Acknowledgements

MAYOR
Jim Phaup

TOWN COUNCIL
Kara Ranta - Place 1     Saji George - Place 2
Ronnie Henderson, Jr. - Place 3
Jim Wade - Place 4     Karen Hill - Place 5
John Bailey - Place 6

4B DEVELOPMENT CORPORATION
BOARD OF DIRECTORS
Michael Giordano - President
Javier Torres - Vice President
Debi Lockhart - Secretary
Sarah Bradford - Treasurer
Pollye Hunter
Ray Vanek
Mark Van Vessem

STAFF MEMBERS
Sean Fox - Town Manager
Randall Heye - Economic Development Director
Robert Blackburn - Parks Supervisor
Lisa Wilson - Director of Development Services
Regina Farris - Executive Assistant
Table of Contents

Introduction & Plan Purpose ........................................................................................................... 5
Plan Development Process ............................................................................................................. 5
Goals & Objectives .......................................................................................................................... 6
Conservation of Open Spaces ....................................................................................................... 6
Parks Infrastructure ....................................................................................................................... 7
Demographic Profile ...................................................................................................................... 8
Town Population Growth .............................................................................................................. 8
Race and Ethnic Distribution ........................................................................................................ 8
Age Distribution .......................................................................................................................... 9
Household Income Levels .......................................................................................................... 9
Inventory of Areas and Facilities ................................................................................................. 10
Town of Sunnyvale Parks ............................................................................................................ 10
Jobson Park ................................................................................................................................ 10
Robert Vineyard Park ................................................................................................................. 11
Samuell Farm North Park ............................................................................................................ 12
Town Center Park ....................................................................................................................... 13
Samuell New Hope Park .............................................................................................................. 14
Park Facility Inventory .................................................................................................................. 15
Park Types and Recommended Standards .................................................................................... 16
Neighborhood Park ..................................................................................................................... 16
Community Park .......................................................................................................................... 17
Special Use Parks ........................................................................................................................ 18
Open Space, Reservations, Preserves and Greenbelts ................................................................. 18
Needs Assessment & Identification ............................................................................................. 19
General Assessment & Identification ......................................................................................... 19
Public Hearings ............................................................................................................................ 19
Standard-Based Analysis ........................................................................................................... 20
Facility-Recreation Standard ....................................................................................................... 20
Park Land Analysis ....................................................................................................................... 22
Demand-Based Recreation Analysis ............................................................................................ 23
Future Park Improvements & Recommendations ........................................................................ 24
Existing Park Improvements ........................................................................................................ 24
Jobson Park .................................................................................................................................. 25
Robert Vineyard Park ................................................................................................................... 26
Samuell Farm North Park ............................................................................................................. 27
Town Center Park ........................................................................................................................ 28
Samuell New Hope Park .............................................................................................................. 29
Future Neighborhood Park Acquisition ...................................................................................... 30
Community Parks ........................................................................................................................ 30
Indoor Recreation Centers .......................................................................................................... 30
Greenbelts and Open Space ......................................................................................................... 31
Special Use Parks ........................................................................................................................ 31
Introduction & Plan Purpose

A vital component of an urban area is the space devoted to satisfying active and passive community recreational needs. The quantity of this space and its distribution within the population generally indicates the quality of the local park and recreation services. Furthermore, all these spaces collectively are considered to be elements that enhance and contribute to the quality of life found in the community.

The purpose of this Parks, Recreation, & Open Space Plan to examine and analyze existing park and recreation spaces and facilities, to identify issues related to present and future community needs, and to make recommendations on how the Town's park and recreation facilities can be integrated into a cohesive system. This Parks, Recreation, & Open Space Plan evaluates existing facilities, establishes facility criteria and standards, and provides a comparative analysis of Sunnyvale's park system to accepted park standards, and identifies park-related issues that Sunnyvale will need to address in the short-term and long term.

Plan Development Process

The Town Council recognized the need for a comprehensive analysis of the park system in Sunnyvale. The Town employed a private consulting firm (Dunkin Sims Stoffels, Inc.) to prepare the Parks, Recreation & Open Space Master Plan. The consultant worked with the Town of Sunnyvale Parks & Recreation Department staff to develop this Master Plan. Meetings were held with the Sunnyvale Parks & Recreation Department staff to examine collected needs, findings and preliminary recommendations. To obtain a comprehensive and complete analysis of the Town's park and recreation needs, and park system, three methodologies were used for this evaluation: public hearings, standards-based analysis and demand-based recreation analysis.

The time period of the financial plan of this Master Plan (specifically within the Implementation sub-section) is ten years. In July 2014 the Town determined it was necessary to update the Master Plan and address the Texas Parks and Wildlife Department requirements. The prioritization listing identifies certain projections as high priorities for development with the priorities based on satisfying a stipulated/recognized need. The Master Plan provides the Town long-range planning for future areas of urbanization. The service area studied for the Parks, Recreation & Open Space Master Plan includes the area within the City limits of Sunnyvale.
Goals & Objectives

Goals provide a statement for achievement or accomplishment. Objectives are a perceived means through which the goal(s) can be partially or fully attained. Identified within this section are the ways and methods of implementing the Parks, Recreation & Open Space Master Plan recommendations. Critical to the implementation of these goals and objectives is the Five-Year Action Plan which should be updated annually by the Sunnyvale Parks Board, working in close association with Town staff and the Town Council.

The following are the goals and objectives for the Sunnyvale park system.

Conservation of Open Spaces

Goal: To promote respect, conservation, and enhancement of important natural features and resources within the community.

Objectives:

- Develop standards for the preservation and, where appropriate, dedication of floodplain and other flood hazard areas in their natural states in order to ensure that the Town's natural drainage systems are not compromised.
- Develop and implement guidelines to identify and preserve important natural features.
- Preserve major tree lines and stand of trees
- Preserve the Lake Ray Hubbard shoreline and work with the City of Dallas to look at other plans for goals and objectives.
Parks Infrastructure

Goal: Ensure that adequate parks and recreation facilities are distributed equitably throughout the City to meet the needs of each and every citizen.

Objectives:

- Establish a hierarchy of park classifications that will provide for the adequate and equitable distribution of park facilities throughout the community.
- Establish guidelines that create standard specifications for each classification of park.
- Develop standards for the preservation and/or dedication of land for park facilities to ensure that adequate park amenities will be provided throughout the planning area.
- Provide for an integrated system of parks, which are connected in a linear fashion throughout the community. Said linear connections may be achieved by utilizing the alternative transportation systems, major easements, and preserved floodplains/open spaces.
- Utilize existing utility easements and rights-of-way to provide connectivity for the linear park system.
- Utilize existing Railroad Right-of-Way to promote a Town-wide trail system.
- Evaluate future and existing park land for development of athletic fields for youth and adult organized leagues.
Town Population Growth

Basic demographic data provides valuable information about the community. Data such as population growth and age composition may be used to create a snapshot of the Town at a given point in time. This data also provides insight as to the segments of the population who might need and utilize park and recreation facilities.

**Table 1** shows population growth for the Town of Sunnyvale from 1970 to the 2010 Census estimate. The Town has grown in every decade since 1990, although growth was slower between 2013 and 2014. Based on a Land Use Assumption Study on the Town in 2014 the built-out population for Sunnyvale is 14,000. It is anticipated that Sunnyvale will continue to experience a relatively high rate of growth, making the provision of park and recreational services even more important to address in the short- and long-term.

Race and Ethnic Distribution

**Table 2** depicts Sunnyvale’s race and ethnic distribution in 2014. The percentages are based on a NCTCOG 2014 Population Estimate. The NCTCOG does not provide projections of race/ethnicity for municipalities. The percentages are based on 2010 U.S. Census Data. The White/Caucasian groups accounted for the highest percentage of the local population, while the Asian group was the second-highest percentage. Also a high percentage was the group representing people of Hispanic Origin.

