

4 *STANDARDS AND NEEDS*



After gaining an understanding of the parks and recreation system as it is today, this information is compared to the existing and projected population to begin to identify the current and future needs of the community. Through an analysis of the current inventory and condition of facilities, and a comparison of that data with local level-of-service ratios, the opinions voiced by the community, and the local resources available, the Parks Master Plan can develop a clear picture of what is currently lacking and where opportunities exist in the parks system.

Introduction

At a basic level, the needs assessment compares the current state of Killeen with the parks and recreation facilities that will be needed in the future. An understanding of the deficiencies that exist in the parks and recreation system is vital so that actions can be developed to address these needs. This assessment also projects potential future needs relative to recreational trends and the changing needs of the City so that an action plan can be developed to address these needs effectively.

It is important to recognize that the criteria and standards established in this section primarily serve to establish a baseline for facilities and to help the City see whether it is providing an adequate number and distribution of facilities. These levels of service can and should be adjusted periodically to meet changing conditions in the City.

Assessment Methods

This Plan uses a variety of different techniques to evaluate Killeen’s current and future park and recreation needs. Three different techniques are included in the needs assessment analysis. These techniques follow general methodologies accepted by the Texas Parks and Wildlife Department for local park master plans. The three techniques are described in Figure 4.1, *Assessment Methods*, below.

All three methods are important in their own regard, but individually do not represent the entire picture. This assessment, and the recommendations resulting from it, use findings from all three methods to determine what types of recreation facilities and park requirements are needed in Killeen. Ultimately, these needs are vetted by the residents of Killeen, and are determined to best represent the key park and recreational needs of the City.

The national guidelines and standards that were created decades ago were based on demographic trends rather than

Figure 4.1, *Assessment Methods*



Access-Based Approach

Access-based assessment analyzes the current quantity and location of parkland and facilities to determine if the needs of the population are being met. This technique uses locally developed level-of-service ratios of facilities to population (typically expressed as quantity of acreage or facilities to every 1,000 residents) to determine what is available for residents today and project future needs as the population grows.



Demand-Based Approach

Demand-based assessment uses citizen input on the types of activities they would like to engage in to determine which facilities and programs are most in demand.



Resource-Based Approach

Resource-based assessment is based on the usefulness of available physical and natural resources to provide recreation opportunities. For example, the South Nolan Creek corridor provides opportunities for residents to access nature in the City.





specific local desires, and are now intended to serve as a starting point for park planning. Each city has its own unique geographic, demographic, and socioeconomic composition, and as such, the arbitrary application of national standards would not necessarily meet the needs of a particular community. Therefore, national standards are no longer used to project facility needs since they are based on a “one size fits all” type of evaluation. Instead, the standards are fine-tuned to meet local conditions.

This Plan utilizes the existing level of service in the City as a starting point and determines whether that level of service is adequate or needs to be increased or decreased. Extensive public input and the anticipated growth of the City and its population are used to determine how to adjust the current level of service, as well as what parts of Killeen are well served and what parts are not. Local needs and desires are used to mold these guidelines to meet the expectations of the citizens of Killeen in a realistic manner.

Three types of access-based level of service determinations are made as described below.

Level of Service - Park Acreage

The park acreage level of service analysis defines the quantity of parkland acreage in the City, expressed as a ratio of acreage to population. It analyzes whether there is sufficient acreage to serve the population today and in the future.

Level of Service - Access to Parkland

The access to parkland analysis examines the location and distribution of parkland throughout Killeen to determine how easy it is for residents to access parkland, and determines where parkland is needed to meet the City’s target level of service.

Level of Service - Park Facilities

The facility level of service analysis defines the number of facilities recommended to serve each particular recreation need. Facility standards are usually expressed as a ratio

of units of one particular facility per population size. For example, a facility standard for a baseball field might be one field for every 12,000 residents of the city.

The Level of Service (LOS) based assessment uses a target level of service established by the local jurisdiction, in this case the City of Killeen, to determine the quantity of park facilities required to meet the City’s needs. These target levels of service are usually expressed as the quantity of park facilities needed to adequately serve a given ratio of residents. These targets are established to provide the level of service that the particular jurisdiction believes is the most responsive to the amount of use and the interest of its citizens. This Plan establishes individual city-specific levels of service for Killeen, and again does not rely on national standards that may not be applicable to this community.

2016 Access-Based Assessment

Park Acreage

The purpose of park acreage levels of service for parks and recreational areas is to ensure that sufficient area is allocated for all the outdoor recreation needs of a community. They allow a city to plan ahead so that parkland can be targeted and acquired before it is developed. To help determine an appropriate level of service, a “target” level is incorporated into this Plan.

Killeen is a relatively large city with room to expand into its extraterritorial jurisdiction (ETJ). Dense development in some areas of the City has minimized the amount of accessible open space. As previously discussed in Chapter 2, the City’s population is projected to increase by over 23,000 people within the next 10 years and over 48,000 in the next 20 years. With that growth will come additional development and reduction of open space. The City must now focus on preserving its valuable parkland resources which play a key community-building and quality-of-life role in the City. Identifying these levels of service will allow Killeen to plan ahead so that parkland can be designed and built to



Regional Parks

Regional parks are intended to serve the entire city and surrounding region. Like community parks, they act as locations for larger community events, tournaments, or activities. There are currently no regional parks in the City, but there is a great opportunity for the City to potentially develop Westside Regional Park.

Regional parks are often larger than 150 acres, and have a service radius of five to 10 miles. The recommended level of service for regional parks in Killeen is *five to 10 acres per 1,000 residents*. As there are no existing regional parks, the City has a deficit of 704 to 1408 acres of regional parkland.

Open Space

Open space comes in many forms. It can be the expanses of green along drainage corridors such as the South Nolan Creek, or simply the designated parks within the City. Open spaces are the green ribbons that break up the developed areas of a city. Simply because they are different, these open spaces stand out and provide a much-needed respite from the developed world. The recommended level of service for open space is *10 to 20 acres per 1,000 people*. Future open space should be preserved if it has some unique value, and not simply to meet a specific acreage target. Therefore, the

suggested target level of service for open space shown should be treated as a benchmark noting where the City is today, and to provide a target to strive to meet.

Preserved open space serves a significant function in terms of wildlife habitat, flood control, and improved air and water quality; however, without being publicly accessible it cannot provide any recreational benefits to the community. While not all open space should be accessed, this Plan recommends that preservation efforts be maintained along drainage corridors in the City with key public access points for the added benefit of recreation.

