

6

Needs Assessment

6.1 Introduction

The 2007 Keller Parks, Recreation and Open Space Master Plan proposes a unique, citywide vision, "Inspiring Exemplary Cultural Landscapes". This vision is born out of the needs of the City, in terms of its parks and recreation, beautification, public image, as well as its history, culture and community spirit. In this way, the needs of the City of Keller become instrumental in achieving the vision.

The Needs Assessment is the most critical component of the Parks Master Planning effort. An assessment of what deficiencies exist in the parks system is vital so that actions can be developed that address those deficiencies. It is also important to determine future needs and develop the necessary action plan to address these effectively.

In essence, a needs assessment is an analytical way of assessing what facilities are most needed and desired by the citizens of Keller, and determining which needs are the most critical. All identified needs are prioritized to form the basis for developing an action plan for the City.



Rural landscapes such as this are vanishing from urban settings. Yet, when preserved within an urban context, the effect these scenes have upon our senses becomes more pronounced and refreshing.



The City of Keller's immediate needs consist of land acquisition for parks, development of existing undeveloped park lands, renovation of existing parks and acquiring open space including natural areas, historic areas and rural landscapes. The City will benefit by establishing City policies to ensure open space protection. Another far-reaching need is to extend the hike and bike trails network which will add greatly to the connectivity of the City on a pedestrian friendly level.

6.2

Methods of Assessing Park and Recreation Needs

Three techniques were used in evaluating the City of Keller's current and future park and recreation needs. These techniques follow general methodologies accepted by the Texas Parks and Wildlife Department for local park master plans and by the Department of the Interior for local park system Recovery Action Plans (RAP).

Standard-Based Approach - uses standards established by the local jurisdiction (in this case the City of Keller) to determine the quantity of park facilities required to meet the City's needs at a given population. Standards usually are expressed as the quantity of park facilities needed to adequately serve every 1,000 citizens of the City.

Standards are established to provide the level of service that the particular jurisdiction believes is most responsive to the amount of use and the interests of its citizens. This plan establishes individual standards for the City of Keller.

- 2. <u>Demand-Based Approach</u> uses participation rates, league usage data and surveys to determine how much the population uses, desires and demands certain types of recreation facilities. Chapter 5: Public Input, reflects the demand based approach.
- 3. <u>Resource-Based Approach</u> is based on the usefulness of available physical resources to provide recreation opportunities. For example, the City's creek and drainage system provides opportunities for trail connections. It also refers to the need to access and enjoy the natural resources available in the City.

All three methods are important in their own particular way, but individually do not represent the entire picture of the needs assessment. This assessment, and the recommendations resulting from it, uses findings from all three methods to



determine what types of recreation facilities and park acreage are needed in Keller.

6.3 Standard Based Needs

National guidelines and standards are based on demographic trends rather than specific local desires, requiring that they be fine-tuned to meet local conditions. It is important to recognize that national standards are simply guidelines or benchmarks that are intended to serve as a starting point for park and recreation planning.

Each city has its own unique geographic, demographic, and socio-economic composition. As such, the arbitrary application of national standards - as is often done - would not necessarily best meet the needs of a particular community.

Local needs and desires are used as the guiding criteria to mold national guidelines to meet the expectations of the citizens of Keller in a realistic manner.

In addition, <u>Park standards</u> are guidelines allowing the City of Keller to compare itself to other similar Cities, and to assess amenity provisions that Keller's citizen's desire.

Three types of standards are used to analyze the parks and recreation needs of the City of Keller, as follows:

Figure 6.1 – Types of Standard Based Assessments

- <u>Spatial or Park Acreage Standards</u> these define the acres of park land needed, and are usually expressed as a ratio of park acreage to population;
- <u>Facility Standards</u> these define the number of facilities
 recommended to serve each particular recreation need. Facility
 standards are usually expressed as a ratio of units of a particular
 facility per population size. For example, a facility standard for softball
 might be one field for every 5,000 inhabitants of a city; and
- <u>Development Standards</u> these define the exact spatial requirements for a specific recreation area e.g. a neighborhood park versus a community park. These recommended standards are contained in Chapter 3.



6A. Park and Open Space Needs in Keller

The **goal of the 2007 Parks Master Plan** is to attain as close as is possible the complete coverage of the City in terms of the parks' service radii relative to the neighborhoods they serve.

The **Existing Parks and Open Space Map,** on the next page depicts all of the existing parks, recreational facilities and open space in the City of Keller including the parks' service radii relative to the neighborhoods they serve.

6.4 Park Acreage Standards

The purpose of spatial standards for parks and recreational areas is to ensure that sufficient area is allocated to satisfy all the outdoor recreation needs of a community. They act as a framework so that a city may plan ahead, targeting and acquiring parkland before it is otherwise developed. These spatial standards are expressed as the number of acres of parkland per 1,000 inhabitants.

The national recommended park acreage and spatial standards for cities in general are shown in Figure 6.2 below.

