expenditure: Description and Metrics

Total Operating Budget

The annual operating expenditures for Pearland's Park and Recreation Department consist primarily of employee salaries and benefits; materials and supplies for parks and recreational facilities; maintenance of parks and recreational facilities; and

miscellaneous services consisting of administration expenses. Capital outlay expenditures are for the on-going or upcoming parks capital projects.

The total operating budget for the Department in fiscal year (FY) 2020 (October 1, 2019 – September 30, 2020) is \$6,704,582. The Department's total operating budget has not varied by more than eight percent over the past five years. Details of the Parks and Recreation Department's operating budget for the FY 2016 through FY 2020 are in Table 5.11, *Total Operating Budget, 2016-2020*.

Operating Budget by Function

A breakdown of the operating budget by the Department's functions illustrates how expenditures are distributed between the components of Pearland's parks and recreation system (Table 5.12, *Operating Budget by Function, 2016-2020* on page 5.39). For FY 2016 through FY 2020, the Department allocated operating expenditures for administration, which include employee salaries, professional development for staff, communications, and marketing; the Recreation Center/Natatorium, which include its operations and maintenance; athletics; special

Table 5.11, *Total Operating Budget, 2016-2020*

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Salaries and Wages	\$3,767,792	\$3,960,051	\$3,903,738	\$4,108,810	\$4,623,469
Materials and Supplies	\$467,400	\$520,814	\$457,545	\$481,673	\$516,383
Buildings and Grounds	\$609,086	\$703,984	\$526,022	\$387,589	\$415,478
Equipment Repair and Maintenance	\$101,500	\$92,387	\$87,810	\$35,383	\$78,600
Miscellaneous Services	\$1,095,286	\$1,008,079	\$825,335	\$829,856	\$881,561
Inventory	\$179,805	\$12,012	\$17,037	\$49,352	\$800
Capital Outlay	\$161,725	\$278,584	\$273,705	\$248,391	\$144,820
Motor Pool Transfer	\$-	\$-	\$-	\$78,927	\$43,471
Total	\$6,382,594	\$6,575,911	\$6,091,191	\$6,219,982	\$6,704,582



events; senior programs; aquatics; parks, which include parkland maintenance; recycling; natural resources; and recreation operations (including operating expenses for recreation facilities).

The Parks and Recreation Department significantly increased the operating budget for aquatics from less than \$100,000 in FY 2016 to \$595,741 in FY 2020, (which represents an increase of 510 percent). The significant increase in aquatics budget occurred in FY 2018. Since then the Department has continued to increase aquatics budget, albe-

it in smaller proportions of five and nine percent. Operating budgets for senior programming, special events, and athletics have also increased in FY 2016 through FY 2020. During this time, the operating budget for parks, which includes park operations and maintenance, has increased by 13 percent, to \$2.1 million. This represents the smallest increase in the operating budget for a department function compared to the increases in the budgets for other departmental functions, such as aquatics and athletics (Figure 5.14, *Percent Change in Operating Budget by Function, 2016-2020*).

Table 5.12, Operating Budget by Function, 2016-2020

Function	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Administration	\$725,649	\$642,400	\$774,838	\$860,316	\$859,398
Athletics	\$257,168	\$254,570	\$298,744	\$293,329	\$338,087
Special Events	\$344,643	\$385,564	\$393,027	\$378,987	\$446,492
Senior Program	\$274,759	\$268,431	\$264,477	\$307,719	\$319,784
Aquatics	\$97,654	\$17,100	\$572,547	\$546,291	\$595,741
Parks	\$1,929,141	\$2,197,318	\$1,925,648	\$2,008,480	\$2,156,302
Recreation Center / Natatorium ¹	\$2,592,470	\$2,521,430	\$384,308	\$399,825	\$434,199
Recreation Operations ¹	\$-	\$-	\$1,212,963	\$1,163,406	\$1,229,673
Recycling	\$94,283	\$1,672	\$1,174	\$1,062	\$1,200
Natural Resources	\$66,828	\$287,429	\$263,468	\$260,566	\$323,706
Total	\$6,382,595	\$6,575,912	\$6,091,191	\$6,219,982	\$6,704,582

Figure 5.14, Percent Change in Operating Budget by Function, 2016-2020



¹ In FY 2018, the operating budget for Recreation Center / Natatorium was split into two line items: Recreation Center / Natatorium and Recreation Operations.

Operating Budget and Park Acreage

An analysis of expenditures on parkland sheds light on the adequacy of allocated funding for the maintenance of a community’s parks. Since 2016, the City of Pearland’s total number of parks and park acres have remained unchanged. Meanwhile, the total operational budget, which also includes expenditures for recreational programs, has increased by five percent. The expenditure for parks operations too has increased, though at a higher rate (12 percent) than the total operating budget. This means that while the Department is maintaining the same number of parkland acres today as it was five years ago, it has 12 percent more funding to do so (Table 5.13, *Pearland Percent Change in Parkland Acres and Operational Budget, 2016-2020*).

The PARD spends a significant amount per acre (\$13,679) on park maintenance. The operating budget total used to calculate the operating expenditure per acre managed excludes the operating budget for the Recreation Center / Natatorium. In comparison with its benchmark communities, the City of Pearland spends more on managing one acre of parkland than the median amount spent by benchmark communities. The median operating expenditure per acre of parkland in 2019 for benchmark communities was \$8,214 and the upper quartile value, i.e., the expenditure per acre on park maintenance by communities at the 75th percentile, was \$19,876 (Table 5.14, *Operating Budget for Benchmark Communities, 2019*). This places Pearland, at \$13,679 expenditure per acre, in the upper quartile of peer communities with parkland maintenance expenditures.

Table 5.13, Pearland Percent Change in Parkland Acres and Operational Budget, 2016-2020

	FY 2016	FY 2020	Percent Change
Parkland Acres	458.4	458.4	0%
Total Operating Budget	\$6,382,595	\$6,704,582	5%
Parks Operating Budget	\$1,929,141	\$2,156,302	12%

While Pearland’s operating expenditure per acre is in the upper quartile, its total operating budget, at \$6.4 million, is less than the median operating budget of \$9.8 million for the benchmark communities. This implies that while Pearland spends more on per acre maintenance than half of the benchmark communities, its total operating budget is less than that of half of the benchmark communities.

Table 5.14, Operating Budget for Benchmark Communities, 2019

	Pearland	Lower Quartile	Median	Upper Quartile
Operating Budget Per Acre Managed	\$13,679	\$3,449	\$8,214	\$19,876
Operating Budget Per Capita	\$53	\$35	\$78	\$141
Total Operating Budget	\$6,704,582	\$4,164,053	\$9,806,998	\$17,603,923



Operating Budget Per Capita

Pearland spends a lower amount (\$53 per person) in delivering parks and recreational services to its residents than most of its comparison and benchmark communities. It is second lowest among its comparison communities (Table 5.15, *Operating Budget Metrics for Pearland’s Comparison Communities*); and has a per capita expenditure that is lower than the median amount (\$78) for benchmark communities, as detailed in Table 5.14 on page 5.40. A low per capita budget compared to the benchmark communities may be attributed to a low total operating budget for Pearland that is less than the median value for the total operating budget for benchmark communities, as detailed in Figure 5.14, *Percent Change in Operating Budget by Function, 2016-2020*, on page 5.39.