Existing open space in Killeen includes the entirety of all designated public and HOA parks and key undeveloped city-owned parcels along drainage corridors. The current open space in Killeen totals 523.8 acres yielding an existing level of service of 3.7 acres for every 1,000 residents. Compared to the recommended 10 to 20 acres of open space per 1,000 residents, the City currently has a 884.2 to 2292.2 acre deficit (see Table 4.1, *Percent of Need Met by Existing Parks Only, 2016*).

Table 4.1, *Percent of Need Met by Existing Parks Only, 2016*

Park Classification	Existing Acreage	Current Level of Service (based on 140,800 population)	Recommended Target Level of Service	Recommended Acreage	Surplus / Deficit Acreage	Percent of Need Met (2016)
Neighborhood Parks* (City-owned)	85.4	0.6 Ac./1,000 Residents	1.0 to 1.5 Ac./1,000 Residents	140.8 to 211.2	55.4 to 125.8 Ac. Deficit	40% to 61%
Neighborhood Parks* (incl. HOA parks)	100.1	0.7 Ac./1,000 Residents	1.0 to 1.5 Ac./1,000 Residents	140.8 to 211.2	40.7 to 111.1 Ac. Deficit	47% to 71%
Community Parks	254.0	1.8 Ac./1,000 Residents	5 Ac./1,000 Residents	704.00	450.0 Ac. Deficit	36%
Special Use Parks	4.8	0.03 Ac./1,000 Residents	Varies	N/A	N/A	N/A
Regional Parks	0.0	0.0 Ac./1,000 Residents	5 to 10 Ac./1,000 Residents	704.0 to 1408.0	704.0 to 1408.0 Ac. Deficit	0%
Open Space/Linear Parks	523.8	3.7 Ac./1,000 Residents	10 to 20 Ac./1,000 Residents	1408.0 to 2816.0	884.2 to 2292.2 Ac. Deficit	37% to 19%

*Including a percentage of community parkland serving as a neighborhood park

**Acreage includes Fort Hood property

Table 4.2, Percent of Need Met with Development of Potential Future Parks

Park Classification	Existing Acreage	Current Level of Service (based on 140,800 population)	Recommended Target Level of Service	Recommended Acreage	Surplus / Deficit Acreage	Percent of Need Met (2016)
Community Parks (includes potential parkland dedication)	357.1	2.54 Ac./1,000 Residents	5 Ac./1,000 Residents	704.00	346.9 Ac. Deficit	51%
Regional Parks**	338.60	2.40 Ac./1,000 Residents	5 to 10 Ac./1,000 Residents	704.0 to 1408.0	365.4 to 1069.4 Ac. Deficit	24% to 48%

**Acreage includes Fort Hood property

Now that an analysis of the existing parks and open space has been completed, the community park and regional park acreage will be reanalyzed as if the potential Heritage Oaks Park (community park) and Westside Regional Park were developed (see Table 4.2, *Percent of Need Met with Development of Potential Future Parks*, above). If Heritage Oaks Park was developed, the City’s community parkland acreage would increase to 357.1 acres or 2.54 acres per 1,000 residents. Considering the target level of service, this means the community parkland deficit would reduce by 23 percent to 346.9 acres. If Westside Regional Park was developed, the City’s regional parkland acreage would increase from zero acres to 338.60 (including the portion of the park on Fort Hood property). Based on the target level of service of five to 10 acres per 1,000 residents, this would reduce the regional parkland deficit from 704.0 to 1408.0 acres to 365.4 to 1069.4 acres.

2026 and 2036 Access-Based Assessment

As previously indicated in Chapter 2, the City’s population is projected to increase to approximately 164,000 by the year 2026 and 188,300 by 2036. Using these numbers and considering the same level of service ratios for parks as previously described, the recommended park acreage and associated deficit in 2026 and 2036 (if no parkland is added) are illustrated in Table 4.3, *Percent of Need Met with Development of Potential Future Parks, 2026* and Table 4.4, *Percent of Need Met with Development of Potential Future Parks, 2036*. Both of these analysis tables count Heritage Oaks Park and Westside Regional Park as developed parkland. As the projected population increases, so does the recommended parkland acreage proportionally to population growth. In other words, as the population grows and developed areas of the City expand, it is important for the City to consider strategies to enlarge the existing parks and open space system commensurate with growth in order to ensure the needs of the community are met in the future.



Development of additional parkland such as Westside Regional Park will be a key consideration as the City continues to grow.





Table 4.3, Percent of Need Met with Development of Potential Future Parks, 2026

Park Classification	Existing Acreage	Current Level of Service (based on 164,000 population)	Recommended Target Level of Service	Recommended Acreage	Surplus / Deficit Acreage	Percent of Need Met (2026)
Neighborhood Parks* (City-owned)	85.4	0.5 Ac./1,000 Residents	1.0 to 1.5 Ac./1,000 Residents	164.0 to 246.0	78.6 to 160.6 Ac. Deficit	35% to 52%
Neighborhood Parks* (incl. HOA parks)	100.1	0.6 Ac./1,000 Residents	1.0 to 1.5 Ac./1,000 Residents	164.4 to 246.0	63.9 to 145.9 Ac. Deficit	41% to 61%
Community Parks	357.1	2.2 Ac./1,000 Residents	5 Ac./1,000 Residents	820.3	463.2 Ac. Deficit	44%
Special Use Parks	4.8	0.03 Ac./1,000 Residents	Varies	N/A	N/A	N/A
Regional Parks**	338.60	2.1 Ac./1,000 Residents	5 to 10 Ac./1,000 Residents	820.0 to 1640.0	481.4 to 1301.4 Ac. Deficit	21% to 41%
Open Space/Linear Parks	965.5	5.9 Ac./1,000 Residents	10 to 20 Ac./1,000 Residents	1640.0 to 3280.0	674.5 to 2314.5 Ac. Deficit	29% to 59%

*Including a percentage of community parkland serving as a neighborhood park **Acreage includes Fort Hood property

