



2.0 PEARLAND PARKS TOMORROW



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Introduction

To respond to community needs, and achieve verifiable results, this master plan proposes a set of goals, objectives, strategies and actions that address the needs identified in the needs assessment. Chapter 2.0, *Pearland Parks Tomorrow*, lays out the recommended actions that the City of Pearland can take to address the needs in its parks system, as described in Chapter 5.0, *Needs Assessment*. Each action is tied to specific goals, objectives, and strategies that will address the community's needs; as well as develop and improve parkland, recreation facilities and programs in Pearland. This master plan lays out five goals, 67 strategies, and over 200 recommended initiatives and actions.

GOAL 1 EQUITABLE DISTRIBUTION OF PARKS

A balanced distribution of parkland and facilities throughout the City that serve the recreational needs of a diverse community constituency.

Parkland, recreational facilities, open spaces and trails should be conveniently and safely accessible to all residents of Pearland and should be within a 10-minute walking distance from their home or place of work. In principal, no one should have to drive to a park, trail, or recreational facility in the city. The analysis of the park service areas in Pearland (Chapter 5.0, *Needs Assessment*, page 5.21) illustrates that while most residential neighborhoods in Pearland are within one half-mile walkshed of a home owners association (HOA) administered or City-owned park, there are areas in south central Pearland which do not enjoy this convenience. Furthermore, as Pearland's diverse constituency grows and evolves, there may be heightened need for publicly-accessible parkland and open spaces that are not restricted by private ownership (e.g., HOA park or recreational facility). As a CAPRA-accredited agency, the City of Pearland Parks and Recreation Department (PARD) should strive to meet and exceed the current acreage level of service for neighborhood and community parks to ensure that all areas of the Pearland are within a 10-minute walking distance to park, trail, and/or recreational facility.



OBJECTIVE 1.1: Assure an even geographic distribution of parks and recreation facilities to provide equitable access and opportunity for all of Pearland's residents.

As described in the results of the demand-based assessment in Chapter 5.0, *Needs Assessment*, Pearland residents desire spaces for recreation close to their homes. The results of the community needs survey revealed that one of the top reasons for residents not utilizing City parks was that they were "too far away." A balanced and diverse distribution of parks and recreational facilities throughout Pearland will help serve the needs of all Pearland residents.

Figure 2.1, *Parkland Distribution*, on page 2.3 is a composite map, derived from combining Map 5.3, *Neighborhood Parkland Service Area* and Map 5.4, *Community Parkland Service Area* in Chapter 5.0. This map illustrates the distribution and degree of accessibility of parks, special use facilities, and open space areas within the City and ETJ. The area shaded in light red is area outside of parks' walkshed.

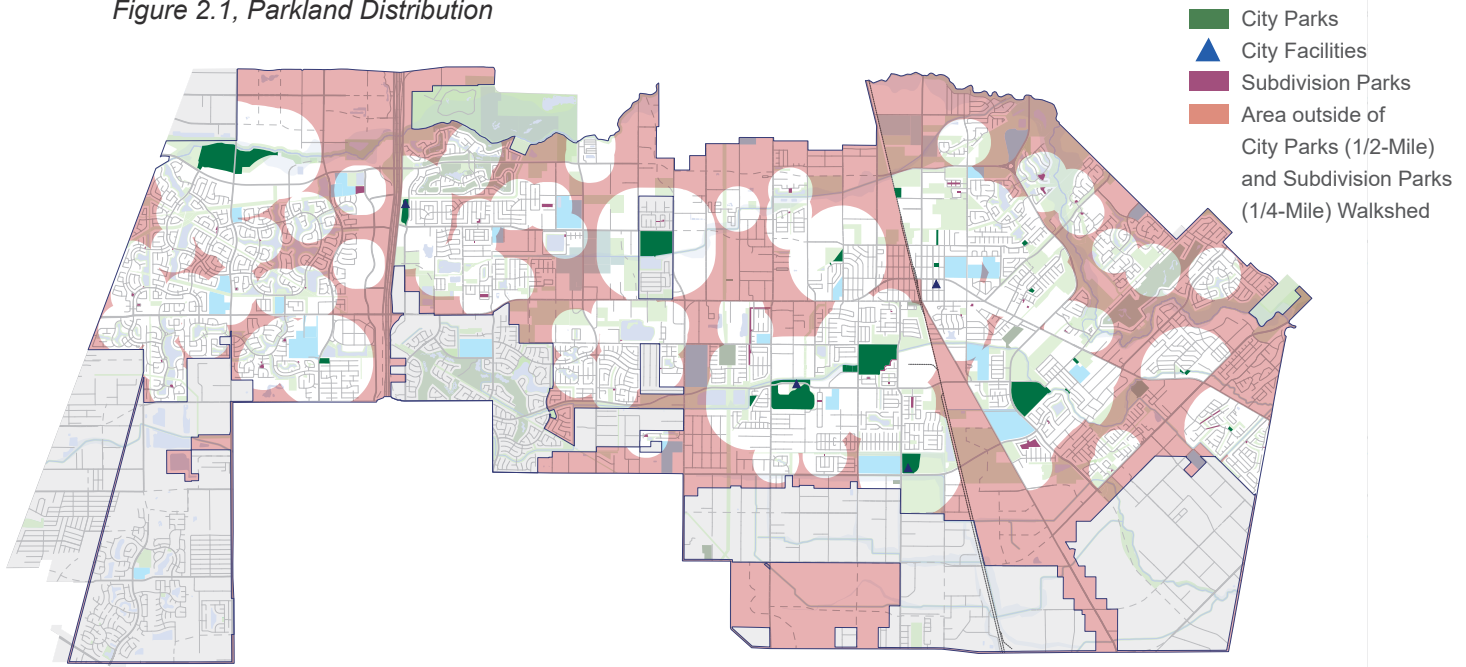
STRATEGY 1.1.1: Examine walking access to parks from each neighborhood and subdivision within the city.

Barriers to park access include heavily-trafficked thoroughfares that lack sidewalks or safe pedestrian crossing. Attendees of the open house at the Delores Fenwick Nature Center on July 9, 2019 mentioned Pearland Parkway and Kirby Drive, as examples of busy streets which lacked sidewalks and impeded pedestrian access to parks and neighborhood amenities.

A lack of universal design features also impedes access to parks and trails for persons with disabilities. Examining walking access to City-owned parks from surrounding neighborhoods will help establish the need for constructing appropriately designed or universally accessible sidewalks, trails, and park features that ensure equitable access for all residents in Pearland, including those with a wide range of needs or disabilities. Walking access



Figure 2.1, Parkland Distribution



to a park from surrounding neighborhoods is also important to ensure equitable access to park facilities for low-income families who may not be able to conveniently access transit or personal vehicles for regular visits to parks and recreational facilities. By examining walking access to parks from each neighborhood and subdivision within Pearland, the City’s Parks and Recreation Department (PARD) can undertake remedial renovation and construction of sidewalks to ensure that all parks are accessible and connected to their adjacent neighborhoods and other areas of the city.

STRATEGY 1.1.2: *Formulate a long-range parkland acquisition program.*

The level of service analysis in Chapter 5.0, *Needs Assessment*, illustrates the need for additional pocket, neighborhood, and community park acreage to accommodate the future needs of the community. Developing a long-range parkland acquisition program will help determine the tracts or parcels of undeveloped land which may be acquired by the City of Pearland for open space, trail, and parkland development. This will help address park acreage needs in advance of new development and reduce

the need to retrofit a park – typically a costly and difficult undertaking - into an already developed area.

INITIATIVES AND ACTIONS

1. Collaborate with Fort Bend, Harris, and Brazoria County Appraisal Districts to identify undeveloped parcels in underserved areas, which may be for sale.
2. Work with the City’s Planning Department and the appraisal districts to identify undeveloped and available land in floodplains and wetlands that is large enough to accommodate environmentally appropriate recreational facilities, parkland or open space programming for a variety of park classifications.
3. Work with the Natural Resources Division to identify undeveloped parcels which contain unique / sensitive ecological resources worthy of conservation (refer to Strategy 4.1.4).

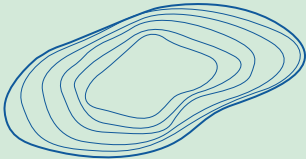
STRATEGY 1.1.3: *Prepare defensible criteria for the selection and acquisition of properties to serve as dedicated parkland.*

Refer to the sidebar on facing page related to *Parks and Facilities Selection Criteria*.

Parks and Facilities Site Selection Criteria

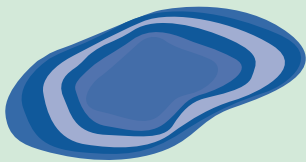
There are various factors which influence the siting of parks and recreation areas. Among the criteria that influence site selection are the surrounding land use characteristics (e.g., type and scale of development, lot size), the size and anticipated programmatic function and use of the proposed area, and the potential physical development constraints and barriers (e.g., arterial roadways and other streets, waterways, and drainage ditches). The general site selection criteria and principal considerations for park and recreation facilities include the following factors:

Topography



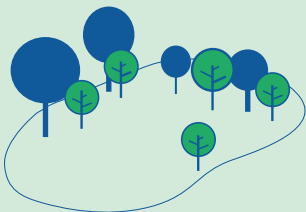
- The park should have a land surface configuration (topographic relief) to accommodate its intended uses, such as ball fields and open play areas. Some topography, even if created through cut and fill, is desirable to create visual interest and to offer additional opportunities for park uses such as mountain biking and hiking. There should be sufficient slope to allow for adequate storm water runoff from ball fields and other developed areas.
- Desirable views into and away from the site should be preserved and protected.

Soils



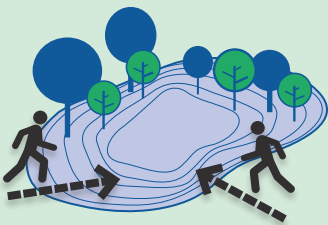
- The topsoil should be suitable for turf grasses and trees.
- The area should be protected from soil erosion during construction and designed to avoid erosion upon completion (e.g., through mulches, retaining walls).

Vegetation



- Natural or landscaped vegetation should include grass areas and trees using hardy, low maintenance species preferred for planted vegetation.
- Xeriscaping (a landscape practice which requires little or no irrigation) is preferred to minimize required irrigation and maintenance given the local climate.
- Irrigation systems should be provided for intensively used areas such as playing fields and landscaped areas.
- Significant individual specimens or unique wildlife habitats are desirable.
- Interpretive signage should be provided to identify species and varieties of natural vegetation and to educate the public.

Access and Location



- All parks should be readily accessible to their users and convenient for pedestrians, bicyclists, and motorists.
- Parks should be accessible from collector (secondary) streets rather than arterial (primary) roadways.
- Parks should be located adjacent to trails and greenways to provide linkages to neighborhoods and other areas of the community.
- Joint use of sites for public parks and school use is highly desirable to maximize the public benefit and to be efficient in the expenditure of public resources.

Site selection criteria is particularly important when the site is associated with the construction of new parks in or around new residential subdivisions. The dedication of land for new parks should conform to site selection criteria and not be relegated to so much left-over, undevelopable land; particularly if the Parks Department is to assume maintenance responsibilities for the new park.



STRATEGY 1.1.4: *Develop a community-based program through which homeowners associations and neighborhood groups can work with the City's Parks Department to develop pocket parks.*

The National Recreation and Parks Association's (NRPA) recommended level of service (LOS) standard for pocket parks is one-half acre per 1,000 persons. As indicated within Table 5.5, *Current and Future Acreage* in Chapter 5.0 and diagrammed in Figure 2.2, there is currently 53.5 acres of pocket parks within the City; all of which are operated and maintained by private entities (i.e., homeowners associations, MUD Boards, etc.). To meet the NRPA's LOS standard for the City's current population would require 56.8 acres of pocket parklands; meaning that there would be a current deficit of 3.3 acres; which is commendable. However, when applying the NRPA LOS standard to Pearland's projected 2040 population of approximately 167,000 persons, the City should be providing 83.5 acres of pocket parklands, which then equates to an accrued deficit of 30 acres of parkland over the next 20 years.

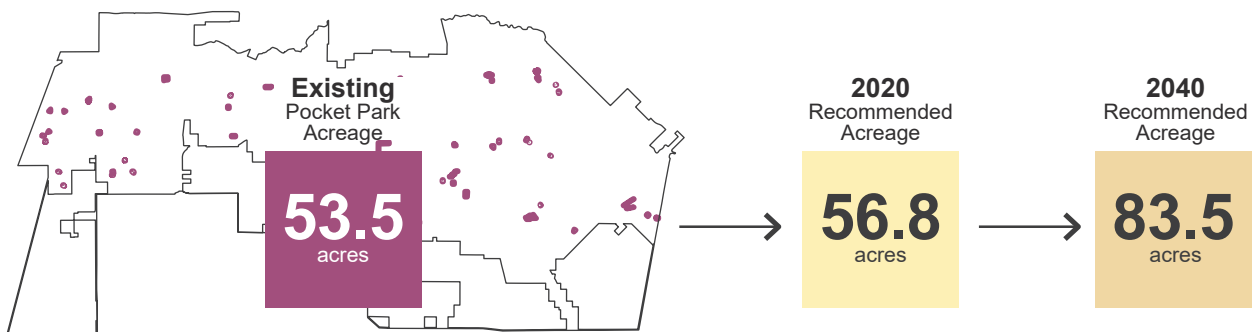
With the advent of the Covid-19 pandemic and the increase in people working from home, there has never been a time when being able to walk to a place outside, to relax and de-stress, maybe over lunch, has been more important. Pocket parks provide this critical need. According to the NRPA, successful pocket parks have four key qualities: 1)

they are accessible; 2) they allow people to engage in activities; 3) are comfortable spaces and have a good image; and finally, 4) are sociable places: providing a place where people can meet each other, while observing social distancing requirements. The NRPA has summarized a series of important considerations when developing pocket parks in neighborhoods and commercial districts.²

INITIATIVES AND ACTIONS

1. **Secure the community's commitment.** The more inclusive the decision-making, the more successful the park will be. Start talking to as many neighbors as possible and secure their help throughout the process. Consider neighborhood resources. Is there someone who is an expert gardener, someone who knows what's going on at every block, or someone who may let you use their spigot for water? Seek these people out and get them involved.
2. **Convene a steering committee.** Local leadership will be required for the project. One of the best ways to accomplish this is to create a committee with divided responsibilities in terms of planning and working on the project.
3. **Choose a site.** Work with the City's Public Works Department, and utility providers, such as Reliant Energy or Centerpoint Energy, and drainage providers, such as Brazoria Drainage District #4, and other public entities to identify small parcels, easements and rights-of-way which may be pro-

Figure 2.2, *Pocket Parks Current and Future Acreage*¹



¹ Refer to Table 5.5, *Current and Future Acreage* in Chapter 5.0, *Needs Assessment*.

² NRPA Issue Brief. Creating Mini-Parks for Increased Physical Activity. <https://www.nrpa.org/contentassets/f768428a39aa4035ae55b2aaff372617/pocket-parks.pdf>

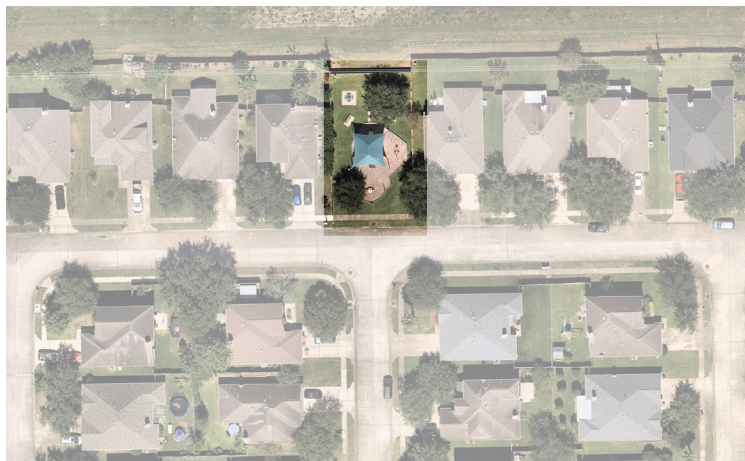
grammed to serve or support public open space and may function, in part, as a small neighborhood park. Think about how the site will be used. What kinds of improvements are needed? Keep in mind how much the neighborhood can realistically take on to address issues such as the creation and maintenance of the plan and make sure the space suits all expectations.