---

**Table 1**

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>Population Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>995</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>1980</td>
<td>1,404</td>
<td>409</td>
<td>41.1%</td>
</tr>
<tr>
<td>1990</td>
<td>2,228</td>
<td>824</td>
<td>58.7%</td>
</tr>
<tr>
<td>2000</td>
<td>2,693</td>
<td>465</td>
<td>20.9%</td>
</tr>
<tr>
<td>2010</td>
<td>5,130</td>
<td>830</td>
<td>19.3%</td>
</tr>
<tr>
<td>2013</td>
<td>5,270</td>
<td>140</td>
<td>2.7%</td>
</tr>
<tr>
<td>2014</td>
<td>5,280</td>
<td>10</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Sources: U.S. Census (years 1970-2010)
North Central Texas Council of Governments (NCTCOG) 2013 & 2014

**Table 2**

<table>
<thead>
<tr>
<th>Race/ Ethnicity</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/ Caucasian</td>
<td>3,612</td>
<td>68.4</td>
</tr>
<tr>
<td>African-American</td>
<td>327</td>
<td>6.2</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>21</td>
<td>0.4</td>
</tr>
<tr>
<td>Asian</td>
<td>1,077</td>
<td>20.4</td>
</tr>
<tr>
<td>Hawaiian or Pacific Islander</td>
<td>1</td>
<td>0.0</td>
</tr>
<tr>
<td>Other(1)</td>
<td>242</td>
<td>4.6</td>
</tr>
<tr>
<td><strong>TOTAL POPULATION</strong></td>
<td>5,280</td>
<td>100</td>
</tr>
<tr>
<td>Hispanic Origin (of any race)(2)</td>
<td>448</td>
<td>8.7</td>
</tr>
</tbody>
</table>

Source: NCTCOG 2014 Population Estimate
(1) Includes “Two or More Races”
(2) Hispanic/Spanish Origin may be of any race and may be included in any category. It is therefore not included in the total, but is separately included.
**Age Distribution**

Table 3 contains information on various age groups and how they are represented within Sunnyvale. Age is an important population characteristic because it is a strong indicator as to the types of services and facilities that the Town will need to provide. This data suggests that families with young children are moving to Sunnyvale. Younger populations are typically more active and demand more Town amenities like parks and recreation centers.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2014 Population</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 and Younger</td>
<td>1,769</td>
<td>33.5</td>
</tr>
<tr>
<td>25 to 44</td>
<td>1,040</td>
<td>19.7</td>
</tr>
<tr>
<td>45 to 64</td>
<td>1,880</td>
<td>35.6</td>
</tr>
<tr>
<td>65 and Older</td>
<td>591</td>
<td>11.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,280</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: NCTCOG 2014 Population / U.S. Census 2010

**Household Income Levels**

Table 4 shows income data for the Town of Sunnyvale in 2010, as reported by the 2010 U.S. Census. This data is also the most recent of this type that is available. The largest percentage of households in 2010 in Sunnyvale, specifically 27.2 percent, earned $150,000 or more annually. The lowest percentage of households in the Town, 2.1 percent, earned less than $15,000 annually in 2010, but there were a large percentage of households that reported an income of $50,000.00 to $149,999.00.

<table>
<thead>
<tr>
<th>INCOME LEVEL</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than $15,000</td>
<td>37</td>
<td>2.1</td>
</tr>
<tr>
<td>$15,000 to $49,999</td>
<td>363</td>
<td>20.3</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>316</td>
<td>17.6</td>
</tr>
<tr>
<td>$75,000 to $99,999</td>
<td>268</td>
<td>15.0</td>
</tr>
<tr>
<td>$100,000 to $149,999</td>
<td>318</td>
<td>17.8</td>
</tr>
<tr>
<td>$150,000 or more</td>
<td>487</td>
<td>27.2</td>
</tr>
<tr>
<td><strong>Total Households</strong></td>
<td>1,789</td>
<td>100</td>
</tr>
</tbody>
</table>

**Median Household Income** $ 90,640.00

Source: U.S. Census 2010
Dunkin Sims Stoffels, Inc.
Inventory of Areas and Facilities

Town of Sunnyvale Parks

The following information documents existing park and recreational facilities in Sunnyvale.

Jobson Park  (Leased from the Sunnyvale I.S.D. - Lease expires July 30, 2020)

Park Size:  6.0 Acres

Park Location:  300 Jobson Road

Park Classification:  Neighborhood Park

Park Facilities:  Youth Baseball Field  
Quarter-Mile Hike & Bike Trail  
Soccer Field  
Bleachers  
Drinking Fountain  
Two Picnic Tables  
Parking Lot

Jobson Park Signage
Robert Vineyard Park

Park Size: 3.0 Acres

Park Location: 402 Tower Place

Park Classification: Neighborhood Park

Park Facilities: Two Soccer Fields
                Practice Ballfield
                Practice T-Ball
                Quarter Mile Hike & Bike Trail
                Drinking Fountain
                Two Picnic Tables
                Two Grills
                Parking Lot
Samuell Farm North Park  *(Leased from the City of Dallas - Lease expires May 23, 2051)*

Park Size: 103 Acres

Park Location: Jobson Road and Tripp Road

Park Classification: Community Park

Park Facilities:
- Parking Lot
- Half-Mile Hike & Bike Trail
- Fishing Pond
- Three Park Benches
- Drinking Fountain
- Covered Exercise Stations
- Two Picnic Tables
- Two Grills
Town Center Park

Park Size: 9.0 Acres

Park Location: 356 Tripp Road

Park Classification: Community Park

Park Facilities:
- Two Covered Playgrounds with Four Exercise Stations
- Two Tennis Courts (available by reservation to Sunnyvale residents)
- Restroom Facility
- One 40’ x 60’ Shelter with Fifteen Picnic Tables (available by reservation to Sunnyvale residents)
- Two 16’ x 16’ Shelters with Picnic Table and Grill
- Fishing Pond
- ¾ Mile Lighted Hike & Bike Trail
- Seven Exercise Stations
- Multi-Purpose Court
- Seven Grills
- Eight Park Benches
- Seven Picnic Tables
- Parking Lot
Samuel New Hope Park (Leased from the City of Dallas – Lease expires May 23, 2051)

Park Size: 120 Acres

Park Location: Town East Blvd. and Tower Place

Park Classification: Community Park

Park Facilities: Undeveloped
# Park Facility Inventory

## Table 5

**Park Facility Inventory**  
**Town of Sunnyvale, Texas**

<table>
<thead>
<tr>
<th>PARKS</th>
<th>FACILITIES</th>
<th>Acres</th>
<th>Undeveloped</th>
<th>Parking Lots</th>
<th>Baseball Field / Practice Baseball Field</th>
<th>Soccer Field</th>
<th>Basketball Court</th>
<th>Playground Equipment (Covered)</th>
<th>Tennis Court(s)</th>
<th>Multi-Purpose Court</th>
<th>Pond</th>
<th>Pavilion(s)</th>
<th>Small Pond with Fountain</th>
<th>Picnic Table(s)</th>
<th>Benches</th>
<th>Restrooms</th>
<th>Grills</th>
<th>Exercise Stations</th>
<th>Jogging/Walking Trail</th>
<th>Drinking Fountain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood Parks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jobson Park</td>
<td></td>
<td>6.0</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Vineyard Park</td>
<td></td>
<td>3.0</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Community Parks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samuell Farm North Park</td>
<td></td>
<td>103</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town Center Park</td>
<td></td>
<td>9.0</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samuell New Hope Park</td>
<td></td>
<td>120</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Park Types and Recommended Standards

In order to provide the parks, recreational and open space facilities needed by the Town’s residents, a set of standards and design criteria should be followed. The National Recreation and Park Association (NRPA) has developed such standards for parks, recreation and open space development, which are intended to guide communities in establishing a hierarchy of park areas. The general standard established by the NRPA for park acreage per 1,000 people is approximately 15 to 20 acres, or for every 1,000 people. Sunnyvale currently has 12 acres of public park land and 212 acres of park land which is leased from the City of Dallas and the Sunnyvale I.S.D. Specific park and open space needs for Sunnyvale will be discussed later herein.