Table 4.4, Percent of Need Met with Development of Potential Future Parks, 2036

Park Classification	Existing Acreage	Current Level of Service (based on 188,300 population)	Recommended Target Level of Service	Recommended Acreage	Surplus / Deficit Acreage	Percent of Need Met (2036)
Neighborhood Parks* (City-owned)	85.4	0.5 Ac./1,000 Residents	1.0 to 1.5 Ac./1,000 Residents	188.3 to 282.5	102.90 to 197.05 Ac. Deficit	30% to 45%
Neighborhood Parks* (incl. HOA parks)	100.1	0.5 Ac./1,000 Residents	1.0 to 1.5 Ac./1,000 Residents	188.3 to 282.5	88.20 to 182.35 Ac. Deficit	35% to 53%
Community Parks	357.1	1.9 Ac./1,000 Residents	5 Ac./1,000 Residents	941.5	584.4 Ac. Deficit	38%
Special Use Parks	4.8	0.03 Ac./1,000 Residents	Varies	N/A	N/A	N/A
Regional Parks**	338.60	1.8 Ac./1,000 Residents	5 to 10 Ac./1,000 Residents	941.6 to 1883.0	602.9 to 1544.4 Ac. Deficit	18% to 36%
Open Space/Linear Parks	965.5	5.1 Ac./1,000 Residents	10 to 20 Ac./1,000 Residents	1883.0 to 3766.0	917.5 to 2800.5 Ac. Deficit	26% to 51%

*Including a percentage of community parkland serving as a neighborhood park **Acreage includes Fort Hood property



Access to Parkland

When determining the needs of the community, it is important to analyze both quantity and location of parkland acreage. As previously described in Chapter 3, *The System Today*, Killeen includes over 400 acres of dedicated parkland. However, of those 400-plus acres, over half are located in Council District 1 and are not easily accessible to residents in other areas of the City. The maps on the following pages will analyze the location of parkland acreage throughout the community. Since they have different sizes, quantities of facilities, and service areas, neighborhood, community, and regional parks will be analyzed separately. In addition, since special use parks and recreational facilities serve a unique purpose, they will also be analyzed separately.

Neighborhood Accessibility

Neighborhood parks typically have a one-quarter-mile ideal service area and a one-half-mile standard service area. These distances correlate to a reasonable walking distance for children and other park users. These service areas are illustrated on Map 4.1, *Neighborhood Park Accessibility*. Neighborhood parks including one acre or less of land, and including minimal facilities, are only shown with a one-quarter-mile service area as there is not currently a significant draw for residents from a further distance. Conversely, as community parks serve the function of a daily-use neighborhood park for residents in the vicinity, these parks are shown on this map with the one-quarter and one-half-mile neighborhood park service areas. When pedestrian access to the site would require crossing major thoroughfares, service areas are cut short as the walking distance may no longer be safe for children.

Current Need Areas

Areas not currently served by neighborhood parks are illustrated in red on Map 4.1, *Neighborhood Park Accessibility*. In the park system's current state, only 19 percent of the City

has nearby access (i.e., 1/4 or 1/2-mile) to a neighborhood park. Aside from Lions Club Park and the three joint-use KISD sites (i.e., Timber Ridge Park, Iduma Park, and Maxdale Park), there is no neighborhood park access for residents who live south of U.S. Highway 190, or essentially the entire southern and western portions of the City.

KISD School Sites

Existing Schools

While it is important that the City develop additional neighborhood parkland in its need areas, opportunities may exist for substantial cooperation with KISD to develop additional joint use parks. As illustrated on Map 4.2, *Neighborhood Park and Existing KISD School Accessibility* on page 100, existing KISD schools are located throughout the community, with many located in the City's neighborhood parkland need areas. When KISD schools are factored into the neighborhood parkland areas, up to 39 percent of the community would have access to neighborhood parks. Even though not all of the schools may have potential as joint use parks, further investigation is warranted.

Future Schools

In addition to the existing KISD schools, there are five sites that are currently allocated for future schools. These sites are added to Map 4.3, *Neighborhood Park and Existing and Future KISD School Accessibility* on page 101 and would increase the neighborhood park service areas to approximately 43 percent of the community. Since these schools are located in the City's need areas and have yet to be developed, timely coordination with KISD, prior to the designs being finalized, would maximize partnership opportunities.