4. **Plan.** Develop a site plan, potentially with the help of a landscape architect. Begin to strategize how the landscaping will be installed, how it will be funded, and how the neighborhood will maintain it in the long run.
5. **Identify and secure potential partners.** Partners should be local businesses, nonprofits and other organizations available in the city. Identify the roles of each partner and secure a written understanding if possible.
6. **Secure long-term and short-term funding.** Begin to look at various resources for funding in the form of grants, in-kind materials and money from businesses. Consider corporate sponsorships and be sure to think long-term about funding and saving money for maintenance and repairs in the future or to cover other necessary items including liability insurance coverage (refer to Appendix H, *Funding for Implementation*).
7. **Schedule work days in advance.** Assign a project manager and plan out what activities need to occur in what order. Can everything be done in one day, or will it take multiple work days?
8. **Plan a big work day/dedication/celebration event.** This is a very important part of the process to the neighborhood and to the partners. This is a chance to possibly garner media attention, as well as involve as many people as possible.
9. **Implement a maintenance plan.** Before any plants go in the ground, the neighborhood should agree to a maintenance plan and document it in writing.
10. **Pursue consistent engagement.** Just as maintenance is a never-ending job, so is everything else involved. On-going communication with the neighborhood especially should keep them interested and involved in your project.

Pocket Parks in Pearland



Avalon Terrace (North) Subdivision Pocket Park. Image source: Nearmap.



Park Village Estates Subdivision Pocket Park. Image source: Nearmap.



Creek Bend Subdivision Pocket Park.



STRATEGY 1.1.5: Partner with local Independent School Districts for the use of school recreational facilities after school hours.

Pearland can significantly increase the number of neighborhood parks and sports facilities available to the community by partnering with local Independent School Districts (ISD) through joint use agreements. A joint use agreement between the City of Pearland and independent school districts will increase the number of active and passive recreational facilities available to residents within their neighborhoods. Refer to *Joint Use Agreement* sidebar for additional information.

The Robert Wood Johnson Foundation provides resources to help develop and implement joint use agreements, including model agreements, as well as an overview of liability risks in all 50 states and a checklist for creating an agreement.¹

INITIATIVES AND ACTIONS

1. Pearland’s Parks and Recreation Department should approach the Pearland, Alvin, Fort Bend, Houston, Pasadena, and Clear Creek ISDs to discuss potential opportunities for joint use of school facilities through formal agreements within the City limits and the ETJ.
2. Continuously explore ways with which to fund the development, maintenance, and operation of park facilities through community involvement, which can consist of grants, fundraising, development charges, and cost-sharing agreements with third parties.
3. Consider partnering with the local ISDs to apply for funding through Every Child Outdoors ([www.http://everychildoutdoors.org/](http://everychildoutdoors.org/)) for an Environmental Education grant. Research from Lawrence Hall of Science at University of California, Berkeley shows that on average, elementary school students receive less than 60 minutes of science instruction per week. ECO grantees participate in 14 hours of interactive science instruction, which equates to 14 weeks of science.

¹ Refer to: <https://www.rwjf.org/en/library/research/2012/02/joint-use-agreements-creating-opportunities-for-physical-activit.html>

Joint Use Agreement



A joint use agreement is a formal agreement that sets the terms and conditions for shared use of public property or facilities between two separate government entities, such as a public school and a city or county. With such an agreement, city governments can increase its residents access to parks and recreation by opening school playgrounds and facilities to the public when schools are not in session.

As described in Chapter 4.0, *Pearland Parks Today*, Pearland is composed of several Independent school districts (ISD). In total, ISD campuses in Pearland cover approximately 968 acres of land. Joint use agreements between the City and the school districts will help align resources for ISD and the City of Pearland’s Parks and Recreation Department to meet the needs of the community and facilitate cost-sharing for maintenance or purchase of recreational facilities. This will be particularly beneficial for neighborhoods that are under-served by the City but have school playgrounds and recreation facilities. As a result of an interlocal agreement, residents will be able to access recreational facilities such as playgrounds, basketball courts, running tracks, and walking trails on school property when schools are not in session, such as after school hours on weekdays, on weekends and on holidays. Community organizations will also gain access to fields and gymnasias to practice and compete.

A joint use agreement between Pearland’s ISDs and the City’s Parks and Recreation Department should:

- clearly identify eligible facilities which may be used for recreational purposes;
- provide guidelines for operation;
- clearly defines eligible users and the time where facilities are available; and
- specify any liability and repair responsibilities for eligible users.

4. Continue discussion with Alvin ISD to partner and utilize the Natatorium at Shadow Creek Ranch High School to offer swimming lessons in the evenings.

STRATEGY 1.1.6: Increase the amount of open, forested areas in Pearland by acquiring forested parcels and preserving existing city-owned parcels.

There are a few large, forested areas within Pearland that the City can work to preserve to increase the amount of publicly-accessible, forested area. First, there is undeveloped land adjacent to Mary's Creek. It is on either side of Pearland Parkway bounded by John Lizer Road to the south and by Mary's Creek to the east. The second area is on the other side of Mary's Creek. A large parcel owned by Pearland ISD stretches northeast to FM 518 Broadway Street. The third area, the City of Pearland already owns and is on the northern edge of Corrigan and Woody Parks. These parcels are among the few forested areas that remain in Pearland and they have advantageous locations; the first is in proximity to Mary's Creek and Independence Park, and the second is adjacent to Corrigan and Woody Street Parks. Both are in walking distance from several neighborhoods.

The acquisition and preservation of these parcels presents an opportunity for open space programming and to develop pedestrian trails, as described within Objective 2.2 Strategies and Actions. If developed as open space, the parcels will require minimal maintenance and can be managed by the Natural Resource Division as a natural amenity for nature programs, hiking, and wildlife viewing.





OBJECTIVE 1.2: Plan for the recreation and open space needs of a community with evolving demographic characteristics and interests.

Pearland's population is projected to increase steadily in the next two decades by over 53,000 people. It will be a diverse community with close to half of the population comprised of Hispanic, African-American, and Asian community members. As described on page 1.21 in the demographic analysis section in Chapter 1.0, *Introduction*, park access and use can vary by ethnicity and race. The types of physical activities that interest people may also vary by ethnicity and race. Programming parks and open spaces in Pearland and offering recreational programs and events should be in accordance to the diverse interests of residents and in line the city's evolving demographic characteristics.

STRATEGY 1.2.1: *Ensure that the programming of parks and open spaces meets the diverse ethnic needs of the community.*

Research on recreation, leisure, and physical activity has found variations by race and ethnicity in park-use patterns, recreation setting preference, and constraints to park use. One of the findings is that Latino community members perceive parks to have social, psychological, and cultural benefits, and not just venues for physical activity or sports.¹ Another study has found differences in the levels of physical activity of different race and ethnic groups in Los Angeles parks, whereby African-Americans and Latino community members were less likely to report being physically active or exercising in a park compared to White community members, even though there was no significant difference in frequency of park visits by these race-ethnic groups.²

¹ Stodolska M, Shinew KJ, Acevedo JC, & Izenstark D. (2011). Perceptions of Urban Parks as Havens and Contested Terrains by Mexican-Americans in Chicago Neighborhoods. *Leisure Science*. Volume 33, No. 2:103–126.

² Derose, K., et. al. (2015). Racial-Ethnic Variation in Park Use and Physical Activity in the City of Los Angeles. *Journal of Urban Health*. Volume 92, No. 6: 1011-1023.

Pearland's park programming should aim to create a welcoming, convenient, and safe environment in which community members of all races and ethnicities utilize park space in accordance to their needs. Programming should include open spaces and amenities for leisure activities and social interactions as well spaces for exercise and physical activity.

INITIATIVES AND ACTIONS

1. Develop means with which to monitor and quantify the use of parks and recreational facilities on an annual basis. Re-program parks as needed to ensure continued and enhanced active and passive recreation as well as leisure activities and social interactions for park patrons.
2. Continually monitor national trends and research findings regarding park use and identify best practices which may be applicable to Pearland's parks system.
3. Encourage coaches of sports leagues and clubs to receive input from participants, via a post-season survey, and provide feedback on successes and failures of the sports program.
4. Track sports league and club participant numbers to quantify increases or decreases in youth participation, on an annual basis.

STRATEGY 1.2.2: *Consider developing an additional disc golf course.*

Disc golf is a sporting activity that may be played at any age and by people at varying levels of fitness; and has been gaining popularity in the recent years. Pearland should consider developing a championship-caliber, 18-hole course that can provide economic benefit to the community by way of events and championships as well as health benefits to community members as a low impact, safe, inexpensive activity for all age groups. From a fiscal standpoint, the construction of an additional disc golf course is far less costly than constructing other championship-caliber sports facilities in Pearland, with cost per hole as low as \$1,000. The costs for

additional amenities and maintenance are also minimal. An additional disc golf course in Pearland offers community interaction, aesthetic appeal for surrounding neighborhoods, health benefits related to outdoor recreational activity, and a low-cost sporting activity for Pearland residents in various age groups and of different socio-economic backgrounds.

INITIATIVES AND ACTIONS

1. Evaluate large open space areas within City limits which can be acquired by the City and is suitable for the development of an 18-hole disc golf course.
2. Consider also whether a disc golf course could be retrofit into an existing community park or along one of Pearland's recreational trails.

STRATEGY 1.2.3: Consider developing an extreme sports park somewhere in central Pearland.

Several participants who attended the community open houses expressed interest in the City developing an extreme sports park. This further reflects

people's interest in a diverse range of individual and team sporting activities, including mountain biking trails, BMX race track, skate park, pump track, climbing wall facilities, paintball, zipline, ropes course, and muddy obstacle running races.

STRATEGY 1.2.4: Develop an Adventure Playground for Pearland's children.

Adventure playgrounds are unique play areas for children as there is no conventional play equipment. Adventure playgrounds offer flexible play spaces and play supplies, such as pieces of rope and wood, buckets for water, and sand pits. They provide an opportunity for self-directed and creative play. Adventure playgrounds may be incorporated within existing parks by reprogramming open space or may be constructed at an appropriate site acquired by the City.

INITIATIVES AND ACTIONS

1. Evaluate which park(s) may have enough open area to be reprogrammed as an adventure playground.

Disc Golf Course Design Elements

The Professional Disc Golf Association offers disc golf course design goals, course design assistance, and recommended course design elements.³

SPACE.

Space needed for a well balanced course that provides for different skill levels.

HOLE COUNT.

Number of holes in a disc golf course.

LENGTH.

Length of each hole in the disc golf course.

HOLE NOTES.

A disc golf hole flight path and type of throw.

TEES.

Surface type, size, and color of tee pads.

TARGETS.

Type of target, required dimensions, and how to install.

SIGNS.

Rules, directions, out-of-bounds, hole number, and hole description.

PAR.

Standards on setting par for each hole.

LAYOUT.

Proper organization and layout of fairways.

ADA COMPLIANCE.

Efforts to provide and opportunity for those with disabilities to play.



³ Professional Disc Golf Association. Disc Golf Course Design and Development. <https://www.pdga.com/course-development>

Adventure Playgrounds¹

Unlike traditional playgrounds, adventure playgrounds are designed to be free form so that children can have freedom and self-direction over the way that they play. Adventure Playgrounds are premised on the principle of playwork, which has roots in the United Kingdom. Playwork involves removing barriers to play and creating flexible play environments which are controllable by the children. Adventure parks don't have playground equipment designed by adults for prescribed play, such as swings, see-saws and merry-go-rounds. Instead they have loose parts, structures, tools, and supplies that have no pre-determined purpose.

A typical adventure playground has a sand pit, water hoses, ropes, and loose parts. The children in the playground decide how to play with these parts and can ask for other supplies, as needed. Their play involves building things from loose parts or creating forms from sand, water and other natural elements. The purpose of free form play through playwork is to encourage self-direction, creativity, and learning through experience.

An important component of adventure playgrounds are playworkers, who may be parents or designated playground staff. They help facilitate the play but do not direct it. They also monitor the playground environment to ensure an adequate supply of differentiated supplies, and remove objects that are hazardous, for example, a nail protruding from a piece of wood that is not easily visible to the playing children.

Houston has one of only six adventure playgrounds in the country at the Parish School in the Spring Branch neighborhood. The Parish School adventure playground helped children synthesize and personalize information from changes in their world after Hurricane Harvey in 2017. According to a playworker at the playground, the most popular area of the playground was the sandpit, where, after the hurricane, children created a giant lake and experimented with building channels, flood gates and reservoirs synthesizing information from their world into play through experience.



Image Sources: On Adventure Playgrounds and Multi-Use Destinations, Project for Public Spaces. <https://www.pps.org/article/on-adventure-playgrounds-multi-use-destinations>

The St. Kilda Adventure Playground just outside of Melbourne, Australia / Photo: Fernando de Sousa via Flickr

¹ Zinn, J. (February 12, 2019). Adventure Playgrounds Put Kids in Charge of How They Play and Create. Retrieved from <https://www.houstonpublicmedia.org>

STRATEGY 1.2.5: *Develop an Adventure Park recreational program and associated facilities for families, youth, and adults.*

As described within Strategy 1.2.4, and identified within the Community Needs Survey, Pearland residents are most interested in developing outdoor adventure programs and facilities within the City of Pearland. Adventure parks, such as the Texas TreeVentures in The Woodlands, attract a variety of visitors, including families, adventure-seeking adults, and employees of corporations partaking in team-building exercises at the park.

INITIATIVES AND ACTIONS

1. Evaluate which park(s) may have enough area and supporting facilities (i.e., parking, restrooms) to include an adventure park.
2. Develop an adventure park ropes and orienteering program and facilities.

STRATEGY 1.2.6: *Consider developing an indoor amateur sports facility in Pearland.*

As outlined in the Pearland Economic Development Corporation's (PEDC) June 10, 2019 presentation to City Council, the PEDC analyzed the market feasibility of a 170,000 square foot Indoor Amateur Sports Facility, the program of which would be based on a hybrid approach consisting of a local programming business model (to serve the sports and recreation interests of local residents) combined with a sports tourism operating model (aimed at attracting out-of-town teams, players, and spectators and associated revenue generation from indirect spending). As outlined within the PEDC's *Indoor Amateur Sports Facility Project Information Overview* (refer to Appendix G), the development program for the Indoor Amateur Sports Facility would include:

- six (6) full-size indoor high school basketball courts
- 12 full-size hardwood volleyball courts
- one (1) 200 ft x 200 ft indoor turf field, which would include two 200 ft x 100 ft multi-purpose fields, six batting cages and pitching tunnels

Adventure Parks

Offering a variety of outdoor adventure activities, adventure parks are increasingly gaining popularity around the country. The activities offered include hiking, rope climbing, bouldering, rock climbing, zip-lining, and traversing obstacle courses. Adventure parks are premised on the idea that outdoor activities provide recreation through mental and physical challenges as well as the social interaction provided by teamwork.

Adventure parks can be of varying sizes and can be designed to cater to a high volume of visitors. Almost all adventure parks include climbs and aerial traversing through zip lines or rope courses. Some parks also offer bungee jumping, wall climbing, and even sightseeing trams. Increasingly, adventure parks are catering to families and young children by incorporating traditional recreation into adventure activities. The Jackson Hole Grand Adventure Park offers bike parks, disc golf, and spray grounds alongside adventure activities. The Adventure Park at Nashville offers nighttime rope climbing in tree canopies with light shows and music.

An optimum location for developing an adventure park would be close to high-density urban area or tourist destination, such as a resort or amusement park. In Europe, ski-resorts also serve as adventure parks in the summer. There are over 200 aerial adventure parks in the United States. Some have utilized revenue-sharing agreements with schools and nonprofits to lease vacant land and create longer zip line circuits.



Image Source: Texas TreeVentures, Aerial Adventure Course in the The Woodlands, Texas, texasreeventures.com.



- one (1) indoor play climb family adventure area; and
- one (1) sports performance tenant space for sport-specific training.

While the likely design, construction, and start-up costs are projected to be around \$36 million, the economic impact of the proposed Indoor Amateur Sports Facility Project would exceed \$57 million within 10 years, and \$91 million within 15 years (cumulative new direct spending).

INITIATIVES AND ACTIONS

1. Preserve the multi-use fields around the Pearland Recreational Center and Natatorium until a site has been selected for the proposed Indoor Amateur Sports Facility.

STRATEGY 1.2.7: *Where appropriate, retrofit existing parks with additional outdoor sand volleyball courts.*

Demand was expressed during listening sessions and public open houses for new types of amenities within parks that would appeal to intergenerational users. Several survey respondents noted the lack of “things to do” within Pearland’s parks. There were several comments regarding the amenities available in Stevenson Park in Friendswood, specifically sand volley-ball courts, and how Pearland residents travel to Friendswood to play volleyball there. Installing outdoor sand volleyball courts would be an inexpensive way to provide additional programmatic activities for groups of people in parks.

