

6

Needs Assessment



Edinburg Parks and Recreation Master Plan

A needs assessment is conducted with the objective of determining whether parks are in sufficient supply and appropriately located to meet the recreation needs of community residents. By applying the standards that are outlined in [Chapter Five, Facility Standards](#), to the current population, the existing acreage of parks and recreation areas, number of facilities and improvements available within each park, and the degree of sufficiency or deficiency of the current parks and recreation system may be determined. This same approach is used to determine the future needs of the community. In other words, standards are applied to the projected future population providing a total required acreage and number of facilities, equipment, amenities, and improvements needed to fulfill the needs of community residents.

The purpose of this chapter is to identify the parks and recreation needs of the City and its planning area. The community's needs are matched with the existing parks and recreation facilities to determine current and forecasted needs, represented as a surplus or deficit. Parks and recreation needs are quantified in acres required to meet locally adopted standards. Improvement needs for each park are also identified.

6.1 DETERMINING NEED ■ ■ ■

The existing parks and recreation supply available to citizens is documented in [Table 4.1, Existing Public Parks](#). The system generally includes one mini-park (Citrus), eight neighborhood parks (Frontier, Cenizo, West, Apollo, Fountain, Jaycee, Freddy Gonzalez and Trevino), four community parks (Memorial, South, and Dr. Diaz and Bicentennial), one regional park (Municipal), and five special use facilities (Ebony Hills Golf Course, Monte Cristo Golf Course, Los Lagos Golf Club, the Roadrunners Professional Baseball Park, and the World Birding Center). Standards have been developed for each of these areas and facilities in [Chapter Five, Facility Standards](#), which are generally consistent with those established by the National Recreation and Park Association (NRPA).¹ Further to the aforementioned existing parks and recreation facilities, it is noted that there is also a parcel of land (3.5 acres) at the northeast corner of Canton and Jackson,

¹ Standards have not been developed for the special use facilities due to their unique use characteristics and, in many cases, non-public ownership.

- Mini – Parks**
- ◆ Citrus Park (0.9 ac.)
- Neighborhood Parks**
- ◆ Frontier Park (2.2 ac.)
- ◆ Cenizo Park (5.4 ac.)
- ◆ West Park (2.1 ac.)
- ◆ Apollo Park (2.1 ac.)
- ◆ Fountain Park (4.1 ac.)
- ◆ Jaycee Park (2.6 ac.)
- ◆ Freddy Gonzalez Park (8.2 ac.)
- ◆ Trevino Park (8.0 ac.)
- Community Parks**
- ◆ Memorial Park (16.8 ac.)
- ◆ South Park (15.0 ac.)
- ◆ Dr. Diaz and Bicentennial Parks (18.0 ac.)
- Regional Parks**
- ◆ Municipal Park (156 ac.)

which is currently being used for gas wells, but which has been dedicated to the City for future use as a park.

The most common approach for assessing the need for parks and recreation areas and facilities is use of a two-pronged assessment involving both community- and standard-based methods. Application of these two methods results in a determination of the service level of the existing parks and recreation system. The degree of sufficiency or deficiency is determined by applying standards (standard-based) and by soliciting community input (community-based) to identify the existing needs and future priorities of the community.

To determine the parks and recreation needs, a combination of both the standard-based and community-based approaches was used. The former approach used NRPA standards. The latter approach used input from a citizens’ questionnaire, as described in **Chapter Four, Environmental Scan, Meeting Minutes**, and active engagement of the Citizens’ Delegation, Parks Board, and others through meetings and one-on-one discussions.

6.2 CURRENT AND FUTURE NEEDS ■ ■ ■

The NRPA sets forth standards for recommended acreage of parks per 1,000 persons. The standards include: 0.25 to 0.50 acres/1,000 persons for mini-parks, 1.0 to 2.0 acres/1,000 persons for neighborhood parks, 5.0 to 8.0 acres/1,000 persons for community parks, and 8.0 to 10.0 acres/1,000 persons for regional parks. Using the low range of these standards as a measurable benchmark and basing the assessment on a current year (2005) estimate of 58,200 persons, the total acreage of parks and recreation areas needed is 829.4 acres. As indicated in **Table 6.1, Park Supply and Demand (Based on NRPA Standards)**, this need is calculated to include 14.6 acres of mini-parks, 58.2

Table 6.1, Park Supply and Demand (Based on NRPA Standards)

Park Classification	Existing Acreage	Recommended Acreage	Percent of Need
Mini-Park	0.9 acres	14.6 acres	6.2%
Neighborhood Park	34.7 acres	58.2 acres	59.6%
Community Park	49.8 acres	291.0 acres	17.1%
Regional Park	156 acres	465.6 acres	33.5%
TOTAL	241.40 acres	829.4 acres	29.1%

Source: Lane Kendig, inc.
Based on NRPA standards, 1996

acres of neighborhood parks, 291.0 acres of community parks, and 465.6 acres of regional parks.

A comparison of existing acreage of mini-parks to determined need reveals that only 6.2 percent of the NRPA standard is currently being met. Similarly, there is a deficit, although to a lesser extent, of neighborhood, community, and regional parks. At present, the City is meeting 59.6 percent of neighborhood parkland needs, while meeting 17.1 and 33.5 percent of community and regional parkland needs, respectively.

Applying standards to calculate a recommended acreage of parks is useful, but it is more appropriate to determine park and recreation area requirements by supplementing the standards with community input. Therefore, the final determination of parkland requirements is reflective of community desires and preferences, and not based solely on national standards.

Using as a measurable benchmark the standards established by the NRPA size criteria and a moderate Level of Service (LOS) standard, as displayed in **Table 6.2, Park Supply and Demand (Based on Current Level of Service)**, the acreage of parks and recreation areas needed include 0.6 acres of mini-parks, 8.9 acres of neighborhood parks, 47.7 acres of community parks, and

Table 6.2, Park Supply and Demand (Based on Current Level of Service)

Park Classification	Existing Acreage	NRPA Size Criteria	Low LOS Standard	Moderate LOS Standard	High LOS Standard	Recommended Acreage	Surplus or (Deficit)
Mini-	0.9 acres	0.057 to 1 acre	0.001 acre/1,000 persons	0.010 acres/1,000 persons	0.020 acres/1,000 persons	0.6 acres	0.3 acres
Neighborhood	34.7 acres	5 to 10 acres	0.102 acre/1,000 persons	0.153 acres/1,000 persons	0.205 acres/1,000 persons	8.9 acres	25.8 acres
Community	49.8 acres	30 to 50 acres	0.614 acre/1,000 persons	0.819 acres/1,000 persons	1.023 acres/1,000 persons	47.7 acres	2.1 acres
Regional	156.0 acres	100 to 500 acres	2.047 acres/1,000 persons	6.140/1,000 persons	10.233/1,000 persons	357.3 acres	(201.3 acres)
TOTAL	241.4 acres	--	--	--	--	414.5 acres	(173.1 acres)

Source: Lane Kendig, inc.
Based on NRPA size criteria, 1996

357.3 acres of regional parks². These acreages are based on the current level of service provided by the parks and recreation areas existing in the community. The total need for an estimated current year (2005) population of 58,200 persons is 414.5 acres. Therefore, there is currently a deficit of 173.1 acres, which is primarily for regional parks.