Figure 6.2 – Park Acreage Guidelines Based on National Recommended Standards

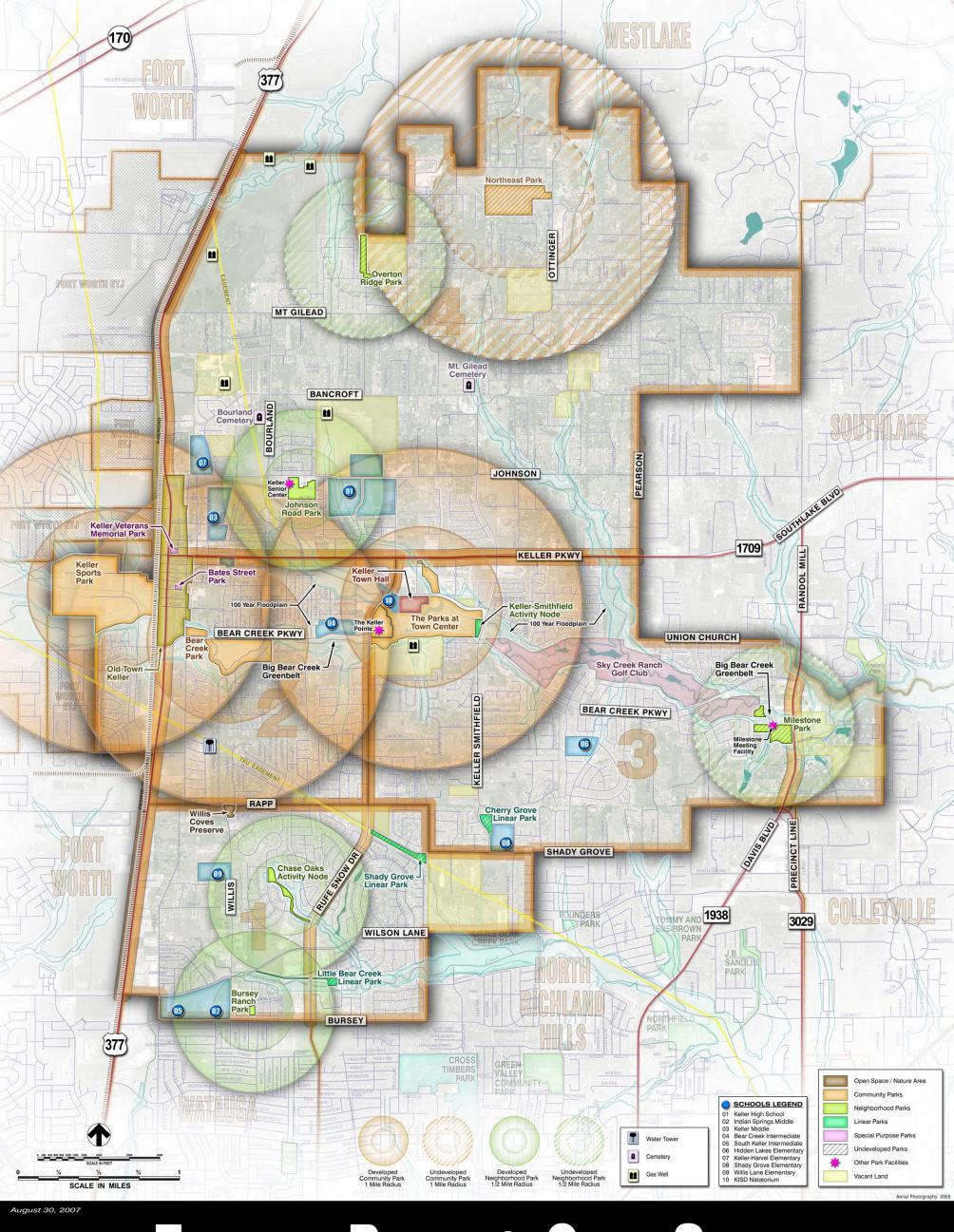
Close to Home Parks

- Neighborhood Parks Recommended Standard 1 to 2 acres per 1,000 population
- **Community Parks -** Recommended Standard 5 to 8 acres per 1,000 population

<u>Total Recommended Close to Home Parks National Standards – 6 to 10 acres per 1,000 population</u>

Other City Wide Parks

- Regional Parks Suggest standard 5 –10 acres per 1,000 population
- Special Purpose Parks Variable standard
- Linear Parks/Linkage Parks Variable standard
- Open Space Preserves Variable standard



Existing Parks & Open Space





Halff Associates

Keller Parks, Recreation and Open Space Master Plan



"Inspiring Exemplary Cultural Landscapes"

The nationally recommended spatial standards as presented in Figure 6.2 above were adapted to develop target standards for Keller's particular situation. These are expressed in terms of:

- Neighborhood Parks (developed and undeveloped)
- Community Parks
- Special Purpose Parks
- Linear Parks
- Natural Areas/Open Space
- Regional Parks

6.5 Target Standards for Keller

The City of Keller 2007 target standards for park acreage are based on the national and regional averages followed by consultant interpretation. These parkland target standards for Keller are presented in Table 6.1 and are summarized in Figure 6.3 below.

Table 6.1 Park Land Standards on the next page shows the acreage standards for park land in the City of Keller in terms of NRPA standards and Keller Target Standards and resultant needs for build-out.



City of Keller Parks, Recreation and Open Space Master Plan Table 6.1 - Park Land Standards



Facility Type	N.R.P.A. Size/ Acres	Total Existing Acres	NRPA Target Standard (1)	Keller 1998 Target Standard (2)	Keller 2007 Target Standard (3)	2007 ~ 37,700 pop. (4)	Build-out 51,310 <u>~</u> 52,000 pop. (4)
Park Category							
Neighborhood Parks	5 - 10 acres	45.14 acres	1 - 2 Acres / 1,000 pop.	3 Acres/ 1,000 pop.	3 Acres/ 1,000 pop.	113 Acres (deficit of 68 acres)	156 Acres (deficit of 111 acres)
Community Parks	According to function; usually 30 - 50 acres	265.73 acres	5 - 8 Acres / 1,000 pop.	5 - 8 Acres/ 1,000 pop.	7 Acres/ 1,000 pop.	264 Acres (deficit of 2 acres)	364 Acres (deficit of 98 acres)
Special Purpose Parks	Varies by function	0.76 acres	Variable	Variable	3 Acres/ 1,000 pop.	113 Acres (deficit of 112 acres)	156 Acres (deficit of 155 acres)
Linear Parks	Varies by resource protection & opportunity	41.34 acres	Variable	Variable	2 Acres/ 1,000 pop.	75 Acres (deficit of 34 acres)	104 Acres (deficit of 63 acres)
Natural Areas/Open Space	Varies by resource availability & opportunity	84 acres	Variable	Variable	3 Acres/ 1,000 pop.	113.1 Acres (deficit of 29 acres)	156 Acres (deficit of 72 acres)
TOTAL		437 acres	11 - 20 Acres / 1,000 pop. (including Reg. Parks)	13 - 21 Acres / 1,000 pop. (including Reg. Parks)	18 Acres/ 1,000 pop. (excluding Reg. Parks)	678 Acres (deficit of 241 acres)	936 Acres (deficit of 499 acres)
Regional Parks (5) NRPA = Metropolitan	100 - 500+ acres	0 acres	5 - 10 Acres / 1,000 pop.	5 - 10 Acres / 1,000 pop.	0 Acres/ 1,000 pop.	n / a	n/a
Schools and Colleges (6)	n/a	263.4 acres	n/a				
HOA Parks (6)	n/a	24.46 acres	n/a				