STRATEGY 1.2.8: *Expand operating hours of park facilities and provide more flexibility in recreational programs.*

Increasingly, it seems people suffer from a lack of free time. This represents a significant barrier to participation in structured recreation and cultural activities for both youth and adults. As a result, parks and recreation departments across the

country are adjusting their schedules and providing longer operating hours and flexibility in scheduling recreation programs in order to accommodate people’s busy schedules.

INITIATIVES AND ACTIONS

1. Consider extending, or providing enhanced flexibility in the operating hours of the Delores Fenwick Nature Center, Knapp Activity Center, and the Recreation Center and Natatorium. This may require additional staffing. Approach Shadow Creek Ranch about providing flexibility in the hours of operation of its recreational facilities.
2. Continue to consider additional recreational and fitness programs and activities for both youth and adults which would be held in the evenings and would be short in duration, and may appeal to those looking for after-work recreational opportunities.

STRATEGY 1.2.9: *Develop a network of Wi-Fi hotspots within Pearland’s community neighborhood parks.*

To increase public use of Pearland’s parks by those who are interested in more passive recreational activities and may want to just get away from the house and sit in a park while doing some work online, investigate the feasibility of providing Internet access within community and neighborhood parks.

INITIATIVES AND ACTIONS

1. To determine feasibility, identify and research case studies of cities that have implemented Wi-Fi hotspots in parks.
2. Identify a viable demonstration park, such as Independence Park, within which to test the Wi-Fi concept.
3. Monitor demonstration park to determine degree of additional use.

OBJECTIVE 1.3: Ensure that Pearland’s parks and open space areas are designed and maintained to be safe and inclusive social gathering places within the community.

Results from the community survey detailed in Chapter 5.0, *Needs Assessment*, indicate that Pearland residents value family-oriented outdoor recreation activities and rank them among the most preferred recreational activities. PARD should ensure that the City’s parks and open spaces are designed and maintained to be safe and inclusive spaces which can be programmed to provide opportunities for social gatherings and outdoor recreational activities.

STRATEGY 1.3.1: Continue to periodically monitor and quantify park and recreational facility use.

As discussed in Strategy 1.2.8, national trends can dictate how local parks and recreational facilities are used, or not used, as the case may be. The significant increase in the use of park land and trails during the Covid-19 pandemic is a good example. Parks and the neighborhoods they are within, are very dynamic and ever-changing environments. As children grow-up their social and recreational interests change and evolve. From playing with friends on a play structure to participating on a team in pursuit of a touchdown to sitting on a park bench feeding the birds, one’s activities in a park change with the seasons of one’s life. During one period a neighborhood may be teaming with children, racing

up and down the street on bicycles. A few years later all of the children will have grown-up and moved-on, to go college or start a family of their own; leaving the neighborhood devoid of children; often for several years at a time. During this time, the park’s play structure may remain unused, often for a generation.

INITIATIVES AND ACTIONS

1. Develop means through which to periodically monitor and quantify the visitation and use of parks and recreational facilities. Re-program parks as needed to ensure continued and enhanced active and passive recreation.
2. Continually monitor national trends (refer to sidebar below) regarding park use and identify best practices which may be applicable to Pearland’s parks program.
3. Beyond programming and maintaining recreational facilities and equipment for children and adolescents engaged in organized, team-oriented, active recreational sporting events (e.g., baseball and football), consider passive recreational enhancements for other demographic sectors of the community, including young people not involved in team sports, and senior citizens.
4. Encourage coaches of sports leagues and clubs to receive input from participants, via a post-season survey, and provide feedback on successes and failures of the sports program.

Relevant Trends in Parks and Recreation

Trends change and recycle themselves over years. Through a parks master plan, a community can respond to community needs and changing trends by protecting and improving existing parkland and facilities and improving quality-of-life aspects of the system and the amenities offered.

Climate Change Impacts	Focus on Neighborhood Parks	Parks for People of All Ages and Abilities	Mobile Connectivity	Focus on Health	Recreation Centers as Community Wellness Hubs	Trail Systems
Youth Sports Complexes	Video Surveillance	Drones in Parks	E-Sport Coaches in Recreation Centers	Sponsorship for Parks and Recreational Facilities	Think Small	Popular Team Sports

Source: The National Recreation and Park Association (NRPA) releases an article on the top trends in parks and recreation each January for that upcoming year: <https://www.nrpa.org/parks-recreation-magazine/2020/january/top-trends-in-parks-and-recreation-2020/>.



5. Track sports league and club participant numbers to be able to quantify increases or decreases in youth participation, on an annual basis.

STRATEGY 1.3.2: *Ensure that the City's parks provide age-friendly recreational facilities and opportunities for all cohorts.*

Park facilities and amenities should serve the needs of all members of the Pearland community, including young children, youth, teens, adults, and seniors. While almost all neighborhood and community parks in the city offer sports facilities and amenities for children and youth, there are few facilities aimed at providing fitness and active recreational facilities for adults and seniors. Pearland parks should offer a healthy blend of active and passive opportunities for people of all age groups, young and old alike. Design and programming of park facilities and open spaces should ensure a sense of security and feeling of being within a park space while avoiding the creation of visual barriers into the park space. Access to single and multiple seating should be convenient and, where possible, seating should be movable. Signage should be conveniently located at all park entrances and should be easy to read and understand.

INITIATIVES AND ACTIONS

1. Review park facilities and amenities inventory to determine gaps in facilities for children, youth, adults, and seniors in all neighborhood and community parks.
2. Evaluate open space and facility programming in all neighborhood and community parks to offer greater choice for passive and active recreation for seniors.
3. Survey all parks to identify any accessibility issues for seniors or persons with disabilities, such as Americans with Disabilities Act (ADA) compliance, uneven surfaces, spaces between paved and unpaved areas, and lack of convenient seating.

4. Consider adding outdoor fitness equipment for seniors in neighborhood parks.

STRATEGY 1.3.3: *Ensure that parks are designed to optimize requirements for health and safety related to epidemics or other events which may require physical distancing.*

As more residents rely on parks and outdoor space for recreation in a post-pandemic world, the City of Pearland should ensure that all City-owned parks are reprogrammed, as necessary, to provide safe social interaction in City parks. Among other health and safety considerations, this includes making sure park visitors can abide by, and maintain social distancing regulations (i.e., six feet for Covid-19). In addition to following local health officials' guidelines on opening playgrounds, sports fields, and sports courts; disinfecting surfaces in restrooms and indoor facilities; and routine cleaning of outdoor play equipment; the City of Pearland should ensure that all parks, trails, and outdoor spaces allow social interaction while adhering to social distancing requirements. Refer to sidebar on Social Distancing Best Practices on page 4.16.

INITIATIVES AND ACTIONS

1. Monitor all open spaces in parks, including picnic areas, where people are likely to gather, and post signs discouraging groups from gathering in large numbers.
2. Consider displaying posters and signs throughout the parks and along trails to remind visitors of steps they can take to remain safe. This will help promote everyday preventive actions.
3. Install physical guides to ensure that people remain at least six feet apart while in the park. According to the Center for Disease Control (CDC), appropriate physical guides include markings on the ground, colored tape, or signs to indicate safe distances.

Social Distancing Best Practices

The Covid-19 Pandemic has impacted the way people utilize outdoor spaces and parks for social interaction and recreational activities. As park usage increases due to restrictions on indoor recreation, communities are adopting new practices for socially distanced and safe use of park facilities. These include closing some facilities, such as playgrounds, and modifying spaces through new signage and markings.

While drafting social distancing guidelines, parks departments should ensure that the guidelines are adaptable to various recreational facilities depending on the varying levels of caution required to maintain a safe environment and participation at sports fields, sports courts, and swimming pools. Parks departments should also consider increasing park hours to alleviate overcrowding and offer park patrons the opportunity to access the park during off-peak time.

To achieve compliance of new guidelines, parks departments should actively communicate social distancing practices and expectations with community residents utilizing announcements through postal mail and digital media. Digital media includes the city's social media accounts, city and department websites, and email to sports associations and leagues, members of recreational programs and centers, and city staff.

Based on guidance from the Centers for Disease Control and Prevention (CDC) and public health officials, practices to encourage physical distancing among park patrons should include the following:

- Create markings and fencing by utilizing cones, tape and metal barriers to:
 - Encourage visitors to keep a six-foot distance from other park visitors;
 - Ensure physical separation or distance between visitors walking on park trails;
 - Avoid visitors gathering in large groups at trailheads, park entrances, bathrooms, or other park facilities;
- Have effective signage that is located at all parks and trails entrances, park facilities, and other high volume areas to:
 - Encourage visitors to stay in small groups of no more than six people;
 - Recommend visitors to wear a face covering when maintaining a six-foot physical distance is not feasible;
 - Inform visitors to stay at home if they are exhibiting symptoms related to Covid-19, such as a fever, cold, or flu-like symptoms;
 - Encourage visitors to sanitize hands before and after use of playground or sports equipment.

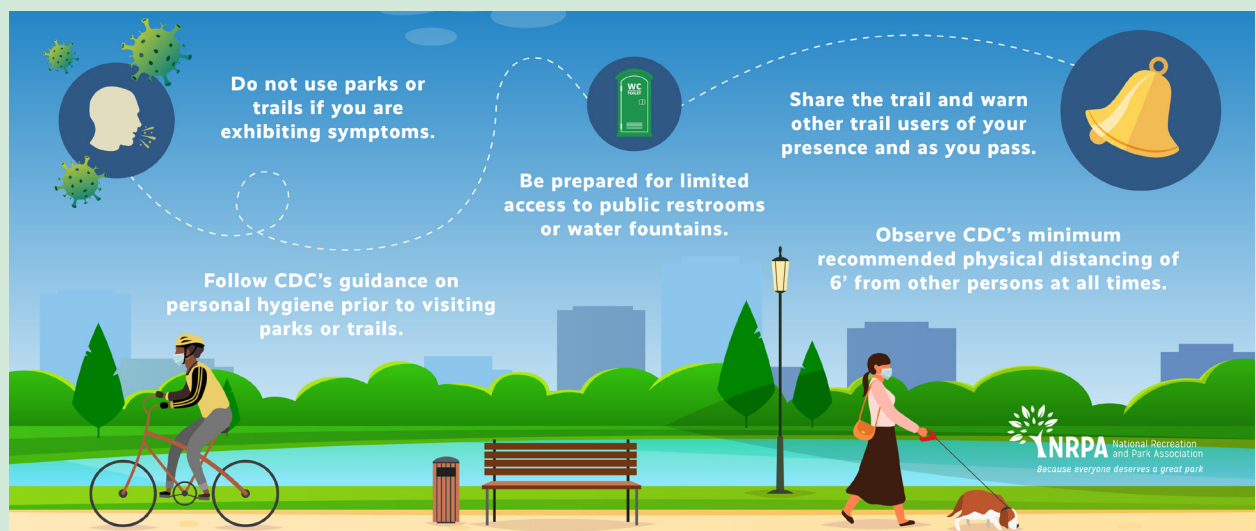


Image Source: National Recreation and Park Association. Joint Statement on Keeping Parks, Trails and Open Spaces Accessible, nrpa.org/Coronavirus.



STRATEGY 1.3.4: *Beyond ADA accessibility compliance, continue to ensure playgrounds are designed to meet the needs of children with disabilities.*

It is very important that children with disabilities can not only access playground facilities and equipment but also actively participate in playing on the equipment. One of the struggles families with disabilities face is there are fewer places to meet and be part of the community. According to a study on physical and developmental disabilities, 53 percent of children with disabilities spend less than two hours per week with their peers outside of class. Parks and playground equipment shouldn't limit or segregate children; but rather, should be a place for children to come together and learn from each other. Inclusive playgrounds encourage play, which leads to mutual understanding, friendships, and a true feeling of community.

An inclusive playground is about more than wheelchair ramps, although those are important. A wide range of design elements should be included in a play space so all children can interact with the structures and with other children. Things to keep in mind when building an inclusive playground include:

- **Access.** Can any child or parent access this space regardless of their ability? Including ramps and rails is important, as is using ground level play equipment. Unitary protective fall surfacing forms a uniform shock absorbing surface. This type of surfacing makes it easier for wheelchairs and strollers to enter and navigate the playspace.
- **Engaging.** Is the playground engaging, considering factors such as color, sound, texture, movement, and versatility? Incorporate activities that engage the auditory, tactile, proprioceptive, vision, and vestibular sensory systems.
- **Comfort.** Does the play space have a good mix of active and quiet play areas? Quieter rest areas can be helpful for children who may be over stimulated in crowds.

- **Cognitive Development.** Activities such as swinging, sliding, climbing, spinning, and rocking have both physical and cognitive benefits. Additionally, number or alphabet boards are a fun way to incorporate learning into play.
- **Multiple Levels of Challenge.** Choose play activities that provide graduated levels of challenge, ensuring all ages and abilities are actively engaged on the playground.
- **Routes and Maneuverability.** Make travel routes around and through the playground wide enough for wheelchair users to pass, transfer onto equipment, and get close to activities. As mentioned, Unitary Surfacing Protective surfacing is the preferred surfacing for a truly inclusive playground because unitary surfaces make it easier for individuals who use mobility equipment to participate safely and comfortably on the playground.
- **Safe Perimeter Barriers.** Fencing is important for running or elopement (also known as wandering). A contained area for play is especially helpful for those on the autism spectrum.

Playgrounds designed to meet the needs of children with disabilities. A tree house themed accessible playground was installed in Independence Park in Pearland in the summer of 2019.



Image Source: City of Pearland

STRATEGY 1.3.5: *Implement the remedial recommendations identified within the Park Conditions Assessment.*

The PARD should focus on elevating all of the City's existing parks and recreational facilities to an equivalent standard of quality and excellence. Appendix E, *Park Conditions Assessment*, provides detailed assessment of needed renovations, enhancements, or improvements to parkland and facilities. PARD should prioritize the implementation of the remedial recommendations within the *Park Conditions Assessment* to ensure that all Pearland parks, facilities and open spaces are safe for social interaction and passive and active recreation. Incorporate the following park-specific improvements into the PARD's Capital Improvement Program.

In addition to the park specific recommendations below, refer to Strategy 3.1.4 for additional recommendations for trail improvements within parks.

INITIATIVES AND ACTIONS

Community Parks

1. Centennial Park

- Replace playground (2027).
- Add outdoor sand volleyball court (refer to Strategy 1.2.8).
- Restripe basketball court.

2. Heritage Plaza

- Install a concrete edge to contain the pavers.
- Paint gazebo posts and rails.
- Install lighting in the parking lot for safety.
- Install a City standard park sign with accent planting at the street frontage (as funding becomes available).

3. Hunter Park

Hunter Park is a new park site for which a conceptual design and order of magnitude costs have been prepared. Refer to Strategy 1.3.6 for site recommendations.

4. Independence Park

The Independence Park Improvement Project was completed in 2019 and so there are no improvements at this time.

5. Southdown Park

- Refurbish the splash pad.
- Update and increase the options of fitness stations with new decomposed granite surface and replace the equipment.
- Replace missing furnishings.
- Replace playground (2025).
- Replace park sign with City standard park sign adding accent planting (as funding becomes available).

6. Zychlinski Park

- Repaint basketball court.
- Install a City standard park sign with accent planting at the street frontage (as funding becomes available).
- Expand the rubberized play surface area to encompass fall zones.
- Replace playground (2035).

Neighborhood Parks

7. Aaron Pasternak Memorial Park

- Add a park path to access site amenities.
- Install curb ramps for on-street parking to access park.
- Install crosswalk and stop bar striping.
- Refurbish the shade structure.
- Replace the site furnishings.
- Replace park sign with City standard park sign adding accent planting (as funding becomes available).
- Replace playground (2032).

8. Corrigan Park

- Remove the existing basketball court and construct a new court behind the swing set to ensure visibility to the basketball court.
- Add waste/recycling receptacles.
- Replace playground (2034).

9. Creekside Park

- Add park path to site amenities
- Replace Playground (2021).
- Add back yard games amenities.
- Add a drinking fountain.
- Add benches.
- Add waste and recycling receptacles.



- Add trees along a proposed internal walking trail.
- Plant overstory trees around seating areas to provide shade.
- Install curb ramps for on-street parking to access park.
- Install a City standard park sign with accent planting at the street frontage (as funding becomes available).

10. Cypress Village Park

- Replace the shade structure fabric.
- Add picnic tables.
- Add waste and recycling receptacles.
- Add a drinking fountain.
- Replace Playground (2024).
- Install a City standard park sign with accent planting at the street frontage (as funding becomes available).

