1.1 Purpose and Impetus

The purpose of the Pearland Trail Master Plan (herein referred to as the Plan) is to establish appropriate policy guidance and direction for the gradual, phased development of a community-wide trail network in Pearland. As a complement to the City’s Parks and Recreation Master Plan, which was last updated and adopted in 2006, this Plan is also ultimately aimed at enhancing livability in the community.

As Pearland has grown rapidly in recent years and seen great success in its economic development efforts, there is now increasing interest in ensuring a higher level of amenities. As in many similar communities in Texas and elsewhere, the careful planning and implementation of a well-designed trail system is a key component of this community enhancement strategy.

Considering the desire in Pearland for a community-wide system of walking and bicycling paths, the objectives of this Plan are to:

- Document the vision of stakeholders, including elected officials, citizens and established groups and organizations, regarding the possibilities for and potential characteristics of a community-wide trail network;
- Verify the degree of interest and enthusiasm for trail development given the limited presence of trails in Pearland to this point in the community’s development history;
- Offer strategic direction for the phased development of an interconnected and practical community-wide trail network that links neighborhoods, parks, schools, public facilities, commercial areas and other key destinations;
- Consider geographic locations within the community where potential trail alignments would be most feasible, make good sense as part of an overall trail system, and would likely attract the highest utilization based on proximity to population and development, both current and future;
- Serve as a reference document and provide useful information for local decision makers, advisory boards, trail and recreation enthusiasts, and Pearland residents regarding key considerations in trail system development and maintenance;
- Establish the policy justification for securing land and/or easements for trail improvements, whether obtained through regulatory mechanisms, dedications or donations;
- Provide the basis for pursuing grants and other external funding and for generating community support for local funding initiatives, such as potential bond program funding; and

An estimated 131 million Americans regularly bicycle, walk, skate or jog for exercise, sport or recreation.

- National Bicycling & Walking Study
Introduction and Background

Pearland Trail Master Plan

- Provide action recommendations and implementation priorities for the acquisition, development, maintenance and management of individual trail facilities and an overall trail network.

Rather than dictate strict standards, this Plan is intended to establish sound but flexible guidelines for the location, type and construction of individual trail and path segments that will contribute toward an eventual city-wide system.

1.2 Trail System Benefits

Like parks and recreation facilities in general, a community trail system can be a key ingredient in community livability and appeal by:
- providing opportunities for social interaction (across all age and race/ethnic groups), physical activity, and relief from the urban environment;
- promoting the community’s physical connectivity, especially by means other than the private automobile;
- enabling public access to creek corridors and other natural features that lend character to the community – and, in some cases, buffering such assets from urban development by preserving a linear corridor in perpetuity for trail use; and by
- offering safer walking and biking routes to schools by separating youngsters from busy roadways.

While a Pearland trail system is envisioned primarily for recreational use, a community linked by interconnected trails offers its residents and businesses a transportation alternative that can reduce vehicular trips, provide a safe commuting option for individuals who live close to their workplace, and contribute to better air quality in the area.

1.3 Trail Planning Considerations

Whether planning and designing an individual trail alignment or an overall trail system, the following potential features, opportunities and constraints, and “sensitivities” must be considered:
- Local and regional demographic characteristics, recreation trends, and expected levels of facility use;
- Perceptions, desires and needs of local residents and potential trail users;
- Existing and future patterns of land use and the corresponding distribution of population;
- Planned major investments and capital improvements (e.g. roads/bridges, utilities, parks, community facilities);

People who exercise regularly have 14% lower claims against their medical insurance and spend 30% fewer days in the hospital than people who do not exercise regularly.

- National Bicycling & Walking Study
Introduction and Background

Potential physical obstacles to particular alignments, including waterway and railroad crossings, limited space adjacent to existing homes and/or commercial development, etc.;

Advance outreach to abutting property/home owners who may have concerns, and responsiveness to owners if and when any problems arise from trail activity;

Access from neighborhoods, parks, schools and other locations, and interconnection with the city sidewalk system;

Trail type, surface, width and other design features depending on intended uses, particularly for shared use;

Trail location and separation from roadways and vehicular traffic;

Trail design and construction standards in environmentally sensitive locations and areas where slope is a factor;

Safety and design considerations at intersections, crosswalks and other street crossings;

Vertical clearance where trees, bridges or other structures will be over the trail segment;

Utility and drainage planning;

Landscaping or other enhancements;

Trail accessibility consistent with Americans with Disabilities Act (ADA) standards;

Directional and informational signage;

Lighting;

User security (including police patrol planning, emergency call boxes);

Emergency vehicle access;

Amenities such as benches, stretching and exercise stations/equipment, etc.;

Trailhead locations and parking, bike racks plus other potential amenities such as drinking fountains and restrooms;

Trail promotion and public information (maps, guides, brochures);

Potential volunteer roles (maintenance, education/guides, etc.);

Coordination with other plans and programs; and

Opportunities for partnerships (public/public and public/private) related to acquisition, development, maintenance and management.