Sample Calculation:

Recommended Mini-Park Acreage for the Current Year (2005):

$$(0.6 \text{ acre} / 14.6 \text{ acres}) \times 100 = 4.1\%$$

$$1.00 - 0.041 = 0.959$$

$$0.959 / 2 = 0.4795$$

$$0.4795 \times 14.6 \text{ acres} = 7.0 \text{ acres}$$

Therefore, the recommended mini-park acreage for the current year (2005) is 7.0 acres.

To achieve a middle ground between national standards and the current level of service, the recommended acreage (based on LOS) for a given park classification is calculated as a percentage of the recommended acreage - based on NRPA standards - for the same park classification, as shown in the sample calculation. This percentage (represented in numeric decimal form) is then subtracted from 1.00 and divided by two. The quotient is multiplied by the recommended acreage (based on NRPA standards), the product of which is the overall recommended acreage for a given park classification.

Illustrated in **Table 6.3, Recommended Parkland Acreage for the Current Year (2005)**, is the community's need for mini-parks, as only 12.9 percent of the recommended acreage is currently being met.³ The existing inventory of neighborhood parks is exceeding the recommended acreage. Community parks are meeting 41.1 percent of the recommended acreage. The needs assessment also reveals that the community is exceeding the recommended acreage of regional parks due to Municipal Park. In total, 77.9 acres are currently needed, including 6.1 acres of mini-parks and 71.8 acres of community parks.

Table 6.3, Recommended Parkland Acreage for the Current Year (2005)

Park Classification	Existing Acreage	Recommended Acreage	Percent of Actual	Additional Required Acres
Mini-	0.9 acres	7.0 acres	12.9%	6.1 acres
Neighborhood	34.7 acres	24.6 acres	141.1%	0 acres
Community	49.8 acres	121.6 acres	41.1%	71.8 acres
Regional	156.0 acres	54.2 acres	288.0%	0 acres
TOTAL	241.40 acres	207.4 acres	116.4%	77.9 acres

Source: Lane Kendig, inc.

² Level of Service (LOS) is derived by identifying the spaces and facilities needed to meet the community recreation demand, the minimum amount of parkland needed to accommodate specific facilities, and the space needed for unprogrammed recreation activities. LOS is measured per 1,000 people.

³ Parks have not been inventoried in private development (e.g. gated communities, apartment complexes, etc.). As such, it is possible that some of this need is currently being met through private development.

Table 6.4, Year 2025 Park Supply and Demand (Based on NRPA Standards)

Park Classification	Existing Acreage	Recommended Acreage	Add'l Required Acres
Mini-	0.9 acres	26.3 acres	25.4 acres
Neighborhood	34.7 acres	105.3 acres	70.6 acres
Community	49.8 acres	526.5 acres	476.7 acres
Regional	156.0 acres	842.5 acres	686.5 acres
TOTAL	241.4 acres	1,500.6 acres	1,259.2 acres

Source: Lane Kendig, inc.
Based on NRPA standards, 1996

Year 2025 Needs

Displayed in **Table 6.4, Year 2025 Park Supply and Demand (Based on NRPA Standards)**, is the amount of park acreage required to meet the demand of a projected Year 2025 population of 105,307 persons (refer to **Chapter 1, Introduction**). The assessment bases the need calculations on NRPA Standards, as previously described. The results reveal a recommended acreage of 1,500.6 acres of parks and recreation areas for the Year 2025. Of this total, there is 26.3 acres of mini-parks, 105.3 acres of neighborhood parks, 526.5 acres of community parks, and 842.5 acres of regional parks that are recommended for acquisition to meet the needs of the projected future population. A comparison of existing acreage of mini-parks to determined need reveals that 25.4 additional acres of mini-parks are needed to meet NRPA standards. Similarly, there is a need for 70.6 acres, 476.7 acres, and 686.5 acres of neighborhood, community, and regional parks, respectively, for a total of 1,259.2 additional acres.

Similar to the LOS analysis for the current year, applying the LOS approach to the projected future population determines a future need of 750.0 acres – versus 1,500.6 acres using NRPA standards - to meet the demand of 105,307 persons. As illustrated in **Table 6.5, Year 2025 Park Supply and Demand (Based on Level of Service)**, the City would need to acquire a total of 508.6 acres of parkland by 2025 to meet the recommended acreage.

Table 6.5, Year 2025 Park Supply and Demand (Based on Level of Service)

Park Classification	Existing Acreage	Moderate LOS (per 1000 persons)	Recommended Acreage (Year 2025)	Surplus or (Deficit)
Mini-	0.9 acre	0.010 acres	1.1 acres	(0.2 acres)
Neighborhood	34.7 acres	0.153 acres	16.1 acres	18.6 acres
Community	49.8 acres	0.819 acres	86.2 acres	(36.3 acres)
Regional	156.0 acres	6.140 acres	646.6 acres	(490.6 acres)
TOTAL	241.4 acres	--	750 acres	(508.6 acres)

Source: Lane Kendig, inc.
Based on NRPA size criteria

Similar to the approach combining national standards and community input for the current year, the same equation was applied to obtain the results presented in **Table 6.6, Recommended Parkland Acreage in the Year 2025**. The needs assessment reveals that the greatest deficiency is for community parks, given that an additional 170.3 acres are needed to meet Year 2025 demands. Deficiencies also exist, albeit to a lesser extent, for neighborhood and mini-parks, which require an additional 9.9 percent and 11.7 acres, respectively, by the Year 2025. There is a surplus of 57.8 acres for regional parks due to the size of Municipal Park.