Comparable adopted park land standards in like-size cities.

Waxahachie's adopted park land standards = 20 acres per 1,000 residents.

Prosper's adopted park land standards = 20 acres per 1,000 residents.

Lancaster's adopted park land standards = 23 acres per 1,000 residents.

The Fort Worth average is 16.25 acres per 1,000 residents (translated to the City of Keller = 845 acres for build-out population).

Keller's 2007 Target Standard is 18 acres per 1,000 residents.

City wide developed and undeveloped park area.

Current City of Keller park acreage = 437 acres.

Keller's current level of service (LOS) = 437 acres per 37,500 residents, or 11.65 acres per 1,000 residents.

Keller's build-out population = 52,000; the deficit park and open space acreage for Keller = 499 acres.

Park area as a percentage of City area

The City of Keller acreage = 18.39 sq mile = 11,772 acres.

Current park area in the City of Keller = 3.71% calculated as 437 total park acres / 11,772 city total acres.

Metroplex average = 4.8% (translated to the City of Keller = 565 acres).

National average = 8.1% (translated to the City of Keller = 953 acres).

City of Dallas = 10.0% (translated to the City of Keller = 1,177acres).

City of Fort Worth = 5.75% (translated to the City of Keller = 677 acres).

The existing park and open space acreage for the City of Keller is:

128 deficit acres compared to the metroplex average.

516 deficit acres compared to the national average.

740 deficit acres compared to the City of Dallas.

240 deficit acres compared to the City of Fort Worth.

- (1) 1995 NRPA standards
- (2) City of Keller 1998 Adopted Standards
- (3) Standard allows City of Keller to establish general target service levels.
- (4) Population projections for the City of Keller based on City of Keller Department of Economic Development
- (5) Regional Parks: The Clty of Keller currently has no regional parks and no standard is established for 200
- (6) Not counted toward city owned and managed park land.
- (7) Source: Inside City Parks, Peter Harnik, 2000





Figure 6.3 – Park Acreage Target for Keller

Close to Home Parks

- Neighborhood Parks Target Standard 3 acres per 1,000 population
- **Community Parks-** Target Standard 7 acres per 1,000 population
- Linear Parks* Target Standard 2 acres per 1,000 population

<u>Total Recommended Close to Home Parks Standards – 12.0 acres per</u> 1,000 population

Other City Wide Parks

- Special Purpose Parks Target Standard 3 acres per 1,000 population
- Open Space Target Standard 3 acres per 1,000 population
- Regional Parks No standard established

<u>Total Recommended Standards for Other Parks - 6.0 acres per 1,000 population</u>

* NOTE: Linear Parks, because of their goal to establish connections between different destinations including residential areas, are classified as "Close to Home" Parks for Keller.

The 2007 target standard for park land acreage including all type of parks is 18 acres per 1,000 population. For the 2007 population of 37,700, this standard translates to a target of 678 acres of park land for the City of Keller.

Park acreage currently dedicated to park land (both developed and undeveloped parks) totals 437 acres. This constitutes a deficit of 241 acres in 2007 when compared to the target standard of 678 acres.

For the projected 2030 build-out population of 52,000, this standard translates to a target of 936 acres of park land. Given today's total park land acreage, the City of Keller at the build-out population of 52,000, would have a deficit of 499 park land acres.



6.6 Park Acreage Comparisons

Reasoning for the recommended spatial target standard for Keller is in part based on a comparison with nationally recommended standards and existing national and local spatial ratios.

Figure 6.4 – National and Regional Comparison

Existing park acreage compared to the nation and the Dallas/Fort Worth Metroplex

City wide developed and undeveloped park area per 1,000 residents

- Current City of Keller developed and undeveloped park acreage = 437
 Acres.
- This is an equivalent to 11.65 acres parkland for every 1,000 residents in Keller today, and 8.4 acres for every 1,000 residents for the build-out population of 52,000.
- The Dallas/Fort Worth Metroplex average is 14.17 acres per 1,000 residents, which translated to Keller, is 737 acres for the build-out population. Keller is thus 59% of the metroplex average, which constitutes a deficit of 299 acres at build-out population.

Park area as a percentage of City area*

- Park area in City of Keller = 3.71% (437 / 11,772 acres).
- National average = 8.1%, which translated to Keller is 953 acres and constitutes a **deficit of 516 acres**.
- City of Dallas = 10%, which translated to Keller is 1,177 acres and constitutes a **deficit of 740 acres**.
- DFW Metroplex = 4.8%, which translated to Keller is 565 acres and constitutes a **deficit of 128 acres***.

*NOTE: The comparison of park acreage as a percentage of City area can be misleading. The comparison with other cities in the DFW Metroplex includes both undeveloped and built-out cities. Undeveloped cities typically will have less acreage dedicated to park land thus resulting in a relatively low ratio of park acreage per city area.