The following sections describe a commonly used classification system that follows guidelines similar to those set forth by the National Recreation and Park Association (NRPA). The park areas discussed are defined by 1) the various types of activities that are to be furnished, and 2) their type, size, and service area. Each park type is discussed below in order to:

(1) Identify the function of each park type;
(2) Identify the recreational activities generally associated with each park type; and
(3) Define the general service area and the physical relationship of each type of park to the population residing within its service area.

These various park types will be considered within this Park, Recreation, & Open Space Plan as possible components of Sunnyvale’s park system.

Neighborhood Park

The neighborhood park, sometimes referred to as a playground, is deemed to be one of the most important features of a park system, and is often considered to be one of the major cohesive elements in neighborhood design. Its primary function is the provision of recreational space for the neighborhood that surrounds it.

When it is possible to combine an elementary school with this type of park, the two features further enhance the identity of the neighborhood by providing a central location for recreation and education, and by providing a significant open space feature within the neighborhood. A neighborhood park should be located near the center of the neighborhood, and should have a service area of approximately one-half mile to one mile. Safe and convenient pedestrian access (sidewalks or hike-and-bike trails) is important to a neighborhood park location. Generally, the
location should not be adjacent to a heavily traveled major thoroughfare. Facilities normally provided at a neighborhood park consist of the following:

- Playground equipment for small children;
- A multiple-purpose, surfaced play area;
- An athletic area (non-lighted) for games such as baseball, football and soccer, and a surfaced area for such sports as volleyball, basketball and similar activities.

Other desirable elements for neighborhood parks include:

- Pavilions with tables and grills for picnics,
- Drinking fountains; and
- A passive area with landscaping, trees and natural elements.

Neighborhood parks are designed to serve a small population and geographic area. An appropriate standard in relation to size and population for this type of park is 2.5 acres per 1,000 persons. These parks normally serve a population base of 1,000 to 2,500 persons, and they generally range in size from five to ten acres.

**Community Park**

A community park is larger than a neighborhood park, and is oriented toward providing active recreational facilities for all ages. Community parks serve several neighborhood areas or an entire town, and therefore, they should be conveniently accessible by automobile, and should include provisions for off-street parking. Activities provided in these parks generally include:

- Game and practice fields for baseball, football, soccer and softball;
- Walking or biking trails;
- A community building/recreation center;
- Tennis courts;
- A surfaced multiple-purpose play area;
- Playground structures; and
- A passive area for picnicking.

The service radius of a community park play field is a minimum of one mile, and a location adjacent to, or as a part of, a junior high or high school is considered desirable. Community parks are designed to serve a medium to large population area. An appropriate size standard...
for these parks in relation to size and population is 5 acres per 1,000 persons. These parks normally serve a population base of 5,000 persons or more, and they generally range in size from 30 acres to 100 acres. Sunnyvale has 232 acres of community park land available to citizens of Sunnyvale.

Special Use Parks

Golf courses, tennis centers, historic parks, school parks, botanical gardens and community centers, including youth centers (e.g., YMCA) and civic centers are considered to be special types of recreational facilities. Standards for this type of facility are variable and dependent upon the extent of services provided by the special facility.

Open Space, Reservations, Preserves and Greenbelts

These areas are natural and are generally left undisturbed, and can be referred to as preserves. Although active recreation can be accommodated within these areas, they are primarily intended for passive recreational use. Two major creek systems within the Town limits, Duck Creek and Long Creek, provide extensive open space and passive use park land for citizens in the Town and surrounding communities. The native and natural settings of Duck Creek would provide an excellent site for a Native Interpretive Center for the citizens of Sunnyvale.


Needs Assessment & Identification

General Assessment & Identification

The Town of Sunnyvale currently provides parks, recreational opportunities and open space to its citizens. All of Sunnyvale’s parks provide passive oriented recreational opportunities. With the exception of one unlit baseball field at Jobson Park, there are no active or sports fields available for league play. Children and adults play in adjacent cities leagues for this recreational activity. The Town may explore the lack of these types of recreational activities. Three methods were used to analyze the needs assessment, they were public hearings, standard based and demand based analysis.

Public Hearings

The Town of Sunnyvale held two public hearings to receive citizens’ comments on the park and recreational needs within the Town. The hearings were advertised in the local newspaper and on the internet. The hearings were held on August 12, 2014 and September 9, 2014. Both hearings were held with the 4B Development Corporation. Participants were given the opportunity to complete questionnaires and to verbally express their concerns, needs, and vision for the Sunnyvale park system. The public comments were varied in all areas of recreation.

Conservation of natural resources and trails to connect all parks, schools and private parks were discussed as valuable recreation features in a park system. Since the 2009 Master Plan and the acquisition / development of Town athletic fields were of great significance because the Town does have organized youth athletic associations; however, the Town does not have game quality facilities at the present time. The following is a listing of recreational elements mentioned at the public hearing.

- Trails
- Playgrounds
- Basketball Courts
- Shade Playground
- Picnic Tables
- Football
- Youth Baseball
- Splash Park
- Baseball Field
- Park Benches
- Park Land Acquisition
- Youth Soccer Fields
- Preservation of Open Spaces
- Dog Park
- Recreation Center
- Adult Soccer Fields
- Picnic Shelters
- Biking
- Access to Lake Ray Hubbard
- Amphitheater
- Youth Softball Fields
Standard-Based Analysis

This approach is used to assist in assessing the future recreational needs, and follows established and recognized standards for assessing the quantity of park land and the number of facilities that are required to meet the needs of a given population.

Facility-Recreation Standard

One source is the National Recreation and Park Association (NRPA). The NRPA has functioned as a source of guidance for park standards and development for a number of years. The NRPA’s standards are suggested to be a guide for determining park and open space needs. From community to community, differences will be found in the socio-economic and cultural characteristics, and in climatic conditions. Therefore, the range of demands and preferences for recreational activities will vary with these differences. Obviously, these variances will directly influence a uniform standard for all locations. NRPA is very specific to point out that their data is to be used only as a guide to the development of local standards. Therefore, the NRPA provides input to the formation of local needs. Table 6 on the following page shows a standard analysis for the current population of 5,280 people, and Table 7 on the following page illustrates a standards analysis for Sunnyvale’s build-out population of 14,000 people.

This is a standard comparison which illustrates the level of services provided at 5,280 and what the projected facilities need would be for the anticipated population of 14,000. Again, it is important to note that these are national standards and the comparison will vary from city-to-city. It is common for larger cities to provide recreational facilities for smaller communities nearby. Often, smaller communities do not have recreational facilities and depend on larger area cities for these resources.