Table 6.6, Recommended Parkland Acreage in the Year 2025

Park Classification	Existing Acreage	Recommended Acreage	Percent of Actual	Additional Required Acres
Mini-Park	0.9 acre	12.6 acres	7.1%	11.7 acres
Neighborhood Park	34.7 acres	44.6 acres	77.8%	9.9 acres
Community Park	49.8 acres	220.1 acres	22.6%	170.3 acres
Regional Park	156.0 acres	98.2 acres	159.1%	(57.8 acres)
TOTAL	241.4 acres	375.5 acres	64.2%	134.1 acres

Source: Lane Kendig, inc.

Some of the recommended park and recreation space needs may be met through efforts described in **Section 6.5, Parks and Recreation System Plan**. However, residents may also choose to make use of existing State Parks and National Wildlife Refuges (NWRs) in close proximity, which can absorb some of the demand for larger parks and recreation facilities. For example, the Bentsen – Rio Grande Valley State Park in Mission is approximately 20 miles from Edinburg. The park is 760 acres plus an additional 1,700 acres of adjoining federal refuge land. It is the headquarters for the World Birding Center and provides activities including hiking trails, primitive camping, and birding adventures (e.g. nature walks, seminars and workshops). In nearby Cameron County, there are two State parks including, Boca Chica State Park (1,055 acres) and the Port Isabel Lighthouse State Historic Park (0.9 acres). Boca Chica State Park does not have any facilities, but on the adjacent Del Mar and Boca Chica Beach permitted activities include picnicking, wading, swimming, birding, natural history observation, camping, fishing (with a license), and surfing. The Port Isabel Lighthouse Historic State Park is suitable for passive recreation such as strolling, picnicking, and relaxing, and the on-site facilities are for historical study and scenic viewing. National Wildlife Refuges in close proximity to Edinburg include, the Santa Ana NWR

(2,088 acres), the Lower Rio Grande NWR (90,000+ acres), and the Laguna Atascosa NWR (45,000 acres). The Gladys Porter Zoo in Brownsville and South Padre Island, located at the southernmost tip of the Texas Gulf Coast, also represent passive and active recreation opportunities that may be found in close proximity to Edinburg.

6.3 EVALUATION OF PARK SERVICE AREAS ■ ■ ■

Further to evaluating acreage per population, it is important to determine whether parks are adequately distributed to meet the needs of the community. By evaluating park service areas, it is possible to identify geographic areas that have sufficient parks available, and conversely, identify those that are in need of additional parks and recreation areas.

The following generally describes the service areas for each park classification, and more specifically, their service areas within the City and ETJ.

Mini-Parks

Mini-parks are intended for passive use and limited recreational activity of the immediate neighbors. They are typically developed within apartment complexes, retirement communities, and other small pockets to meet the needs of a relatively small population. Mini-parks are created from parcels of land that are too small for other types of development, such as rights-of-ways, vacant lots, vacant alleys and easements, areas beneath or adjacent to overhead power lines, irregularly shaped lots (e.g. pie lots), and “leftover” parcels.

Illustrated by **Figure 6.1, Parks and Schools Service Areas**, is the primary service area coverage of Citrus Park, the only public mini-park. Clearly, the service area is limited due to the fact that only one mini-park exists. It is noted that other mini-parks may exist in private developments (e.g. gated communities, apartment complexes), but the number is unknown since the inventory did not account for parks within private development.

In order to achieve the additional 6.1 acres of mini-parks to meet the current recommended acreage, an inventory of City-owned property and other vacant lots should be conducted to identify potential sites for development.

Neighborhood Parks

Neighborhood parks are a step up in size from mini-parks and provide more variety in the types and quantities of activity areas and facilities provided. These parks are designed to accommodate the passive and semi-active recreation activity needs of complete neighborhoods, typically within a distance of six to eight blocks. This proximity encourages use through convenience and ease of access, while also promoting safety for children and healthy living through alternative transportation options (i.e. walking, biking, etc.).

The size of neighborhood parks varies according to the availability of the property, method and timing of acquisition, and intended use. National standards recommend a minimum neighborhood park size of five acres, assuming an adequate and even distribution across the planning area. Although a ten acre park may accommodate ball fields and larger recreation and open space areas, two parks that are five acres in size may equally and perhaps better, serve community needs while ensuring good spatial distribution of parks. This is particularly true where the acreage requirement for neighborhood parks is currently being met. That said, problems exist with distribution inequity, as depicted in [Figure 6.1, Parks and Schools Service Areas](#).

The service area for neighborhood parks is divided into primary and secondary areas. The primary service area is one-quarter mile and the secondary service area is one-half mile. The service areas of the eight neighborhood parks (Frontier, Cenizo, West, Apollo, Fountain, Jaycee, Freddy Gonzalez, and Trevino Parks) are illustrated in [Figure 6.1, Parks and Schools Service Areas](#). The illustration highlights the fact that residents living south of Chapin Street are within the primary service areas of the neighborhood parks. West Park and Cenizo Park have overlapping primary service areas, indicating that residents in these areas are very well served by nearby neighborhood parks. The same is true of Apollo Park, Fountain Park, and Jaycee Park, which have overlapping primary service areas. In contrast, community residents who live north of Chapin Street are not within the primary service area of the existing neighborhood parks. The mapping analysis also reveals that most residents living south of Freddy Gonzalez Drive are underserved by neighborhood parks.

Achieving a system of neighborhood parks that is evenly distributed throughout the City and the developed portions of its planning area may be accomplished in several ways, including pre-development acquisition by the

City, dedication requirements concurrent with subdivision approval, public/private partnerships, and other strategies. Requiring the dedication of parkland concurrent with a final plat or a development site plan is an effective way to ensure that park development keeps pace with where development is occurring, and in turn, responds to the parks and recreation facilities needs of new residents.

Community Parks

As described in [Chapter Five, Facility Standards](#), community parks provide for the needs of the community at-large and therefore, with the exception of regional facilities, are the largest parks within a municipal system. There are a large variety of facilities and intended uses within community parks, including both passive and active recreation such as walking and jogging paths, athletic courts, ball fields, lakes or other natural features, picnic areas, activity centers, swimming pools, and other facilities that draw residents typically within a one mile reach, and in many cases much farther. The secondary service area extends two miles from a community park. This additional area allows for user patterns that are associated with community park activities and facilities, such as little league athletic fields, which attract users from across the community.

Depicted in [Figure 6.1, Parks and Schools Service Areas](#), is the service areas of the four community parks, including Memorial, South, and Dr. Diaz and Bicentennial Parks. The map highlights the fact that residents living in south Edinburg are well serviced by community parks, as indicated by overlapping service area coverage. However, similar to the pattern of service area coverage seen with mini-parks and neighborhood parks, community parks do not serve residents living in north or west Edinburg. Coverage is also lacking in the southernmost part of the community, south of Canton Road and Wisconsin Road.