Compared to national standards, Keller has a deficit of 516 acres. Compared to local standards, Keller has a deficit of between 128 and 740 acres.

Based on the Keller 2007 standard of 936 acres, the deficit for Keller is 499 acres for build-out conditions, which is well in range of the local and national standard.



6.7 Existing Neighborhood Parks in Keller

Table 6.2 below summarizes the current developed neighborhood park acreage on a citywide basis.

Table 6.2 <u>Developed Neighborhood Parks in Keller Today</u>

- Current Acres 21 Acres (developed)
- Target Standard 3 acres per 1,000 population
- Current ratio 0.29 acre per 1,000 population
- Current Needs of 37,700 population 113 acres (deficit of 92 acres)
- Future need for 52,000 build-out population 156 acres (deficit of 135 acres)
- Existing developed acres are 13% of build-out target standard.

The standard of 3 acres of neighborhood parks for every 1,000 residents reflects the importance of having nearby parks for the residents of Keller. Keller currently has 11 acres of developed neighborhood parks for a population of 37,500. On a citywide basis, the City currently has a ratio of 0.29 acres per 1,000 population, which represents a deficit of 102 acres.

Developed AND Undeveloped Neighborhood Parks in Keller

Undeveloped neighborhood parks in Keller constitute approximately 24 acres. Added to the existing developed park land, a total of 45 acres are currently dedicated to neighborhood parks. Table 6.3 below summarizes the current DEVELOPED and UNDEVELOPED acreage on a citywide basis.



Table 6.3 Developed & Undeveloped Neighborhood Parks combined in Keller

Today:

- Current Acres 45 Acres (21 developed & 24 undeveloped)
- Target Standard 3 acres per 1,000 population
- Current ratio of developed & undeveloped parks 1.2 acres per 1,000 population
- Current Needs of 37,700 population 113 acres (deficit of 68 acres)
- Existing acres (developed and undeveloped) are 40% of the target standard.

Build-out:

- Current Acres 45 Acres (21 developed & 24 undeveloped)
- Target Standard 3 acres per 1,000 population
- Current ratio of developed & undeveloped parks 1.2 acres per 1,000 population
- Build-out Needs of 52,000 population 156 acres (deficit of 111 acres)
- Existing acres (developed and undeveloped) are <u>29% of the target</u> standard for build-out.
- 111 acres required to meet the target standard for build-out in 2030 translates to <u>an average yearly acquisition of 4.8 acres.</u>*
- For Neighborhood Parks 10 acres in size, the required additional acreage for build-out represents a total of 11 parks.

Development of the undeveloped neighborhood parks would add 24 acres and would begin to reduce the current neighborhood park deficit. It is thus imperative that the undeveloped parks be developed and **more park land be acquired** in order to meet the standard at build-out conditions.

Neighborhood Park Distribution

The strength of a city's park system may be measured in terms of the network coverage provided by its neighborhood parks. Neighborhood parks are, in a real sense, the "spine" of the parks system: much daily use is dependent on them. With this need and the rapid development of land in Keller, emphasis should be

^{*} Note that land acquisition should be done proactively, rather than spread out over the period until 2030. Not only will land become more expensive, the availability of land also decreases over time.



placed on maximizing opportunities to locate neighborhood parks throughout the city, adjacent to schools where possible.

Even when all land currently dedicated to neighborhood parks is developed, with their service radius of $\frac{1}{2}$ mile each, there will still be a lack of neighborhood parks in the far west, central, southeast and east section of Area 4 in Keller as well as the area south of the Keller Sports Park in Area 2; also, in the area north of Rapp and near Rufe Snow; and in the area south of Bear Creek Parkway, near Hidden Lakes Elementary school. When the service radius of neighborhood parks is applied to community parks (which serve as de facto neighborhood parks), the service coverage increases, although large areas are still left under served. (See Map, "Existing Parks and Open Space", page 6-4 a).

While Keller has a total of ten Home Owners Association (HOA) Parks, these parks are not open to the public, and thus are not included in the parks system.

One of the goals of neighborhood parks, in addition to serving the public, is to locate parks adjacent to schools. Of the nine schools in Keller, none has a neighborhood park associated with a school.

The Attitude (Telephone) Survey identified an overwhelming need for neighborhood parks including picnic facilities and nature areas. Survey results are shown in the preceding Table 5.6 on page 5-10.

It is strongly recommended that a concerted effort be made to acquire land for additional Neighborhood Parks where possible.

6.8 Existing Community Parks in Keller

The Community Parks contain excellent facilities in such parks as Bear Creek Park and The Parks at Town Center. As a result, these parks are highly utilized. In addition, these parks also serve as *de facto* neighborhood parks for the areas around them.

Table 6.4 summarizes the citywide Community Park supply in Keller today.



Table 6.4 Community Parks in Keller

Today:

- Current Acres 266 Acres (3 developed & 1 undeveloped)
- Target Standard 7 acres per 1,000 population
- Current ratio 7 acres per 1,000 population
- Current Needs of 37,700 population **264 acres** (surplus of 2 acres)

Build-out:

- Current Acres 266 Acres (3 developed & 1 undeveloped)
- Target Standard 7 acres per 1,000 population
- Build-out Needs with 52,000 population 364 acres (deficit of 98 acres)
- Existing acres (developed and undeveloped) are <u>73% of the target</u> standard for build-out.
- 98 acres required to meet the target standard for build-out in 2030 translates to an **acquisition of 4.3 acres average per year.**
- For Community Parks 30 50+ acres in size, the required additional acreage for build-out represents approximately 2 3 parks.