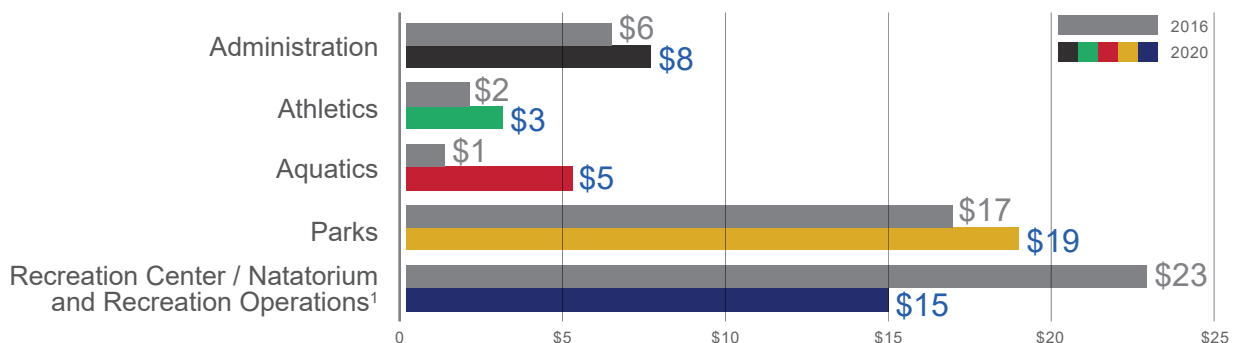
Operating Budget Per Capita by Function

An analysis of per capita expenditures by departmental functions helps shed light on components of Pearland’s parks and recreation system that may not be adequately funded. An analysis of per capita spending illustrates that Pearland has decreased its spending per capita for the Recreation Center / Natatorium operation and Recreation Operations (which includes operating expenses for other recreation programs) by \$8 in the past five years, as described in Figure 5.15, *Operating Budget Per Capita, 2016 and 2020*. The Recreation Center / Natatorium and Recreation Operations is the only department function that has undergone a decrease in the operating budget per capita from 2016 through 2020.

Table 5.15, Operating Budget Metrics for Pearland’s Comparison Communities

	Population	Total Operating Budget	Operating Budget Per Capita
Pearland	117,867	\$6,462,780	\$53
Baytown	77,862	\$7,256,027	\$93
Cary	159,715	\$18,392,980	\$115
Frisco	177,286	\$17,500,000	\$99
League City	105,105	\$5,657,528	\$54
McKinney	181,330	\$35,641,783	\$197
Olathe	134,368	\$16,082,350	\$120
Round Rock	123,678	\$12,135,832	\$98
Sugar Land	88,488	\$5,213,244	\$59

Figure 5.15, Operating Budget Per Capita, 2016 and 2020



¹ In FY 2018, the operating budget for Recreation Center / Natatorium was split into two line items: Recreation Center / Natatorium and Recreation Operations.

In the 2016 through 2020, per capita spending on park maintenance has increased moderately from \$17 per capita to \$19. Similarly, the spending on Aquatics and Athletics has also increased moderately from \$1 to \$5 per capita and \$2 to \$3 per capita, respectively. Operating budget per capita for Administration has also increased slightly by \$1. Figure 5.15, on the facing page, describes the components of Pearland’s parks and recreation system that have undergone a significant change in per capita spending in the past five years. Other components of the system which have not experienced any significant change in spending per capita are senior programs and special events.

Funding Sources

PARD operating expenditures rely on four sources of funding: General Fund, Parks Donation Fund, Tree Trust Fund, and Park Development Fund. Table 5.16, *Funding Sources for Operational Budget, 2020*, breaks down the contribution of these funding sources towards the operating budget of the PARD for FY 2020. In FY 2021, a new policy known as the Financial Naming Rights Policy will also begin to generate revenue for the department for upcoming years.

- **General Fund**
The General Fund is the largest source of funding for the PARD. This fund is comprised of tax monies, such as property taxes, sales taxes, and franchise taxes, collected by the City of Pearland. It also includes fees from licenses and permits, payments from fines and forfeitures, and charges for certain City of Pearland services.
- **Parks Donation Fund**
The Parks Donation Fund comprises of private donations and sponsorships in support of the Department’s recreational programs and events.

Table 5.16, Funding Sources for Operational Budget, 2020

Funding Source	FY 2020
General Fund	\$ 6,704,582
Park Donations Fund	\$ 122,500
Tree Trust Fund	\$ 250,750
Park Development Fund	\$ 250,000

- **Tree Trust**
The Tree Trust is funded through fees for removal of existing trees in new developments. Such fees, also referred to as mitigation fees, are paid by the developer when re-planting of trees is not an option. Tree Trust funds are used to plant or replace trees within City parks and street rights-of-way. The purpose of this fund is to purchase, grow, and maintain trees and associated plant material in Pearland.
- **Park Development Fund**
As part of the Unified Development Code, new developments in Pearland must either dedicate portions of the development site for parkland or pay fees to the City in lieu of dedicated parkland. These fees constitute the Park Development Fund.
- **Financial Naming Rights**
The Financial Naming Rights policy, a recent initiative, allows private parties to name a city park facility in exchange for payment to the City of Pearland. The park facilities include open spaces, sports facilities, playgrounds, trails, park benches, flowerbeds, sports equipment, and any structure owned or controlled by the City of Pearland and under the care of the PARD. Revenues generated through this policy will be included in budget year 2021 revenues.



Forever Parks Foundation

As a nonprofit organization with a mission to establish parks, facilities, and recreational programs in Pearland, Forever Parks Foundation partners with the City of Pearland to improve the parks and recreation offerings in the city. The foundation helps generate revenue through partnerships with sponsors and donors to fund the development of park facilities and recreational programs. In 2019, the Forever Parks Foundation initiated a financial assistance program for low-income individuals and families that provides free membership to the City’s recreation programs with the goal of increasing access to health and wellness recreation programming.

Other projects included funding an artistic mural at the berm tunnel in Independence Park; sponsoring the 2019 Pearland Turkey Trot; and raising money for natural resources projects by hosting events, galas, and bike rides. Most recently, the Forever Parks Foundation has initiated the design process for an all-inclusive playground in the Shadow Creek Ranch Sports Complex. Upcoming projects include the development of an educational pond and wetlands area at the Dolores Fenwick Nature Center.



Revenue: Description and Metrics

Total Revenue

The PARD generates revenue for the General Fund, Parks Donation Fund, Tree Trust, and Park Development Fund through events, concessions, permits, fees, rentals, memberships, and other nontax sources. This revenue is funneled back to the operational budget for the Department and helps recover costs of operation. Table 5.17, *Parks and Recreation Department Revenue, 2019*, describes the revenues generated by the Department for FY 2019.

Table 5.17, *Parks and Recreation Department Revenue, 2019*

	Revenue for FY 2019
General Fund	\$2,022,994
Recreation	\$271,515
Athletics	\$157,500
Special Events	\$43,375
Senior Programs	\$31,699
Aquatics	\$187,000
Natural Resources	\$46,755
Recreation Operations	\$1,285,150
Park Donations	\$128,000
Administration ¹	\$128,000
Tee Tree	\$7,800
Parks ¹	\$7,800
Parks and Recreation Development	\$138,000
Administration ²	\$138,000
Total	\$2,296,794

¹ This includes revenue generated through investment earnings.

² This includes revenue generated through licenses and permits.

Revenue Per Capita

The per capita revenue generated by Pearland's PARD in 2019 was \$19.5. NRPA's Agency Performance Review describes wide variation in per capita revenue for benchmark communities (Table 5.18, *Revenue Per Capita for Benchmark Communities, 2019*). Pearland's per capita revenue, at \$19.5, is just slightly higher than the median per capita revenue (\$19) for benchmark communities. The upper quartile of benchmark communities has a per capita revenue of \$51 and the lower quartile has a per capita revenue of \$6. This suggests that Pearland's revenue generation through its parks, recreational facilities, and programs is at par with that of benchmark communities.

Table 5.18, Revenue Per Capita for Benchmark Communities, 2019

	Pearland	Lower Quartile	Median	Upper Quartile
Revenue Per Capita	\$19.5	\$6	\$19	\$51

Cost Recovery

A useful metric that helps to illustrate a public agency's effectiveness to recover costs and reduce dependence on the community's tax monies is to evaluate revenue as a percentage of operating expenditures. A higher percentage or ratio signifies an agency's effectiveness in recovering some costs of delivering parks and recreation services to the community. In comparison with its benchmark communities, Pearland recovers more operational costs, at 34 percent, than the median benchmark community ratio of 22 percent. In fact, Pearland is in the upper quartile of benchmark communities which recover over one-third of their operating expenditures through revenues generated by their parks and recreation system (Table 5.19, *Cost Recovery for Benchmark Communities, 2019*).

Table 5.19, Cost Recovery for Benchmark Communities, 2019

	Pearland	Lower Quartile	Median	Upper Quartile
Total Revenue as Percentage of Total Operating Expenditures	34%	11%	22%	38%

Capital Projects

For FY 2020, Pearland has allocated \$10.32 million to parks capital projects. These include park equipment replacement, a permanent stand-by generator that will operate the recreation center at full capacity during an emergency, and the design of the Shadow Creek Ranch Park. The median budget for capital projects for benchmark communities in 2019 was \$4.1 million and the value for communities in the upper quartile was \$7.4 million. Pearland has a capital projects budget for FY 2020 that is higher than capital budget of benchmark communities in the upper quartile, as shown in Table 5.20, *Capital Projects Budget, 2020*.