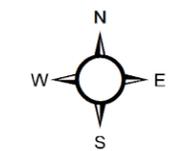


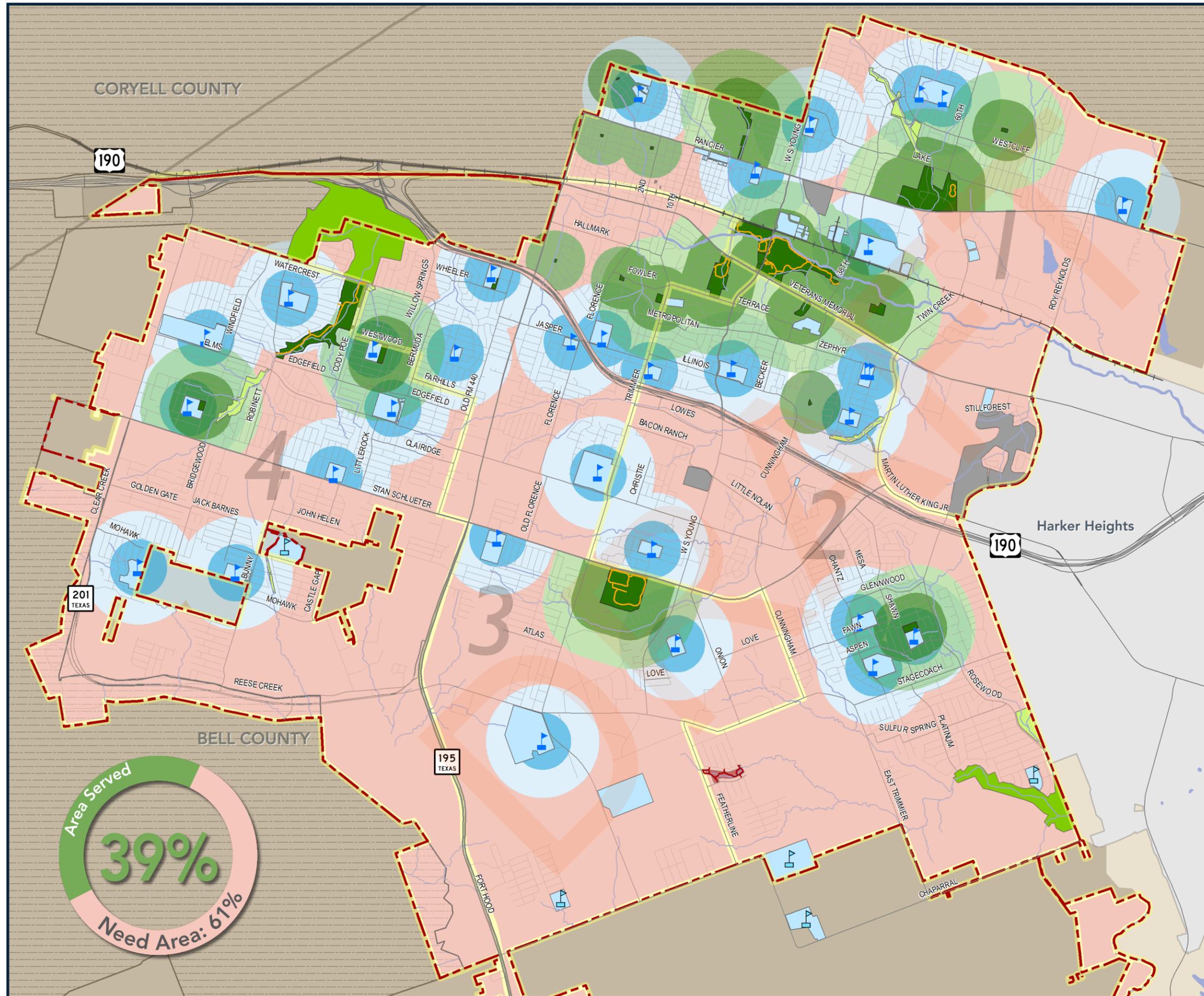


Neighborhood Park Accessibility

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Neighborhood Parks 1/4-Mile Service Area
- Neighborhood Parks 1/2-Mile Service Area
- KISD Property
- Existing KISD School
- Future KISD School
- City Council District Boundaries
- Killeen City Limits
- Nearby City Limits
- Killeen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas

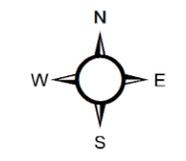
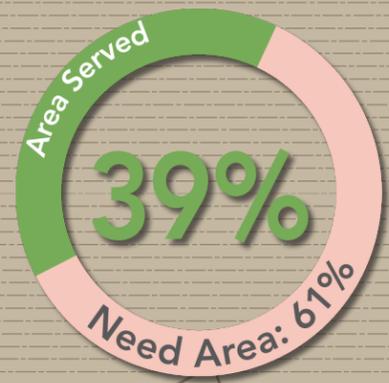




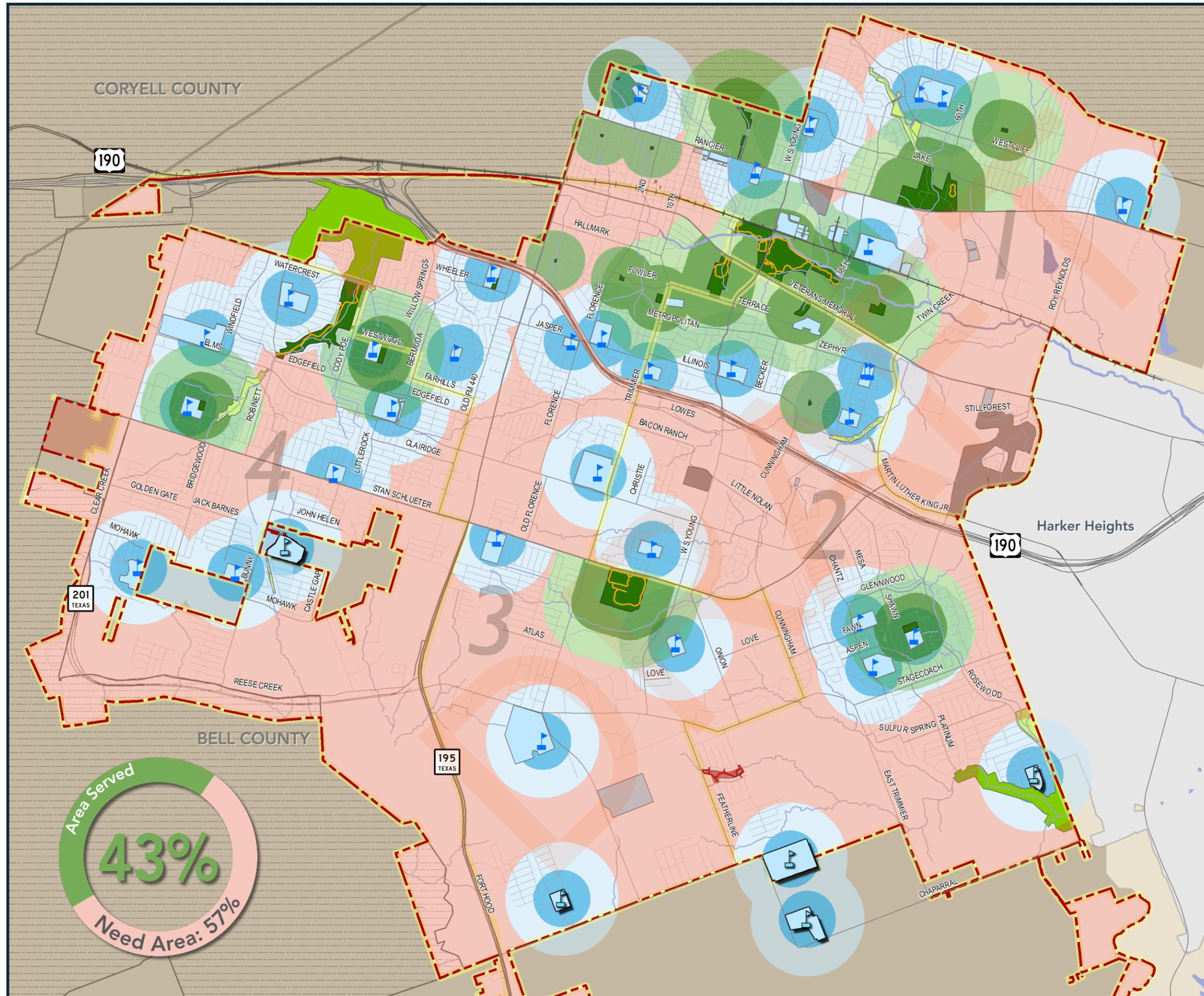
Neighborhood Park Accessibility with Existing KISD Schools

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Neighborhood Parks 1/4-Mile Service Area
- Neighborhood Parks 1/2-Mile Service Area
- KISD Schools 1/4-Mile Service Area
- KISD Schools 1/2-Mile Service Area
- KISD Property
- Existing KISD School
- Future KISD School
- City Council District Boundaries
- Killen City Limits
- Nearby City Limits
- Killen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas



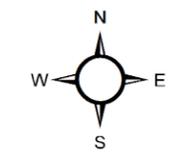
Map 4.3, Neighborhood Park and Existing and Future KISD School Accessibility



Neighborhood Park Accessibility with Existing and Future KISD Schools

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Neighborhood Parks 1/4-Mile Service Area
- Neighborhood Parks 1/2-Mile Service Area
- KISD Schools 1/4-Mile Service Area
- KISD Schools 1/2-Mile Service Area
- KISD Property
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- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas



Community Accessibility

Community parks have a general service area of one to two miles. These distances reflect a reasonable one-mile walking distance and a two-mile biking distance. Considering this, Map 4.4, *Community Park Accessibility*, illustrates the community park service areas today. Once again, the red areas represent the need areas. The majority of Council Districts 1 and 3 are served by community parks, or approximately 55 percent of the community. The other 45 percent of the community, or the southern portion of Council District 2 and almost all of Council District 4, are lacking access to community parks.

Potential Community Parkland

While the City is currently lacking community parkland in Council Districts 2 and 4, the potential Heritage Oaks Park in Council District 2 and Westside Regional Park in Council District 3 provide valuable opportunities for the City. As illustrated on Map 4.5, *Community Park Accessibility with Development of Potential Future Parks* on page

104, if these parks were developed, they would provide community parkland access to an additional 21 percent of the population, increasing the area served to 76 percent of the City. Even though Westside Regional Park would be developed as a regional park intended to serve more than just the surrounding community, the park would provide close access for adjacent neighborhoods and would likely be used as a community park by those residents. As the areas around these two potential parks are almost entirely devoid of parkland, it would be extremely beneficial for the City to take advantage of the unique opportunities afforded by these sites to enhance the park system and help meet the needs of the residents, both today and in the future. Heritage Oaks Park specifically is located in the growth area of the City. As such, while this area is not largely inhabited today, development is underway and the need for parkland in the area will continue to grow over the coming years.

Potential Regional Parkland

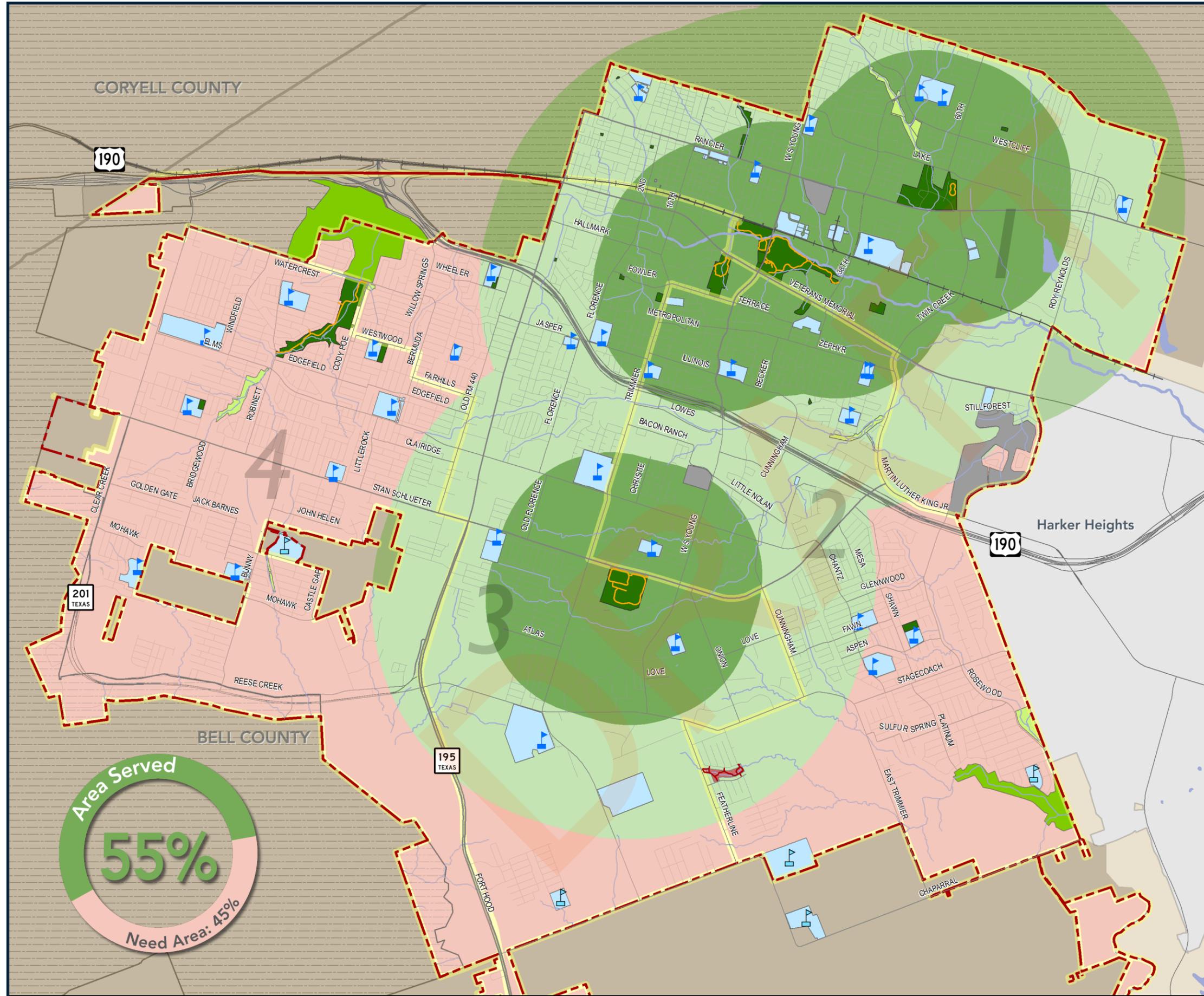
Regional parks are typically larger, unique parks which provide recreational opportunities at a scale not found in smaller parks. Consequently, the service areas of these parks are typically larger. In Killeen, the potential service area for Westside Regional Park is illustrated on Map 4.6, *Regional Park Accessibility with Development of Potential Future Parks* on page 105. A five-mile service area correlates approximately to a 15 to 20 minute drive in Killeen¹. The potential service area of the park includes 69 percent of the City. With its potential to meet both community and regional parkland needs, and to provide recreational opportunities for many underserved or unserved areas, development of Westside Regional Park would go a long way towards providing a high-quality, diverse, and adequate park system for the citizens of Killeen.