Community Park distribution

Community Parks in Keller are dispersed through the central, west and northern parts of Keller. Northeast Park is located in the northern part of Keller; Keller Sports Park, Bear Creek Park and The Parks at Town Center are more centrally located. Both the eastern areas from Keller-Smithfield Road and southern sections around Rapp are underserved by Community Parks with their service radii of 1 mile. (See Map "Existing Parks and Open Space", page 3 -12 a).)

The Attitude (Telephone) Survey identified a need for Community Park facilities including soccer fields, playgrounds and an amphitheater. Survey results are shown in the preceding Table 5.6 on page 5 – 13.

It is recommended that a concerted effort be made to acquire land for additional Community Parks where possible.



6.9 Existing Special Purpose Parks in Keller

Table 6.5 below summarizes the citywide Special Purpose Park supply in Keller today:

Table 6.5 Special Purpose Parks in Keller

Today:

- Current Acres 0.8 Acres
- Target Standard 3 acres per 1,000 population
- Current ratio 0.02 acres per 1,000 population
- Current Needs with 37,700 population 113 acres (deficit of 112 acres)
- Existing acres are 0.009% of target standard.

Build-out:

- Build-out Needs with 52,000 population 156 acres (deficit of 155 acres)
- Existing acres (developed and undeveloped) are <u>0.6% of the target</u> standard for build-out.
- 155 acres required to meet the target standard for build-out in 2030 translates to an <u>acquisition of 6.7 acres average per year.</u>
- For Special Purpose Parks which vary in size, the required acreage for build-out represents any number of parks, depending on the function.

Based on a recommended standard of 3 acres per 1,000 population for Special Purpose Parks, the City has a deficit of 155 additional acres at build-out conditions.

The Attitude (Telephone) Survey identified a need for special purpose facilities including expanding the Keller Senior Center, tennis courts, an amphitheater and an environmental learning center. Survey results are shown in the preceding Table 5.6 on page 5-13.

It is recommended that a concerted effort be made to acquire land for additional Special Purpose Parks where possible.



Special Purpose Park distribution

The Veterans' Memorial Park and Bates Park (undeveloped) both lie along Keller's western edge, near the Keller "Old Town" district approximately central relative to north and south. The Keller Senior Center, located in Johnson Road Park is centrally located. Future special purpose parks should be located in a strategic manner to best serve the population. Having a special purpose, the distribution of such parks is primarily a function of purpose rather than even distribution.

6.10 Existing Linear Parks in Keller

Table 6.6 below summarizes the current Linear Parks acreage on a citywide basis.

Table 6.6 <u>Linear Parks</u>

Linear Parks

Today:

- Current Acres 41 Acres
- Target Standard for Linear Parks 2 acres per 1,000 population
- Current ratio of Linear Parks 1 acre per 1,000 population
- Current Needs with 37,500 population 75 acres (deficit of 34 acres)
- Existing Linear Park acres are 54% of target standard.

Build-out:

- Build-out Needs with 52,000 population 104 acres (deficit of 63 acres)
- Existing acres (developed and undeveloped) are
- 39% of the target standard for build-out.
- 63 acres required tom meet the target standard for build-out in 2030 translate to an **acquisition of 2.7 acres average per year.**
- For Linear Parks which vary in size, the required acreage for buildout represents any number of parks, depending on the opportunity and function.

A target goal of 2 acres of linear parks for every 1,000 residents has been established. This goal is far from absolute, and is only established to begin to encourage the acquisition of linear park corridors along creeks and utility corridors. This goal of 2 acres of linear parks or corridors per 1,000 population ratio equates to 104 acres of linear park/linkage corridors in Keller at build-out conditions.



Railway line corridors are ideal for the use of trails. The railway along the western boundary of Main Street through Keller may serve such a purpose. It is recognized that this is an active train route, and that trail amenities would need to be located outside of the rail right of way. Although this area was removed from the regional trail veloweb, because it represents such a desirable long term connection, it is suggested that an additional easement or right of way be acquired outside of the rail right of way to facilitate a more feasible trail connection in the future. The land along the railway, with a 50 foot buffer potentially constitutes approximately 29 acres of land available for recreation. See the Parks and Trails Master Plan Map at the end of Chapter 6 on page 6-62 a).

The Attitude (Telephone) Survey identified a need for hike and bike/ jogging trails, which are ideally located within linear parks. Survey results are shown in the preceding Table 5.6 on page 5-10.

It is recommended that a concerted effort be made to acquire land for additional Linear Parks where possible.

6.11 Existing Natural Areas/Open Space in Keller

Table 6.7 below summarizes the current Natural Preserves/Open space acreage on a citywide basis.

Table 6.7 Natural Areas/ Open (Unprogrammed) Space

Today:

- Current Acres 84 Acres
- Target Standard for Open Space 3 acres per 1,000 population
- Current Needs with 37,500 population **113 acres** (deficit of 29 acres)
- Existing Open Space acres are 74% of the target standard.

Build-out:

- Build-out Needs with 52,000 population 156 acres (deficit of 72 acres)
- Existing acres (developed and undeveloped) are <u>54% of the target</u> standard for build-out.
- 72 acres required to meet the target standard for build-out in 2030 translates to an acquisition of 3.1 acres average per year.
- For Natural Areas/ Unprogrammed Space which vary in size, the required acreage for build-out represents any number of natural areas/ unprogrammed space, depending on the opportunity and function.



In all of Keller's park system, Willis Coves Open Space is the only park land which is dedicated as solely nature area/ open space. Most of the nature areas in Keller are concentrated centrally, in the park land along Big Bear Creek and farther south along Little Bear Creek. Not all open space is "natural", as in the cleared utility and rail easements, though there are corridors of nature areas alongside them. Bourland and Mt. Gilead cemeteries in Keller contain pockets of open space and the portion of park land in existing parks which is reserved as nature area/ open space is shown in Table 3.1. A concerted effort to identify remaining nature areas/ open space will serve to highlight sites which, by their character, may be earmarked as priority land to acquire and preserve.