Table 5.20, Capital Projects Budget, 2020

	Pearland	Lower Quartile	Median	Upper Quartile
Capital Projects Budget FY 2020	\$10.3 million	\$0.8 million	\$4.1 million	\$7.4 million

Staffing

In FY 2020, Pearland has fewer full-time equivalent (FTE) positions than approximately half of the benchmark communities. Table 5.21, *Full-time Equivalent Positions, 2019*, describes that the median number of FTE positions for benchmark communities is 112 and for Pearland is 94.5. Analyzing parks and recreation staffing by the community's population reveals that Pearland has 8 staff members for every 10,000 residents. This is at the median value for benchmark communities (8.1 staff members) and suggests that the Department is staffed at adequate levels to meet its parkland maintenance and recreational programming needs in comparison to approximately half of the benchmark communities.

Table 5.21, Full-time Equivalent Positions, 2019

	Pearland	Lower Quartile	Median	Upper Quartile
FTE Positions	94.5	58	112	188
FTE per 10,000 population	8	5.2	8.1	15



Operations-Based Assessment Summary

- The operations-based assessment reveals that the PARD's total operating budget has increased by five percent over the past five years. The functions within the Department that have had an increase in their allocated budgets include aquatics, athletics, special events, and senior programming. Park maintenance budget has also increased.
- In comparison with its benchmark communities, the City of Pearland spends more on managing one acre of parkland than the median amount spent by benchmark communities. However, Pearland spends a lower amount (\$53 per person) in delivering parks and recreational services to its residents than most of its comparison and benchmark communities. Furthermore, compared to its comparison communities, Pearland has the lowest number of parkland acres per staff with one staff for every five acres of parkland.
- The per capita revenue generated by Pearland's PARD in 2019 was \$20, which is just slightly higher than the median per capita revenue (\$19) for benchmark communities. This suggests that Pearland's revenue generation through its parks, recreational facilities, and programs is at par with that of benchmark communities. Furthermore, in comparison with its benchmark communities, Pearland recovers more operational costs, at 34 percent, than the median benchmark community ratio of 22 percent.



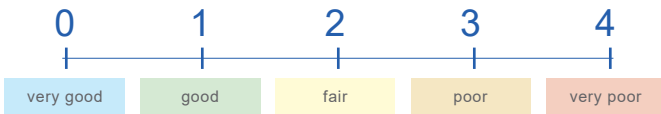


Conditions-Based Assessment

The condition of existing parks, recreation facilities, buildings, equipment, and other improvements is an important measure of a park system’s performance. The quality, appearance, and maintenance of the park system contributes to the image of the community and the perception of its livability. It is, therefore, crucial for the City of Pearland to maintain the community’s parkland and facilities. The Condition-Based Assessment helps determine the current condition of parks and facilities; and provides an assessment for the need for repairs, upgrades, and improvements. The Conditions-Based Assessment also helps to determine whether the parkland and facilities in the community’s park system are maintained in a condition that is suitable for frequent and safe use, and can continue to attract park users.

Methodology

To determine the need for repair and improvement for parkland and park facilities for a Conditions-Based Assessment, each anatomical component of a park is assessed on an ordinal scale, where “0” represents good condition and “4” represents poor condition. The assessment is carried out visually and each park component is ranked according to the condition scale. A score of “4” is assigned to anatomical components of a park, such as buildings, facilities, and turf, that are in very poor condition and therefore, warrant replacement, rehabilitation, or reconstruction. The scores of “2” and “3” represent an increasing level of disrepair or deteriorated condition.



Park Assessment Categories

For a conditions assessment of Pearland’s parks, the anatomical components of all parks are categorized into 15 assessment categories, which include turf; plantings and trees; irrigation; parking; sidewalks and trails; basketball nets and playing surfaces; tennis courts, fencing, and nets; park accessibility; park amenities; play equipment; buildings, shelters, and pavilions; playing fields and equipment; signage; fencing; and lighting. Table 5.22, *Park Conditions*

Assessment Categories, describes the anatomical components assessed for each category. While conducting the visual assessment, each category was assessed on the conditions scale and assigned a score. In turn, each park was assigned a conditions assessment score based on the cumulative score of its individual assessment categories.

Table 5.22, *Park Conditions Assessment Categories*

Category	Principal Review Items
Turf	Manicured lawn areas.
Plantings Trees	Health, maintained condition, and coverage of trees and other landscaping, including overgrowth; strategic placement of vegetation to define park spaces.
Irrigation	Existing planting’s health, presence / absence, and condition of irrigation.
Parking	Striping, pavement condition, and ingress/ egress of parking lots
Park Sidewalks Trails	Surface condition, pathway/trail width, vertical and horizontal clearance, crossing points, ADA accessibility; considers variations in pathways/trail types depending on the type of fitness, recreational, or transportation activities the trail is designed to support.
Basketball Nets Playing Surfaces	Stability and level of nets; playing surface; striping on court.
Tennis Courts Fencing Nets	Stability and level of nets; playing surface; striping on court.
Park Accessibility	Perimeter sidewalks; striped and signed crosswalks; walking surface condition.
Park Amenities	Benches; grills; sheltered/unsheltered picnic tables; trash receptacles.
Play Equipment	Playscapes, surrounding surface area; accessory structures to improve the comfort of users and attendants.
Buildings Shelters Pavilions	Buildings; shelters; pavilions; restrooms; concession stands; bleachers; and special use facilities.
Playing Fields Equipment	Playing surface; fencing; netting; striping; walls; and other non-removable facilities essential to support the activity and define the field of play.
Signage	On-site park name sign, regulatory signs; wayfinding signs.
Fencing	Structure and surface condition of fencing.
Lighting	Lighting standards; fixtures; coverage area.

Composite Scores for Park Assessment Categories

The composite score for each assessment category is the average of all scores in that category for all parks assessed. It indicates the need for maintenance or repair in each park as well as the category of maintenance that may require PARD's resources. As detailed in Table 5.23, *Composite Condition Assessment Scores by Park*, the overall score for Pearland's parks system is 1.3, which indicates a good condition of parkland and facilities across the park system. The composite scores for each park reveal the condition of each park and provide a comparative ranking of all parks in Pearland. This information is valuable to determine City-wide priorities, and more specifically, to determine the improvements needed at each park.

Table 5.23, Composite Condition Assessment Scores by Park*

Community Parks	Turf	Plantings Trees	Irrigation	Parking	Sidewalks Trails	Basketball Nets Playing Surfaces	Tennis Courts Fencing Nets	Park Accessibility	Park Amenities	Play Equipment	Buildings Shelters Pavilions	Playing Fields Equipment	Signage	Fencing	Lighting	Composite Score
Centennial Park	1		1	1	1	2	0	1	0	1		1	1	1	2	1.0
Heritage Plaza	0	2		2	4			2	0		2		2		2	1.8
Hunter Park	1	1						2								1.3
Independence Park	1	1	1	0	0	0	0	2	0	0	0		1		0	0.5
Southdown Park	1	1	1	0	1			2	1	1	1	2		1	2	1.2
Zychlinski Park	1	1	1		0	1.5		2	1	2						1.2
Average Composite Score																1.2
Neighborhood Parks																
Aaron Pasternak Memorial Park	1	3			3			3	3	1	3		2			2.4
Corrigan Park	1	3			2	3		2	3	4						2.6
Creekside Park	0	1			2			2	3	2						1.7
Cypress Village Park	1	2	0		1			2	1	2						1.3
Hyde Park	2	1			0			2	0	0	3		1			1.1
Pine Hollow Park	2	2	3		2	2		2	1	0	2		1	1	3	1.8
South Gate Park	1	1	1		1			1	2	1						1.1
Woodcreek Park	2	1			1			4	0	0			0	3		1.4
Woody Street Park	1	2		3	3			3	2	1				2		2.1
Average Composite Score																1.7
Athletic Complexes																
Hickory Slough Sportsplex	1	1	1	1	1			2	1		1	1	1	1	0	1.0
The Sports Complex at Shadow Creek Ranch	1	1	0	1	1			1	1	1	0	0	1	0	1	0.7
Veterans Sports Complex	1	2	0	1	2			1	2		2	2		2	1	1.5
Average Composite Score																1.0
Composite Score	1.1	1.5	0.9	1.1	1.5	1.7	0.0	2.0	1.2	1.1	1.6	1.2	1.1	1.4	1.4	1.3

*Notes:

The Facilities: Delores Fenwick Nature Center (JHEC); Melvin Knapp Activity Center; Recreation Center and Natatorium; and Westside Event Center were not assessed for the Park Conditions Assessment. The Trails and Natural Spaces, Old Settler's Cemetery have not been assessed for the Park Conditions Assessment.