11. Hyde Park

- Refurbish the pavilion.
- Add recycling receptacles.
- Plant accent planting around park sign.
- Re-paint the crosswalk striping.
- Replace playground (2034).

12. Pine Hollow Park

- Refurbish the shade structures.
- Add recycling receptacles adjacent to existing waste receptacles.
- Repaint basketball court.
- Regrade the areas along the walking path with drainage issues.
- Install a City standard park sign with accent planting at the street frontage (as funding becomes available).
- Replace playground (2028).

13. South Gate Park

- Replace waste and recycling receptacles.
- Install a City standard park sign with accent planting at the street frontage (as funding becomes available).
- Replace playground (2028).

Examples of park conditions in Community Parks, Neighborhood Parks, and Athletic Complexes that require improvements.



Re-stake newly planted trees to prevent leaning.



Decomposed granite trail overgrown with weeds and requires edging.



Minimal tree canopy or shade should be provided near park amenities.



Install new style park signage.

14. Woody Street Park

- Replace playground (2020).
- Add paved access to benches and picnic tables.
- Add waste and recycling receptacles.
- Replace the concrete pads under the tables and benches.
- Add shade structures.
- Replace asphalt parking lot with concrete.
- Install a City standard park sign with accent planting at the street frontage (as funding becomes available).

15. Woodcreek Park

- Replace bridge fencing.
- Replace playground (2034).

Athletic Complexes

16. Hickory Slough Sportsplex

- Add seating and benches along the concrete path for spectator seating.

17. The Sport Complex at Shadow Creek Ranch

- Replace playground (2032).

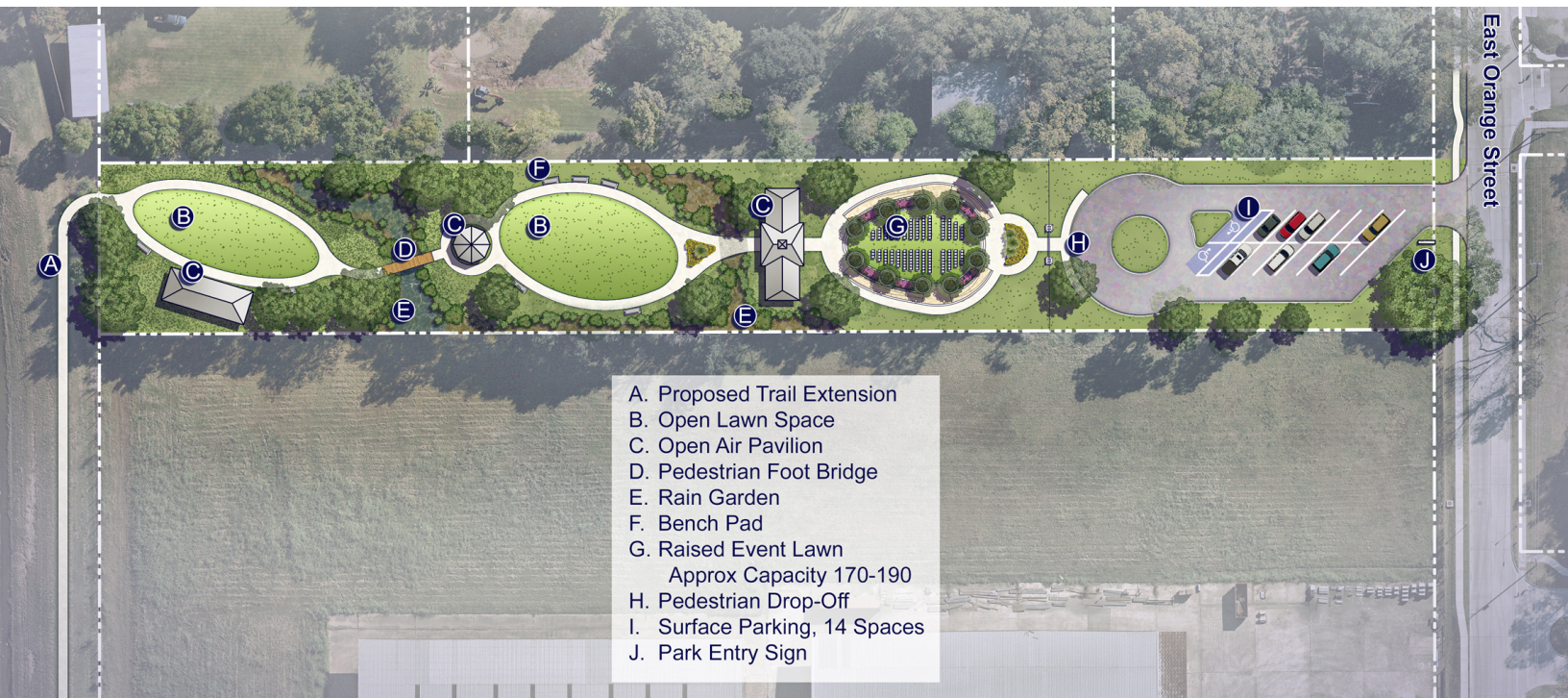
18. Veterans Sports Complex

- Update the outfield fence by painting and replacing missing panels.
- Refurbish or replace softball field scoreboard.

STRATEGY 1.3.6: *Implement landscape site work enhancement recommendations for Hunter Park.*

As illustrated in Figure 2.3, *Conceptual Design for Hunter Park*, it is envisioned that Hunter Park will function as a predominantly passive recreational park that would have facilities to accommodate formal social gatherings; the setting of which would be very gardenesque, with decorative pavilions and other amenities which would provide lushly landscaped back drops for important celebrations such as weddings and young women’s Quiceanera photographs. The park would also contain an educational dimension and feature interpretive signage which would explain the function and importance of rain gardens, vegetated swales and other low-impact development (LID) strategies to restore the pre-development hydrology of the park.

Figure 2.3, *Conceptual Design for Hunter Park.*





INITIATIVES AND ACTIONS

1. Work with a landscape architect to develop construction documents, specifications, and a detailed cost estimate for improvements within Hunter Park.
2. Include the estimate for professional services and order-of-magnitude construction costs within the Parks department's annual budget and City's Capital Improvements program (CIP).

STRATEGY 1.3.7: Implement Phase 2 landscape sitework improvements at Independence Park.

In order for Independence Park to become one of Pearland's main event spaces several facilities-related improvements must be implemented; many of which are included within the park's Phase 2 enhancements program (refer to Figure 2.4, *Independence Park Design Concept*). Landscape improvements include developing an ADA-compliant events viewing area, the need for additional parking, lighted parking areas, storage facilities, and expansion of the park's irrigation system. Refer to Chapter 3.0, *Strategic Plan*, for order of magnitude costs for facilities improvements.

STRATEGY 1.3.8: Implement Phase 2 of JHEC Nature Trails.

Phase 2 of the John Hargrove Environmental Complex (JHEC) Nature Trails involves adding a boardwalk and pavilion to allow visitors to interact with the wildlife on the two islands as well as perform education tours for school kids. Refer to Figure 2.5, *JHEC Nature Trails Phase 2*. In addition, a space is set aside for natural elements with a high play value in the form of a natural playground. Initially, a site approximately 40 by 60 feet, located between the Stella Roberts Recycling Center and the Delores Fenwick Nature Center, is proposed.¹ Finally JHEC requires a storage and greenhouse for Natural Resource department's use.

¹ Preliminary Engineering for JEC Nature Trails Phase 2 prepared by CobbFendley. November 2018.

Figure 2.4, Independence Park Design Concept



Image Source: City of Pearland.

Figure 2.5, JHEC Nature Trails Phase 2



Image Source: Preliminary Engineering for JEC Nature Trails Phase 2 prepared by CobbFendley. November 2018.

OBJECTIVE 1.4: Ensure that Pearland’s sports and athletic facilities fulfill the needs of area youth and remain programmatically competitive in order to continue to draw regional and state tournaments.

STRATEGY 1.4.1: *Implement softball field facility improvements at Centennial Park.*

Program, schedule, and budget a phased approach to implementing landscape improvements to the softball fields (1 - 4) at Centennial Park. Currently, several fields do not conform to U.S. regulations for girls softball. Recommended improvements include:

- Artificial turf fields
- Fenced-in dugouts
- Lighted parking lots at Centennial Park

STRATEGY 1.4.2: *Develop dedicated soccer fields to serve Pearland’s soccer enthusiasts.*

Currently Pearland Soccer is played at Hickory Slough Sportsplex. Soccer enthusiasts who attended listening sessions during the development of this Master Plan explained that current facilities are woefully inadequate to serve those who are serious about the sport. Developed to be a stormwater detention facility, the Hickory Slough Sportsplex is subject to routine flooding, which causes games to be routinely postponed or cancelled. Other concerns include field size – several fields are too small; and there is a need for field lighting.

INITIATIVES AND ACTIONS

1. Implement Phase 2 of the Hickory Slough Sportsplex and Detention Pond.

Phase 2 of the Hickory Slough Sportsplex will improve and expand facility by increasing its field capacity and providing a bigger footprint for recreational sports within the Pearland community. This Phase will consist of four additional turf fields and two multi-purpose fields all complete with field lighting, more parking spots, expanded restrooms, concession expansion, and additional field lighting for existing fields. Concrete walks, a playground, an additional picnic area with seating and tables, and an on-site maintenance yard are also proposed. Phase 2 will also add an additional storage to the pond. New field inlets and swales will provide additional on-site drainage that will flow to the existing pump station.²

STRATEGY 1.4.3: *Consider developing a permanent outdoor archery complex at the Hickory Slough Sportsplex.*

While the sport of archery as a trend is decreasing slightly,³ based on listening session feedback and community survey responses there is significant interest in a permanent outdoor archery facility in Pearland. Current users travel to archery facilities in the Harris County park system but would like to have a larger facility in Pearland to accommodate the growing members of the Greater Pearland Archery Club (GPAC) program. Currently, there are 53 members of GPAC, 17 of whom compete nationally. The GPAC expressed an interest to grow the sport of archery regionally and be able to accommodate tournaments in Pearland. This is another example of a relatively inexpensive way to grow what could become a very popular sport.

² Pearland Hickory Slough Sportsplex and Detentional Pond Phase 2, City of Pearland, TX by Clark Condon. November 20, 2018

³ National Sporting Good Association. Sports Participation Report. <https://www.nsga.org/research/nsga-research-offerings/sports-participation-single-sport-2020/>



Images of Hickory Slough Sportsplex fields when flooded.



Image Source: Pearland Soccer. Hickory Slough Sportsplex Field Status. <https://www.pearlandsoccer.org/fields---hickory.html>

Figure 2.6, Overall Master Plan of Hickory Slough Sportsplex Phase 2.



Image Source: Pearland Hickory Slough Sportsplex and Detentional Pond Phase 2, City of Pearland, TX by Clark Condon. November 20, 2018

GOAL 2 RECREATIONAL PROGRAMS FOR EVERYONE

A diverse and equitable range of recreational programs and activities for the enjoyment of Pearland residents.

OBJECTIVE 2.1: Ensure that recreation programs meet the interests and needs of a variety of ages and abilities.

As described in Strategy 1.3.2, the City of Pearland should ensure age-appropriate park facilities, open space programming, and park design. Similarly, the City should ensure that the recreation programs offered by PARD serve the needs of all age cohorts and people with different abilities. This includes young children, youth, adults, seniors, and people with disabilities.

STRATEGY 2.1.1: Consider expanding the PARD's summer camp program.

Currently the number of staff to facilitate the PARD's summer camp program is inadequate to serve the demand from area youth who would like to participate. With an enrollment cap set at 85 participants there is invariably 30-50 kids on the active waiting list. As described in Chapter 4.0, *Pearland Parks Today*, while enrollment is on a steady increase since 2017, it remains 14 percent below the number of participants in 2015 and earlier, which hovered around 1,059 participants per year. This is primarily due to a staffing turnover in 2016. Another issue is that there is a general lack of shaded areas within parks to host outdoor summer camp activities.

INITIATIVES AND ACTIONS

1. Actively recruit additional part-time summer camp instructors in order to increase participation among area youth.
2. Identify areas within Independence and Centennial Parks where additional groves of trees may be planted to support organized recreational activities for large groups of people.





STRATEGY 2.1.2: Continue to expand programs and facilities for adaptive recreation.

The City of Pearland should continue to expand its offering of adaptive recreation programs for persons with disabilities. Besides offering adaptive sports fitness and art programs for adults, the PARD should consider expanding its adaptive recreation programming to serve children with special needs. Such programs may include assisted play and outdoor educational activities. As discussed in Strategy 1.3.4 (page 2.14 - 2.15), the PARD should ensure that playground equipment in parks is accessible for children who must use wheelchairs, as appropriate and consider incorporating universal design features in all parks and playgrounds.

INITIATIVES AND ACTIONS

1. Review recreational programs, park facilities, and playgrounds to identify gaps in offerings and design features for persons and children with disabilities.
2. Consider hiring additional appropriately trained staff to design and deliver recreational program offerings for children with special needs.

OBJECTIVE 2.2: Continue to provide, promote, and encourage the development of recreational programs and community events that provide access to a variety of cultural arts opportunities.

As a culturally diverse and affluent community, Pearland should continue to offer events and programs that provide a variety of cultural arts opportunities to its residents. These programs should include components that highlight the various cultural and ethnic diversity of the Pearland community, including visual art, literature, music, theater, film, and dance.



Program images from Pearland in Motion Fall 2020.

STRATEGY 2.2.1: *Enhance multi-generational and multi-cultural recreational facilities, program offerings, and events.*

Facilities and programs that provide recreation opportunities to a multi-cultural community and age-groups will enhance utilization of Pearland's parks system and increase the quality of life of Pearland's diverse population. According to the National Recreation and Park Association, recreational programs and events aimed at engaging multi-cultural, racial, or ethnic community members inspire civic engagement and create connections between community members. Examples of culturally engaging programs or events include:

- Heritage and holiday celebrations;
- Culturally-sensitive programming hours (e.g., women-only pool time, female program leaders for female students, etc.);
- Health and wellness programs targeting specific cultures, race, and ethnicities (e.g., GirlTrek, My Brother's Keeper);

Regarding multigenerational programs, as revealed in the community needs survey results (Chapter 5.0 *Needs Assessment*, page 5.5-5.12), Pearland residents want to see a multitude of indoor and outdoor programs and events, including musical events, food events, farmers markets, and art and craft shows. Residents have emphasized family-oriented and outdoor programs for youth, adults, and seniors.

INITIATIVES AND ACTIONS

1. Review current offerings at the Recreation Center and Natatorium and Melvin Knapp Activity Center to determine gaps in the types of culturally engaging programs offered to various age groups.
2. Determine demand for types of events, programs, or activities through short surveys for visitors at City parks, Recreation Center and Natatorium, and the Melvin Knapp Activity Center.

3. Evaluate the opportunities to increase or modify recreation space at the Recreation Center and Natatorium, Melvin Knapp Activity Center, and the Westside Events Center to address the demand for multigenerational and culturally engaging events and programs.
 - Based on the high demand and wait lists for childcare at Kidz Korner in the Recreation Center and Natatorium, expand the facility to increase the capacity. This may require increasing the Kidz Korner personnel.
 - Expand the office space within the Recreation Center and Natatorium to support the growing staff.
 - Repurpose the racquetball court to meet the changing needs of the recreational programs offered at the Recreation Center and Natatorium.
 - Develop a plan to increase the square footage of the Melvin Knapp Activity Center by either building out into existing lawn area for additional programmable space and alleviate storage space needs, or building an outdoor covered area for programs.
 - Consider purchasing empty lot adjacent to the Melvin Knapp Activity Center to address parking needs.
4. Evaluate the need for additional recreational personnel as part of the development or modification of recreational facilities, programs, and events.
5. Continue to seek community input at PARD events and programs to determine the need for various types of recreational programming and events.
6. Continue to develop programs and events that engage a variety of age groups and cultures. This should include curated cultural arts – music shows or concerts, visual art exhibitions, outdoor theatre, dance shows and classes, and craft exhibitions and classes – that reflect the multicultural identity of the Pearland community and have recreational value for families, youth, and seniors alike.

GOAL 3 SAFE PEDESTRIAN ACCESS

Safe active transportation access from points of origin (e.g., neighborhoods and residential subdivisions) to key destinations (e.g., parks, schools, employment centers and commercial districts) throughout Pearland.

OBJECTIVE 3.1: Ensure a safe and connected system of off-street pedestrian facilities (sidewalks and recreational trails) throughout Pearland and beyond.