It is important for cities to have land that remains in an undeveloped and unprogrammed state. One only has to travel into other cities that are rapidly developing in Texas to see the need and importance of open space preserves. These preserves add green space to the City, and break up the continuous bands of buildings and streets that characterize most cities. Open space is defined as land which is not programmed for any specific active recreation purpose. However, its value may typically be defined as visual, ecological, providing compensation for impermeable surfaces including parking lots and roofs, as well as for bio-filtering and buffering between incompatible land uses. Open spaces are becoming increasingly valuable and precious in the Dallas/Fort Worth metroplex.

Keller will soon approach build-out which makes it difficult to secure additional nature areas/ open space. Based on the target acreage of nature areas/open space for the city of 3 acres per 1,000 population, the deficit of nature areas/ open space is calculated at 72 acres at build-out conditions.

The Attitude (Telephone) Survey identified a strong need for natural habitat and nature areas, which protect valuable and unique natural resources. Survey results are shown in the preceding Table 5.6 on page 5-10.

It is strongly recommended that a concerted effort be made to acquire land for additional Natural Areas/ Unprogrammed Open Space where possible.

6.12 Park Acreage and the 2007 Parks Master Plan

The 2007 acreage recommendation of 18 acres per 1,000 is in line with the 1998 Parks Master Plan that recommended a standard of 12 - 20 acres per 1,000 population. The 1998 standard constituted a range of 136 - 399 acres total for the City for an estimated population of 20,775. The total park land at the time was 193 acres and build-out projected to be 39,850. The deficit at the time was calculated at 0 - 206 acres, compared with today's need of an additional 499



acres. These higher numbers are due to the population increase to 37,700 in 2007, and build-out projected at 52,000.

Table 6.8 below summarizes the key spatial needs for the next 5 to 10 years for Keller, and forms a crucial part of the 2007 Parks and Recreation and Open Space Master Plan recommendations in Chapter 7.

Table 6.8 <u>Summary of Key Acreage Needs for the City of Keller with a Build-</u> out Population of 52,000

Neighborhood Parks

- Current acreage is 31% of the target standard.
- Need to acquire additional land of at least 111 acres to meet target standard.

Community Parks

- Current acreage is 73% of the target standard.
- A minimum of <u>98 acres</u> of land is needed for Community Parks in order to meet the target standard.

Special Purpose Parks

- Current acreage is 0.6% of target standard for build-out.
- A minimum of <u>155 acres</u> of land is needed for Special Purpose Parks in order to meet the target standard.

Linear Parks

- Current acreage is 54% of the target standard of 2 acres per 1,000 population.
- Need to acquire additional land of at least <u>63 acres</u> to meet the target standard of 2 acres per 1,000 population for build-out.

Natural Area/ Unprogrammed Open Space

- Current acreage is 74% of the target standard of 3 acres per 1,000 population.
- Need to acquire additional <u>72 acres</u> to meet the target standard of 3 acres per 1,000 population for build-out.

Regional Parks

- No land is currently dedicated to Regional Parks.
- Keller currently has no acreage needs for such at this time.

Citywide Acreage Needs

- Sum of all target goals recommends 18 acres per 1,000 population.
- This represents a target goal of 936 acres of parks and open space for the City of Keller for the build-out population of 52,000.



6.13 Existing Vacant Land in Keller

The City of Keller today is approximately 91% developed. Of all the city's area, the available vacant land is only 9%, and decreasing. The current acreage of vacant land in the City of Keller amounts to about 698 acres which constitute the sum total of all individual vacant spaces larger than 4 acres. It is recommended that every effort possible be made to secure land that can be dedicated as open space park land.

The Existing and Proposed Parks Map represents a need for approximately 71.5% of all the available vacant land in Keller today. About 25.3% of the additional park land is needed for Neighborhood Parks; about 46.3% of the additional park land is needed for Community Parks; another 12.6% of the additional park land is needed for Linear Parks; more than 14.4% is needed for Nature Areas/Open Space preserves; about 1.4% of additional park land is needed for Special Purpose Parks.



6в.

Recreational Facilities Needs

6.14 Introduction to Park Facility Standards, Needs and Levels of Service

Facility standards define the number of facilities recommended to serve each particular type of recreation. They are expressed as the number of facilities per population size. The standards shown are based on comparisons with the national (NRPA) standard, as well as the actual number of facilities in Keller and the amount of use each facility receives.

Table 6.9 on page 6-20 a) summarizes the City of Keller 2007 target standards and level of service (LOS) for each type of facility.



Residents of Keller enjoy spending time outdoors and playing games in parks. The volley ball sand courts are particularly popular amongst teenagers and young adults.

Levels of Service - The recommended Levels of Service for recreation facilities are specifically based on demonstrated needs, the actual number of facilities in Keller and the amount of use each facility receives. They are expressed as the number of facilities per population size. The Levels of Service are determined by the current needs, the community's demand and recognized standards.



Current Levels of Service (CLOS) – The Current Levels of Service are expressed as the number of current recreation facilities per population size. An evaluation of the current use by each league in a city is used to develop strategies to meet both current and future recreation facility demands.

Minimum Levels of Service (MLOS) –The MLOS for each type of facility are determined as a guide to provide the most basic recreation facilities to the Community. The target timeframe for each facility is five years, or 2007 – 2012. The MLOS is the projected number of facilities based upon the target standard established for the City of Keller.

The MLOS as determined by a small/young city, may be more than the ideal target standard per existing population size, whereas the MLOS for a large/old city may be lower than the ideal target standard. In other words, the MLOS may not reflect the ideal goal for that particular recreation facility, but rather the minimum facility requirement that that particular city should have at present regardless of the size of the population.