The Trails and Natural Spaces: Edible Fruit Trail; Shadow Creek Ranch Nature Trail; and Trails at JHEC have been assessed in the Pedestrian Level of Service, refer to the summary of the Pedestrian Level of Service in this section starting page 5.54 and also in Appendix F, Pedestrian Level of Service.



Turf

Rating: 1.1, good condition

Most of the assessed parks have established turf, although some have areas with erosion found along the banks of drainage channels. At the John Hargrove Environmental Complex and the Hickory Slough Sportsplex, the side slopes of drainage channels have areas of erosion that may lead to slope failure. Many parks have erosion at the edges of sidewalks leading to ponding of water due to improper drainage. During the park conditions assessment, numerous parks had un-mowed turf which indicated a need for more consistent maintenance practices.

Plantings | Trees

Rating: 1.5, fair condition

Most of the neighborhood parks have few plantings and shade trees resulting in minimal natural shade coverage. Pine Hollow Park, Hyde Park and Woody Street Park have mature trees that provide shade to the park elements and visitors. Since park patrons typically like to use outdoor spaces that are cool and protected from the sun, having shade trees help bolster park usage. Utilizing native plants in arid climates, such as that of Pearland, instead of ornamental plants reduces the need for irrigation and maintenance. Shrub, perennial, and ground-cover plantings can be used as accents for entry signage and foundation plantings.

Irrigation

Rating: 0.9, good condition

Irrigation is an important aspect in the maintenance and health of the vegetation and tree plantings in parks. Although the operation of each park's irrigation system was not performed, the visual analysis of the existing planting's health indicates that they receive water either through natural rainfall or with an automatic irrigation system. Exposed irrigation pipes were frequently observed at the base of trees.

Parking

Rating: 1.1, good condition

On-street parking is provided for many neighborhood and pocket parks, while most community parks provide off-street parking. Most off-street parking areas are in fair condition, although striping improvements for many of the parking lots is needed. For parks with only on-street parking, access to the park is somewhat impeded. Some parks do not have handicapped ramps leading from the street to the sidewalk; or the existing handicapped ramps were inundated with water after a rain event at the time of assessment.



Current condition of Plantings | Trees at Centennial Park.



Current condition of Parking at The Sports Complex at Shadow Creek Ranch.

Park Sidewalks | Trails

Rating: 1.5, fair condition

While the condition of concrete sidewalks and pathways are in good condition, many parks do not have sidewalks. Many parks have decomposed granite trails, and remain in unimproved condition; except for Woodcreek Park and the John Hargrove Environmental Complex, where the trails and sidewalk pavement are in good condition. Most of the decomposed granite trails have lost surface material and are overgrown with weeds. There are several parks that do not have paved access to the site amenities or perimeter sidewalks which limits handicapped access. Several sidewalks and decomposed granite trails require maintenance and/or immediate remedial repairs to avoid more significant damage and subsequent replacement costs.

Basketball Nets | Playing Surfaces

Rating: 1.7, fair condition

Basketball backboards, nets, basketball courts and playing surfaces are in good condition. Most parks' basketball courts require restriping. The basketball court at Corrigan Park is in poor condition due to graffiti on the backboards and court, a ripped net, non-existent striping, and cracked concrete.

Tennis Courts | Fencing | Nets

Rating: 0.0, very good condition

Centennial Park and Independence Park have tennis courts, and both have recently undergone renovations. The renovations included new surfacing, nets, fencing, and mesh screening.

Park Accessibility

Rating: 2.0, fair condition

Accessibility is ranked as the highest concern with a relative average score of 2.0. In most cases, visual assessment has revealed the lack of sidewalk access to parks, missing perimeter and other sidewalks within parks, and absence of crosswalks with street crossing signs. Accessibility is among the highest priorities to ensure that park visitors can access the City's parks safely and conveniently. The priority must extend beyond the individual parks to the design and retrofitting of sidewalks within streets and neighborhoods.



Current condition of Park Sidewalks | Trails at Aaron Pasternak Park.



Current condition of Park Accessibility at Woodcreek Park.



Park Amenities

Rating: 1.2, good condition

The amenities within the parks are in good condition, although the assessment indicates a need for new or improved amenities in some parks. Certain amenities, such as benches, picnic tables and shade structures require increased maintenance to ensure longevity. It is recommended that picnic tables, barbecue grills and waste receptacles be in closer proximity to one another to ensure ease of use and to reduce the appearance of amenities being haphazardly scattered throughout the park. Irrigation vaults should be checked to see if they are operable. If the vaults are inoperable, then the vaults should be removed to avoid creating safety hazards. In some parks, the filter fabric that was originally installed under play equipment fall surfaces or decomposed granite trails have been uncovered, creating an unsightly appearance. The fabric should either be removed or buried with additional granite material.

Play Equipment

Rating: 1.1, good condition

Many of the City parks have play equipment that are in good condition. Some parks have equipment that require maintenance or need to be replaced. Corrigan Park, Creekside Park and Cypress Village Park have rusty and faded equipment that needs to be replaced. Not all play equipment throughout the parks are inclusive as access is not available to those who are wheelchair bound.

Buildings | Shelters | Pavilions

Rating: 1.6, fair condition

The buildings and shelters are in moderate condition. Ongoing maintenance and repair are needed due to stains, rust, paint chippings, and vandalism.



Current condition of Park Amenities at Woody Street Park.



Current condition of Play Equipment at Corrigan Park.



Current condition of Buildings | Shelters | Pavilions at Pine Hollow Park.

Playing Fields | Equipment

Rating: 1.2, good condition

The playing fields, backstops, dugouts and equipment are in good condition. Many infields are overgrown with weeds that require eradication for optimum playability. Turf conditioning in many playing fields is needed.

Signage

Rating: 1.1, good condition

There is a lack of wayfinding signage that direct people to parks. Only a few parks have signs that state park rules and regulations. “Children at Play” signs should be erected in the areas around all parks within neighborhoods. Parks such as Centennial Park, Hickory Slough Sportsplex, Hyde Park, The Sports Complex at Shadow Creek Ranch and Woodcreek Park all have updated signage. Except for Woodcreek Park, all previously listed parks have freestanding signs without accent planting.

Fencing

Rating: 1.4, good condition

Existing fencing is generally in good condition. For parks without fences, there exists a need to install fencing for to protect young children from running into oncoming street traffic and, to prevent sport balls from rolling onto adjacent streets, as well as for screening of adjacent properties.

Lighting

Rating: 1.4, good condition

Additional lighting is needed in many of Pearland’s parks. Many parks rely on flood lights mounted on telephone poles or sports field lighting. Pedestrian lighting will help improve the overall safety of the parks, and the perception of security for park visitors. The sports complexes and many parks with off-street parking include parking lot lighting. Although an assessment of the safety lighting at parking lots was not performed, lighting during evening hours is important for safety and the perception of security for park visitors.





Conditions Assessment by Park

For a comparative analysis of Pearland’s parks, all parks are ranked relative to one another based on their cumulative assessment category scores. Overall, the composite scores for the assessed Neighborhood Parks is higher, at 1.7, than Community Parks, which have a score of 1.2, and Athletic Complexes, which have a score of 1.0 (Table 5.24, *Park Conditions Assessment Score by Park Classification*). An average score of 1.0-1.2 indicates that most anatomical components in Community Parks and Athletic Complexes are in very good to good

Table 5.24, *Park Conditions Assessment Score by Park Classification*

Park Classification	Average Composite Score
Community Parks	1.2
Neighborhood Parks	1.7
Athletic Complexes	1.0

Table 5.25, *Park Conditions Assessment Score by Park, Low and High Scores*

	Average Composite Score
Highest Ranking Parks	
Independence Park	0.5
The Sports Complex at Shadow Creek Ranch	0.7
Centennial Park	1.0
Hickory Slough Sportsplex	1.0
Hyde Park	1.1
South Gate Park	1.1
Lowest Ranking Parks	
Creekside Park	1.7
Heritage Plaza	1.8
Pine Hollow Park	1.8
Woody Street Park	2.1
Aaron Pasternak Memorial Park	2.4
Corrigan Park	2.6

condition. In comparison, the anatomical components of Neighborhood Parks are in good to fair condition and will likely require increased repair or maintenance in the future.