STRATEGY 3.1.1: Provide safe access to Pearland's parks from adjacent neighborhoods through implementing crosswalk improvement standards at principal thoroughfare intersections.

As identified within both the *Park Conditions Assessment* (Appendix E) and *Pedestrian Level of Service* (Appendix F), few of the city's parks have safe routes across streets for pedestrians to reach parks from adjacent residential neighborhoods. Safe pedestrian crossings should be developed to limit the number of places where people cross streets. Pedestrian crossings should be located at places where vehicles are either slowing or stopping (i.e., intersections). Crosswalk improvements should include features such as crosswalk striping, signage, curb cuts and ADA-compliant curb ramps, and pedestrian activated signal changing push buttons (at signalized intersections).

INITIATIVES AND ACTIONS

1. Refer to Strategy 1.3.5; and the *Park Conditions Assessment* and the *Pedestrian Level of Service* Remedial Recommendations and Opportunities for Improvement figures for recommended locations of pedestrian crossings.
2. Utilizing the NRPA's Safe Routes to Parks Action Framework (refer to sidebar on page 2.28), conduct a safe routes to parks audit for the City's parks and implement improvements to the park and adjacent streets (both within and outside the park) based on the following criteria: enhanced park design, street design, park amenities, ADA compliance, signage and way-finding, and maintenance practices.
3. Implement "Safe Park Zones" (refer to sidebar on page 2.28) to slow vehicular speeds around parks.



What are Safe Routes to Parks?

Safe Routes to Parks aims to make parks more accessible for people walking, bicycling, and taking public transportation. This occurs by creating routes that are safe from traffic and personal danger for people of all ages and abilities, and ensuring that well-maintained and well-programmed parks are conveniently located within a 10-minute walk (approximately one-half mile) from where people live. Safe Routes to Parks provides advocates with the tools to champion safe and equitable access during consideration of park siting, community engagement, allocation of funds, planning, and implementation of traffic and public safety initiatives, as well as park improvements. Over the long term, with increased safety and accessibility, Safe Routes to Parks seeks to increase park usage and improve health and wellbeing for people of all ages, races, abilities, and income levels.

"Safe Routes to Parks." National Recreation and Parks Association. Accessed October 2020. <https://www.nrpa.org/Safe-Routes-To-Parks/>.

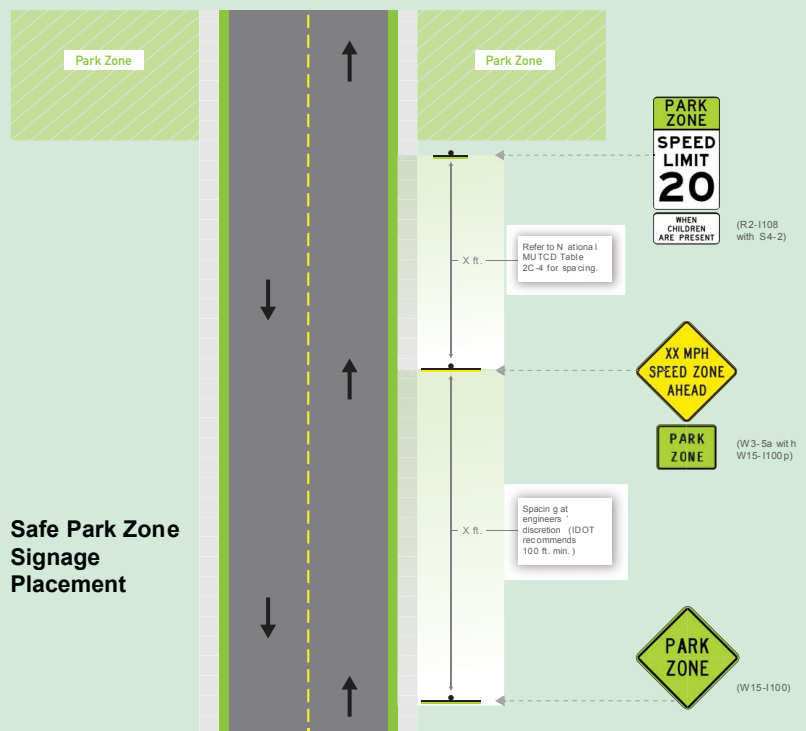


Safe Park Zones



When parks are more accessible, more people actively use them. One way to boost access is to improve traffic safety and pedestrian facilities around parks. Similar to School Zones, Safe Park Zones are sections of roadway near parks where speed limits are lowered, and fines for traffic infractions are raised. Routine enforcement spreads awareness about safety, and revenue from fines can be used to fund pedestrian facility improvements.

Safe Park Zones, creating safe park zones for communities in Illinois. Active Transportation Alliance. http://atpolicy.org/wp-content/uploads/2016/05/Creating-a-Safe-Park-Zone-for-Communities-in-Illinois-Active-Transportation-Alliance_BGW.pdf





STRATEGY 3.1.2: *Ensure that the City’s trail system provides respite and refuge for its users.*

As described within Appendix F, *Pedestrian Level of Service*, several trails have been constructed in open areas with little to no shade; forcing users to walk great distances full exposed to the sun, with no place to stop and rest in a shaded area.

INITIATIVES AND ACTIONS

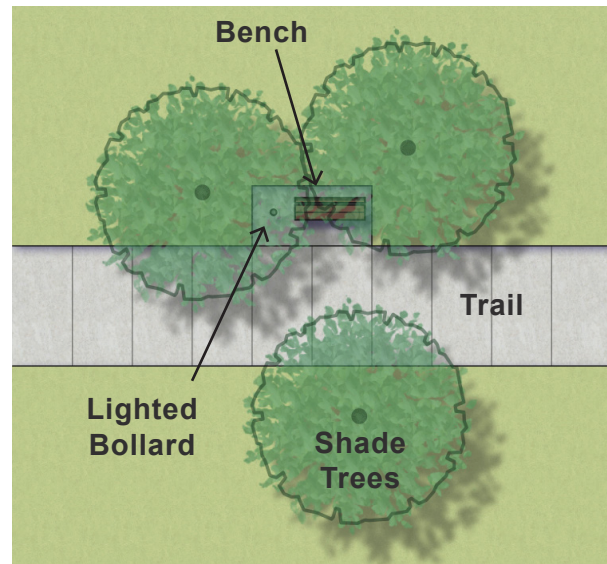
1. Amend the City’s Engineering Design Criteria Manual (September 2018), Sec. 6.9, Trails, No. 6.9.15, to require a maximum bench spacing of no more than 1,000 feet.
2. In addition to the one or more benches required, and corresponding ADA compliant concrete pad, require a cluster of three shade trees minimum, planted in a triangular spacing around the bench and spanning the trail, as well as a lighted bollard, as per the Pedestrian Refuge recommendation within the *Pedestrian Level of Service*, refer to Figure 2.7.
3. Enforce provisions requiring landscaping (shade trees and shrubs) along each side of the trail (refer to the City’s Engineering Design Criteria Manual (September 2018), Sec. 6.9, Trails, No. 6.9.10, 6.9.12 – 14). With enhancements to the City’s urban forest canopy will be the need to provide additional maintenance and watering of newly planted trees. As outlined within Strategy 5.2.1, this will require an additional forester staff position.

STRATEGY 3.1.3: *Develop a cost-effective and efficient program for providing lighting along primary trails and sidewalks.*

During the summer months it is often too hot to walk along trails and sidewalks, particularly along reaches of trail that are predominantly in full sun. Many people wait until after dinner to take a walk; after the sun has set and it is cooler outside. Providing lighting for some sidewalks and trails can increase safe evening use; and provide visual cues regarding function (i.e., spine or secondary sidewalk), orientation and legibility.

Figure 2.7, Pedestrian Refuge

By grouping the bench and lighted bollard with a cluster of three trees spaced in a triangular pattern and spanning the trail, a pedestrian refuge is created.



INITIATIVES AND ACTIONS

1. Develop a suite of light fixture selection criteria for standard-mounted and bollard-mounted fixtures, to ensure standardization of operation and maintenance.
2. Consider a solar-powered fixture, to reduce the need for installation of electrical conduit.

STRATEGY 3.1.4: *Implement the remedial recommendations within the Trails PLOS analysis (refer to Figure 2.8 on facing page for an example).*

INITIATIVES AND ACTIONS

1. **Centennial Park Trail**
 - Install four benches.
 - Install seven lighted bollards.
 - Install 25 trees.
2. **Clear Creek Trail - East**
 - Install eight benches.
 - Install eight lighted bollards.
 - Install 33 trees.

3. Clear Creek Trail - West

No improvements recommended because the trail is under construction at the time of this plan.

4. Corrigan-Woody Parks Trail

- Install five curb ramps.
- Install five crosswalk and stop bar striping.
- Construct decomposed granite trail (in Corrigan Park).
- Replace decomposed granite trail with concrete (in Woody Street Park).
- Install trailhead / marker.
- Install four benches.
- Install four lighted bollards.
- Install four light poles in the Woody Street Park parking lot.
- Install five trees.

5. Cypress Village Park Trail

- Replenish decomposed granite trail.
- Install concrete edging for material containment.

- Install trailhead / marker.
- Install four benches.
- Install four lighted bollards.
- Install 12 trees.

6. Edible Fruit Trail

- Install curb ramp.
- Install two crosswalks and stop bar striping.
- Install signalized pedestrian crossing.
- Refurbish sign.
- Install seven lighted bollards.
- Install seven trees.

7. Independence Park Trail

- Install trailhead / marker.

8. Mary's Creek Trail - Central

- Add three benches.
- Install one drinking fountain.
- Install three lighted bollards.
- Install 11 trees.

Figure 2.8, Trail Improvement Recommendations Example

An Example of trail improvement recommendations are illustrated in the figure below, refer to Appendix F, *Pedestrian Level of Service*.

Existing Conditions



Opportunities for Improvement



Note: drawing is not to scale. Aerial Imagery: Nearmap



9. Mary's Creek Trail - East

- Replace decomposed granite trail.
- Install trailhead / marker.
- Install seven lighted bollards.

10. Mary's Creek Trail - West

- Install 15 trees.

11. Pine Hollow Park Trail

- Install two curb ramps.
- Install two crosswalk and stop bar striping.

12. Shadow Creek Ranch Nature Trail

- Refurbish ten trail signs.
- Install two drinking fountains.
- Install eight lighted bollards.
- Install three light poles.
- Install eight trees.

13. Southdown Park Trail

- Install three crosswalk and stop bar striping.
- Install trailhead / marker.
- Install five lighted bollards.
- Install 13 trees.

14. South Gate Park Trail

- Widen decomposed granite trail.
- Install concrete edging for material containment.
- Install trailhead / marker.
- Install three benches.
- Install three lighted bollards.
- Install 21 trees.

15. The Sports Complex at Shadow Creek Ranch Trail

- Install trailhead / marker.
- Install three benches.
- Install three lighted bollards.
- Install 12 trees.

16. Town Ditch Trail

- Install two drinking fountains.
- Install seven benches.
- Install seven lighted bollards.
- Install 21 trees.

17. Trails at JHEC

- Add six benches.
- Add six lighted bollards.
- Add 18 trees.

18. Woodcreek Park Trail

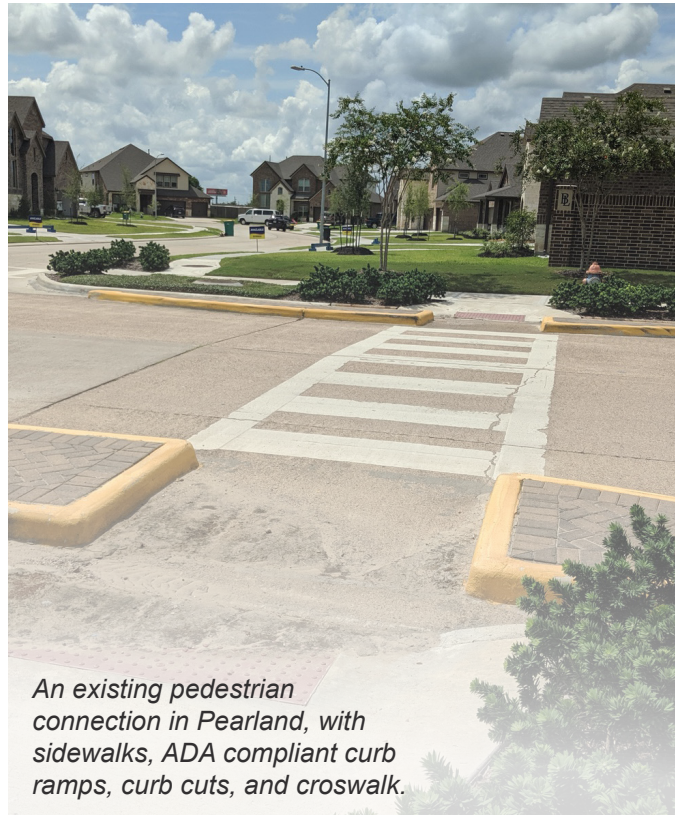
- Install a crosswalk and stop bar striping.
- Install four lighted bollards.
- Install seven trees.

19. Zychlinski Park Trail

- Install two crosswalks and stop bar striping.
- Install five lighted bollards.
- Install six trees.

STRATEGY 3.1.5: *Improve connectivity between neighborhood sidewalks and municipal pedestrian facilities.*

Amend Division 11 – Sidewalks and Alleys, of Chapter 3, *Subdivision Regulations*, within the City's *Unified Development Code (UDC)*, to require sidewalks on both sides of entrance roads leading-in to residential subdivisions from collector streets, to be a minimum of six feet wide (compared to current four foot width).



An existing pedestrian connection in Pearland, with sidewalks, ADA compliant curb ramps, curb cuts, and crosswalk.

STRATEGY 3.1.6: *Establish sidewalk connection partnerships.*

Amend Chapter 3, *Subdivision Regulations*, of the City's *Unified Development Code* to include a requirement whereby all new development must provide pedestrian connections to adjacent recreational trails and municipal pedestrian facilities (sidewalks), both existing and proposed.

STRATEGY 3.1.7: *Consider constructing recreational trails around all of the City's existing stormwater detention basins.*

Beyond stormwater conveyance and detention, Pearland's stormwater drainage infrastructure can serve multiple functions, including wildlife habitat and recreational open space. Continue to construct recreational trails to circumnavigate detention facilities, similar to those around the detention basins behind the JHEC / Delores Fenwick Nature Center detention basins.

INITIATIVES AND ACTIONS

1. Provide access to detention basin trails through developing trailhead facilities, complete with parking area (six spaces), shade structure, street lighting, drinking fountain, and wayfinding / interpretive signage.
2. Implement a trail and trailhead facility through which people can access the Magnolia Ponds, refer to Figure 2.9, below.
3. Strategically locate benches along recreational trails so people can sit and view water fowl, sunrises and sunsets.

STRATEGY 3.1.8: *Develop a phased trail expansion program.*

In conjunction with the trail improvements identified within Strategy 3.1.4, develop a phased trail expansion program as listed in Table 6, *Proposed Trails and Order of Magnitude Costs* and illustrated in Map 19, *Proposed Trails* (pages 61-62 of the *Multi-Modal Master Plan*) also shown in Figure 2.10 and Table 2.1 on page 4.33.

Figure 2.9, Possible Recreational Trail around Magnolia Ponds.