Westside Regional Park, if developed, would provide access to a variety of natural habitats found in few other locations in Killeen.

¹ Google Maps Traffic Data

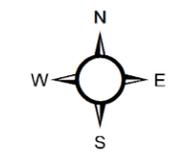


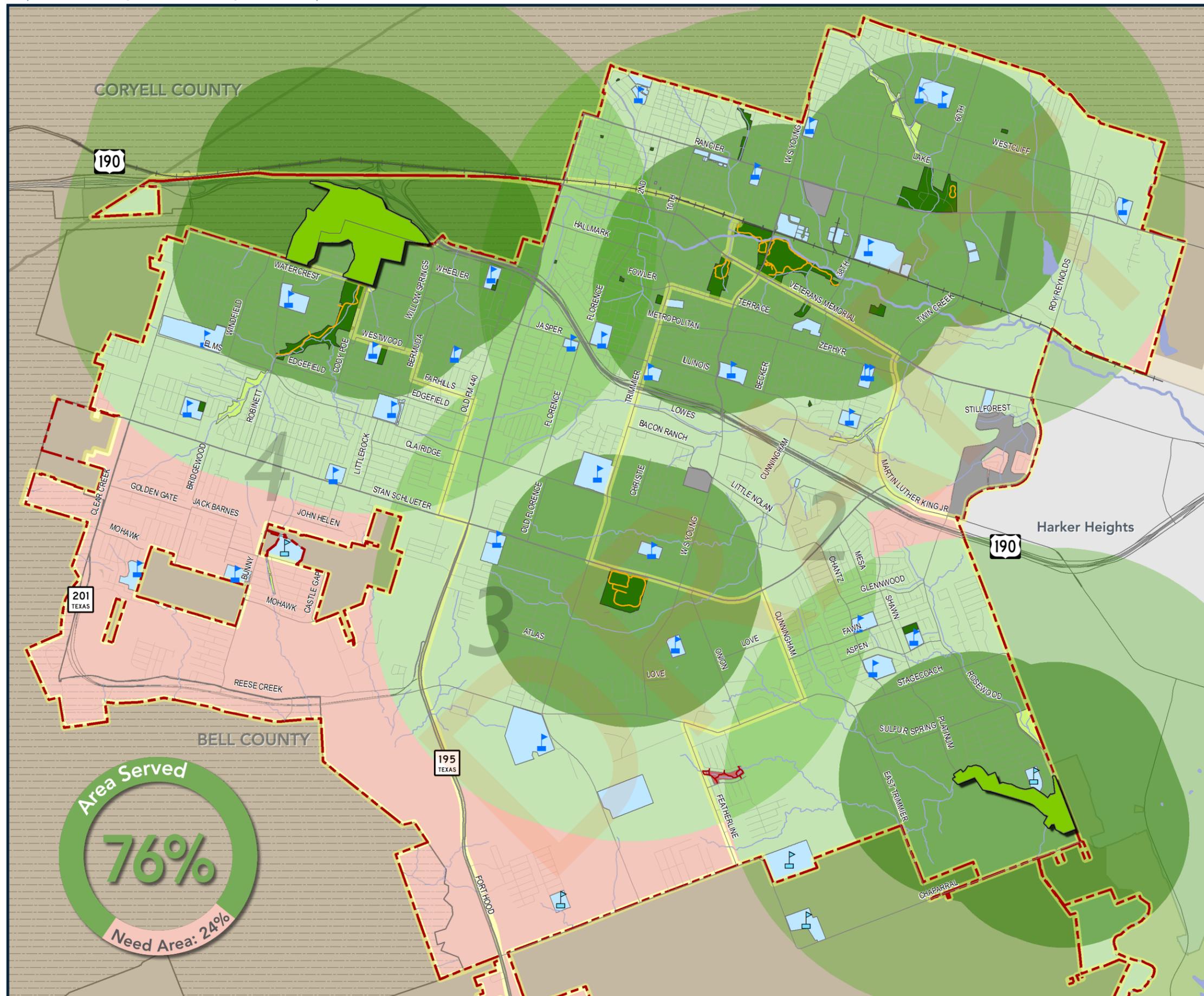


Community Park Accessibility

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Community Park 1-Mile Service Area
- Community Park 2-Mile Service Area
- KISD Property
- Existing KISD School
- Future KISD School
- City Council District Boundaries
- Killeen City Limits
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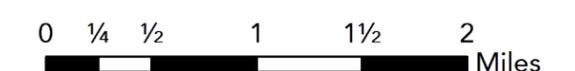
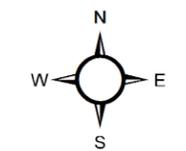