This Plan recognizes the presence and use of privately-owned trails and off-street sidewalk systems in Pearland, especially in the area’s larger, master-planned developments. However, the Plan does not directly address the development or maintenance of such private facilities, although public and private trail networks should be interconnected wherever possible and avoid duplication of alignments and areas served.

In its Sample City Non-Motorized Trail Plan, the Mountainland Association of Governments in Utah cited 10 Economic Benefits of Greenways and Trails:

**Increase in Real Property Values**, particularly for property owners in close proximity to such amenities.

**Increased Property Tax Revenues**, which provides return on the public investment, thereby helping to offset the public cost of trail system development.

**Value to Private Development**, as nearness to trail amenities can increase sales prices and the marketability of adjacent properties – and clustering of residential units to accommodate trail installation can reduce overall development costs and increase profitability.

**Expenditures by Residents**, as area residents purchase walking/jogging shoes and clothing, bicycles and related accessories, skates, etc., and trail users also patronize local convenience and service businesses near the trails.
1.4 Guiding Principles of the Plan

This Plan was prepared based on a set of principles that reflect community values and priorities as expressed during the plan development process. These principles include:

- The City should begin longer-term trail system development by focusing first on one or more “signature” projects that highlight good trail design and utilization and will help to build public support for a sustained improvement program.
- As an early initiative, the City should also expand upon the few existing trail locations in the community (east-west segment near Aaron Pasternak Park, north-south segment south of Broadway and parallel to West Oaks Boulevard).
- Another prime consideration in initial trail system development should be locations with existing drainage district maintenance easements. Otherwise, space for trail development may be minimal or will depend upon future property acquisition or securing of additional rights-of-way.
- The trail system should be developed similar to a community’s thoroughfare network, with primary and secondary alignments identified and designed according to their anticipated system role and utilization level – and with principal segments built first, followed by secondary linkages.
- Trail connections between various community destinations and focal points should be highlighted and promoted (including neighborhoods, schools, parks, community facilities, commercial areas, etc.).
- To the maximum extent practicable, the trail network should be designed as an off-street system with minimal use of widened sidewalks along roadways or striped, on-street bicycle lanes.
- In deciding on which side of a waterway to put a trail (e.g., along Mary’s Creek, Clear Creek), access by current and longtime Pearland residents should be a priority. On the other hand, it should be recognized that the less developed side of a creek corridor may be more workable for new trail development. A trail on both sides may be warranted in more developed areas, similar to along Brays Bayou in Houston.
- To avoid impositions on private property, trail alignments should deviate from creeks and follow parallel streets in locations where existing development, particularly residential backyards, abut the creek with limited setback and/or no available right-of-way.
- The City’s trail network should interconnect with and build upon trail systems and projects of other entities, including area drainage and utility districts and private developments.
Introduction and Background

The City should seek linear dedications of land from new developments along Clear Creek to begin to establish a continuous trail alignment along this key corridor.

Creek crossings by trail users should be accommodated by periodic foot/bike bridges at key points (as is planned for the new phase of Centennial Park) and by walkways and bike lanes on new/upgraded roadway bridges.

With the extent of current and planned drainage detention areas in Pearland, primary trail segments should be linked to side/loop trails, recreational areas, and nature preserves associated with such sites.

It should be recognized that any U.S. Army Corps of Engineers drainage project that is finally approved for Clear Creek will likely involve significant reworking of the creek banks similar to Sims Bayou, which would offer trail opportunities within a much wider cross section.