Inequitable distribution, combined with a current and projected future deficit for community parkland, points to the need to consider acquisition options. One such option, among others, includes the acquisition of land at the Northwest holding pond – a municipally owned 40 acre lot that is located within a high growth area of the community.

6.4 ECISD PARTNERSHIP



The City has a history of working with the ECISD to use its facilities for the purpose of conducting summer youth basketball, tennis, volleyball, track and field, soccer, and athletic camp programs. During non-summer months, the



“Learning Landscape” before redesign
(Greenlee Elementary in Colorado)

City also enters into an agreement with the ECISD to use its facilities for a youth basketball league. Similarly, the ECISD enters into an agreement with the City to use its swimming pools for school sports activities. These reciprocal agreements have proved beneficial in terms of ensuring efficiency, sustained facility use, and cost-savings.

Despite the success experienced with joint facility use, to date, no agreement has been signed to trigger joint purchase, use, and maintenance of school grounds and equipment, other than for Trevino Park in which case an agreement was signed to acquire and develop parkland. Failure to create further partnerships is a missed opportunity. Accounting for the 36 ECISD school properties and additional three private school properties makes a substantial difference in terms of meeting the community’s parks and recreation

needs. As depicted in [Figure 6.1, Parks and Schools Service Areas](#), school sites and associated open space and equipment serve an area equal to that of a neighborhood park (one quarter mile service area). Taking into account school sites greatly affects the ability of the City’s existing parks to meet the community’s recreational needs. This is particularly relevant in north Edinburg where ten schools located in the city boundary and ETJ present parks and recreation opportunities for an area that otherwise is not well served.

While the inclusion of school sites in the assessment of parks supply suggests a more equitable distribution of recreation space throughout the community, it is acknowledged that not all school sites are fully equipped with equipment suitable for active and passive recreation (e.g. jungle gyms, benches). It is recommended that an equipment inventory be undertaken at school sites to determine if a recreation service is currently being provided to the community, or rather, exists as an opportunity that can be capitalized upon to increase access to parks for citizens.



“Learning Landscape” after redesign
(Greenlee Elementary in Colorado)

Denver, Colorado serves as an example of a municipality that has partnered with schools to increase the number of parks in the city, and in turn, increase accessibility. Denver officials are “repurposing” land to create parks. One approach includes the creation of “learning landscapes”. More than 200 old, gravel-covered elementary and middle school grounds are being redesigned with the assistance of bond funding to include trees, gardens, playground equipment, and public art. These “learning landscapes” remain part of the school property, however, they are open to use by the public after school

hours and on weekends, thereby providing mutual benefit to the School Board and the City's park users. Given that schools are located every half mile, revitalizing school yards to become public amenities means substantial gains in terms of park accessibility.⁴

The ECISD has indicated that the greatest need for school construction based on rates of growth and household size is in northeast Edinburg. It follows, that there are a significant number of potential park users in this area as well. It is therefore, recommended that the learning landscapes approach be applied to already built schools in this area, including Monte Cristo, Villareal, Memorial, and Eisenhower. While it is acknowledged that there are schools such as Guerra and Economedes that would benefit from repurposing of their school yards into public parks, from a sustainable planning perspective, the focus should be on developing public parks within the city limits. Since land (school yards) is already available for repurposing into places of public value, this approach can be acted on more quickly than park development that requires land acquisition. Given the rate of growth in northeast Edinburg, combined with household size, it is recommended that the learning landscapes approach be adopted as a first priority to meet the parks and recreation needs of residents.

As a second priority, it is recommended that the City and the ECISD plan to acquire land jointly for the purpose of school and park construction. This approach will require advance planning to determine shared priorities for park and school siting, allocation of appropriate funds, and ultimately, land acquisition, co-development and maintenance. Areas determined to be in need of community and neighborhood parks are identified in [Figure 6.2, Parks and Recreation System Plan](#). Partnership opportunities should particularly be sought to develop a community park and a neighborhood park in the northeast part of the community, as identified in the parks and recreation system plan.

6.5 PARKS AND RECREATION SYSTEM PLAN



The City owns and maintains 241.4 acres of parkland. Based on a current year (2005) population of 58,200 persons, it recommended that the community have a total of 207.4 acres. As such, the City currently owns and maintains 116.4 percent of the recommended acreage. An examination of the total recommended amount of parkland for a Year 2025 population of 105,307

⁴ Harnik, Peter and Jeff Simms. "Parks: How Far is Too Far?" [Planning](#). December, 2004, pages 9-11.

reveals that the City currently has 64.2 percent of the recommended acreage, as represented in its existing parks. Notably, both current and projected total acreage deficiencies are largely attributed to a shortage of community parkland.

Based on service and park demand analyses, it is determined that the primary community need is community parkland and generally, more equitably distributed parkland that can provide ready access to residents living in all parts of the community. To address this issue, the following strategies are identified:

- ◆ **Strategy One** - Land should be reserved in future growth areas well in advance of ensuing development to ensure availability, protection, and reasonable acquisition costs. Preference should be given to developing community and/or large urban parks that are designed to accommodate passive recreation and require less maintenance. Land should be acquired for park development through the parkland dedication ordinance or fee-simple purchase. The City should pursue strategic partnerships for land acquisition with other jurisdictions, such as ECISD and UTPA.
- ◆ **Strategy Two** - The parkland dedication ordinance should be re-structured to ensure that land acquisition occurs commensurate with new development, as outlined in [Appendix E, Parkland Dedication Ordinance Review](#), and reflected by the re-aligned park zoned in [Figure 6.3, Park Zones](#). The City should consider amending its ordinance to allow for a parkland fee on both residential and commercial properties. The City should further consider re-structuring its ordinance, to also include the ability to use a set-aside portion for parks maintenance. Currently, the ordinance allows the parkland fees to be set aside only for land acquisition. Should this strategy be deemed preferable, it is advised that legal counsel be sought to ensure that the City is within its legal bounds to proceed with the recommended amendments.
- ◆ **Strategy Three** - Consider neighborhood parks in well-serviced areas for partial redevelopment into other suitable uses (e.g. infill residential, commercial) and develop parks in areas for which a need is demonstrated. An option for partial redevelopment could be Cenizo Park and others, as deemed appropriate based on user levels and concentration of parks within a given area. The total acreage of redeveloped parkland could be swapped to develop one or more parks in north Edinburg where growth is coupled with a deficiency of parks and recreation areas.
- ◆ **Strategy Four** - Develop a trail system and comprehensive network of sidewalks to provide better accessibility to each of the parks from surrounding neighborhoods. Trails along linear rights-of-way (e.g. drainage canals) would be given priority over those located within

roadway rights-of-way to avoid safety issues associated with mixing vehicular and bicycle traffic. One of the objectives in designing the conceptual trail network would be to connect areas of the community that are underserved by parks to those areas that have a concentration of parks. A further objective would be to meld the conceptual trail network with the proposed trails and sidewalks that have been put forward by the Hidalgo County Metropolitan Planning Organization (MPO) in the Metropolitan Transportation Plan (MTP).