At the present time organized youth and adult league baseball, softball, soccer or football are members of associations in adjacent cities. Sunnyvale does not have active game facilities available for these citizens.
## TABLE 6
### PARK FACILITY STANDARD ANALYSIS RATIO USING EXISTING POPULATION OF 5,280
### TOWN OF SUNNYVALE, TEXAS (2014)

<table>
<thead>
<tr>
<th>Facility</th>
<th>NRPA Standards</th>
<th>Current Sunnyvale Inventory</th>
<th>Recommendation Metroplex Standard(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td>1/5,000</td>
<td>1</td>
<td>1/4,000=2</td>
</tr>
<tr>
<td>Tennis Courts</td>
<td>1/2,000</td>
<td>2</td>
<td>1/4,000=2</td>
</tr>
<tr>
<td>Youth Baseball</td>
<td>1/20,000</td>
<td>1</td>
<td>1/5,000=2</td>
</tr>
<tr>
<td>Youth Softball</td>
<td>1/5,000</td>
<td>0</td>
<td>1/5,000=2</td>
</tr>
<tr>
<td>Football</td>
<td>1/20,000</td>
<td>0</td>
<td>1/65,000=1</td>
</tr>
<tr>
<td>Youth Soccer</td>
<td>1/10,000</td>
<td>2</td>
<td>1/5,000=2</td>
</tr>
<tr>
<td>Playgrounds (1)</td>
<td>NS</td>
<td>1</td>
<td>(1)</td>
</tr>
<tr>
<td>Picnic Tables</td>
<td>NS</td>
<td>30</td>
<td>1/300=18</td>
</tr>
<tr>
<td>Swimming Pool</td>
<td>1/20,000</td>
<td>0</td>
<td>1/30,000=1</td>
</tr>
<tr>
<td>Trails</td>
<td>NS</td>
<td>1.75 miles</td>
<td>As many as possible*</td>
</tr>
<tr>
<td>Recreation Center</td>
<td>1/20,000</td>
<td>0</td>
<td>1/30,000=1</td>
</tr>
</tbody>
</table>

(1) One playground should be installed in each neighborhood, community and regional park.
Table assumes lighted facilities
NS = No Standard
NRPA = National Recreation and Parks Association
* As many as possible in order to provide a comprehensive system of pedestrian trails that connect residential areas to parks, schools and open space
(2) The term “Metroplex” represents cities in the Dallas/Ft. Worth region.
Standards are Rounded Up.

## TABLE 7
### PARK FACILITY STANDARD ANALYSIS RATIO USING BUILD-OUT POPULATION OF 14,000
### TOWN OF SUNNYVALE, TEXAS

<table>
<thead>
<tr>
<th>Facility</th>
<th>NRPA Standards</th>
<th>Current Sunnyvale Inventory</th>
<th>Recommendation Metroplex Standard(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td>1/5,000</td>
<td>1</td>
<td>1/4,000=4</td>
</tr>
<tr>
<td>Tennis Courts</td>
<td>1/2,000</td>
<td>2</td>
<td>1/4,000=4</td>
</tr>
<tr>
<td>Youth Baseball</td>
<td>1/20,000</td>
<td>1</td>
<td>1/5,000=3</td>
</tr>
<tr>
<td>Youth Softball</td>
<td>1/5,000</td>
<td>0</td>
<td>1/5,000=3</td>
</tr>
<tr>
<td>Football</td>
<td>1/20,000</td>
<td>0</td>
<td>1/65,000=1</td>
</tr>
<tr>
<td>Youth Soccer</td>
<td>1/10,000</td>
<td>2</td>
<td>1/5,000=3</td>
</tr>
<tr>
<td>Playgrounds (1)</td>
<td>NS</td>
<td>1</td>
<td>(1)</td>
</tr>
<tr>
<td>Picnic Tables</td>
<td>NS</td>
<td>30</td>
<td>1/300=18</td>
</tr>
<tr>
<td>Swimming Pool</td>
<td>1/20,000</td>
<td>0</td>
<td>1/30,000=1</td>
</tr>
<tr>
<td>Trails</td>
<td>NS</td>
<td>1.75 miles</td>
<td>As many as possible*</td>
</tr>
<tr>
<td>Recreation Center</td>
<td>1/20,000</td>
<td>0</td>
<td>1/30,000=1</td>
</tr>
</tbody>
</table>

(1) One playground should be installed in each neighborhood, community and regional park.
Table assumes lighted facilities
NS = No Standard
NRPA = National Recreation and Parks Association
* As many as possible in order to provide a comprehensive system of pedestrian trails that connect residential areas to parks, schools and open space
(2) The term “Metroplex” represents cities in the Dallas/Ft. Worth region.
Park Land Analysis

Park land analysis is also evaluated on the basis of Sunnyvale’s current population, as shown in Table 8 below. This evaluation is a reliable guide and analysis for park land comparison. The acreage required per 1,000 populations varies for each park classification. For long range planning, this is a useful tool for determining future park land acreage acquisition. As mentioned previously, the neighborhood park is an important aspect to the overall municipal park system. The minimum acreage for a neighborhood park should be five (5) acres for several important reasons. A minimum of five (5) acres provides enough land to develop playgrounds, small pavilions, etc. A smaller tract will limit the facilities and the recreational opportunities available to citizens. In the event that the Town accepts a smaller tract of land, in the one (1) acre to three (3) acre range, maintenance of these parks would be time consuming and would also require an increase the Town’s maintenance budget. A minimum of five (5) acre tracts is therefore recommended for Neighborhood Park development.

<table>
<thead>
<tr>
<th>Park Type</th>
<th>Recommended Acres per 1,000 Persons</th>
<th>Existing Sunnyvale Parks Acreage</th>
<th>Acreage for Existing 5,280 Population</th>
<th>Acreage for 14,000 People at Build-Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood P*</td>
<td>2.5 acres</td>
<td>3.0 acres</td>
<td>13.2 acres</td>
<td>35.0 acres</td>
</tr>
<tr>
<td>Neighborhood L*</td>
<td>6.0 acres</td>
<td>6.0 acres</td>
<td>26.4 acres</td>
<td>70 acres</td>
</tr>
<tr>
<td>Community P*</td>
<td>5 acres</td>
<td>9.0 acres</td>
<td>223 acres</td>
<td>28 acres</td>
</tr>
<tr>
<td>Community L.</td>
<td>6-8 acres</td>
<td>0 acres</td>
<td>10.5 acres</td>
<td>112 acres</td>
</tr>
<tr>
<td>Special</td>
<td>2 acres</td>
<td>0 acres</td>
<td>10.5 acres</td>
<td>28 acres</td>
</tr>
<tr>
<td>Open Space/Greenbelts</td>
<td>6-8 acres</td>
<td>0 acres</td>
<td>42.2 acres</td>
<td>112 acres</td>
</tr>
<tr>
<td><strong>Acres:</strong></td>
<td><strong>17.5 acres</strong></td>
<td><strong>241 acres</strong></td>
<td><strong>92.3 acres</strong></td>
<td><strong>245 acres</strong></td>
</tr>
</tbody>
</table>

L. 206 Acres of community park land is leased from the City of Dallas.
L* Leased from Sunnyvale I.S.D.
P* Public Owned by Town of Sunnyvale
Demand-Based Recreation Analysis

Prior to 2009 the Town of Sunnyvale did not have any organized youth or adult leagues for any sport. In 2009 the Sunnyvale I.S.D. opened the Sunnyvale High School. The Sunnyvale Raiders Youth Sports Association (SRYSA) was founded in 2013. The Association sponsors baseball, football, soccer, tennis, cheer, track, basketball, and volleyball (basketball and volleyball are indoor recreation activities). At the present time the Town of Sunnyvale does have athletic fields in the Town. The Association uses the Sunnyvale I.S.D. facilities for many of the activities.

The SRYSA’s participation members are growing; specifically with youth soccer.

The Association has requested the Town assist the SRYSA and provide fields within the Town limits so the teams do not have to travel to other communities for competitive games. The SRYSA is growing in all sports.
**Future Park Improvements & Recommendations**

**Existing Park Improvements**

The focus of this section will be the addition of recreation elements to the park system. The improvements are based on an analysis of existing facilities. Descriptions of these parks and related recommendations begin on the following page.