The average composite score for the lowest and highest ranking parks in the City-owned park system are described in Table 5.25, *Park Conditions Assessment Score by Park, Low and High Scores*. The parks that have the best scores (assessed as very good and good) are newer and have had recent investments in maintenance and improvements. They are also larger community parks that symbolize community-wide pride. The common element that scored high across the top five parks are well-maintained park amenities and facilities. However, park accessibility and lighting were limiting factors.

On the other hand, the lowest scoring parks are neighborhood parks that have amenities, such as benches, grills and picnic tables in disrepair; diminished accessibility due to missing crosswalks and sidewalks; uneven or broken pavement leading to unsafe conditions for the elderly or persons with special needs; and sidewalks or trails in poor condition requiring replacement or reconstruction. However, the low ranking neighborhood parks had above average composite scores for turf indicating very good turf quality. Detailed park assessments for all City-owned parks are included in Appendix E, *Park Conditions Assessment*.



The Independence Park Improvement Project included relocation and replacement of the existing playground with a tree house themed accessible playground.

Pedestrian Level of Service

The pedestrian level of service (PLOS) analysis determines the level of service for City-owned trails both inside and outside City-owned parks. The PLOS is based on four key aspects of a user’s experience on a trail: comfort, safety, ease of mobility, and convenience. Each aspect or category of service is assessed on an ordinal scale, between 0 and 4, where 0 indicates a very good level of service, 1 indicates good level of service, 2 indicates fair level of service, 3 is poor level of service, and 4 is very poor level of service. Similar to the park conditions assessment, the trail assessment is carried out through a visual review of the trail, its features, and the immediate surroundings. The characteristics reviewed for each category are described in Table 5.26, *Category by Characteristics Measured*.

Table 5.26, *Category by Characteristics Measured*

Comfort	Slope gradient, pavement maintenance, shade, and rest stations
Safety	Lighting and buffering against vehicular traffic
Ease of Mobility	Signage, signals, and wayfinding references
Convenience	Ease of connectivity and distance to destinations

Comfort

A trail’s comfort level can be described as its ability to attract users through its offerings of amenities that maintain the user’s comfort on the trail. The trail’s surface material is an important characteristic and its most utilized feature. A concrete trail offers a flat and smooth walking or running surface that is easy to maintain yet puts a strain on the human body if used frequently. Trail users who use wheelchairs or push strollers find it easier to use concrete trails, but joggers or fast runners typically do not. A decomposed granite trail on the other hand, offers a smoother running and bicycling surface yet is difficult to use for pushing a stroller. Maintenance is

also a challenge as decomposed granite is likely to scatter after continuous use or by heavy gusts of wind; or it can get washed away during storm events. Over time, replacement of the decomposed granite becomes necessary. The most effective trail system minimizes the shortcomings of pavement or surface material by balancing the use or having a combination of the two materials.

A trail’s slope gradient helps determine the effectiveness of a trail. The smoother the gradient, the more inclusive it is for all age groups and for persons with disabilities. While adults can adapt to steep slopes, children and the elderly may not be able to adapt easily. The physically and visually impaired user will also find a trail difficult to use if there are unpredictable or sharp grade changes. Conversely, a flat trail with little to no slope may result in ponding during or after a storm event.

The maintenance of a trail system is also an important characteristic that impacts a user’s comfort. A clean surface that is free of overgrown grass and noxious weeds, and pruned tree limbs that do not impede biking or walking increases user comfort. Repairs of cracked concrete and replacement of missing or scattered decomposed granite also increases user comfort.

Other trail characteristics that play a crucial role in aiding user comfort are naturally growing trees and overhead pavilions that offer relief from the sun, providing the user time to recuperate from the heat and continue using the trail. As with any amenity, the long-term maintenance of trees and pavilions is important as they can become a hindrance as much as a benefit for the user’s comfort.

Full rest stations and accessories at trailheads provide a longer resting point. Rest stations with shaded seating, drinking fountains, restrooms and bicycle racks will encourage the trail user to stop and use the amenities before continuing with trail use. Trailheads can indicate a trail’s point of origin but can also be intermittently placed along a trail to provide respite to users during their walk.



Safety

Key trail characteristics that determine user safety include lighting and wayfinding devices. Since trail usage is not limited to daytime, adequate lighting during evening and nighttime impact the perception of safety for users. Appropriately placed lighting also serves as a wayfinding device. Trails are often combined with sidewalks and are located adjacent to the street edge. Physical barriers between pedestrians and cyclists on a trail and vehicular traffic on an adjacent street are important safety features. Trees, bollards and space enhancers such as grass strips are examples of safety barriers.

Safety precautions taken to minimize the risks at street intersections are important safety elements. Pedestrians will inevitably cross at street intersections and in doing so, their safety is severely compromised. Precautions that can be taken to minimize this risk take the form of crosswalk markings, curb cuts, refuge islands, and wide sight distances. In the absence of traffic signals, crosswalk markings inform motorists that the area has a likelihood of pedestrian activity. For pedestrians with physical disabilities, curb cuts are made at intersections to allow wheelchair access through curbed sidewalks. For street crossings with a median, refuge islands provide pedestrians a safe location to wait for an approaching vehicle to pass. A wide site distance allows drivers to either slow down their vehicle or wait for the pedestrian to move away from the vehicle.

Ease of Mobility

Ease of mobility is the lack of difficulty for a pedestrian to negotiate a trail system. For instance, its width determines whether pedestrians and cyclists can share a trail. A trail that maintains ease of mobility typically has enough room for users to move in a desired path without altering their movements in response to other pedestrians and cyclists. For this purpose, the optimum width for a trail may be a minimum of eight feet and as wide as the site can bear. The speed a user can maintain freely while bypassing slower pedestrians and minimiz-

ing crossing conflicts is also an important mobility consideration. Similarly, maintaining stride is a consideration when determining a trail's ease of mobility, especially at trail and street intersections. Any crossing delays greater than 60 seconds may cause trail users to forgo waiting and proceed to cross without safe notifications to other users in the intersection. Appropriate signal phasing is typically within a 60 second range.

Wayfinding signs play a key role in the ease of mobility. Wayfinding signs are typically found along trails and parks and are designed to provide identification and directional information. Identification signs are typically located at the park entrance and clearly identifies the park or trail's name, and oftentimes is accompanied by a dedication plaque. Interpretive signage may be found along the trail system and may contain information on local flora and fauna, or provide reference to a historical or cultural event. Directional signage help to prevent the user from getting lost. Directional signs are located at junction points or on the path where a trail user may look for instructions on how to reach a destination point. These signs may contain a mile marker or show the distance to destination points.

Convenience

The final category for a pedestrian level of service assessment is convenience, which is understood as proximity to a variety of destinations within a short distance. Within this context, trail users are categorized as casual walkers or hard runners. The runner typically uses a trail as an exercising tool and often returns to the point of origin upon completion of use. For the casual walker, the convenience of connectivity between point of origin and destination plays a pivotal role as the destination is the main purpose for the trail use. The ease of connectivity and distance to destinations such as transit stations, commercial and retail centers, and community gathering spaces are primary reasons why the casual walker may forgo the use of automobiles and choose to use a trail.



Results

The PLOS analysis is based on a visual assessment of 19 City-owned trails in Pearland with an average composite LOS score of 1.5. According to the assessment scale (0 through 4), a score of 1.5 signifies that the level of service of the assessed trails is between good and fair. The trail characteristics with the highest level of service scores ranging between very good and fair are sidewalks and trails, at 0.9; buildings, shelters, and pavilions, at 0.9; and parking, at 1.3 (Table 5.27, *Trail Conditions Assessment Scores*). The trail elements with poor level of service scores include lighting and accessibility.