Many of the guiding principles within the City’s adopted Parks and Recreation Master Plan also apply to the Trail Master Plan. Those principles highlight such themes as community well-being and livability, promotion of fitness and leisure opportunities, environmental resource protection and nature tourism promotion, community cohesiveness and connectivity, equitable access, and intergovernmental and public/private cooperation and coordination. The following Master Plan principles, in particular, are repeated here given their universal applicability from a planning and procedural standpoint:

- Availability of financial resources will be considered in all phases of planning, acquisition, development, operation, and maintenance of facilities.
- The public will be involved in all stages of the planning process so that facility design considers the needs, desires and opinions of users.
- Facilities will be planned and coordinated to allow for flexibility in adapting to future community recreation needs and requirements.
- Other existing plans that affect the community will be integrated into the final recommendations and the implementation of this plan.
- A process and procedure for land acquisition for future system improvements will be established prior to development.
- The planning and implementation process will continuously offer opportunities for incremental evaluation and review.

1.5 Vision and Goals

A vision statement incorporates a shared understanding of the nature and purpose of the community, and uses this understanding to move it toward a greater purpose. The statement describes the community’s preferred future,
offering direction for the goals, objectives and policies that provide a framework for future planning, development and programmatic decisions.

The community’s vision statement for this Trail Master Plan was developed through community input by way of the Parks, Recreation and Beautification Board (PRBB). The PRBB previously agreed on a vision statement for purposes of the Parks and Recreation Master Plan:

*Connect the community through people, parks, and programs.*

The complementary trail system vision for Pearland is as follows:

*Enable Pearland residents to reach countless destinations within the community safely, on foot or by bike, through a comprehensive trail system – and one that ultimately provides a continuous linkage beyond Pearland all the way to Clear Lake and Galveston Bay.*

A mission is a more detailed statement of the vision. It specifies the role, or philosophy, by which the community intends to serve its residents. The mission describes what the community does, who it serves, and what makes it unique. As with the vision, the community’s mission statement was also developed by the PRBB. The mission statement for Pearland, as previously stated in the Parks and Recreation Master Plan, is as follows:

*Pearland Parks and Recreation is motivated by the needs and desires of all citizens of the community. Guided by the Pearland Parks, Recreation and Beautification Board, the department is dedicated to providing the citizens of Pearland with accessible parks and indoor and outdoor areas which are multi-functional, clean, safe, secure, and unique. The City will promote activities to strengthen the body and mind as well as beautification efforts that bring visual appeal to all areas of the City. In this manner, the City reflects its intent to preserve and highlight our natural environment while promoting tourism and enhancing future growth.*

Once a long-range vision is established – and the community mission is understood – goals provide a next set of guideposts for moving toward attainment of that vision. The City, in collaboration with the PRBB, has identified the below-listed goals for the Plan:
Introduction and Background

Goals

1. An interconnected community enjoyed by recreational walkers and cyclists.
2. A well-designed trail system that accommodates users interested in longer-distance hikes and bicycle routes.
3. A trail network that supports the community’s environmental and open space priorities.
4. A series of trails that allow for shared use, where safe and appropriate, but also specialized uses to serve a diversity of interests.
5. Equitable distribution of and access to trail system components across the community.
6. A manageable trail system that can be built, operated and maintained by the City in a cost-effective manner.
7. Pursuit of interagency and public/private partnerships to share the costs and maintenance responsibilities of a comprehensive trail system.

1.6 Policies

The following statements of policy should guide decisions related to trail system development and project planning and implementation:

- Trail system elements should be located and designed to be conveniently accessible to nearby residents as an outdoor resource for physical activity and fitness opportunities, particularly walking, jogging and bicycling.
- Pearland’s trail system should be designed, implemented and promoted to yield the economic and “quality community” benefits such an amenity can provide.
- Trail system development should be well coordinated with the City’s other physical planning activities (land use, transportation, parks, etc.) so that trail corridors serve a buffering role between different development intensities, help to preserve “green space” amid urban development, and offer protection to valued environmental resources such as creeks and wetlands.
- Trail segments should be developed, potentially in coordination with areas schools and community organizations, to provide “outdoor classroom” opportunities near schools for environmental education and stewardship activities.
- As Pearland works to revitalize its original townsite and elevate the community’s history, trails in and around the downtown area should be designed with heritage promotion and access to significant sites in mind.
- The City should maximize disabled access in its trail network design and promotion, including by posting the accessibility level of particular segments at trailhead locations.

The American public saves from 5 to 22 cents for every automobile mile replaced by walking and bicycling, due to reduced pollution, oil import costs, and costs due to congestion, such as lost wages and lost time on the job.