- ◆ **Strategy Five** – Partner with ECISD to redevelop school yards into more usable public spaces. Adopt the “learning landscapes” approach and redesign gravel-covered school grounds to include enhancements such as trees, gardens, playground equipment, and public art. ECISD would retain property rights to the school property, however, they would be open to use by the public after school hours and on weekends.
- ◆ **Strategy Six** - Dedicate land acquisition efforts to community parks and large urban parks that will have a sizeable service area. An option would include redeveloping the municipally owned northwest holding pond (40 acres), which is currently not formally recognized as a recreation area but is used by many residents for walking and jogging activities. A further option would be to redevelop the Ebony Hills Golf Course (65 acres) into a public park once its lease expires in 2013.
- ◆ **Strategy Seven** – Proceed with different permutations of the aforementioned options.

A parks and recreation system plan has been developed based on an evaluation of existing conditions, planned improvements, and projected future needs derived from anticipated population growth and development. Reflected in [Figure 6.2, Parks and Recreation System Plan](#), is Strategy Seven - a combination of options to meet the future parks and recreation needs of the community. This strategy is described below in further detail.

Redevelopment of the Northwest Holding Pond

The plan calls for redevelopment of the northwest holding pond into a community park to address the current and projected community park deficit that was identified during this needs assessment. Use of this 40-acre site is also desirable given the identified need for improved equity in parkland distribution, particularly in north Edinburg. Redeveloping this site is a priority over acquiring the Ebony Hills Golf Course due to reasons of ownership and location. The City currently owns the site, whereas the golf course is currently under lease and would need to be acquired once the lease expires. Moreover, the northwest holding pond is located in a growing area

that is currently underserved by parks. By comparison, the golf course is located in an area that is already well served.

It is recommended that the northwest holding pond should be naturalized using vegetation that is native to the area to provide habitat thereby decreasing municipal maintenance costs. Opportunities should be created for active recreation facilities to meet the current and increasing needs of this part of the community. If for some reason in the future the northwest holding pond is not deemed appropriate for redevelopment into a large urban park, it is recommended that a site be found within the area outlined as “Proximity for Future Community Park” in [Figure 6.2, Parks and Recreation System Plan](#) so that the residents of northwest Edinburg will have access to a park and associated facilities.

Land Acquisition and Parkland Development in Northeast Edinburg

While the redevelopment of the northwest holding pond would help to alleviate the deficit of parkland that currently exists in north Edinburg, the community’s need for a community park, particularly in north Edinburg, would not be fully met by this redevelopment project alone. The Parks and Recreation Master Plan that was adopted in 1992 called for the redevelopment of the northeast reservoir. While this option is reasonable given the location of the reservoir relative to demonstrated parkland need, and the fact that the City already owns the site, the reservoir continues to be used for water retention purposes and there are no plans at present to discontinue its use for this purpose. As such, it is generally recommended that a large urban or regional park be built in northeast Edinburg. Determining the exact location of the park will be contingent upon a large parcel becoming available for acquisition and development.

Partnership with ECISD

The plan identifies the need for a partnership with the ECISD to redesign school yards with a view to creating more community-oriented public spaces that meet diverse needs of residents.

At present, decisions regarding the placement of equipment in school yards are generally based on budget/funding availability. Decisions are made on a school-by-school basis, with no consideration given to whether there is an adjacent park with, or without similar equipment that may exist in, or be planned for the school yard. A partnership between the City and ECISD would, therefore, mean a more coordinated and efficient approach to the siting of recreation equipment throughout the City and its planning area.



The north-west holding pond is already informally being used for recreation purposes (e.g. jogging).



Trevino Park is an example of where the City has partnered with the ECISD to develop a park.

Murals, playing fields, sculptures, and community gardens are among some of the enhancements that should be made to improve the schoolyards for broader, community-wide use.⁵ Opportunities for funding (actual and in-kind) may come from the state, school board, local foundations, and the business community.

Trail System

The plan outlines a conceptual trail system that is a composite of bike lanes, hike and bike trails, and sidewalks. In effect, the trail system fills in gaps within the existing network to create a fully integrated means for an alternate means of transit to and from parks and other destinations across the community. Emphasis is placed on creating linkages from neighborhoods with few parks to those with higher concentrations of parks to enhance connectivity and ensure better access. In developing the conceptual trail system, efforts were made to coordinate with MPO-planned hike and bike trails to ensure connectivity within Edinburg and beyond to other municipalities in the County. A rail-to-trail component of the trail system is also proposed to capitalize on the opportunity presented through unused rights-of-way. Segments of the rail line (e.g. along Russel Road) are no longer in use. These segments present an excellent opportunity to provide a linear connection to existing or new trails, thereby enhancing the trail network within the City. This rail-to-trail opportunity would be eligible for funding through the Texas Parks and Wildlife Department, which administers the National Recreational Trail Fund under the approval of the Federal Highway Administration⁶.



The conceptual trail system fills in gaps within the existing network to create an integrated means for alternate transit to and from parks and other destinations.

Courthouse Square Redevelopment

The Courthouse Square should be redeveloped to include mixed-uses, including a public plaza. The plaza would provide an opportunity for people working and shopping downtown to rest, eat lunch, and people-watch. Further to serving as a public amenity, landscaping of the plaza will add

⁵ A community garden is a community environmental education program that is operated by a non-profit society to produce food and flowers for the personal use of society members. The community garden has an education component to encourage the involvement of schools, youth groups, and citizens who do not have an assigned plot to get involved in gardening activities (<http://www.city.vancouver.bc.ca/parks/info/policy/comgardn.htm>). A twist on the community garden concept is the Edible Schoolyard. Martin Luther King Junior Middle School in Berkeley, California runs the Edible Schoolyard project which is designed to teach students how to grow, harvest and prepare seasonal produce (www.edibleschoolyard.org/homepage.html).