6.15 Athletic Facility Evaluation

As stated previously at the conclusion of Chapter 5, Public Participation, many factors are considered in the process of assessing and ranking facility choices to ascertain the needs of Keller citizens. While the greatest weight is given to the Attitude Survey, due to its random, unbiased nature and sample size, other factors also come to bear. These include undeveloped parks and recreation master plan facilities, parks and recreation facility works in progress, current sports leagues' needs, citizens input in public meetings and questionnaires, as well as parks and recreation trends. All of these factors serve to include the best information in evaluating the needs of Keller citizens.

Components of the facility evaluation are as follows:

Attitude Survey Results - This component reviews the data gleaned from the Keller Attitude Survey, and provides insight into the need, based upon the results.

Key Issues/ Needs – This component covers current recreation facilities, league participation, and anticipated need for additional facilities or improvements to existing facilities for each type of sport, activity or amenity.

Team sports in Keller are provided by the Keller Youth Association (KYA), the Keller Soccer Association (KSA), the Keller Alliance Tennis Charter (KATCH), and Alliance Rugby. Athletic facilities are at present based in the Keller Sports Park, community parks and on KISD property. Each sport association provided



the planning team with their participation projection and future facility needs (see Addendum B: Sport Organization Input).

Demand Based Needs – The residents' demand for recreational facilities, are determined based on their expressed need/ attitude. Respondents to the Resident attitude survey were asked to indicate which facilities they would most likely participate in and what recreation activities they prefer. A summary of resident attitudes and needs is provided in Chapter 5, Public Participation, and is also contained in the Addendum 1: Public Participation.

Standards Based Needs – This need is based on comparisons with the national standard, as well as the actual number of recreation facilities in Keller and the amount of use each facility receives. Table 6.9 on the next two pages summarizes the Keller 2007 Current Levels of Service and target standards for each type of facility.

Joint Use Agreement – The Parks Master Plan includes school athletic facilities along with city facilities as a true reflection of the total facilities provided to the residents of Keller. The joint use agreement between the city and the Keller Independent School District (KISD) provides for access and use by Keller resident of the following KISD facilities:

- Playgrounds and Open Spaces on Elementary School campuses
- The High School and Middle School tennis courts

6.16 Accounting of Major Athletic Facilities

A specific review of each type of major athletic facilities, current usage, the locally adopted standard for each facility, key issues and the recommended Minimum Levels of Service associated with each type of facility follows and is summarized in Table 6.9.

Table 6.9 - Major Recreational Facility Level of Service (LOS) on the next page describes a recommended target standard and level of service for recreation facilities expressed as a ratio of the number of facilities per 1,000 population.



Table 6.9

Major Recreation Facility Level of Service (LOS) City of Keller Parks, Recreation and Open Space Master Plan



		•	·				
Facility Type	Existing (1) City & School	NRPA Target Standard (2)	1998 LOS 20,775	City of Keller 1998 Target Standard (3)	Current Levels of Service (37,700 pop.)	2012 Target LOS	2012 Target LOS (4) (~ 41,000 pop.) (5)
Competitive Facilities	es						
Baseball	13 fields (City: 11; schools: 2)	1 / 5,000 pop.	1 / 3463 pop.	1/ 5000 pop.	1 / 2900 pop.	1 / 4500 pop.	9.1 ~ 9 Fields surplus of 4 fields)
Softball Girls' Fastpitch	5 fields (City: 4; schools: 1)	1 / 5,000 pop.	1 / 20775 pop.	1/ 5000 pop.	1 / 7540 pop.	1 / 5000 pop.	8.2 ~ 8 Fields (deficit of 3 fields)
Adult Softball	(City: 0; schools: 0)		0	none	0	1 / 20000 pop.	2.1 ~ 2 Fields (deficit of fields)
Soccer	5 fields (City: 5; schools: 0)	1 / 10,000 pop.	1 / 2308 pop.	1/ 8000 pop.	1 / 7540 pop.	1 / 7000 pop.	5.9 ~ 6 Fields (deficit of 1 fields)
Football/ T-ball	5 fields (City: 2; schools:3)	1 / 20,000 pop.	1 / 20775 pop.	1/ 30000 pop.	1 / 7540 pop.	1 / 25000 pop.	1.6 ~ 1 Field (surplus of 4 fields)
Practice Facilities							
Baseball/Softball/T-ball	12 backstops (City: 7; schools: 5)	none	0	1/ 2000 pop.	1 / 3142 pop.	1 / 2000 pop.	20.5 ~ 20 Backstops (deficit of 8 backstops)
Multi-use Play Areas (Soccer, Football, Rugby)	15 fields (City: 6; schools: 9)	none	1 / 831 pop.	1/ 3500 pop.	1 / 2513 pop.	1 / 2500 pop.	16.4 ~ 16 Fields (deficit of 1 field)
Multi-purpose Courts	6 courts (City: 11; schools: 2)	none	1/ 0	1/ 30000 pop.	0	1 / 30000 pop.	1.4 ~ 1 Court (surplus of 5 courts)
Other Athletic Facil	ities						
Basketball Courts (Outdoor)	14 courts (City: 3; schools: 11)	1 / 5,000 pop.	1 / 2597 pop.	1/ 8000 pop.	1 / 2693 pop.	1 / 3000 pop.	13.7 ~ 14 Courts (deficit of 0 courts)
Sand Volleyball Courts (Outdoor)	7 courts (City: 7; schools: 0)	1 / 5,000 pop.	1 / 4155 pop.	1/ 8000 pop.	1 / 5386 pop.	1 / 5500 pop.	7.5 ~ 7 Courts (deficit of 0 courts)
In-Line Hockey Rinks	1 rink (City: 1; schools: 0)	1 / 20,000	1 / 20775 pop.	1/ 30000	1/ 37700 pop.	1 / 30000	1.4 ~ 1 Rink (deficit of 0 rinks)
Swimming Pools (leisure)	2 pools (City: 2; schools: 0)	1 / 20,000 pop.	0	1/ 30000 pop.	1/ 18850 pop.	1 / 20000 pop.	2.1 ~ 2 Pools (deficit of 0 pools)
Swimming Pools (fitness)	2 lap pools (City: 1; schools: 1)	1 / 20,000 pop.	0	1/ 30000 pop.	1/ 18850 pop.	1 / 20000 pop.	2.1 ~ 2 Pools (deficit of 0 pools)
Tennis Courts	14 courts (City: 0; schools: 14)	1 / 2,000 pop.	1 / 1731.25 pop.	1/ 2500 pop.	1/ 2693 pop.	1 / 2500 pop.	16.4 ~ 16 Courts (deficit of 2 courts)
Tracks	3 tracks (City: 0; schools: 3)	1 / 10,000 pop.	1 / 20775 pop.	1/ 30000 pop.	1/ 12500 pop.	1 / 20000 pop.	2.1 2 Tracks (surplus of 1 track)