- National Bicycling & Walking Study
Introduction and Background

*Pearland Trail Master Plan*

- The trip reduction and alternative transportation benefits of an interconnected trail system should be kept in mind in prioritizing trail segments that would connect neighborhoods with other community destinations.

1.7 Key Community Trends

Chapter 1, Community Perspective, of the City’s adopted Parks and Recreation Master Plan includes extensive documentation of key socioeconomic indicators for Pearland and the surrounding area. As a supplement to this information, below is a summary of some of the latest available data for Pearland and vicinity.

**Population**

According to the Pearland Economic Development Corporation (PEDC), based on 2005 figures from the Claritas data service for zip codes 77581 and 77584:

- The Pearland area had 81,760 residents in 2005, up 37 percent from 59,667 in 2000.
- The Pearland area is projected to have 103,028 residents by 2010, which would represent growth of nearly 73 percent over the current decade – nearly matching the 77 percent growth from 1990 to 2000.
- The area’s median age was 35.46 in 2005, with 28.7 percent of the population under age 18 and roughly nine percent age 65 and older.
- The area’s average household size in 2005 was 2.83 persons, based on 28,844 households in 2005 (projected to increase to 36,359 by 2010).

**Income**

Based on the same data source as for Population above, the PEDC reports:

- Median household income in the Pearland area of $75,783 in 2005.
- Per capita income of $31,162 in 2005.
- Approximately 18 percent of area households had incomes below $35,000 in 2005, while 33.4 percent had incomes of $100,000 or more.

**Growth and Development**

Pearland continues to add population, new housing units, jobs, and commercial square footage at a rapid pace. This has required corresponding public investment in street and infrastructure improvements, school facilities, and expanded public service capacity. It is expected that the city limits will continue to expand in coming years as parts of the extra-territorial jurisdiction (ETJ) are gradually incorporated into the city, including some of the area’s highest-profile master-planned developments and municipal utility districts.
1.8 Coordination with Other Plans

This Plan was prepared with consideration of the following complementary and related plans already prepared and maintained by the City of Pearland:

- **Comprehensive Plan.** The City’s overall, long-range planning document for guiding Pearland’s physical development (land use, transportation, utility infrastructure, etc.) and enhancing the community in coming years. An update to the original 1999 plan was adopted by City Council in July 2004.

- **Thoroughfare Plan.** A component of the adopted Comprehensive Plan which depicts the planned improvement and/or extension of existing arterial and collector roadways and the projected need for, and potential alignment of, additional future roadways. These roadway plans have implications for the City’s current and future sidewalk system, as well as trail system development. The City’s subdivision regulations and associated infrastructure design standards also determine how and where sidewalks and/or trails may be required through the development approval process.

- **Parks and Recreation Master Plan.** Provides comprehensive policy direction and implementation guidance over a 20-year planning period (to 2025) for meeting both current and future parks and recreation needs in Pearland. Adopted in 2006, this plan set the stage for this Trail Master Plan.

- **Old Townsite Downtown Development Plan.** Completed in October 2005, this plan highlights the historic and cultural significance of Pearland’s original townsite area and establishes a vision for its revitalization, including a series of trails that would better connect the downtown area to nearby neighborhoods, parks and commercial areas.

1.9 Plan Development Process

The process of developing this Plan involved technical work involving the consultant team and City staff, including extensive field work across the community, as well as interaction with the following key groups as follows:

- An initial meeting with the City Council-appointed Parks, Recreation and Beautification Board (PRBB) and Trail Subcommittee (June 22, 2006).

- A “Discovery Tour” driving tour in Pearland and other area communities with trail networks (August 31, 2006).

- A series of informal discussion sessions with various interests and partner groups/agencies, including drainage/school/utility districts, private development, Keep Pearland Beautiful, cycling advocates, and a group of key City management and department staff representing planning, engineering, projects, and parks and recreation (October 9, 2006).
Introduction and Background

Pearland Trail Master Plan

- A City Council briefing and initial public hearing (October 23, 2006).
- Review and discussion of draft plan sections with the PRBB (January 18, March 8, April 19, and May 10, 2007).
- A final plan presentation and public hearing before Pearland City Council (June 25, 2007).
- Final City Council consideration and plan adoption (August 13, 2007).

In addition to this Introduction and Background chapter, the final plan document includes the following sections which reflect the major areas of effort in developing this Trail Master Plan:
- Chapter 2, Existing Conditions
- Chapter 3, Needs and Opportunities
- Chapter 4, Proposed Trail Network
- Chapter 5, Implementation