Image Source: Nearmap

Figure 2.10, Proposed Trails and Trailheads (refer to Map 19 on page 62 in Multi-Modal Master Plan)

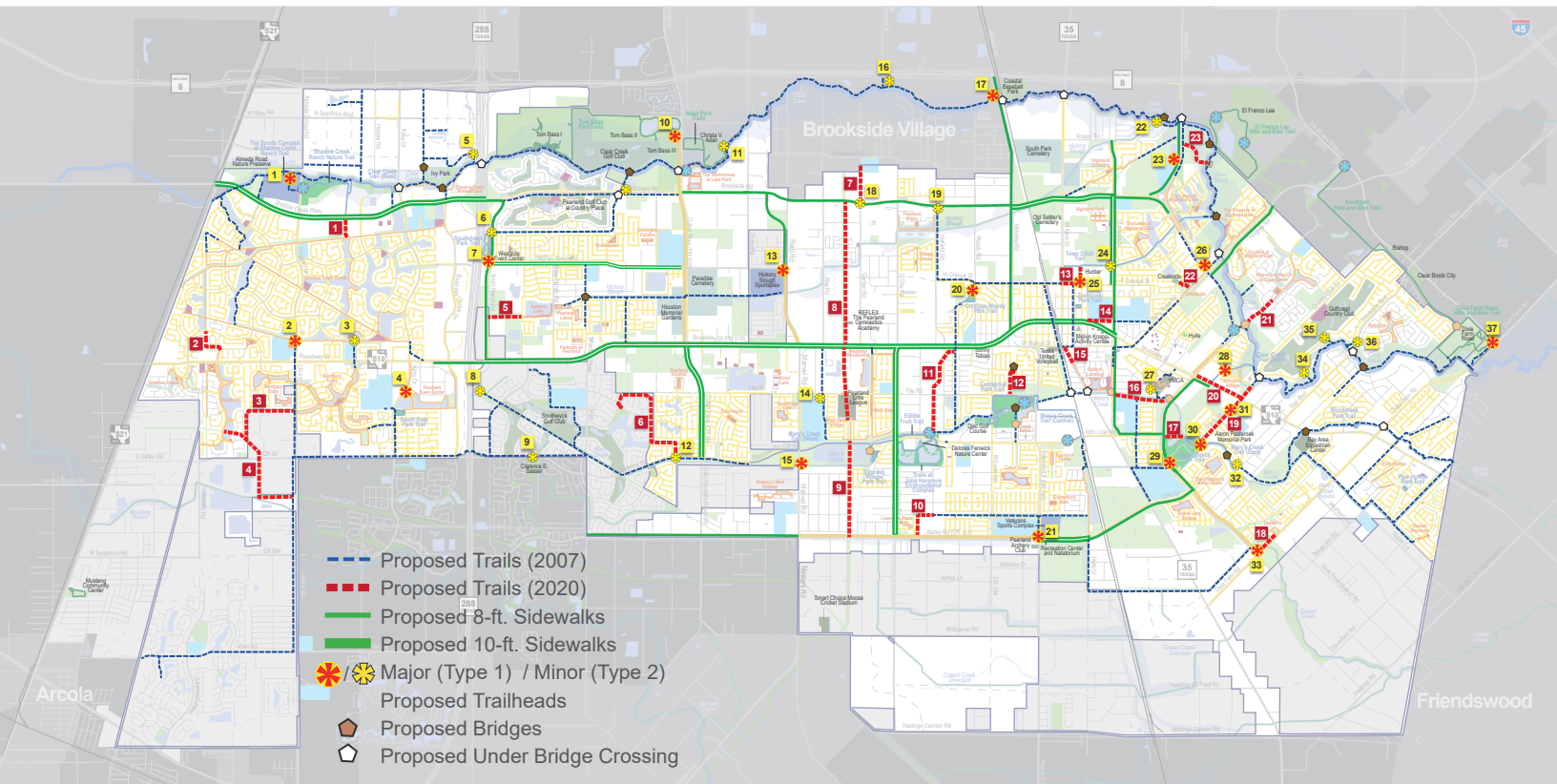


Table 2.1, Proposed Trails Extensions

		Proposed (lf)	Proposed (sf)
1	Shadow Creek Parkway to Shadow Creek Ranch Trail	1,105	11,050
2	Windward Bay Drive to Shadow Ridge Lane	1,686	16,860
3	Southlake Boulevard to Old Airline Road - North	5,628	56,280
4	Southlake Boulevard to Old Airline Road - South	5,396	53,960
5	W. Smith Ranch Road to Fair Oak Street	1,178	11,780
6	Magnolia Parkway to Northfork Drive	5,237	52,370
7	Future Brookside Road to north City Limits	2,234	22,340
8	Pearland Dad's Club to Future Brookside Road	11,661	116,610
9	Bailey Avenue to Magnolia Parkway	5,314	53,140
10	Bailey Avenue to Aubrel Road	2,142	21,420
11	Drainage Ditch adjacent to Hatfield Road to Magnolia Road	5,202	52,020
12	Drainage ditch in Willowick Subdivision to Centennial Park	1,432	14,320
13	Intersection of N. Main Street and E. Orange Street to drainage ditch	973	9,730
14	East Broadway Street to Old Alvin Road	1,094	10,940
15	E. Walnut Street to Baker's Landing Trail adjacent to S. Main Street	941	9,410
16	Old Alvin Road to Pearland Parkway adjacent to Mary's Creek	3,096	30,960
17	Pearland Parkway to Mary's Creek adjacent to John Lizer Road	1,150	11,500
18	Pearland Parkway to Long Oak Drive	1,474	14,740
19	John Lizer Road to Province Village Drive adjacent to Liberty Drive	4,124	41,240
20	Pearland Parkway to Country Club Drive adjacent to E. Broadway Street	2,734	27,340
21	Clear Creek to Riverstone Ranch Subdivision Trail	2,127	21,270
22	E. Orange Street to drainage ditch adjacent to Bary Rose Road	556	5,560
23	Pearland Parkway to Clear Creek	1,900	19,000

STRATEGY 3.1.9: Establish trail and sidewalk connections to population centers and resources outside of Pearland’s City limits.

Consider future connectivity options through which to provide active transportation access to regional parks resources to the north (i.e., Tom Bass Park and El Franco Lee Park in Harris County Precinct 1) via the Clear Creek Trail; as well as future connections from Magnolia Road and Bailey Road to the City of Manvel, via Masters Road.

OBJECTIVE 3.2: Improve vehicular and active transportation wayfinding legibility and access to Pearland’s parks and recreation facilities.

STRATEGY 3.2.1: Build upon the existing trail signage and develop and implement directional signage and wayfinding system for key parks, attractions, and trails (trailheads) within the City.

INITIATIVES AND ACTIONS

1. Identify the principal primary and secondary thoroughfares which lead to each park and identify locations for directional signs at one-half mile intervals, beginning one mile from each park.

STRATEGY 3.2.2: To improve accessibility to trails and widened sidewalks, consider where additional trailheads may be located.

As indicated on Map 19, *Proposed Trails and Trailheads*, in the *Multi-Modal Master Plan*, and in Figure 2.10 on the facing page, in conjunction with proposed new trails, as well as where existing and proposed sidewalks along principal thoroughfares are in close proximity to existing and proposed trails, several additional trailheads are recommended. Two types of trailheads are proposed, a Major (Type 1) that costs \$344,050 per trailhead and a Minor (Type 2) that cost \$23,750 per trail head. See Table 2.2 for a breakdown of these costs.

Major (Type 1) trailheads are proposed for areas where there is ample room to include off-street concrete parking lots (curb and gutter) with up to

seven parking spaces (including one handicapped space), a curb ramp and curb cuts, two street lights, directional-wayfinding signage, landscape enhancements (up to three large trees), a shade structure with two benches, waste receptacle, recycling receptacle, and drinking fountain. Minor (Type 2) trailheads will include a shade structure with one bench, waste receptacle, recycling receptacle, directional-wayfinding signage, and modest landscape enhancements (up to three medium trees). Refer to the *Multi-Modal Master Plan* Table 7 and 8 on pages 63-64 and the *Implementation Action Plan* table in Chapter 5.0, *Strategic Plan*, for a list of proposed trailheads and total costs.

INITIATIVES AND ACTIONS

1. In conjunction with the development of the new Service Center on Old Alvin Road, construct a trailhead and parking lot to provide additional access to the Town Ditch Trail.

Table 2.2, Breakdown of Costs for Each Type of Proposed Trailhead

	✿ Major Trailhead (Type 1)	✿ Minor Trailhead (Type 2)
Trailhead signage	\$5,200.00	\$5,200.00
Wayfinding signage	\$2,000.00	\$2,000.00
Group of 3 large trees (1 unit = \$450)	\$1,350.00	-
Group of 3 medium trees (1 unit = \$350)	-	\$1,050
Landscaping	\$1,000.00	\$1,000.00
Land grading	\$50,000.0	-
Street lights (1 unit = \$3,750)	\$7,500.00	\$3,750.00
Bench (1 unit = \$1,750)	\$3,500.00	\$1,750.00
Shade structure (1 unit = \$7,500)	\$15,000.00	\$7,500.00
Drinking fountain	\$4,000.00	-
Recycle receptacle	\$750.00	\$750.00
Trash receptacle	\$750.00	\$750.00
Curb Ramp (1 unit = \$1,500)	\$3,000	-
Paved parking area (7 spaces)	\$250,000.00	-
TOTAL	\$344,050.00	\$23,750.00

GOAL 4 DEVELOPMENT IN HARMONY WITH THE ENVIRONMENT

Pearland's built environment is in harmony with the resources and amenities that compose its natural environment.



OBJECTIVE 4.1: Conserve, manage, restore, and enhance the ecological functions of Pearland's biotic communities and green infrastructure systems.

STRATEGY 4.1.1: Continue to preserve and restore natural areas within Pearland's parks, recreational trails, and City-owned open spaces.

The preservation of additional natural areas is vital to Pearland's resilience. Preservation and restoration of natural areas within Pearland will benefit the community by:

- strengthening the City's Bird Sanctuary designation by setting aside needed habitat for birds;
- providing needed space with which to reduce flooding;
- improving water quality;
- increasing air quality offsets through carbon absorption in native soils, plants, and trees; and
- reducing the heat island effect, etc.

STRATEGY 4.1.2: Continue to employ habitat restoration best practices within the Shadow Creek Ranch Nature Trail park.

Best practices employed by the PARD Natural Resources Division include:

- enhancing the constructed wetlands (Shadow Creek mitigation area);
- removal of non-native, invasive plant material (i.e., Chinese Tallow)
- introduction and planting of native plant seeds (in partnership with the Nature Conservancy) and propagated seedlings (to be planted by volunteers); and
- incremental removal of mowed parkland and conversion to native naturalized area.

STRATEGY 4.1.3: *Establish a Conservation Area designation program.*

Evaluate the feasibility of amending the City's parkland dedication ordinance to include provisions and incentives for identifying and delineating areas which contain unique and/or sensitive ecological resources; or which provide continuity of habitat resources to extend wildlife corridors. These areas would be designated as park preserves; and plans for which would be submitted for review and approval prior to subdivision platting. An additional provision would be to require that each park preserve submittal would undergo some form of habitat equivalency analysis to determine habitat value.

INITIATIVES AND ACTIONS

1. Consider providing incentives to private property owners for protecting and preserving ecologically sensitive areas.
2. Within designated Conservation Areas consider how passive recreational activities such as bird-watching and hiking may be incorporated into the conservation program.
3. Based on the type and quality of sensitive ecological resources, consider how Conservation Areas may best be interpreted, using on-line media as well as interpretive signage and boards along recreational trails.

STRATEGY 4.1.4: *Consider establishing an acquisition program for ecologically sensitive lands.*

As identified within the Natural Resources Division's *Strategic Plan* (2018), under Initiative 3: Wildlife & Environmentally Friendly Initiatives Development, and acquire land for the purpose of conserving natural habitats. Work with the Natural Resources Division to identify undeveloped parcels which possess unique, ecologically sensitive resources worthy of conservation or restoration, which may be acquired. Parcel selection criteria used by the Natural Resources Division include the following:

- **Size.** The larger the tract the greater the amount of ecosystem services which can be provided, and wildlife species diversity preserved.

- **Habitat Condition / Quality.** Focus on natural areas which possess native plant communities, habitat types, etc., that have not been significantly degraded by external influences,
- **Proximity to a Waterway.** Water quality is a big issue throughout the region and preserving natural riparian buffers adjacent to creeks/streams can help mitigate local flooding issues. As flooded creeks begin backing up, having the ability for adjacent areas to flood is a natural process; but it requires room to prevent built areas from being destroyed.
- **Proximity to Existing Parkland.** Having the ability to add to existing park lands makes it much easier to maintain larger chunks of land. As discussed within the Natural Resources Division's *Strategic Plan* (2018), prioritize projects based on impact, needs, size, costs, location, and benefits.

INITIATIVES AND ACTIONS

1. Seek strategic capital partnerships with public, quasi-public, and private entities to help fund acquisition of ecologically-sensitive lands.

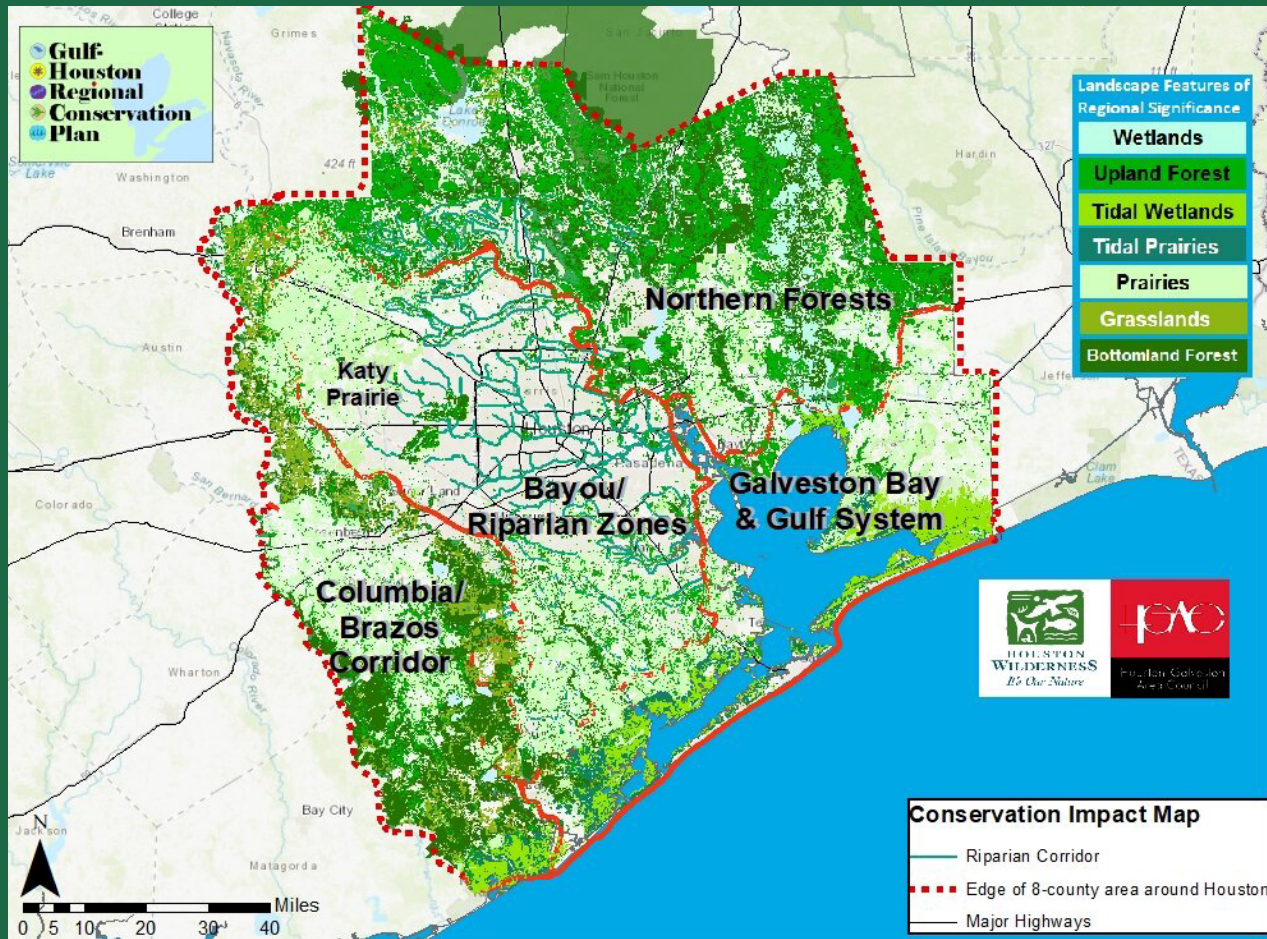
STRATEGY 4.1.5: *Restore riparian vegetation along key waterways and water bodies within the City.*

A key initiative within the Natural Resources Division's *Strategic Plan* (2018), under Initiative 5: Waterway Conservation, is to encourage the establishment of vegetation in and around water bodies (as summarized within Strategy 4.1.4).

INITIATIVES AND ACTIONS

1. Consider approaching Brazoria Drainage District No. 4 to identify areas in and around stormwater drainage infrastructure (i.e., detention basins and drainage canals) where native riparian vegetation can be reintroduced; in order to enhance wildlife habitat, reduce flooding, and promote species diversity.