Table 5.27, *Trail Conditions Assessment Scores*

	Sidewalks Trails	Trees	Parking	Trail Accessibility	Trail Amenities	Buildings Shelters Pavilions	Signage (On-Site Regulatory and Wayfinding)	Lighting	Composite Score
Centennial Park Trail	0	2	0	2	0	0	0	4	1.0
Clear Creek Trail - East (Green Tee Terrace)	0	3	1	1	0	4	0	4	1.6
Clear Creek Trail - West ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A ¹
Corrigan-Woody Park Trail	2	1	0	4	4	4	4	4	2.9
Cypress Village Park Trail	3	2	3	4	4	0	4	4	3.0
Edible Fruit Trail	1	3	2	3	0	0	0	4	1.6
Independence Park Trail	0	0	0	0	0	0	4	0	0.5
Mary's Creek Trail (Central)	0	4	0	4	4	4	0	4	2.5
Mary's Creek Trail (East)	3	1	0	1	0	0	4	4	1.6
Mary's Creek Trail (West)	0	2	4	4	4	0	0	2	2.0
Pine Hollow Park Trail	1	0	3	1	0	0	0	3	1.0
Shadow Creek Ranch Nature Trail	2	2	0	4	1	0	0	4	1.6
Southdown Park Trail	1	2	0	1	0	0	0	1	0.6
South Gate Park Trail	0	3	3	1	1	1	4	4	2.1
The Sports Complex at SCR Trail	0	2	0	4	4	0	1	1	1.5
Town Ditch Trail	0	4	4	3	4	4	4	4	3.4
Trails at JHEC	2	3	0	0	4	0	0	4	1.6
Woodcreek Park Trail	0	2	3	2	1	0	0	4	1.5
Zychlinski Park Trail	1	0	0	2	0	0	0	2	0.6
Composite Score	0.9	2.0	1.3	2.3	1.7	0.9	1.4	3.2	1.5

¹ Clear Creek Trail - West was not assessed and rated because it is currently under construction.

The three highest scoring trails with a level of service of very good are Independence Park Trail, Southdown Park Trail, and Zychlinski Park Trail. These trails have a LOS of very good because of high LOS scores for parking; trail amenities; and buildings, shelters, and pavilions (Table 5.28, *Level of Service Score by Trail, Low and High Scores*). Centennial Park and Pine Hollow Park Trails also have a LOS of good, owing to very good trail amenities and buildings, shelters, and pavilions. Other than the Independence Park Trail, which had poor signage, the five highest scoring trails also had a 0 or very good score for wayfinding and regulatory signage.

The trails that have the lowest LOS scores include Town Ditch Trail (3.4 LOS) and Cypress Village Park Trail (3.0 LOS). Corrigan-Woody Park and Mary's Creek Trails also are among the five lowest scoring trails, with a LOS of 2.9 and 2.5, respectively. The common elements of low scoring trails include lack of lighting and wayfinding signs; very few or lacking trail amenities; and very few or lacking pavilions or shelters along the trail. Low LOS scores for these trail characteristics imply diminished comfort, security, and ease of mobility for trail users.

For a majority of the trails assessed, the trail features for accessibility are either missing or in disrepair impacting the comfort and safety of trail users who have physical disabilities or are accompanying children in strollers. A lack of lighting is also a common feature across a majority of the trails impacting the perception of safety for trail users. Detailed level of service findings for each assessed trail are in Appendix F, *Pedestrian Level of Service*.

Table 5.28, Trail Conditions Assessment Score, Low and High Scores

	Average Composite Score
Highest Ranking Parks	
Independence Park Trail	0.5
Southdown Park Trail	0.6
Zychlinski Park Trail	0.6
Centennial Park Trail	1.0
Pine Hollow Park Trail	1.0
Lowest Ranking Parks	
South Gate Park Trail	2.1
Mary's Creek Trail (Central)	2.5
Corrigan-Woody Park Trail	2.9
Cypress Village Park Trail	3.0
Town Ditch Trail	3.4



Trail Amenities along Mary's Creek Trail (West)



Conditions-Based Assessment Summary:

- The conditions assessment for Pearland’s parks reveals that the community’s park system is in very good condition. The overall score for the parks system is 1.3, which indicates that parkland and facilities across the park system are in very good condition.
- The composite scores for neighborhood parks, at 1.7, is higher than community parks, which have a score of 1.0. An average score of 1.0 indicates that most anatomical components in community parks are in very good to good condition. In comparison, the anatomical components of neighborhood parks are in good to fair condition and may require more repair or maintenance in the future.
- The parks that have high assessment scores are newer and have had recent investments in maintenance and improvements; and are larger community parks that symbolize community-wide pride. The common element that scored high across the top five high-scoring parks are well maintained park amenities and facilities.
- The lowest scoring parks are neighborhood parks that have amenities, such as benches, grills and picnic tables, in disrepair; diminished accessibility due to missing crosswalks and sidewalks, uneven or broken pavements leading to unsafe conditions for the elderly or persons with special needs; and sidewalks or trails in poor condition requiring replacement or reconstruction.
- The pedestrian level of service analysis of 20 City-owned trails in Pearland reveals an average composite level of service score of 1.8, which means that the level of service provided by these trails is between good and fair.
- The trail characteristics with the highest level of service scores (ranging between very good and fair) are sidewalks and trails; buildings, shelters, and pavilions; and parking. The trail characteristics with poor level of service scores are lighting and accessibility.





Resource-Based Assessment

A community's parks system may be augmented through features in the city's landscape that have recreational and parkland value. These features may be natural, such as creeks, lakes and protected natural areas; or built, such as drainage channels and utility rights-of-way. Developed property such as school district property may also be considered assets to the community's parks system. The use of these resources for the community's parks system should be evaluated individually for each resource or asset based on its location and the opportunities it may provide without damaging environmentally sensitive features. There are key natural and built features in Pearland that may be adapted for parkland and recreational uses.



View from Hughes Ranch Road bridge of Clear Creek and surrounding open space.

Parkland Dedication Ordinance

Pearland's Parkland Dedication Ordinance establishes guidelines for subdivision developers to dedicate parkland in newly developed areas. Passed in 1999, this ordinance ensures that parkland and recreational facilities are provided in all upcoming residential developments, so that as the community grows it continues to maintain a high quality of life for residents without overburdening existing park facilities. The Parkland Dedication Ordinance also ensures that residential developers share the cost of providing new park facilities without burdening existing Pearland residents. In other words, Pearland's residential developers and new homeowners, who are responsible for creating the demand for new neighborhood park facilities, pay for the cost of the new parks.

Specifically, Pearland's Parkland Dedication Ordinance requires residential subdividers to dedicate suitable sites for park and recreation purposes at the time of platting or make a cash deposit to the City of Pearland in lieu of dedicated land. The site(s) of parkland are reviewed and approved by Pearland's Parks and Recreation Department in consultation with the Parks, Recreation, and Beautification Board members. If the residential subdivision does not have enough acreage to dedicate park sites that are large enough to be economically viable, or if an adequately sized community park exists in the area, then the City may elect to accept a fee as an alternative to the dedication of parkland. Fees in lieu of parkland dedication are set by the City Council and deposited in the Park Development Fund to be used for additional parkland or the development of parks and facilities by PARD.

Key Natural Features

Clear Creek Corridor

Clear Creek traverses through the northeastern and northwestern quadrants of Pearland. The Clear Creek corridor in the eastern section of the city extends from Pearland Parkway to the north to Dixie Farm Road to the south. The City of Pearland owns several acres of land in the Clear Creek corridor south of the Dixie Farm Road Park as well as along the creek near Scarsdale Boulevard, which may be developed to provide physical and visual access to the creek through trails or natural open space. Similarly, the City of Pearland-owned land at the north eastern edge of the city limits between Clear Creek and Pearland Parkway may be programmed as a natural area and a trail with connections to the University of Houston – Clear Lake Pearland Campus to the west and the trails near Hughes Road to the south (Map 5.6, *Key Natural and Built Features* on page 5.64).

The Clear Lake corridor in the northwestern quadrant of the city presents opportunities for passive recreation through hike and bike trails and access to open land at the Kirby Street intersection with Clear Creek. Publicly-owned property to the north of the creek may be programmed as natural open space with a connection to the trail system on the southern side of the creek.