⁶ For more information on the National Recreational Trail Fund, click on <http://www.tpwd.state.tx.us/grants/trails/>.

beauty to the downtown, thereby contributing to downtown revitalization. Since the Courthouse Square is a focal point of the downtown, redeveloping it to include a public plaza will enhance the view corridor along University Drive, in effect, creating a more pleasant “first impression” of the downtown area.

6.6 FACILITY NEEDS

Table 6.7, Recommended Facility Units

Recreation Facility	Units Per Population	Recommended Units
Basketball	1/5,000 persons	10 basketball courts
Tennis	1/2,000 persons	24 tennis courts
Volleyball	1/5,000 persons	10 volleyball courts
Baseball	1/5,000 persons	10 baseball fields
Soccer	1/5,000 persons	10 softball fields
Golf driving range	1/50,000 persons	1 golf driving range
¼ mile track	1/20,000 persons	0.4 ¼ mile track
Softball	1/5,000 persons (if also used for youth baseball)	10 softball fields
Swimming Pool	1/5,000 persons	10 swimming pools

Source: NRPA and Lane Kendig, inc.

Identified in Table 5.2, Facility Standards is the number of units per population that are recommended for different facilities. Based on these standards, the number of recommended facility units has been identified for the City, as depicted in Table 6.7, Recommended Facility Units. Based on these calculations, facilities such as basketball courts are in sufficient supply to meet the needs of the population. Conversely, facilities such as tennis courts,

volleyball courts, baseball/softball fields, soccer fields, and swimming pools are in short supply. It is important to note that while standards indicate that a large number of facility needs are not being met, some of the local demand may be fulfilled by private facilities and within other nearby communities.

Trends in local recreation facility use may also reduce the demand for facilities. The decision as to whether the identified needs should be addressed must be made based on the experience of the community and the activity preferences of the residents. The current parks and recreation standards paradigm is rooted in a Level of Service (LOS) that is defined by the users’ needs rather than an arbitrary number such as the number of pools per 5,000 people. To understand users’ needs relative to supply, it is essential to determine the number of visits per year that a facility will accommodate, or the recreation facility supply (RFS). The RFS is identified by calculating expected use (number of visits/day/unit) multiplied by availability (number of days/year/unit). The former is typically a combination of average daily use and peak use that are determined through user observation and attendance records.

6.7 EQUIPMENT NEEDS ■ ■ ■

In addition to improvements to address recreation facility needs, the City needs to install park equipment such as benches, picnic tables and shelters, drinking fountains, signage, playground equipment, security lighting, sidewalks and trails, grills, restrooms, parking, automated irrigation systems, and garbage bins. The quantity of these required items is based on the size of each park and its classification.

Displayed in [Appendix F, Equipment Needs](#), is the equipment standards needed to adequately support the demand of the local population. The need for park equipment is determined by comparing the current number of facilities in each park versus the standards provided. The chart indicates when a standard has been met (identified by a zero), and also indicates when a standard is in excess of, or below the standard. Cells that indicate “yes” or “no” refer to improvements that are needed, which are not measured in units.

The most significant equipment needs across the system of parks are benches, picnic tables/shelters, drinking fountains, garbage bins, exercise stations (community parks only), sidewalks along street frontages, and grills.

6.8 COMMUNITY FEEDBACK ■ ■ ■

A citizens’ questionnaire was administered during the Citizens’ Congress to assess usage patterns and local perceptions of the existing parks and recreation system. To improve the response rate, questionnaires were also distributed at the library, through a Chamber of Commerce newsletter, and the recreation center. The questionnaire was designed to assess usage patterns and local perceptions of the existing parks and recreation system, and identify community needs and desires related to the future of the parks and recreation system. The questionnaire was not intended for statistical validation, but as a tool to get a snapshot of residents’ perceptions, activities, and needs/desires.

The findings of the citizens’ questionnaire are identified in [Chapter Four, Environmental Scan](#). However, selected key findings are useful to highlight in this needs assessment since they fulfill the community-based component of the combined standard-based/community-based approach that was used to assess park and recreation facilities needs.

Municipal Park was visited most often (28.4 percent), followed by South Park (22.8 percent), and Dr. Diaz and Bicentennial Parks (13.3 percent)⁷. This level of use suggests that these parks should be designated as high priorities for equipment and facility improvements.

When respondents were asked why they frequent the park they identified as being visited most often, convenient location was most often cited (24.8 percent). Conversely, the primary reason cited by respondents as to why they visit some parks or facilities almost never or never was inconvenience/location (22.6 percent). These findings underscore the need for all land acquisition efforts to focus attention on park location relative to areas of ongoing and future growth and development. Convenient and easy access to parks and recreation areas will determine the degree to which they are used by residents. Other factors that may positively influence park use include a safe environment, prevalence of walking and jogging trails, presence of equipment and facilities (i.e. things to do), and well-maintained facilities (e.g. clean).

As part of the citizens' questionnaire, respondents were asked to identify what type of activity they would be most interested in engaging in when visiting a park. The results revealed that 73.7 percent of respondents are interested in partaking in active recreation activities. This information suggests that improvements such as a hike and bike trail, as described in the Parks and Recreation System Plan, would be well received by citizens. Similarly, any new parks or improvements to existing parks should be made with a view to increasing active recreation opportunities. The findings of the citizens' questionnaire provide guidance in that it was determined that the facilities that would be used most often include trails (bike, walk, and jog), followed by indoor or covered basketball courts, and baseball fields. The citizens' questionnaire also highlighted that active recreation improvements including athletic fields and courts and an indoor recreation facility should be created or improved to enhance the quality of parks and recreation⁸.

6.9 BARRIER ASSESSMENT



Physical barriers are natural or constructed obstructions that impede access to parks by vehicle, foot, or bicycle. Examples of barriers include U.S. 281, railroads, drainage canals, and heavily traveled arterial streets such as

⁷ The questionnaire separated Dr. Diaz and Bicentennial Parks. However, since this Plan refers to them together, the results of both parks were combined to give a response rate of 13.3 percent.

⁸ Restrooms were also listed as needing to be created or improved to enhance the quality of parks and recreation.



Drainage canals can act as barriers to park and recreation area access as seen in this photo at Dr. Diaz and Bicentennial Parks.