Preliminary cost estimates have also been prepared for each park element or improvement. The costs are general for specific elements such as benches, playgrounds, picnic tables, etc. Items such as drainage improvements and major park renovation should be analyzed at the time of the proposed improvements as these items require a detail site analysis which is not included in this Parks, Recreation and Open Space Master Plan.
Jobson Park (Leased from the Sunnyvale I.S.D. - Lease expires July 30, 2020)

- **Park Size:** 6.0 Acres
- **Park Location:** 300 Jobson Road
- **Park Classification:** Neighborhood Park

**Park Facilities:**
- Youth Baseball Field
- Quarter-Mile Hike & Bike Trail
- Soccer Field
- Bleachers
- Drinking Fountain
- Two Picnic Tables
- Parking Lot

**Recommended Improvements:**
- Renovate the Baseball Infield: $5,000.00
- Park Benches (4): $8,000.00
- Overlay Existing Track with Asphalt: $21,100.00
Robert Vineyard Park

Park Size: 3.0 Acres

Park Location: 402 Tower Place

Park Classification: Neighborhood Park

Park Facilities: Two Soccer Fields
Practice Ballfield
Practice T-Ball
Quarter Mile Hike & Bike Trail
Drinking Fountain
Two Picnic Tables
Two Grills
Parking Lot

Recommended Improvements:

- Field Renovation $15,000.00
- Repair Concrete Walking Track $14,000.00
- Remove Baseball Backstops $2,000.00
- Restroom Facility/Storage Facility $125,000.00
- Provide Field Lighting $150,000.00
Samuell Farm North Park (Leased from the City of Dallas – Lease expires May 23, 2051)

Park Size: 103 Acres

Park Location: Jobson Road and Tripp Road

Park Classification: Community Park

Park Facilities: Parking Lot
Half-Mile Hike & Bike Trail
Fishing Pond
Three Park Benches
Drinking Fountain
Covered Exercise Stations
Two Picnic Tables
Two Grills

Recommended Improvements:
- Fishing Pier $ 50,000.00
- Additional Trail $ 100,000.00
- 9-Hole Recreational Disc Golf Course $ 6,500.00
- Championship Disc Golf Course $ 15,500.00
Town of Sunnyvale, Texas
Parks, Recreation, & Open Space Master Plan

Town Center Park

Park Size: 9.0 Acres

Park Location: 356 Tripp Road

Park Classification: Community Park

Park Facilities: Two Covered Playgrounds with Four Exercise Stations
Two Tennis Courts (available by reservation to Sunnyvale residents)
Restroom Facility
One 40’ x 60’ Shelter with Fifteen Picnic Tables (available by reservation to Sunnyvale residents)
Two 16’ x 16’ Shelters with Picnic Table and Grill
Fishing Pond
¾ Mile Lighted Hike & Bike Trail
Seven Exercise Stations
Multi-Purpose Court
Seven Grills
Eight Park Benches
Seven Picnic Tables
Parking Lot

Recommended Improvements:

- Add Restroom $150,000.00
- Splash Park or Spray Pad $300,000.00
- Add Trail Distance Markers $ 7,000.00
**Samuell New Hope Park** *(Leased from the City of Dallas - Lease expires May 23, 2051)*

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Size:</td>
<td>120 Acres</td>
</tr>
<tr>
<td>Park Location:</td>
<td>Town East Blvd. and Tower Place</td>
</tr>
<tr>
<td>Park Classification:</td>
<td>Community Park</td>
</tr>
<tr>
<td>Park Facilities:</td>
<td>Undeveloped</td>
</tr>
</tbody>
</table>

**Recommended Improvements:**

None at this time
Future Neighborhood Park Acquisition

As stated previously, the neighborhood park is considered to be the core unit in a municipal park system. The Town of Sunnyvale has a distribution of park land within the Town limits. The Town is projecting to increase its existing population from 5,280 to 14,000.

According to Table 8 Parkland Acreage Analysis the Town has a deficiency in neighborhood park land. However, community parks provide a geographical distribution of parks for all citizens in Sunnyvale. Therefore, the need for additional neighborhood park land is not a critical factor.

Based on analysis of the northern half of the Town there would be a need for acquisition and development of three neighborhood parks to serve this section of the Town.

Community Parks

The Town presently has 232 acres of community park land which exceeds the estimated built-out requirement of 85 acres of community parks. It should be noted that Samuell Farm North Park and Samuell New Hope Park are leased from the City of Dallas. These are fifty year leases which contain a 30 day notice of vacating and terminating the lease. The Town should be careful in planning and funding major capital improvements within these leased community parks because of this 30 day notice.

As mentioned above, the community parks in Sunnyvale also addresses the needs for neighborhood parks in Town. Therefore, community park land serves as a dual purpose. Sunnyvale does not have any fields for competitive leagues. The Sunnyvale Raiders Youth Sports Association has expanded a need for competitive athletic fields. This would permit teams to travel to Sunnyvale for competition. It may also allow for tournaments which could have an economic impact within the Town. Age divisions with only three or four teams play each other three to four times in a regular season and can become stagnant. A greater number of teams provide variety and competition.

In addition to the existing Sunnyvale community parks the Town will need to acquire another community park of approximately 60 to 80 acres to meet the future needs for athletic facilities.

Splash parks provide water recreation opportunities and are popular because a life guard is not required and the parks have a longer season than a pool or aquatic center. This facility could be built at Town Center Park because of its central location in the Town.

Indoor Recreation Centers

Typically, cities provide indoor recreational opportunities in the form of a recreation center. These facilities provide for organized work out programs such as aerobic exercise, weight lifting, and stationary low-impact bikes and treadmills. Basketball and racquetball also cultivate recreation opportunities. The Town should consider development of one recreation center. These centers normally cost between $6,000,000 to $10,000,000 depending upon size and facilities.
Greenbelts and Open Space

Duck Creek and Long Branch Creek bisect the Town and provide approximately 1,800 acres of floodplain and green space. When property adjacent to creeks and floodplains is developed, floodplain property should be dedicated to the Town. These floodplains and greenbelts provide excellent opportunities for preservation of open space and for trail corridors.

The Park Plan should accept floodplain areas as a donation and should not purchase the land, unless the Town foresees a need for a critical purchase in order to preserve land and/or provide a link to another park. These open spaces preserve trees and native areas and enhance the educational and passive use of floodplains and open space.

Special Use Parks

The Town does not have a special use park in the Town park inventory. In the original Master Plan for Town Hall and Town Center Park an amphitheater was planned for the lawn area north of The Town Hall. During the public hearing a request was made for a historical park reflecting Sunnyvale's history and culture. This could be classified as a Special Use Park.

Park Security and WI-FI Access

Small towns and cities have a unique opportunity to provide additional security features within its park system. The Town currently has five (5) public parks and a projected need for an additional three (3) parks. The Town can provide surveillance/security cameras for each park. Because of the budget required per park large municipalities would have a difficult time providing this security feature. Town Center Park is currently monitored by a surveillance camera. Another feature the Town may provide would be wireless internet service. In today's age, this would be an added feature for park patrons. Before the internet the park was a public space for people to read newspapers and magazines. The internet has changed the way we receive and view news and information. Wireless internet is an added feature for a public park.

Homeowner Associations and Residential Communities

The Parks, Recreation and Open Space Master Plan evaluates public parks and public open space and does not evaluate Homeowner's Association (H.O.A.). The Town has numerous H.O.A. parks and open areas within the Town limits and neighborhood areas; these parks do provide recreational opportunities for Sunnyvale citizens therefore eliminating the need for additional park land in these service areas.