Non-Athletic Facilities	S						
Paved Hike and Bike Trails	10 miles (City: 10; schools: 0)	1 / 10,000	1 / 3645 pop.	1 mile/ 10000 pop.	1 mile / 3770 pop.	1 / 1000 pop.	41.0 ~ 41 Miles (deficit of 31 miles)
Equestrian Trails	3.6 miles (City: 3.6; schools: 0)	none	1/ 10472 pop.	1 mile/ 10000 pop.	1 mile / 10416 pop.	1 / 5000 pop.	8.2 ~ 8.2 Miles (deficit of 4.6 miles)
Equestrian Arena	1 arena (City: 1; schools: 0)	none	0	1/ 20000 pop.	1 / 37700 pop.	1 / 30000 pop.	1.4 ~ 1 Arena (deficit of 0 arenas)
Playgrounds	22 play units (City: 9; schools: 13)	1 / 1,000 pop.	1/ 1731 pop.	1/ 1000 pop.	1 / 1714 pop.	1 / 1000 pop.	41.0 ~ 41 Units (deficit of 19 units)
Recreation/Aquatic Center (leisure waters/ pools)	1 center (City: 1; schools: 0)	none	0	1/ 40000 pop.	1 / 37700 pop.	1 / 40000 pop.	1.0 ~ 1 Center (deficit of 0 centers)
Skate Park	0 skate parks (City: 0; schools: 0)	none	0	1/ 30000 pop.	0	1 / 30000 pop.	1.4 ~ 1 Park (deficit of 1 park)
Water Spray Park	0 parks (City: 0; schools: 0)	none	0	1/ 30000 pop.	0	1 / 30000 pop.	1.4 ~ 1 Park (deficit of 1 park)
Dog Park	0 dog park (City: 0; schools: 0)	none	0	1/ 40000 pop.	0	1 / 40000 pop.	1.0 ~ 1 Park (deficit of 1 park)
Fitness Courses	0 courses (City: 1; schools: 0)	none	0	1/ 8000 pop.	1/ 37,500 pop.	1 / 15000 pop.	2.7 ~ 2 Courses (deficit of 2 course)
Horse Shoe Pits	2 units (City: 2; schools: 0)	none	0	1/ 6000 pop.	1 / 18850 pop.	1 / 10000 pop.	4.1 ~ 4 Pits (deficit of 2 pits)
Support Facilities							
Modern Senior Center	1 center (City:1; schools: 0)	none	1 / 20775 pop.	none	1/ 37700 pop.	1 / 20000 pop.	2.1 ~ 2 Centers (deficit of 1 center)
Environmental Learning Center	0 center	none	0	none	0	1 / 30000 pop.	1.37 ~ 1 Center (deficit of 1 center)
Large/Small (Shade) Pavilions (covers 4 - 6 picnic tables)	10 units (City: 9; schools: 1)	1 / 2,000 pop.	1/ 3463 pop.	1/ 1000 pop.	1 / 3770 pop.	1/ 1500 pop.	27.3 ~ 27 Units (deficit of 17 units)
Amphitheaters	0 units (City: 1; schools: 0)	none	0	0	0	1 / 30000 pop.	1.4 ~ 1 Units (deficit of 1 units)

Notes

- (1) Existing city and school facilities refer to those available to the general public as provided by the city or through joint use agreement between the City of Keller and Keller ISD.
- (2) Source: National Recreation and Park Association (NRPA): J. Mertes and J. Hall; Park, Recreation, Open Space and Greenway Guidelines; 1995. Recreation, Park and Open Space Standards and Guidelines; 1983.
- (3) City of Keller 1998 Adopted Standards
- (4) Numbers with decimals of 0.8 and higher are rounded up to the next whole number.
- (5) Based on population projections for the City of Keller as adopted by the City of Keller City Council

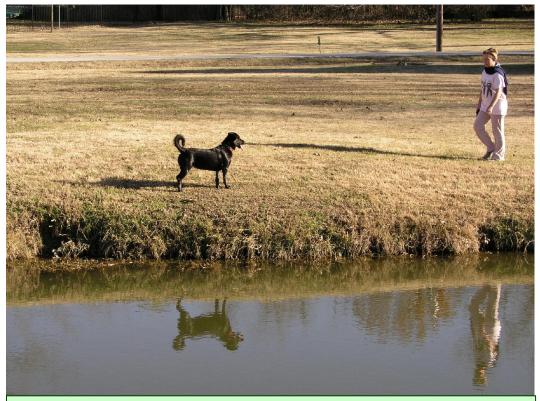








Open play and practice areas are important recreational facilities in the parks system of all Cities.



Open space and trails along the water's edge provide opportunities for both active and passive recreation.