“Houston Wilderness Make Strides through Regional Conservation Plan”¹



As the Greater Houston Region finds itself in what has practically become a perpetual active hurricane season, residents are aware of the growing need for enhanced environmental and community resilience. Shortly after Hurricane Harvey devastated the Greater Houston Region, local environmental nonprofit Houston Wilderness convened over 100 local governmental, business and nonprofit entities to create an ecosystem resilience plan for the eight-county region. This Gulf-Houston Regional Conservation Plan (Gulf-Houston RCP) has made substantial gains for the region since its inception, thanks to a strong collaboration of supporters, and a focus on three key goals:²

- (1) Increasing the current 14.7 percent in protected/preserved land in the eight-county region to 24 percent of land coverage by 2040;³
- (2) Increasing and supporting the region-wide land management efforts to install nature-based stabilization techniques, such as low-impact development, living shorelines, and bioswales, to 50 percent of land coverage by 2040;⁴ and
- (3) Providing research and advocacy for an increase of 0.4 percent annually in air quality offsets through carbon absorption in native soils, plants, trees, and oyster reefs throughout the eight county region. Large-scale native tree planting efforts - including reforestation of historically forested lands, and afforestation in ecologically appropriate areas - substantially increases ecosystem services and employment opportunities (green jobs).⁵

¹ Local Nonprofit Houston Wilderness Make Strides through Regional Conservation Plan. Greater Houston Gains 248,000 Acres in Protected/Preserved Land Since Hurricane Harvey. September 23, 2020. <https://www.gulfhoustonrhp.org/>

^{2,3,4,5} Ibid.

STRATEGY 4.1.6: Consider adopting a dark sky ordinance.

As the City promotes nature-based tourism, focusing on bird watching and the preservation of its urban forest canopy, it should consider how aspects of its built environment may dilute this objective; such as how the City is illuminated at night. Though Pearland is a relatively quiet suburban community devoid of dense urban areas, it is growing rapidly and as a result, should consider how best to reduce the harmful impacts of light pollution.

Artificial light is a known health issue. In June 2016, the American Medical Association issued a report entitled, Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting. According to this report, “60 percent of animals are nocturnal and are potentially adversely affected by exposure to nighttime electrical lighting. Many birds navigate by the moon and star reflections at night; excessive nighttime lighting can lead to reflections on glass high rise towers and other objects, leading to confusion, collisions and death. Many insects need a dark environment to procreate, the most obvious example being lightning bugs that cannot “see” each other when light pollution is pronounced. Other environmentally beneficial insects are attracted to blue-rich lighting, circling under them until they are exhausted and die.”¹ In order to reduce the harmful environmental effects of light trespass and glare many cities across the country have adopted a dark sky ordinance. Dark Sky Compliant fixtures must have the Dark Sky Fixture Seal of Approval which provides objective, third-party certification for lighting that minimizes glare, reduces light trespass and doesn’t pollute the night sky. If a Dark Sky Fixture Seal of Approval is not available fixtures must be full-cutoff with a color temperature rating of 3,000 Kelvin or less.

¹ American Medical Association, 2016. Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting. (Available at: <https://www.ama-assn.org/sites/default/files/media-browser/public/aboutama/councils/Council%20Reports/council-on-science-public-health/a16-csaph2.pdf>).

Recommended Lighting Practices

Illustration: Rami Boucher / Mont-Mégantic International Dark-Sky Reserve

- **Shielding.** Use Full Cutoff Fixtures and Direct Lights Properly to Eliminate Light Spill and Trespass.
- **Color Temperature and Intensity.** Use Amber Instead of Bluish-White Lighting.
- **Timing.** Minimize Lighting Usage. Use light only when and where you need it.

IMPACT:

- Reduces light pollution**
- Increases visibility and safety**
- Average of 80 percent in electricity savings**
- Benefits wildlife**

Source: Dark Skies Initiative McDonald Observatory. Accessed on October 30, 2020. https://texanbynature.org/wp-content/uploads/2018/06/TxN_CWDDarkSkies.pdf



INITIATIVES AND ACTIONS

1. The American Medical Association encourages the use of 3,000 Kelvin (K) or lower lighting for outdoor installations such as roadways and parking lots. When possible, the PARD should ensure that all LED lighting should be properly shielded to minimize glare and detrimental human and environmental effects, and consideration should be given to utilize the ability of LED lighting to be dimmed for off-peak time periods.¹
2. Reduce nighttime glare and light trespass. Use fixtures that are full cutoff so that they light a pathway, sitting area, or the exterior of park buildings without causing glare. When lighting a sidewalk or trail, for example, space light fixtures further apart, to create pools of lights rather than washing the entire trail in light; ensuring safe passage and enhancing user navigability while reducing costs and reducing light trespass and glare.
3. Continue to manage sports lighting installations for minimum impact on the lighting of surrounding park areas and residential areas.
4. Use “de-lamping” techniques to reduce lighting levels at parks, sports fields and parking lots, where appropriate for the location and use, considering security and decorative lighting issues. Change holiday or decorative lighting to LEDs or other energy efficient lighting systems. Replace mercury vapor and high pressure sodium street, parking lot, park and other outdoor lights with energy efficient alternatives, such as LEDs. Work with Pearland’s various energy providers to promote use of utility financial incentives to assist residential and commercial customers improve energy efficiency, such as by using on-bill financing, loans and rebates and demand management programs.

5. Utilize the PARD website and social media platforms to educate people about seasonal bird migrations and encourage Pearland’s residents to turn off their lights at night during seasonal bird migrations.

STRATEGY 4.1.7: Partner with Houston Audubon and Audubon Texas to develop additional bird habitat areas and sanctuaries within Pearland.

INITIATIVES AND ACTIONS

1. Apply to become a certified Bird City Texas community. Audubon Texas has partnered with the Texas Parks and Wildlife Department to develop the Bird City Texas program.



Bird City Texas is a community-focused certification program that has been established to help people protect birds in their neighborhoods, places of employment, and within the parks where they play and relax. The criteria required to attain certification is designed to be impactful and efficient against habitat loss and other harmful factors impacting birds. To date, four cities in Texas have received this certification: Bastrop, Dallas, Port Aransas, and Houston. The 2021 Bird City Texas application cycle begins in early summer. Please visit www.birdcitytexas.org for more information on how to apply for certification.

¹ American Medical Association, 2016. Human and Environmental Effects of Light Emitting Diode (LED) Community Lighting. (Available at: <https://www.ama-assn.org/sites/default/files/media-browser/public/aboutama/councils/Council%20Reports/council-on-science-public-health/a16-csaph2.pdf>).

STRATEGY 4.1.8: Create and enhance habitat for the Monarch Butterfly.

Partner with local ISD elementary and middle school biological science departments to plant butterfly and caterpillar gardens throughout the city with host and nectar plants. Gardens should include basking stone or boards; caterpillar food sources; weedy areas for caterpillars and damp areas for butterflies to drink; and finally pans of mashed fruit to attract butterflies. Refer to sidebar on *Monarch Migration*, below, for migration seasons and types of trees monarch butterfly's perch.

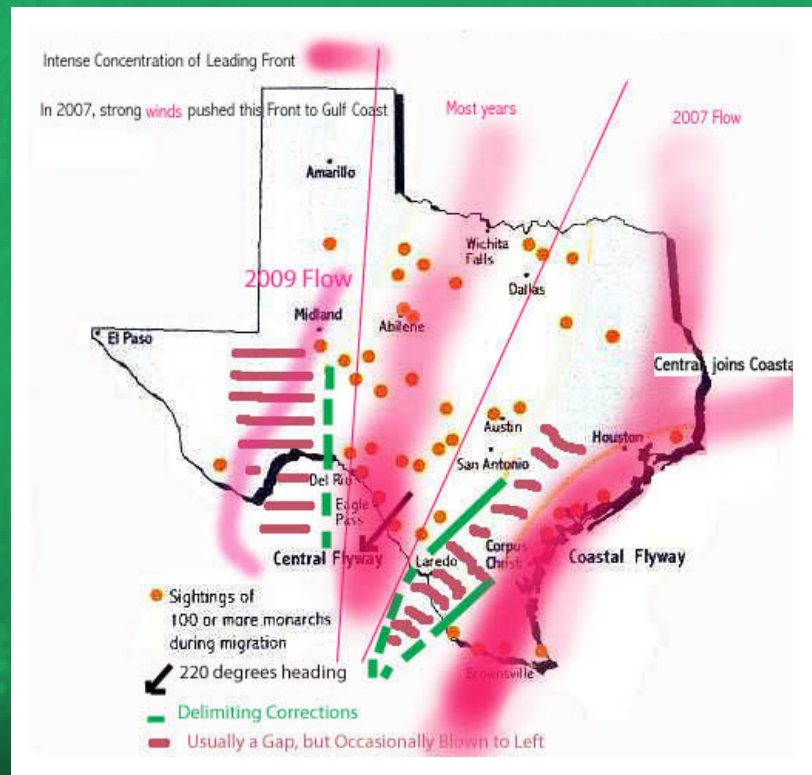
OBJECTIVE 4.2: Preserve, maintain and enhance Pearland's urban forest canopy as a significant amenity and natural resource.**STRATEGY 4.2.1:** Consider establishing the City's Urban Forestry Division as a subdivision of the PARD's Natural Resources Division.

As summarized on the City of Pearland's website, the City's Urban Forestry Program, "strives to maximize the aesthetic environmental and economic benefits that trees provide to residents and visitors by preserving, managing and enhancing existing trees and other vegetation and promoting the reforestation of the urban area, through an active inte-

Monarch Migration

In addition to migratory birds, Monarch Butterflies also migrate through Texas. Monarch Migration Front through Texas, illustrates the Monarch Migration Front and Sightings of Monarchs in Texas. 80 percent of the entire Eastern Population of the Monarch Butterfly, anywhere from 180 to 250 million monarchs, migrates down the Central Flyway over four weeks from mid-October and mid-November. Nightly populations can range as high as hundreds of thousands during the first two weeks of migration. Specific roost sites are used year after year with population clusters in some individual trees reaching as high as 10,000 Monarchs. Monarch clusters may be found on the side of tall trees away from the prevailing south-southeast winds. Ideal places are pecan groves, thickets of hackberry, mesquite, and huizache.

Monarch Migration Front through Texas



Monarch Migration Front through Texas. <http://www.riobravonaturectr.org/home.html>



grated program with community support and participation.” The Urban Forestry Program is currently housed within the City’s Department of Community Development. As the City strives to preserve and enhance its natural resources, additional synergies may be accrued if a subdivision of the Urban Forestry Program was included in PARD’s Natural Resources Division. accrued if the Urban Forestry Program was a subdivision of the PARD’s Natural Resources Division.

STRATEGY 4.2.2: *Implement reforestation projects throughout the City of Pearland, including its parks and trails.*

Many parks and trails within Pearland are located in areas of full sun. Park and trail users should not remain fully exposed to the sun for extended periods of time during harsh summer conditions; as it can result in extreme fatigue, dehydration, and skin cancer. In addition, the City’s stormwater detention and conveyance facilities, including detention basins and drainage sloughs, while attractive and well-maintained, remain totally exposed to the sun. Partial or full reforestation of these stormwater facilities, at least around pedestrian improvements, will reduce solar exposure; promote breezes; and reduce ambient temperatures, especially during the hot summer months; improve ecosystem services and habitat value; sequester greenhouse gas emissions; and ultimately enhance the general character of the City’s residential areas by turning drainage facilities into significant open space amenities.

Actions and Initiatives

1. Jointly work with the City’s Urban Forestry Program and Natural Resources Division to develop reforestation plans for parks, trails, and stormwater detention and conveyance facilities.
2. Partner with the Brazoria Drainage District No. 4 to amend drainage facility maintenance responsibilities; whereby the City of Pearland assumes increased maintenance (lawn mowing, etc.) responsibility for a 200 ft. right-of-way, centered on recreational trails, and for portions

Forest Therapy

Shinrin-yoku is a Japanese term that means “taking in the forest atmosphere,” or “forest bathing.” It was developed in Japan during the 1980s and has become a cornerstone of preventive health care and healing in Japanese medicine. Researchers primarily in Japan and South Korea have established a robust body of scientific literature on the health benefits of spending time under the canopy of a living forest. Now their research is helping to establish shinrin-yoku and forest therapy throughout the world. The idea is simple: if a person simply visits a natural area and walks in a relaxed way there are calming, rejuvenating and restorative benefits to be achieved. Shinrin-yoku is the cornerstone of preventative health care and healing in Japanese medicine. Studies have demonstrated that extended forest walks result in a wide array of health benefits, especially in the cardiovascular and immune systems, and for stabilizing and improving mood and cognition.

of stormwater detention basin embankments; in order to plant and maintain trees in the these areas.

3. Develop metrics to quantify reforestation of the city’s open space areas, including number of trees planted, acres of new forest, tons of greenhouse gases sequestered, etc.

STRATEGY 4.2.3: *Promote the use of native plant material in Pearland’s parks, along the City’s trails and within public medians.*

Native plants are those that occur naturally in the biotic region in which they evolved. As discussed within the Audubon Society’s Bird-Friendly Communities program, restoring native plant habitat is vital to preserving biodiversity. By creating a native plant garden, each patch of habitat becomes part

of a collective effort to nurture and sustain the living landscape for birds and other animals. Additional benefits include:¹

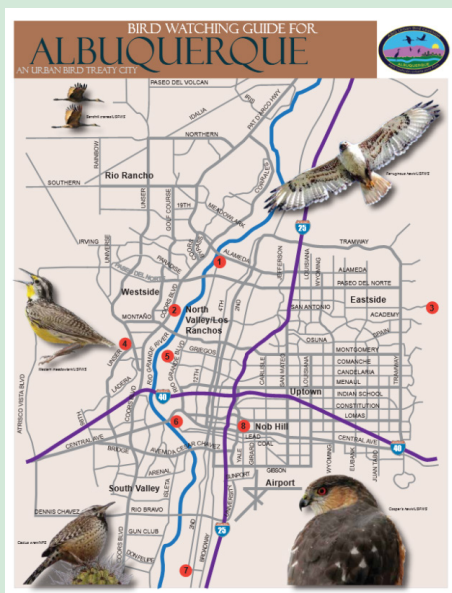
- **Low Maintenance.** Once established, native plants generally require little maintenance.
- **Beauty.** Many native plants offer beautiful showy flowers, produce abundant colorful fruits and seeds, and brilliant seasonal changes in colors.
- **Healthy Places for People.** Lawns and the ubiquitous bark-mulched landscapes are notorious for requiring profuse amounts of artificial fertilizers and synthetic chemical pesticides and herbicides. The traditional suburban lawn, on average, has 10 times more chemical pesticides per acre than farmland. Choosing native plants for landscape enhancements is a healthy alternative to using ornamental plant material.
- **Helping the Climate.** Landscaping with native plants can combat climate change. In addition to the reduced noise and carbon pollution from lawn mower exhaust, many native plants, especially long-living trees like oaks and maples, are effective at sequestering carbon dioxide and storing floodwater.

- **Water Conservation.** Because native plants are adapted to local environmental conditions, they require far less water, which saves time, money, and water.
- **Wildlife.** In addition to providing vital habitat for birds, many other species of wildlife benefit as well. Native plants provide nectar for pollinators including hummingbirds, native bees, butterflies, moths, and bats. They provide protective shelter for many mammals. The native nuts, seeds, and fruits produced by these plants offer essential foods for all forms of wildlife.

STRATEGY 4.2.4: Consider alternative tree species for streetscape enhancements.

To improve habitat and ecosystem services value of the City’s urban forest canopy, work with the City’s Urban Forester to identify alternative, deep-rooted tree species which may be used in place of Crape-myrtles (*Lagerstroemia* sp.) for enhancing the City’s thoroughfares. Additionally, instead of planting trees in equally-spaced, regimented straight lines, consider planting groupings of trees of varying sizes within the rights-of-way of vehicular thoroughfares, as space allows.

1 <https://www.audubon.org/content/why-native-plants-matter>



Bird Watching Guide. The City of Albuquerque developed a map for birders. The map gives the best locations for viewing birds and what type of species one may find there.



“ABQ now a sanctuary city – for migratory birds, that is”. By Matthew Reisen. Albuquerque Journal. Published: Saturday, May 11th, 2019. <https://www.abqjournal.com/1314530/abq-declared-a-sanctuary-for-migratory-birds.html>



OBJECTIVE 4.3: Promote Pearland's unique natural resources.