Based on a review of plats on file the following table identifies existing HOA parks in the Town of Sunnyvale. Specifically Table 9 illustrates the name of the subdivision, the size of the park in acres, and the twenty-year option date. The twenty-year option date is a date recorded on the plat. This date plus twenty years establishes the date in which the Town of Sunnyvale has the option to take ownership, operation and maintenance of the parks.
# HOA Park Summary

<table>
<thead>
<tr>
<th>Addition</th>
<th>Acres</th>
<th>Dedicated for Public Use</th>
<th>20-Year Option To Take</th>
<th>20-Year Option Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoney Creek</td>
<td>35.95 acres</td>
<td>Yes</td>
<td>Yes</td>
<td>11/22/2006</td>
</tr>
<tr>
<td>Stoney Creek 4A</td>
<td>19.18 acres</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Stone Canyon</td>
<td>34.4 acres</td>
<td>Yes</td>
<td>Yes</td>
<td>8/8/2001</td>
</tr>
<tr>
<td>Homestead</td>
<td>18 acres</td>
<td>Yes</td>
<td>Yes</td>
<td>12/21/2001</td>
</tr>
<tr>
<td>Creekside</td>
<td>15.2 acres</td>
<td>Yes</td>
<td>Yes</td>
<td>7/9/1999</td>
</tr>
<tr>
<td>The Falls</td>
<td>0.38 acres</td>
<td>Yes</td>
<td>Yes</td>
<td>2/20/2004</td>
</tr>
<tr>
<td>St. James</td>
<td>4.67 acres</td>
<td>Yes</td>
<td>Yes</td>
<td>5/30/2008</td>
</tr>
<tr>
<td>Meadow Lake</td>
<td>4.5 acres</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Deer Creek</td>
<td>1.1 acres</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Glenwick</td>
<td>15 acres</td>
<td>No</td>
<td>No</td>
<td>4/28/1998</td>
</tr>
<tr>
<td>Tanner Creek</td>
<td>2.5 acres</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
Town-Wide Trail System Plan

Trails are an important component of the future park system, as they serve recreational, transportation and linkage purposes. In Sunnyvale the transportation and linkage aspects of a Town-wide trail system will serve a local and regional purpose.

Purpose of the Trail System Plan

First and foremost, the Town-wide Trail System Plan will serve as a planning tool for Parks and Recreation Staff and the Sunnyvale Community Development Corporation and Town Council. It will also serve to create a vision for a Town-wide trails and greenway network and assist public and private entities who wish to contribute funds or resources to the development of the system. Another key purpose of the trail plan is to serve as a basis for coordinating with other Town departments, to reduce conflicts with their development activities including utility installation, transportation, water quality, storm water runoff, planning services and other activities.

Design Considerations

The following is a general discussion of the parameters associated with trail design and construction. The conclusion of this section contains recommendations for the design and construction of the Sunnyvale Trail System.

Types of Trails

Separated Trails - Separate trails and trail systems are provided for each type of trail user, e.g. bicyclist, pedestrian, skaters.

Shared Trails - Trails are shared by two or more user groups but design parameters restrict the use of the trail by some groups.

Multi-Use Trails - All trail user groups occupy the same trail or trail corridor. The physical design of the trail must be modified accordingly, to accommodate the demands of the expected user groups.
Trail Surfaces

Natural Surface - Most of Dallas County is on clay type soil, which is easily disturbed when wet. Side slopes should be stabilized to avoid being washed onto the trail during heavy rain. Drainage is key to trail corridor safety and maintenance. Use appropriate grading techniques and soil stabilization, such as, grass seeding, plantings, erosion control blankets or rock rip-rap to minimize hazards to users. Natural surface trails should not be used during periods of wet weather to prevent surface damage and should be signed at trailheads.

Mulch - Mulching a trail can be an effective treatment for trails in clay soil areas. To avoid washouts and watershed deposits, mulching should be avoided in areas of steep terrain. Many types of mulch can work, but one of the most effective and least expensive, long-lasting treatments is hardwood mulch.

Board Walk - Trails should avoid sensitive environmental areas, low areas, wetlands or flood plains. However, trails in wetlands can be useful as educational corridors. Board walks allow existing drainage patterns and a site's hydrologic conditions to be preserved while providing access to areas of interest. Board walks minimize construction damage and prevent user disruption to fragile ecosystems. Areas for which boardwalks should be built include marshy or wet sites in the immediate vicinity.

Gravel - Gravel is a granular rock material used in non-rigid paved surfaces and generally defined as having a particle size between 2mm (fine gravel) and 20mm (medium to coarse gravel). When considered as a paving material, gravel has several desirable characteristics. Gravel drains well and is a pervious material, and the coarser the material the less the likelihood that it will be washed away by rainfall or flooding. It is readily obtainable in the Dallas area.

Its usefulness as a trail paving material is limited. Gravel is a non-compacting material that is loose and inhibitive to all forms of trail use other than casual foot traffic. Roller blades, bicycles and wheelchairs alike will not perform adequately on a gravel surface and are subject to skidding and a general lack of traction. Pedestrians tend to collect irritating gravel particles in their shoes, rendering the trail more or less a nuisance than an enjoyable outdoor amenity.
When mixed with other material such as clay/silt particles, or other cement type material, gravel can be stabilized as a semi-rigid to rigid paved surface. Such a surface would be more accepting of wheeled and foot traffic.

When adding gravel or mulch to a trail, care should be taken to avoid excessive material depth, as this can impair even the hardiest pedestrian. Of the many different types of gravel treatments available, some are much more conducive to trail use. Avoid pea-gravel for anything other than equestrian trails, and even then, use should be sparing. Aggregate, crushed or decomposed granite is a very effective trail surface and can easily be upgraded to hard surface. Although off road bicyclists can negotiate most well compacted gravel trails, access can be difficult for disabled users.

Asphalt - Hot mix asphalt can be cost effective to install, but in areas of full sun, decomposition is accelerated by maintenance vehicle traffic. Edges require containment for stability and long term viability. Surface is softer for walking or jogging. Cold-mix asphalt is suitable for patching but is labor intensive. Asphalt is easy to patch or expand, but care should be taken to ensure an even surface for road bicyclists and wheelchair users.

Concrete - While initially more expensive than other material choices, concrete is the longest lasting trail surface with an expected life span of 25 years or more. It requires the least maintenance of any trail surface material. Only saw cut expansion joints should be used to avoid differential settling due to freeze/thaw and wet/dry cycles. Concrete is suitable for poor sub-soil conditions, but is more expensive to repair. Non-skid medium broom finish is ideal for bicycle traffic. Concrete is less desirable for jogging paths.

**Multi-Use Trail Width**

The most appropriate width for multi-use trails has been one of the most discussed topics of parks and recreation construction. The following are the widths required for several different scenarios of common trail usage.

- The minimum width to meet ADA (American Disability Act) guidelines is thirty-six inches (36”); however, this width does not allow traffic flow in both directions and therefore should not be considered.

- A six-foot width is the minimum width to allow wheelchairs traveling in opposite directions to pass unimpeded, even so, at this width the occupants must maneuver to the very edge of the trail.
Two people walking side by side meeting a bicycle from the opposite direction would require a minimum width of eight feet (8') and comfortable width of ten feet (10'). However, two people walking side by side would require a comfortable width of twelve feet (12') because the bicycle passing them on the narrower width will result in the pedestrians being startled or require the bicyclist to slow excessively.

Two bicyclists pedaling side by side require a minimum width of 5.3 feet and a comfortable width of eight feet (8').

Two bicyclists traveling in opposite directions require a minimum of 6.5 feet to pass and a comfort width of 10.9 feet.

Two bicyclists traveling side by side, meeting a bicyclist from the opposite direction or another bicycle passing them requires a minimum width of nine feet (9') and a comfort width of twelve feet (12').