Community Park Accessibility with Development of Potential Parks

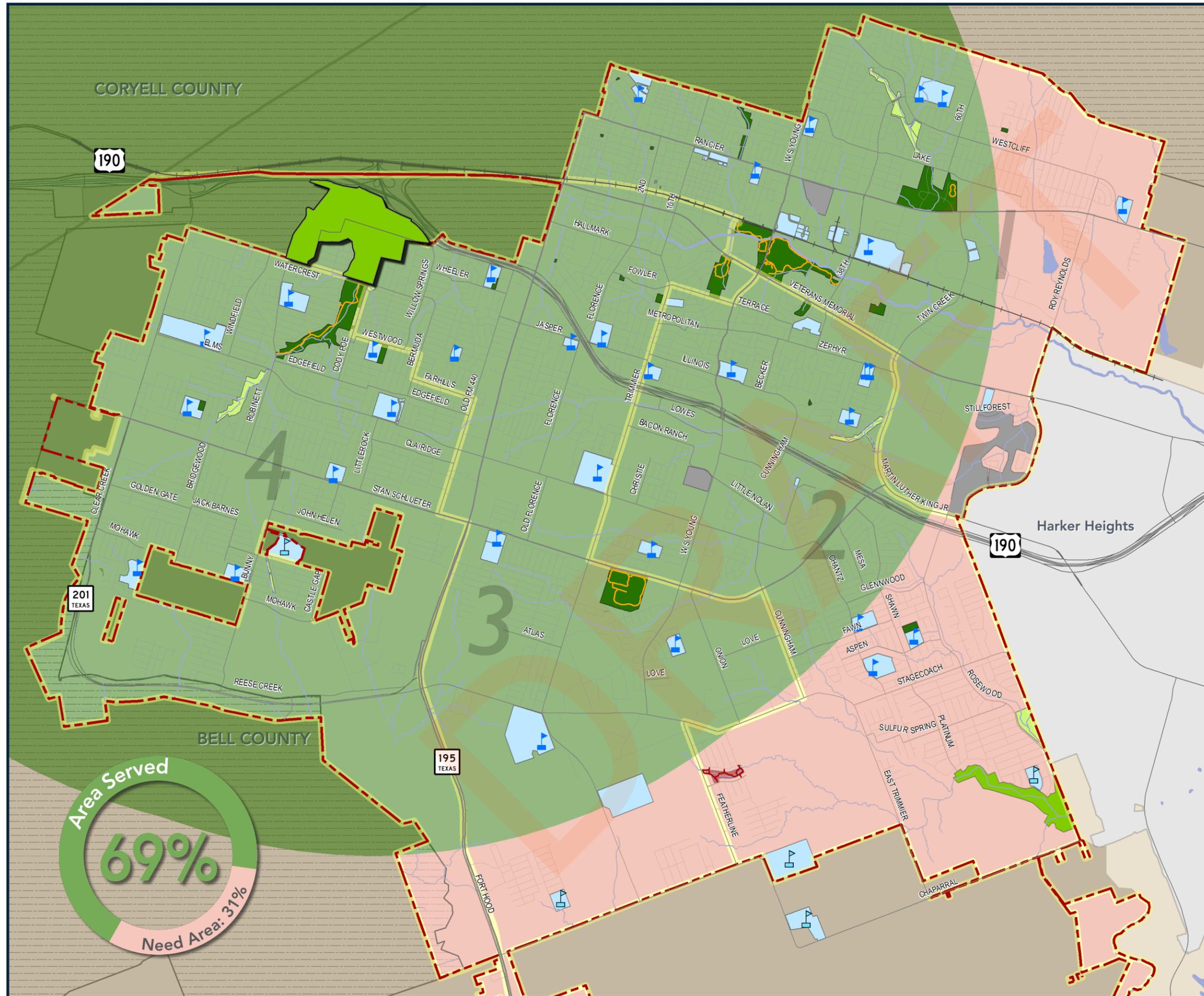
Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Community Park 1-Mile Service Area
- Community Park 2-Mile Service Area
- KISD Property
- Existing KISD School
- Future KISD School
- City Council District Boundaries
- Killeen City Limits
- Nearby City Limits
- Killeen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas

Area Served
76%
Need Area: 24%



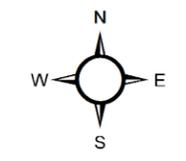
Map 4.6, Regional Park Accessibility with Development of Potential Future Parks



Regional Park Accessibility with Development of Potential Parks

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Potential Regional Park 5-Mile Service Area
- KISD Property
- Existing KISD School
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- Railroad
- Need Areas



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Special Use

Special use parks can be a variety of different types of parks. In Killeen, Mickey's Dog Park and Pershing Pool are considered special use parks. Since the Pershing Pool is not currently active or open to the community, it is not being considered as part of this location-based analysis. Access to additional special use amenities in Killeen including the skate parks at Conder and Long Branch Parks are also being analyzed in the adjacent map. Mickey's Dog Park and Long Branch Park are located in Council District 1, and Conder Park is located in Council District 3. Based on their current development level, a one and two-mile service area for each park/amenity is being illustrated on Map 4.7, *Special Use Park and Amenities Accessibility*. The service area equates to roughly 33 percent of the City.

While some special use parks have a greater service area, a dog park and a playground are not typically features that residents want to drive over two miles to access, unless no other options are available. Many communities today are finding that residents prefer dog parks within a closer vicinity of their homes to allow for more convenient frequent use. Based on the adjacent map, the addition of a dog park located to serve the southern and western portions of the City would likely be supported by residents.

In its current state, the Rotary Club Children's Park is simply a playground similar to many others in the community. However, due to its location near the Andy K. Wells Hike and Bike Trail, Killeen Community Center and Athletic Complex, and Mickey's Dog Park, enhancing the park to include a high-quality, unique playscape would increase its service area as there would be more draw to the park.

Recreation Facilities

Recreation facilities in Killeen include recreation centers, senior centers, and aquatics facilities. Being that the facilities offer unique opportunities not found elsewhere in the City,

the recreation/senior/community centers are being analyzed using a two and four-mile service area, representing a 10 to 15 minute drive in Killeen. Aquatics facilities in the City include the Family Aquatic Center and Long Branch pool and splash pad. These facilities are being analyzed using a two-mile service area. The Family Aquatic Center is also shown with a larger four-mile service area since it is a larger, more highly developed park. The total area being served by the recreation facilities is illustrated on Map 4.8, *Recreational Facility Accessibility* on page 108, and equates to approximately 84 percent of the City. The southern portion of Council District 2 and the western reaches of Council District 4 once again remain underserved. As the City further develops its parks system, the provision of splash pads at additional parks throughout the City would help to provide water-based recreation throughout the community and reduce the traffic at the Family Recreation Center and Long Branch pool and splash pad.

Trails

Trails can be used for transportation as well as recreational purposes. In this day in age, when more and more people are gaining an interest in health, quality of life, and alternate modes of transportation, having close access to a trail is becoming more important for communities. Consequently, Map 4.9, *Trail Accessibility*, on page 109, illustrates a one-quarter-mile and one-half-mile service area around the City's existing trails and oversized sidewalks. Today, trails and oversized sidewalks are spread throughout the community with a service area covering approximately 27 percent of the City. While there are no consistently safe connections between the various trails today, the bones of a large loop trail system around the City are beginning to be seen. With key north-south and east-west connections through floodplains, drainage corridors, parks, and along select roads, a basic loop trail system could provide much greater community-wide connectivity.