Hickory Slough

Hickory Slough corridor is in the north central quadrant of Pearland. The slough flows west to east-northeast and ends where it intersects with Clear Creek just before Pearland Parkway. On its way to Clear Creek several residential subdivisions back on to the slough. It also flows through Houston Memorial Gardens and Paradise Cemetery and lines along the southern edge of Hickory Slough Sportsplex. It continues east-northeast in between more residential subdivisions and through South Park Cemetery before meeting Clear Creek. Hickory Slough may be suitable as a multi-modal trail that provides connectivity between existing trails along Clear Creek and Stonebridge neighborhood subdivision, and the BNSF rail line, as illustrated in Map 5.6 on page 5.64.

ADOPTED January 11, 2021

Tree Protection and Preservation Ordinance



Adopted in 2003, the Tree Protection and Preservation Ordinance contributes to the public health, welfare, and quality of life of Pearland's residents by maintaining the urban forest cover in the city. This ordinance ensures the preservation or replacement of existing trees by mitigating tree damage to existing trees on newly developed or redeveloped real properties. Property owners are required to replace on-site and off-site trees that are removed by planting new trees or depositing fees in lieu of in the Tree Trust Fund.

The Tree Protection and Preservation Ordinance also encourages a site design and planning process that furthers tree preservation during construction and controls the unnecessary removal of trees. The process includes a survey of existing trees; acquiring a permit for the clearing of existing trees and growth of new trees; and a review and authorization by the City of Pearland's Urban Forester. Any tree in the front or on the side of the building site, or in the right-of-way area is considered protected and must be replaced, if removed. The replacement requirements include replanting trees with a diameter that equals 200 percent of the total diameter inches of trees that will be removed. In the case that replacement trees of the specific number and size requirements cannot be planted on the site, then the property owner must plant the replacement trees off-site or pay fees to the Tree Trust Fund. The fee is \$200 per replacement inch. In 2019, the ordinance was revised to include, "replacement inch credits" for property owners who plant trees now but may remove protected trees from the property at any time in the future.



Mary's Creek Corridor

Mary's Creek corridor passes through the south-eastern quadrant of Pearland and is a prominent feature in Independence and Centennial Parks and the Dolores Fenwick Nature Center. Publicly owned land adjacent to the creek to the east and west of Centennial Park presents opportunities for trail or natural open space development with connections to the Centennial Park trail and the nature center.

Cowart Creek Corridor

Cowart Creek runs through the southern area of Pearland to the north of Bailey Avenue and west of State Highway 35. While most of the Cowart Creek corridor consists of developed commercial and residential land, a segment at the northwestern corner of the Pearland Parkway and Dixie Farm Road intersection owned by the City of Pearland may be programmed for recreational use by way of walking trails and picnic areas.

Key Built Features

Drainage Channels and Detention Facilities

Because of their linear corridors and open space, drainageways or drainage channels can enhance connectivity between existing trails, parks, and neighborhood destinations, where feasible. A north-south drainageway (owned by the City of Pearland)

in central Pearland extending between Broadway Street and the Dolores Fenwick Nature Center may be suitable for developing a multi-purpose, shared use trail establishing connectivity between destinations on Broadway Street and the Nature Center for pedestrians and bicyclists.

The storm detention facilities in Pearland include two detention ponds to the west of Dolores Fenwick Nature Center. The area around the ponds presents an opportunity for trail and open space development with trail connections to nearby park destinations, such as the Cypress Village Park to its immediate east and the Nature Center further east on Magnolia Parkway.

School District Property

Fields, playgrounds, and parkland on school property are valuable public assets that can be harnessed by to serve the recreational needs of the community. There are six independent school districts running over 60 schools with recreational and sports facilities within the city limits of Pearland. These school properties can be leveraged to increase the community's access to recreational and sports facilities in their neighborhoods through an interlocal agreement between the independent school districts and the City of Pearland.

County Parks

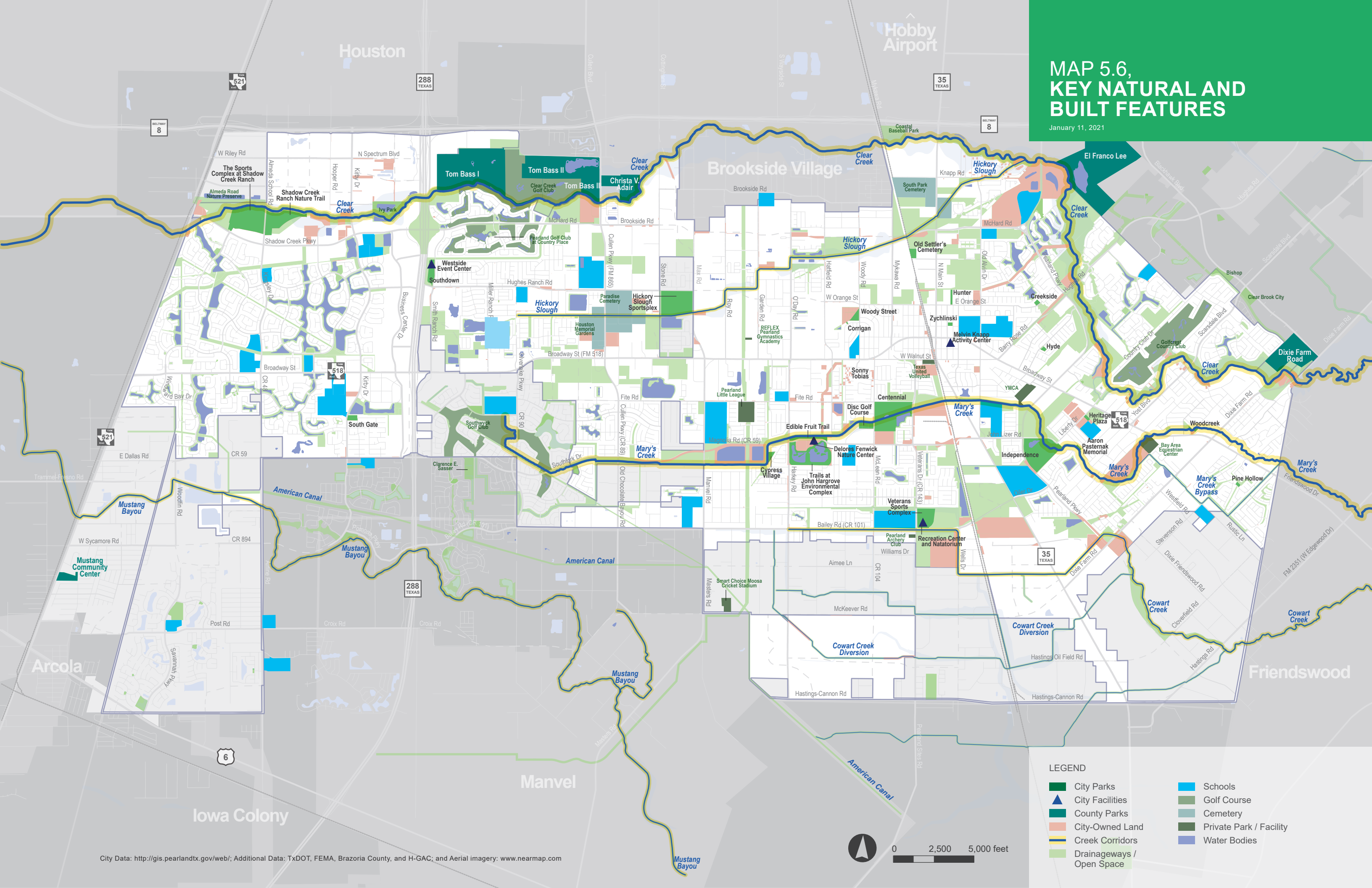
County parks offer parkland and recreational facilities that augment a community's park system and increase the overall park service area. The Harris County-owned Tom Bass Parks, Christia V. Adair Park, El Franco Lee Park, and Dixie Farm Road Park at the northern, eastern, and southern periphery of Pearland offer passive and active recreational facilities as well as green open space to Pearland residents. In addition, Mustang Community Center (in Fort Bend County) is in the southwestern corner of Pearland's extra territorial jurisdiction. Multi-modal trail connections between these county parks and nearby City of Pearland trail facilities and neighborhoods can increase the park service area and accessibility.