STRATEGY 4.3.1: *Actively promote eco-tourism and birdwatching in and around Pearland and Brazoria County.*

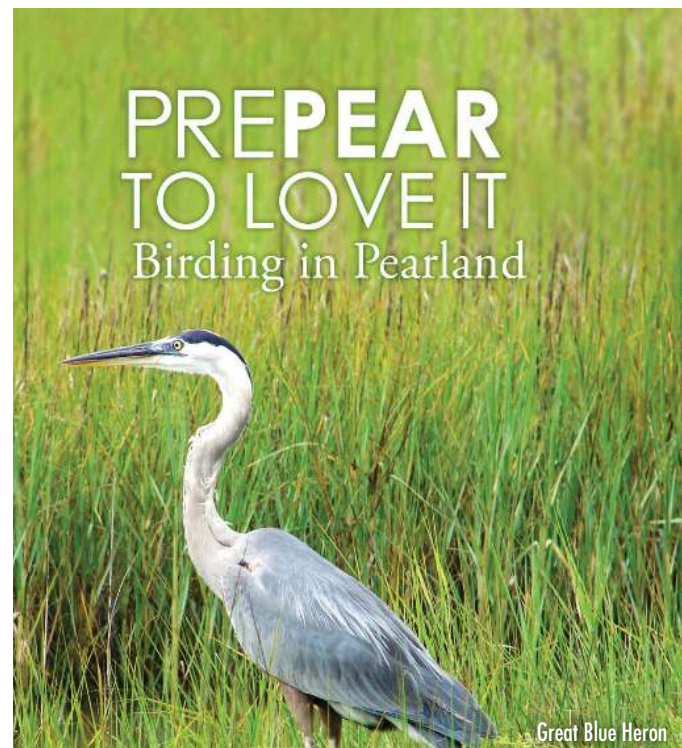
Due to its proximity to the Gulf Coast and the abundance of stormwater detention basins, sloughs, and resulting riparian / aquatic habitat, Pearland has become a significant destination for birders and year-round bird-watching, particularly during fall and spring migrations.

INITIATIVES AND ACTIONS

1. Continue to work with the City's Convention and Visitors Bureau (CVB) to promote heritage and natural resources-based recreation and tourism within Pearland and Brazoria County, including amenities such as the City's stormwater management areas, and national wildlife refuges in Brazoria County, such as Justin Hurst Wildlife Management Area, the San Bernard National Wildlife Refuge, the Brazoria National Wildlife Refuge, and the Big Boggy National Wildlife Refuge.
2. Amend the Visit Pearland, *Prepare to Love It: Birding in Pearland* brochure¹ to include a map of key birding destinations. Incorporate the Upper Texas Coast (UTC) stations that are part of the Great Texas Coastal Birding Trail.
3. Consider habitat enhancements within stormwater detention basins that may further protect the safety of bird species that are roosting, over-wintering, or resting during migration.
4. Consider installing camouflaged bird blinds to the boardwalk and pavilion planned for Phase 2 of JHEC Nature Trails, refer to Strategy 1.3.8.
5. Consider reforestation of the Delores Fenwick Nature Center detention basin's floor with bottomland understory hardwood tree species, including blackgum (*Nyssa sylvatica* Marsh.),

yaupon holly (*Ilex vomitoria*), red maple (*Acer rubrum* L.), and sweetgum (*Liquidambar styraciflua* L.). Consider ways of improving the soil quality.

6. As part of the Great Texas Coastal Birding Trail, Clear Lake Loop, and Mustang Bayou Trail, work with the Texas Parks and Wildlife Department (TPWD) to amenitize birdwatching facilities at the John Hargrove Environmental Complex (UTC 087A) and the Shadow Creek Ranch Nature Park (UTC 087B) sites. Birdwatching amenities could include additional vegetative enhancements to attract birds (i.e., groves of fruiting trees, wetland plants, bird and bat houses, screened pavilions, interpretive signage, stationary binoculars, etc.).
7. Work with TPWD to erect additional Bird Trail Sign Markers along Magnolia Road (UTC 087A), McHard Road (UTC 087B) and other principal thoroughfares around these sites in Pearland.



¹ https://visitpearland.com/wp-content/uploads/2019/05/birding_brochure_2019_web.pdf

GOAL 5 ACCOUNTABLE IMPLEMENTATION

Fiscally sustainable and resilient operation, maintenance, and administration of Pearland's parks, recreational facilities, trails, and open space resources.

OBJECTIVE 5.1: Evaluate a range of opportunities through which to fund improvements to Pearland's parks system.

STRATEGY 5.1.1: Exercise fiscal responsibility and prudence in all financial and business transactions with respect to parkland acquisition, development, operations, and maintenance.

INITIATIVES AND ACTIONS

1. Actively pursue grant funding through the Texas Parks and Wildlife Department (TPWD). As summarized on their website (https://tpwd.texas.gov/business/grants/recreation-grants/copy_of_grant-deadlines), TPWD has a range of grant funding programs relevant to the City of Pearland's parks and recreation system, including the following programs:
 - Community Outdoor Outreach
 - Local Parks Outdoor Outreach
 - Local Parks Non-Urban Outdoor Recreation
 - Local Parks Small Community Recreation
 - Local Parks Non-Urban Indoor Recreation
 - Recreational Trails
2. Continue to apply for funding from private foundations or other granting entities.
3. Utilize the comprehensive listing of potential funding sources provided in Appendix H, *Funding for Implementation*, to identify and leverage additional funding for local projects. Regularly pursue federal, state and foundation grants to subsidize local funding.

STRATEGY 5.1.2: Budget in field groomers and gator style vehicles in the Parks Department's Capital Improvement Program (CIP).

The current number of maintenance staff within the Pearland Parks and Recreation Department varies from 22 - 24 crew members, which works out to about one maintenance staff per park. The maintenance staff is stretched thin and find it difficult to maintain parks to the standards required. In order to support the maintenance staff the right equipment is key. Providing specific tools to care



Pearland's current and expanding athletic and turf fields would allow the maintenance staff to keep the quality of the fields high.

STRATEGY 5.1.3: *Budget electronic keypad entry across facilities in the Parks Department's Capital Improvement Program (CIP) in order for the Parks Department to safely access and secure facilities.*

Technology utilization is a major trend in parks and recreation in recent years.¹ Parks departments are considering drones for natural resources inventory and monitoring systems like geofencing. Updating Pearland's parks and facilities with technology for marketing, security, and data collection will improve the parks system and ensure its continued success. To start, consider installing electronic keypad entry across park facilities, as it is more convenient, provides better access control, and advances security.

STRATEGY 5.1.4: *Continue to develop innovative fund-raising practices such as park and facility naming rights, to raise funds for park operations and maintenance.*

The Parks Department should continue to employ a variety of methods to leverage park and facility assets to raise additional capital resources for park operations and maintenance. One example is to approach utility companies to donate electricity and water for a particular park, or a community's parks system, thus reducing the amount of capital a parks department is required to expend on operating a park or recreational facility. Another option, as outlined in Strategy 5.1.5, enlist the support of the Forever Parks Foundation of Pearland in developing new and innovative ways to raise funds for park amenities.

STRATEGY 5.1.5: *Evaluate the responsibilities, powers and authorities of the Forever Parks Foundation of Pearland in implementing the provisions of this Master Plan.*

Many of the strategies and recommendations within this Master Plan will likely require the support and assistance of an independent, quasi-public entity. Depending on the powers and enabling authorities required, from a "friends of" organization, to an independent, tax-exempt nonprofit organization, and all the iterations in between, a parks foundation can be very successful in supporting a municipal parks and recreation agency. As summarized by the National Association of Park Foundations, important responsibilities of a parks foundation may include:

- development of capital resources through annual fundraising, grants, major gifts, capital campaigns, planned giving, and endowment funds (e.g., cash, appreciated securities);
- development of in-kind donations of equipment, supplies, and land;
- public engagement and effective advocacy efforts;
- volunteerism management;
- land holding;
- protection from potential litigation against a public parks and recreation agency;
- preventative isolation of politics and conflict from making a park system more impactful.

Ultimately, an optimally-functioning parks foundation can counteract public budgeting trends by invoking the power of philanthropy and volunteerism to replace unfunded budgetary items, which reduce the need for higher revenue-producing user fees and the "pay-to-play" trends happening across public recreation.²

INITIATIVES AND ACTIONS

1. In light of the strategies and recommendations summarized within Chapter 2.0, *Pearland Parks Tomorrow*, review the powers and authorities of the Forever Parks Foundation of Pearland against what authorities may be required in the near future; in particular, accept-

¹ The National Recreation and Park Association (NRPA) releases an article on the top trends in parks and recreation each January for that upcoming year: <https://www.nrpa.org/parks-recreation-magazine/2020/january/top-trends-in-parks-and-recreation-2020/>.

² Nathan A. Schaumleffel, August 8, 2015. "What is an optimally-functioning friends group or park foundation?" NAPF, <https://www.the-napf.org/single-post/2015/08/08/What-is-an-OptimallyFunctioning-Friends-Group-or-Park-Foundation>

ing donations of land, administering volunteer efforts and raising capital resources.

STRATEGY 5.1.6: *Actively promote private sector involvement in park enhancement and maintenance projects.*

INITIATIVES AND ACTIONS

1. Work with the Pearland Economic Development Corporation (PEDC), Convention and Visitors Bureau, and Chamber of Commerce to develop a list of local and regional corporate foundations that may be interested in contributing capital and/ or human resources toward a variety of parks-related projects.
2. Develop a menu of demolition/clearing, planting, and maintenance projects that can be accomplished within a four-hour period by different sized groups of volunteers.
3. Identify means through which to provide recognition to corporate / organizational sponsors.
4. Distribute projects menu to candidate groups and follow-up with a teleconference to each, explaining the likely benefits and outcomes of contributions.
5. Design standard park volunteer t-shirts and order form for prospective sponsors.

OBJECTIVE 5.2: Ensure that the Parks Department is fully equipped with the resources it needs to effectively operate and maintain Pearland's parks, recreational facilities and programs, and open space resources.

STRATEGY 5.2.1: *Ensure that the Parks Department is adequately staffed to carry out the Mission of the Department and the goals of this Master Plan.*

Parks are a tangible reflection of the quality of life in a community. They provide identity for citizens and are a major factor in the perception of quality of life in a given community. Parks and recreation

services are often cited as one of the most important factors in surveys of how livable communities are. Parks provide gathering places for families and social groups, as well as for individuals of all ages and economic status. To maintain the demands of a public park system that reflects the quality of life associated with the City of Pearland, appropriate levels and skills of operations and maintenance personnel is paramount to ensuring sustainable administration of PARD assets. In the last five years no additional staff have been added to the Parks and Recreation Department. Over the next five years several additional staff will be required to operate and maintain the capital projects that have recently been implemented as well as the proposed programs and projects recommended within this Master Plan. Administrative staff will also be required to manage the work of additional operations and maintenance staff. The following additional staff positions are required to effectively operate and maintain Pearland's parks and recreational facilities.

INITIATIVES AND ACTIONS

1. **Events Coordinator:** Special Events have assumed a more prominent role in the delivery of City services, outside of parks and recreation. Proportionally to this the City of Pearland continues to grow. To meet the needs of the increasingly diverse community, a Cultural Inclusion Plan is underway. This plan is to meet the antiquated event inventory that has represented Pearland from days of a population of 30,000 residents, and will deliver a relevant product to serve its current constituency.
2. **Parks Manager:** As this number of park maintenance staff grows, so too must the supervision of this portion of PARD operations. In order to meet this need, a Park Manager would provide a level of oversight for existing Park Supervisors. The Parks Manager would carry out supervisory responsibilities in accordance with established standards and lessen the broad span on direct supervision occurring due to growth of the community, and associated maintenance.



3. **Parks Maintenance Staff:** Day-to-day grounds maintenance responsibilities would include: mowing, edging, garden maintenance and care, trail maintenance, small facility repairs, city-wide forestry program via tree farm, and supervision of maintenance worker(s).
4. **Recreation Specialist:** The PARD has been partnering with other agencies to expand aquatics to other sites, to offer a more geographically diverse program. This opportunity has the potential to double the level of offerings with only the addition of one entry level staff member, a Recreation Specialist. With this addition, time is also made available in the Aquatics Division to focus more attention on enhancing and growing relationships in Athletic operations with local user groups.
5. **Mechanic:** Add a mechanic position or shared support of fleet staffing to help expedite equipment repairs.
6. **Forester:** As discussed in Strategies 3.1.2 and 4.2.2, with enhancements to the City's urban forest canopy will come the need for increased watering and maintenance of newly planted trees. An additional Forester position will ensure that the investment into additional tree stock will be adequately maintained.
7. **Natural Resource Maintenance Workers:** As described in Strategy 4.1.2, as additional habitat restoration best practices are employed within the Shadow Creek Ranch Nature Trail park and elsewhere, additional Natural resource Maintenance workers will be required.
8. **Marketing Support Staff:** As the PARD's online and social media presence continues to increase, as well as with additional recreational and other programs being offered at Centennial Park and elsewhere, there is the need for an additional Marketing Support staff position.

STRATEGY 5.2.2: Consider additional recruitment / retention incentives for Parks Department maintenance staff.

INITIATIVES AND ACTIONS

1. Work with City's Human Resources Department to consider potential incentives to attract and retain potential candidates.
2. Provide clear pathways for advancement within the Parks and Recreation Department.

STRATEGY 5.2.3: Consider developing a Park Facilities Standards Manual.

A Park Facilities Standards Manual establishes minimum design, construction and performance expectations for the facilities and elements that are part of, and contribute to, a city's system of parks. The intention behind developing standards is to inform and guide park and open space planning, capital improvements and capital maintenance and to sustain life-cycle resource investments in public space. The standards are a reference instrument for selection of materials, fixtures, and systems and integrate city criteria with industry standards and applicable federal, state, and municipal requirements into a primary-single source document. Anticipated benchmarks for performance/function, safety, environmental impact, and anticipated maintenance/life-cycle resource needs are established by each standard. Utilizing a Park Facilities Standards Manual also enables a Parks Department to ensure continuity in quality and character through specifying uniformity in fabrication, with respect to materials, finishes, and color palette; as well as in construction and installation. A Park Facilities Standards Manual will include equipment specifications that account for factors of safety, inventory standardization, equipment maintenance, product availability and cost, initial replacement costs, staff resources, maintaining aesthetics and service levels, applicable laws and regulations, recycling, and environmental concerns.

INITIATIVES AND ACTIONS

1. Based on the Park Facilities Standards Manual, implement a Work Order Management System. A work order system should be used to track life cycle maintenance requirements

that are tied to weekly and monthly work orders. This will help the Parks and Recreation Department's staff to stay ahead of preventative maintenance and reduce breakage of park facilities and equipment.

STRATEGY 5.2.4: *Consider developing a park asset replacement schedule.*

Develop a depreciation program and replacement schedule for all parks facilities and equipment (all depreciable capital assets).

INITIATIVES AND ACTIONS

1. Based on past experience, develop a realistic lifespan for all physical assets, to begin at the time of installation.
2. Calculate the estimated annual depreciated value of all assets, and incorporate into a budgetary line item within the PARD's annual budget.
3. Develop an asset replacement schedule for all facilities and equipment within Pearland's parks.
4. Work with the Pearland Parks Forever Foundation to periodically replace playground equipment and other park facilities.

STRATEGY 5.2.5: *Consider developing a maintenance manual for all parks and open space areas administered and maintained by the PARD.*

Develop a seasonal maintenance plan and schedule for each park, the Natatorium and Recreation Center, aquatic facility and splashpad. Include preventative maintenance measures as well as routine annual/semi-annual upkeep of facilities and equipment in order to increase lifespan, as outlined within the park asset replacement schedule (proposed in Strategy 5.2.4).

STRATEGY 5.2.6: *In order to better serve the PARD's growing constituency, consider space planning modifications within the Recreation Center and Natatorium, and at the Knapp Activity Center.*

INITIATIVES AND ACTIONS

Recreation Center and Natatorium

1. Expand the Kidz Korner and Drop-in Daycare program.
2. As the PARD staff grows consider additional space to enable office expansion.
3. Based on historically low and declining use, repurpose one racquetball court to expand the fitness space.

Knapp Activity Center

4. To alleviate storage space needs, in the future, consider building-out into existing lawn area for additional programmable space. Also consider encompassing the Knapp Activity Center's courtyard along Grand Boulevard.
5. Alternatively, consider building a covered programmable space outside of the Center.
6. Consider addressing parking needs by acquiring the empty lot next door to the Knapp Activity Center. Evaluate available space adjacent to facility.

OBJECTIVE 5.3: *As a CAPRA-accredited agency, continue to optimize departmental best practices and resources to grow with the open space and recreational needs and aspirations of the community.*

STRATEGY 5.3.1: *Consider alternative software platforms for automating the PARD's CAPRA annual reporting requirements.*

The PARD has just purchased the PowerDMS software platform to assist with annual CAPRA reporting requirements. Ensure that departmental and divisional administrators receive adequate training regarding the use of this program. Schedule times CAPRA reporting information should be submitted well in advance of when it is due.