The North Central Texas Council of Governments’ “Bicycle and Pedestrian Facilities Planning and Design Guidelines” states “The minimum width required for two opposing bicyclists to pass and share the path with a pedestrian is 12.5 feet. The NCTCOG guidelines do stipulate that widths less than 12.5 feet may be acceptable given the following circumstances: (1) bicycle traffic is expected to be low, even on peak days or during peak hours; (2) pedestrian use of the facility is not expected to be more than occasional; (3) there will be good horizontal and vertical alignment, providing safe and frequent passing opportunities; (4) the path will not be subjected to maintenance vehicle loading conditions that would cause pavement edge damage and (5) access maintenance or emergency vehicles are not needed. A multi-use pathway should never be less than eight feet (8') wide.

**Vertical Clearance**

The absolute minimum vertical clearance for multi-use trails is 8.2 feet, 9.5 feet is the minimum comfortable height. The vertical clearance may need to be greater to permit passage of maintenance vehicles. Clearance under crossings and tunnels should be ten feet (10') for adequate vertical shy distance.

**Longitudinal Slope (Grade)**

Grades on off-street paths should be kept to a minimum, especially on long inclines. Grades greater than five (5) percent are undesirable because the ascents are difficult for many bicyclists and the descents cause some bicyclists to exceed the speeds at which they are competent. ADA guidelines stipulate that anything exceeding five percent (1 foot rise in 20 horizontal feet) is a ramp and must be constructed with handrails, a maximum rise of thirty inches (30”) in a maximum length of thirty feet (30’) and must have a 60” x 60” landing at the
base and the top. Therefore to be in compliance with ADA guidelines trail ramps cannot exceed an 8.33% slope (1 foot rise in twelve horizontal feet).

**Signs**

Adequate signs and markings are essential on multi-use trails, especially to alert users to potential conflicts and to convey regulatory messages to both users and motorist at street intersections. In addition, guide signs, such as those indicating destination, direction, distance, route numbers and names of cross streets, should be used in the same manner as they are on highways.

**Access Points**

Although access to the trail will usually be available at every road crossing, the users of the trail should be encouraged to enter the trail at specific access points. By designating specific points of access, there may be an elimination of possible encroachment on private property, as well as, preventing possible congestion at busy road crossings. (1)

**Lighting**

Lighting of the multi-use trail should be considered, especially if the off-street routes are intended for transportation purposes, many trail commuters may need to travel during poorly lit morning and evening hours. Fixed source lighting reduces conflicts along paths and at intersections. In addition, lighting allows the trail user to see the path direction, surface conditions and obstacles. Lighting should be considered through underpasses or tunnels and when night time security could be a problem. (2)

The standard horizontal illumination level is 5 lux (0.5 foot candle) to 22 lux (2 foot candles). Where special security problems exist, height illumination levels may be considered. (2)

**Traffic Control Devices**

Pedestrian signals designed to accommodate a one meter (3.2 feet) per second walking speed, should be provided at major streets where traffic volume and speed is high. ADA stipulates that where provided, buttons shall be raised or flush and a minimum of 1.9 centimeters (3/4 inch) in the smallest dimension. The force required to activate controls shall be no greater than 22.2 N (5 lbs.). Additionally, controls shall be located as close as possible to the curb ramp and, to the maximum extent feasible, shall permit operation from a level area immediately adjacent to the controls and a maximum of 122.7 centimeters (48.3 inches) high. (2)
To provide clear visibility of pedestrians approaching intersection crosswalks at night, the approaches and all street corners should be well illuminated. All intersection lighting should illuminate the crossing and waiting areas and/or create backlighting to make the pedestrian silhouette clearly visible on approach. All commercial, entertainment, school and other pedestrian traffic generating corridors and spaces should be well illuminated. Raised islands in crossings should be cut through level with the street or have curb ramps or other sloped area at both sides. There should be a level area 121.9cm (48 in) long minimum and a minimum of 91.4cm (36 in) wide in the part of the island intersected by the crossings. (2)
Sunnyvale Trail System Design Recommendations

The above outlined design parameters which are specific in nature, shall be followed as delineated. The following recommendations delineate the selected design criteria for the above outlines parameters which were general in nature or which gave several options.

**Off-Street Trail Width**

In off-street applications the trails shall be a minimum of ten feet (10') wide; where feasible the more comfortable 12 foot width shall be used.

**On-Street Trail Width**

In on-street applications the ten-foot width will not be feasible due to the limited width of the parkway (street side right-of-way). A minimum width of six feet (6') shall be maintained for all on-street trails, where the locale allows trail width shall be expanded to eight feet (8') (ten feet (10') adjacent to large lot residential development). In most residential areas an eight-foot (8') maximum width should be maintained as it is felt this will tend to reduce the velocity of bicycle traffic.

**Trail Surface**

All multi-use trails within the Sunnyvale trail system shall be constructed of concrete.

**Access Points/ Trail Heads**

Trail heads shall be served by parking lots accommodating ten to twenty parking spaces. Trail heads should be located adjacent or a short distance from main trail corridors and located at each main trail terminus. Design elements of trail heads should include a drinking fountain, benches, stretch post or other equipment to encourage and facilitate stretching exercises and a mounted map of the trail system with their present location indicated.
**Trail Signs**

Warning signs shall consist of the traffic control signage and devices indicated in the design guidelines.

Directional signs are imperative to facilitate user comfort and confidence, thereby ensuring optimal use of the trail from the standpoint of participation/occupancy levels and enjoyment level of the participants. At trail intersections signs should be provided that indicate destinations; of the various trail branches and a distance to each destination, the cardinal directions should also be indicated. Consideration should be given to providing a map of the trail system at each intersection of major trail branches.

Within residential neighborhoods, in addition to the aforementioned signage, the pavement surface shall be demarked in such a manner that trail users will be able to follow the trail routing through the neighborhood without becoming confused and possibly taking a wrong turn.

Spur trails linking neighborhoods to parks and schools shall have a definite indication at the trail terminus so trail users unsuspectingly traveling into the neighborhood are made aware that the trail system ends at that location. Provision of a map indicating the direction to the main branch of the trail would be beneficial at these locations.
Citizen input with regard to the development of the City Wide Trail System Plan was collected in connection with the citizen /public hearings conducted for the Parks, Recreation and Open Space Master Plan. It was felt that the Trail System Plan is an integral part of the Town’s parks and recreational system.

The Trail Master Plan prepared by Freeman Millican illustrates the future location for pedestrian trails. The primary purpose of the Trail Master Plan is to guide the Town in acquisition and development of a trail system which will provide pedestrian access and recreation opportunities to the citizens of Sunnyvale.

With the existing trails and previously planned trails located, trail alignments were studied which would implement the priorities as delineated. Specifically, alignments were charted which connected the residential neighborhoods to the parks and schools, provided linkage from park to park and finally loops were provided, facilitating movement throughout the Town via non-motorized transportation.
The Five-Year Action Plan/Priority List as outlined in Table 10, for outdoor facilities, and Table 11, for indoor facilities, represents the culmination of the Parks, Recreation & Open Space Master Plan. It is the synoptic conclusion of the park master planning process. Annual review of the action plan by the Town Staff, Town Council members, Sunnyvale Parks and Recreation Board members and citizens will allow analysis of action item recommendations for acquisition, improvements and new facilities to enhance the quality of Sunnyvale Parks and Recreation System to maximum effect.