Dawson High School and facilities, Pearland ISD

MAP 5.6, KEY NATURAL AND BUILT FEATURES

January 11, 2021



LEGEND

■ City Parks	■ Schools
▲ City Facilities	■ Golf Course
■ County Parks	■ Cemetery
■ City-Owned Land	■ Private Park / Facility
■ Creek Corridors	■ Water Bodies
■ Drainageways / Open Space	

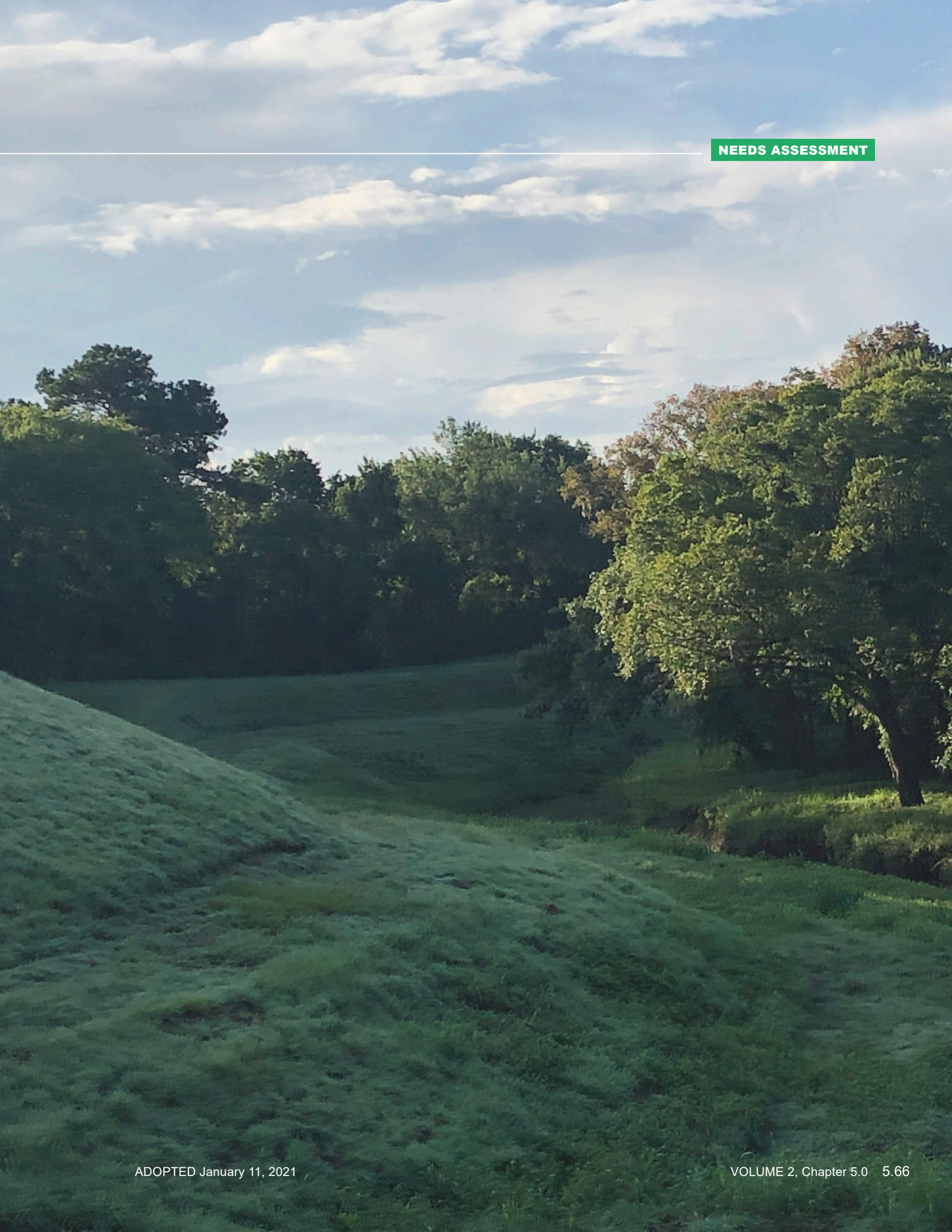


City Data: <http://gis.pearlandtx.gov/web/>; Additional Data: TxDOT, FEMA, Brazoria County, and H-GAC; and Aerial imagery: www.nearmap.com



Resource-Based Assessment Summary

- Corridors along Pearland’s streams and creeks can provide additional recreational and outdoor activities to Pearland’s communities through trail and open space development. Clear Creek corridor in the northeastern and northwestern quadrants of the city and Mary’s Creek corridor in the southeastern quadrant of Pearland present opportunities for the development of multi-use trails that can connect parks.
- Built resources such as drainage channels provide space for outdoor recreation in the northeastern and central areas of the city. Detention facilities along Pearland Parkway can be utilized to develop trail connections to nearby park destinations.
- School-owned park facilities are important publicly-owned resources that can augment Pearland’s park system and can help fulfill the community’s athletic field needs. There are 28 schools within the city limits that can be leveraged to increase the community’s access to recreational and sports facilities in their neighborhoods through an interlocal agreement between the independent school districts and the City of Pearland.



Conclusion

The needs assessments carried out in Chapter 5.0 have helped determine the adequacy of Pearland's parks, recreation and open space system and identified gaps in parks service areas, facilities, and recreational programming. This needs assessment has utilized five types of assessments – demand-based, standards-based, operations-based, condition-based, and resource-based – to describe the system's as well as the community's needs regarding the parks and open spaces in Pearland. The key points identified are as follows:

- While Pearland residents are satisfied with passive outdoor recreation facilities offered at the City-owned parks and the maintenance of park facilities, they would like to have more shade trees, nature trails and interconnected pathways between outdoor destinations, and swimming pools in the community parks. There is a desire for more pedestrian-friendly sidewalks and trails that improve connectivity between the City's parks and outdoor open spaces.
- Pearland's park system is bolstered by approximately 1,400 acres of private Subdivision parkland, primarily in the neighborhood parks category and including over 790 acres of trails and open spaces. This provides a substantial boost to the level of service acreage both for existing needs as well as the future needs of the community. The total acreage in the parks system is 1,972 acres, which translates to 16.7 acres of parkland for every 1,000 residents in Pearland. A current level of service of just under 17 acres is on par with the existing parkland acreage of Pearland's comparison and benchmark communities.
- For the City-owned and Subdivision neighborhood parks, there is surplus acreage of over 280 acres to exceed Pearland's current needs as well as the community's needs in 2040. However, with regard to community and regional parks, Pearland's current level of service acreage and future level of service acreage lag in comparison to the NRPA recommended standards. This signifies a need in the community for larger parks, such as community and regional parks, that offer more variety of sports and passive recreational facilities.
- The current and future level of service computation reveals that there is a deficit of sports courts, most recreational facilities, and indoor pools and spray pads in 2020 and 2040. In 2040, the community faces a deficit in all athletic field categories, with the highest need for youth baseball and adult softball fields. However, private facilities such as the Pearland Area Dad's Club and school facilities under the ownership of local ISDs are key resources that can partially fulfill community need for certain athletic facilities.
- The operations-based assessment reveals that the PARD's total operating budget has not varied by more than five percent over the past five years. The functions within the department that have had an increase in their allocated budgets include aquatics, athletics, senior programming, special events and park maintenance. In comparison with its benchmark communities, the City of Pearland spends more on managing one acre of parkland than the median amount spent by benchmark communities. However, Pearland spends a lower amount (\$53 per person) in delivering parks and recreational services to its residents than most of its comparison and benchmark communities. Furthermore, Pearland has the lowest number of parkland acres per staff with 1 staff for every 5 parkland acres.
- The park condition assessment reveals that Pearland's park system is in good condition. The overall score for the parks system is 1.3, which indicates a good condition of parkland and facilities across the park system.
- There are key natural resources such as Mary's Creek Corridor and Clear Creek Corridor that can provide additional recreational and outdoor activities to Pearland's neighborhoods through trail and open space development. Built resources such as detention ponds also provide an opportunity for outdoor recreation. Additionally, school-owned park facilities are important publicly-owned resources that can augment Pearland's park system and fulfill the community's athletic field needs.



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