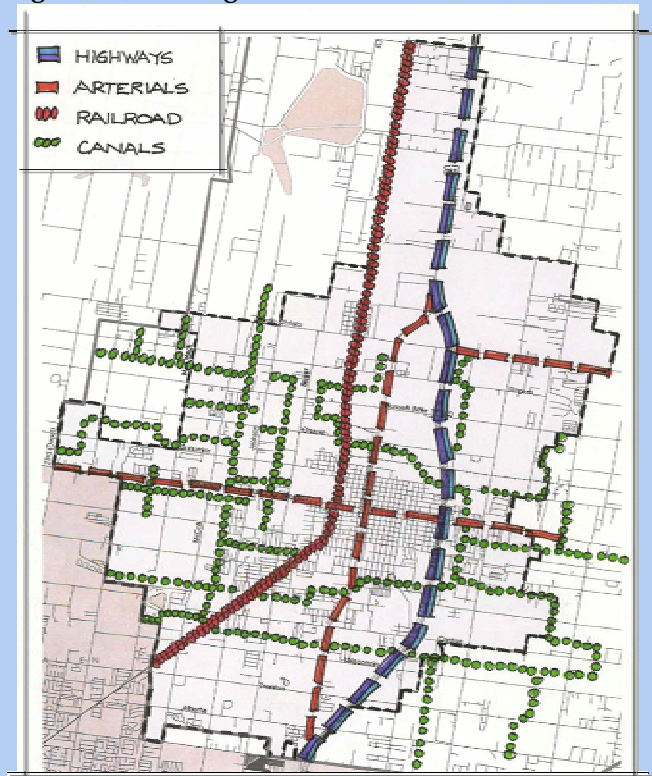
Business 281/Closner. These barriers may or may not have suitable improvements in place to facilitate access. For example, a drainage canal that abuts a park may have a foot bridge and secure fencing around it to allow access to the park. However, whether improvements exist or not, it is important to identify these barriers so that improvements can be maintained, enhanced, and/or created to improve accessibility.

There are strong indications to conduct a barrier analysis given that there is a clear link between accessibility and park use. For example, when respondents to the citizens' questionnaire asked why they frequent the park they identified as being visited most often, they cited convenient location most often (24.8 percent). Conversely, the primary reason cited by respondents as to why they visit some parks or facilities almost never or never was inconvenience/location (22.6 percent). Furthermore, when asked to identify the degree of accessibility of the park or facility they used most often, the highest response rate was seen in the "easily accessible" descriptive category (38.5 percent), followed by "moderately to easily accessible" (35.8 percent).

To determine the extent to which barriers exist throughout the parks system, a barrier analysis was conducted. The methodology for conducting the analysis included identifying barriers within one-quarter and one mile radii of each park. Barriers including highways, arterial roads, railroads, and drainage canals are illustrated in **Figure 6.4, Existing Barriers**, to demonstrate barriers within the parks and recreation system.

U.S. Highway 281 and Business 281 present significant barriers, particularly since they are located amidst a high concentration of parks. Apollo Park, Fountain Park, Jaycee Park, Memorial Park, Freddy Gonzalez Park, South Park, Cenizo Park, and West Park are all located within approximately one mile of these roadways. This presents a problem for pedestrians and cyclists who may not want to cross these busy thoroughfares. Similarly, S.H. 107/University Drive also presents a barrier to pedestrians and cyclists that access

Figure 6.4, Existing Barriers



Source: Lane Kendig, inc. (LKI)



South Park is set back to provide a buffer from Freddy Gonzalez Road and the drainage canal, which together act as barriers.



The raised cross-walk is an example of a traffic control technique that is achieved through design.

Municipal Park, Jaycee Park, Fountain Park and Apollo Park. While there are traffic signals in place at U.S. 281 and Business 281 intersections, the same is not true of S.H. 107/University Drive where traffic heading north/south is controlled by a combination of traffic signals and stop signs. The latter can prove difficult for motorists during busy traffic times, but more concern lies for the safety of pedestrians and cyclists. It is recommended that all three thoroughfares have signal crossings installed within the vicinity of parks, complete with pedestrian operated crossing signals. Alternatively, an overhead cross-over may be considered, particularly in light of projected increases in the student enrollment at UTPA and, hence, increased pedestrian traffic around the campus.

Parks that front onto arterial and collector roadways, such as Trevino Park, South Park, Freddy Gonzalez Park, and Dr. Diaz and Bicentennial Parks, are directly affected by barriers. Dr. Diaz and Bicentennial Parks front onto a principal arterial roadway (Jackson Road), and yet no traffic control mechanisms are in place to provide safety to pedestrians and cyclists that may have to cross this heavily traveled roadway to access the parks. Traffic control (or calming) should be considered to ensure greater safety and access. This can be achieved through various design techniques including, but not limited to, raised cross-walks, pavement markings, and warning signage. Further to providing a physical barrier, arterials and collectors necessitate setbacks for safety purposes. In effect, this removes the park from direct access to pedestrians and cyclists, as compared to neighborhood and mini-parks, which typically front on collector roads. It is recommended that signage be improved to ensure visual access and wayfinding along these thoroughfares.



The drainage canal at South Park acts as a barrier but also presents as a safety concern due to poor fence maintenance along the bridge that crosses the canal.

While local roads do not typically act as significant barriers to accessing parks and recreation areas, Cenizo Park is an exception. The park is bisected by a local road (Hill Drive), which creates a significant physical barrier. The primary focus of the park is a trail that is used for walking and jogging. Given that the park is bisected by a local road, trail users must cross it twice each loop of the trail. Signage and cross-walks do not exist to facilitate safe crossing. It is highly recommended that safety measures be implemented.

Because roads intersect with rail tracks throughout the City, they must be designed to include adequate safety provisions to ensure

safe crossings for pedestrians, cyclists, and motorists, both within the City limits and the ETJ. It has been determined that signal crossings, signage, and pavement markings currently need to be enhanced. These safety enhancements are imperative given that City parks including, Apollo Park, Fountain Park, West Park, and Cenizo Park, are impacted by rail tracks, which effectively act as barriers to access.

Drainage canals also act as barriers to parks and recreation area access. Examples of this include South Park and Dr. Diaz and Bicentennial Parks, which have drainage canals along their perimeters. These barriers present safety concerns for pedestrians and cyclists if adequate fencing and/or signage is not in place or properly maintained to prevent injury to park users.

6.10 ACCESSIBILITY FOR PERSONS WITH DISABILITIES ■ ■ ■

Congress enacted the Americans with Disabilities Act (ADA) of 1992 that provides for equal access to all users of public (and private) facilities and programs. As such, municipalities are both legally and morally responsible for providing a reasonable level of accessibility to parks and programs for individuals with disabilities.