### Table 10
**Five Year Action Plan - Recreational Facility Development Listing - Outdoor**
**Town of Sunnyvale, Texas**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Facility</th>
<th>Timing</th>
<th>Estimated Cost</th>
<th>Possible Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Soccer Field</td>
<td>2015 - 2019</td>
<td>$250,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>3.</td>
<td>Baseball Field</td>
<td>2015 - 2019</td>
<td>$300,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>4.</td>
<td>Multi-Use Trails</td>
<td>2015 - 2019</td>
<td>$200,000 per mile</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>5.</td>
<td>Softball Field</td>
<td>2015 - 2019</td>
<td>$250,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>6.</td>
<td>Playground with Cover</td>
<td>2015 - 2019</td>
<td>$90,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>7.</td>
<td>Picnic Pavilion</td>
<td>2015 - 2019</td>
<td>$70,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>9.</td>
<td>Park Bench</td>
<td>2015 - 2019</td>
<td>$1,500.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>10.</td>
<td>Picnic Tables</td>
<td>2015 - 2019</td>
<td>$1,500.00 each</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>12.</td>
<td>Splash Pad</td>
<td>2015 - 2019</td>
<td>$250,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>13.</td>
<td>Sand Volleyball</td>
<td>2015 - 2019</td>
<td>$25,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>15.</td>
<td>Football</td>
<td>2015 - 2019</td>
<td>$200,000.00</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
</tbody>
</table>
**Table 11**

<table>
<thead>
<tr>
<th>Priority</th>
<th>Facility</th>
<th>Timing</th>
<th>Estimated Cost</th>
<th>Possible Funding Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Indoor Track</td>
<td>2017 - 2019</td>
<td>Varies</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
<tr>
<td>3.</td>
<td>Aerobic Room</td>
<td>2017 - 2019</td>
<td>Varies</td>
<td>Bonds, Grants, Private Donations</td>
</tr>
</tbody>
</table>

**Plan Summary**

This *Parks, Recreation & Open Space Master Plan* is a fluid planning tool which will guide the development and acquisition of new park land and recreational facilities. The *Master Plan* has identified the need for park improvements, recreational athletic fields, facilities, and restoration of existing parks. As with any public or municipal project, the amount of available funding or the potential to retire debt is the controlling factor in deciding which project or projects should be completed first.

As identified, renovation projects for existing parks typically have smaller construction budgets. The renovations specified in this *Park Master Plan* outline required new construction. These types of projects generally receive money from the Town’s general fund and/or a bond issue which requires voter approval. Projects of this nature and scope outlined in this *Master Plan* would take approximately 6 to 8 months to complete. The larger renovation projects, such as field renovation or community parks, should allow for 12 to 14 months to complete. This includes development of plans and specifications and construction.

This *Parks, Recreation & Open Space Master Plan* should be reviewed annually or after a major project or task has been accomplished.

**Implementation**

Identified within this section are the ways and methods of implementing the recommendations within this *Parks, Recreation & Open Space Master Plan*. Critical to its implementation is the action plan, which should be developed annually by the Town of Sunnyvale.
Policies and Ordinances

The accuracy of these implementation mechanisms is dependent upon the proper coordination of input from contributing bodies including Town officials, elected and appointed, Town staff, the Sunnyvale school district, surrounding municipalities, sports groups, and most importantly the citizens of Sunnyvale. All parties must communicate and work collectively toward common goals, only this will ensure the successful development of the park system. An example of this communication, at the staff level, would be the incorporation of the Parks, Recreation & Open Space Master Plan during review of proposed development plans with various entities involved.

Ordinances provide the legal framework for implementation of this Master Plan, and therefore, aid in park system development and protection. Outlined below are several funding sources directly related to park land acquisition and development.

Funding Sources

This Parks, Recreation & Open Space Master Plan recommends the development of a number of new parks, and further development in some existing parks. Once completed, these recommended improvements represent a substantial public investment in parks and open space as the Town grows and develops. The various sources of funds for these improvements are as important as the diversity of those sources. When there are several sources of funds for implementing this Master Plan, then no one source is over-burdened and the Master Plan has a better probability of being successfully implemented. The sources discussed below relate to the purchase and/or development and renovation/expansion of park land and facilities.

General Fund

This source of funding is supported by ad valorem tax revenues and is generally the primary source of funds for maintenance and operation of the existing park system. The general fund is also the source for projects requiring smaller amounts of capital investment. Although projects funded by this source make a small annual contribution to the expansion of the park system, analysis over a number of years usually reflects a major accomplishment in improvements to the park system. It is important to include funding for on-going maintenance and staff requirements for new developments and improvements.

Bonds

Bonds are generally the most common source used by cities for the purchase of land and for providing development monies. There are two types of bonds which are used for parks, both of which must be approved by referendum.
GENERAL OBLIGATION BOND
The General Obligation Bond is amortized using ad valorem taxes and is used for the funding of capital projects which are not supported by a revenue source. These projects include water service, sanitary sewer service, and park acquisition and development. The availability of bonding for parks is often dependent upon the overall municipal needs financed by this source. Capital items such as purchase of land and physical improvements with a useable life expectancy of 15 to 20 years can be funded with general obligation bonds.

REVENUE BONDS
Revenue bonds finance projects which produce enough revenue to retire their debt, such as, golf course, batting cages and enterprise oriented park projects.

PRIVATE DONATIONS
This source of financial assistance would usually come from a citizen, organization, or business which has an interest in assisting with the development of the park system. Land dedication is not an uncommon occurrence when property is being developed. The location of a neighborhood park within a residential development offers additional value to residential units within that neighborhood, especially if the residential development is occupied by younger families with children. Once property is acquired through this method, the Town should be prepared to improve the facility for use within a reasonable length of time.

Private donations may also be received in the form of funds, facilities, recreation equipment, art or in-kind services. Donations from local and regional businesses as sponsors for events or facilities should be pursued. A Parks Improvement Trust Fund may be set up to manage donations by service organizations, benevolent citizens, willed estates and other donated sources. The purpose of this trust is to establish a permanent source of principle value that will increase as donations occur. The principal cannot be decreased; however, the annual interest can be used for park development.

SALES TAX OPTION (4B)
The passage of Senate Bill 376 in 1992 gave cities an economic development tool which provided a sales tax that could be levied for park and recreation purposes. Sunnyvale has passed a 4B sales tax which is dedicated to economic development and community projects.
**Texas Recreation and Parks Account (TRPA) Program**

Texas Local Parks, Recreation and Open Space Fund is administered by the Texas Parks and Wildlife Department (TPWD). The TPWD program allows a city to request matching funds for both the acquisition and construction of park facilities. Currently, funds are available on a fifty percent (50%) cost share basis, the maximum amount a grant request can be for is $400,000.00. The grant is secured through submission of an application which follows a standard format for applicants. All applications received are ranked on a point system which is designed to evaluate the need for the purchase or construction being requested. Funds are distributed among the applicants having the greater number of points until all allocated funds are expended.

Applications to TPWD can be made annually with a six-month waiting period following the submission date before the successful applications are notified. The number of applications a city may submit at any given time is based on past performance on grants and TPWD evaluation criteria. This funding source is used by many communities. The competitiveness of the program generally allows cities having bona fide park needs to prevail in obtaining funds.

**Public Improvements District (P.I.D.)**

When authorized by Town Council in compliance with state laws, new developments can establish a Public Improvement District (P.I.D.). As a taxing district, the P.I.D. provides funds specifically for the operation and maintenance of public facilities such as parks and major boulevards.

**Tax Increment Financing District (T.I.F.)**

A T.I.F. is a tool used by local government to finance public improvements in a defined area as approved by the Town Council. When an area is designated a T.I.F. district the tax base is frozen at the current level. As development occurs within the T.I.F., the increased value of property, the tax increment is captured. The tax increments are posted to a separate fund to finance public improvements within the district.

**TX-DOT - Transportation Alternatives Program**

The Transportation Alternatives Program (TAP) was authorized under Section 1122 of Moving Ahead for Progress in the 21st Century (MAP-21) (the current transportation funding and authorization bill) and provides funding for programs and projects defined as transportation alternatives. The TAP is similar to the former Transportation Enhancement (TE) and Safe Routes to School (SRTS) programs. The Federally funded TAP offers opportunities to expand transportation choices and enhance the transportation experience through several categories of activities related to the surface transportation system. The TAP focuses on non-traditional transportation projects. TAP projects must relate to surface transportation and be eligible under one or more of the qualifying categories.