While there are no requirements within the Act mandating any spatial requirements relative to the size of any particular type of park and recreation facility, the ADA mandates that park areas and facilities must be reasonably accessible and usable to all persons. Compliance with the Act will not likely impact the size or configuration of a particular facility, but it may dictate some changes to specific design guidelines. It is recommended that the Recommendations for Accessibility Guidelines: Recreational Facilities and Outdoor Developed Areas⁹ be incorporated, along with subsequent guidelines and legal standards, in the final determination of spatial and facility design guidelines for all units of the parks and recreation system.¹⁰

According to the ADA, minimum requirements that must be complied with include, but are not limited to the following:

- ◆ One accessible route from the site access point (e.g. parking lot) to the primary accessible entrance. A ramp with a slope of no greater than 1:6 for a length of no greater than two feet may be used as part of this route. Otherwise, a slope of maximum 1:12 is permitted.

⁹ U.S. Architectural and Transportation Barriers Compliance Board, Recreation Access Advisory Committee, 1994

¹⁰ Mertes, James D. and James R. Hall. Park, Recreation, Open Space and Greenway Guidelines. National Recreation and Park Association, 1996, p. 125.

- ◆ One accessible entrance must be provided.
- ◆ One accessible unisex toilet facility must be provided along an accessible route if toilets are provided at the building or facility.
- ◆ Only the publicly used spaces on the level of the accessible entrance must be made accessible.
- ◆ Displays and written information should be situated where they can be seen by an individual who is seated and should provide information accessible to the blind.¹¹

For a municipality that includes park district facilities and programs, the ADA requires that all newly constructed buildings and facilities must be readily accessible. New facilities are those which were built for first occupancy after January 26, 1993. Design and construction is considered to have occurred after this time if a completed application for a building permit was filed after January 26, 1992. The ADA also requires that all renovations or alterations of existing buildings and facilities must be readily accessible if the buildings and facilities have been altered after January 26, 1992.¹² Lastly, all barriers to accessibility in existing buildings and facilities must be removed when it is “readily achievable”.¹³

The ADA requires that architectural and communication barriers of all programs and facilities of local governments must be removed. An architectural barrier is a physical barrier to access (e.g. steps, sidewalks, placement of signs and furniture) whereas a communication barrier is one that is integral to the physical structure of the facility (e.g. telephones mounted too high, elevators and signage without Braille markings). Creating an overall plan for the removal of accessibility barriers can give priority and associated timelines to removal activities. In keeping with the principle of public participation, persons with disabilities should be given the opportunity to register their comments and preferences for prioritization as part of the barrier removal process.

One of the foundation principles for this plan states that all residents and visitors are entitled to full access to public parks and recreation facilities, regardless of age, gender, ability, income, race, cultural background, and place of residence. It follows that the City must be committed to a creating

¹¹ Mertes, James D. and James R. Hall. Park, Recreation, Open Space and Greenway Guidelines. National Recreation and Park Association, 1996, p. 127.

¹² An “alteration” is a change to a building or facility that affects its usability. Alterations include remodeling, renovation, rehabilitation, restoration, reconstruction, and changes or arrangements in structural elements or in any reconfiguration of walls or partitions.

¹³ A structure is “readily accessible” if it meets the ADA Accessibility Guidelines for Buildings and Facilities.

and maintaining a parks and recreation system that is accessible for all persons, including persons with disabilities. The aforementioned information from the Park, Recreation, Open Space and Greenway Guidelines provides some guidance to actualize this principle of the plan. Another resource to consult in future includes, Design Guide for Accessible Outdoor Recreation, which was prepared by the United States Forest Service and the Special Programs and Populations Branch of the National Park Service.

6.11 DETERMINING NEED ■ ■ ■

The following summarizes the identified parks and recreation facility needs:

- ◆ Based on a current year (2005) population of 58,200 persons, there is a current need for an additional 6.1 acres of mini-parks and 71.8 acres of community parks, for a total of 77.9 additional acres.
- ◆ By the Year 2025, based upon a projected population of 105,307 persons, the City will need an additional 11.7 acres of mini-parks, 9.9 acres of neighborhood parks, and 170.3 acres of community parks, for a total of 134.1 additional acres.
- ◆ Based on current and projected parks and recreation area needs, community parkland acquisition is a priority. Acquiring land to achieve a more equitable distribution of parks is also a priority, particularly to serve north Edinburg.
- ◆ Formalizing an agreement with ECISD presents a significant opportunity to achieve improved park accessibility across the community.
- ◆ Seven strategies have been presented to respond to the needs assessment. The strategies represent opportunities to acquire land, develop partnerships, redevelop land for other uses, enhance the trail system, and re-structure the parkland dedication ordinance.
- ◆ According to national standards, current needs for facilities include tennis courts, volleyball courts, baseball/softball fields, soccer fields, and swimming pools. Stakeholder interviews and the citizens' questionnaire revealed that the City is also in need of an additional community center/indoor recreation center.
- ◆ In terms of equipment requirements, more benches, picnic tables/shelters, drinking fountains, garbage bins, exercise stations (community parks only), sidewalks along street frontages, and grills must be installed.
- ◆ The citizens' questionnaire indicates that Municipal Park should be given priority for staged improvements given high usage levels, followed by South Park and Dr. Diaz and Bicentennial Parks. Findings also indicate that the City should site new parks in convenient locations and improve accessibility to maintain or increase the number of park users. It was also identified that there is a need to ensure that existing and new parks have

sufficient activities/facilities to meet the needs of existing and future park users.

- ◆ Respondents to the citizens' questionnaire indicated what types of facilities they would use most often. Findings revealed that trails ranked highest (12.9 percent), followed by indoor or covered basketball courts (8.9 percent), and baseball fields (8.5 percent). When asked what types of parks and facilities they would like to see created or improved to enhance the quality of parks and recreation, restrooms (11.4 percent) was cited most often, followed by athletic fields and courts (9.9 percent), and an indoor recreation facility (9.9 percent). This information points to the community's priorities for improvements and will be considered when developing the implementation plan.
- ◆ Barriers, including highways, arterial roads, railroads, and drainage/irrigation canals, present access and safety issues for pedestrians and cyclists. Improvements such as signage, crosswalks, pavement markings, and traffic signals, are among some of the alternatives that can be explored to enhance access, improve safety, and ultimately, work toward increased use of parks and recreation areas.
- ◆ There is a legal and moral responsibility to provide a reasonable level of accessibility to parks and programs for individuals with disabilities. Edinburg must be committed to creating and maintaining a parks and recreation system that is accessible for all persons, including persons with disabilities.