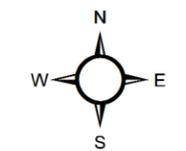
Map 4.7, Special Use Park and Amenities Accessibility

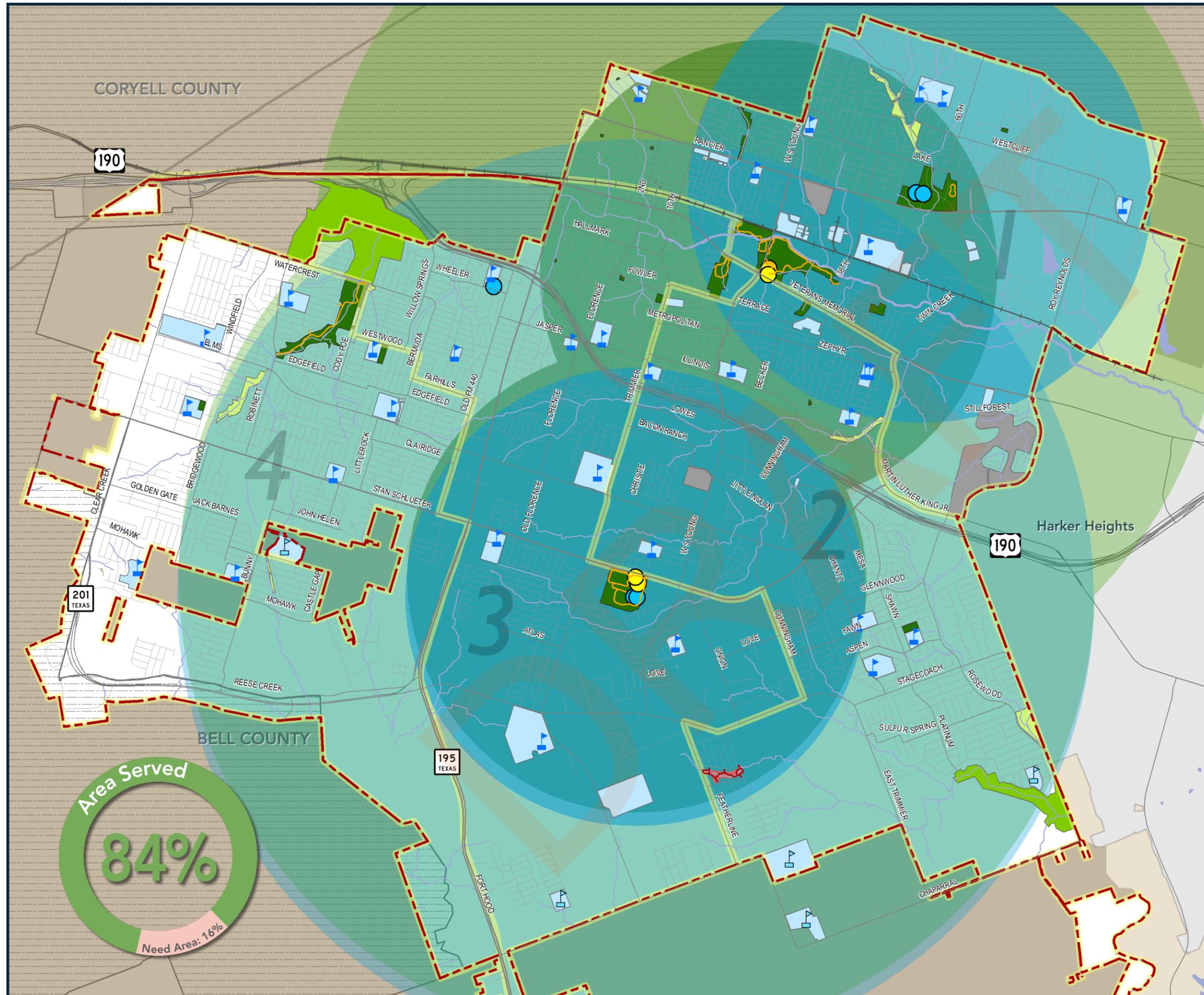


Special Use Park & Amenities Accessibility

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Special Use Park/Amenity 2-Mile Service Area
- Special Use Park/Amenity 1-Mile Service Area
- KISD Property
- Existing KISD School
- Future KISD School
- City Council District Boundaries
- Killeen City Limits
- Nearby City Limits
- Killeen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas

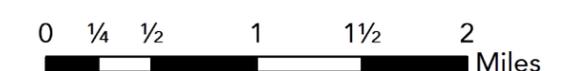
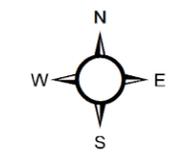




Recreational Facility Accessibility

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Recreation Centers
- Aquatic Facility
- Recreation Center 2-Mile Service Area
- Recreation Center 4-Mile Service Area
- Aquatics Facilities 2-Mile Service Area
- Aquatics Facilities 4-Mile Service Area
- KISD Property
- Existing KISD School
- Future KISD School
- City Council District Boundaries
- Killen City Limits
- Nearby City Limits
- Killen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas



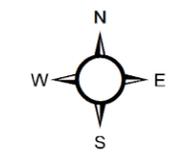
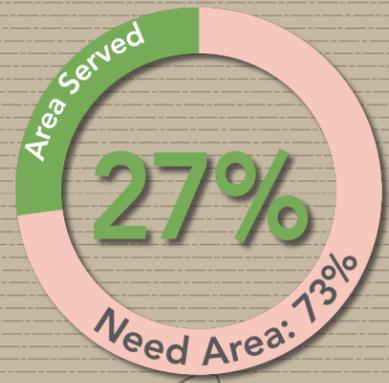
Map 4.9, Trail Accessibility



Trail Accessibility

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Existing 8' Oversized Sidewalks
- Existing Sidewalks
- Trail & Oversized Sidewalk 1/2-Mile Service Area
- Trail & Oversized Sidewalk 1/4-Mile Service Area
- KISD Property
- Existing KISD School
- Future KISD School
- City Council District Boundaries
- Killeen City Limits
- Nearby City Limits
- Killeen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas



Parkland & Trail Needs in the City's Growth Area

In addition to analyzing and identifying parkland and trail needs within the existing City limits, it is important to recognize projected needs and potential opportunities in the City's primary growth area. As previously defined on Map 2.2, *Growth Context* in Chapter 2, the City's growth area includes the southern portion of the City and its ETJ. The current parks, trails, potential parks, and existing and future KISD schools, and their associated service areas, are illustrated on Map 4.10, *Growth Area Needs*. When all viewed together, it becomes evident that the City's growth area is not currently served by any of the parks, trails, or facilities described on the previous pages.

While the City's ETJ is not highly developed at this point, growth is headed that way. In order to ensure that land is available to meet the future parks and recreation needs in that area, the City should consider looking for opportunities to protect areas of significant open space, floodplain corridors, and other sensitive natural resources in advance of further development. Much like KISD has done with its land

acquisition in future growth areas, preservation of good-sized areas of natural lands now ensures that parkland is available for development when needed. Preservation of floodplains creates opportunities for potential trail connections while also providing water quality improvements, natural habitat, and passive recreation space.

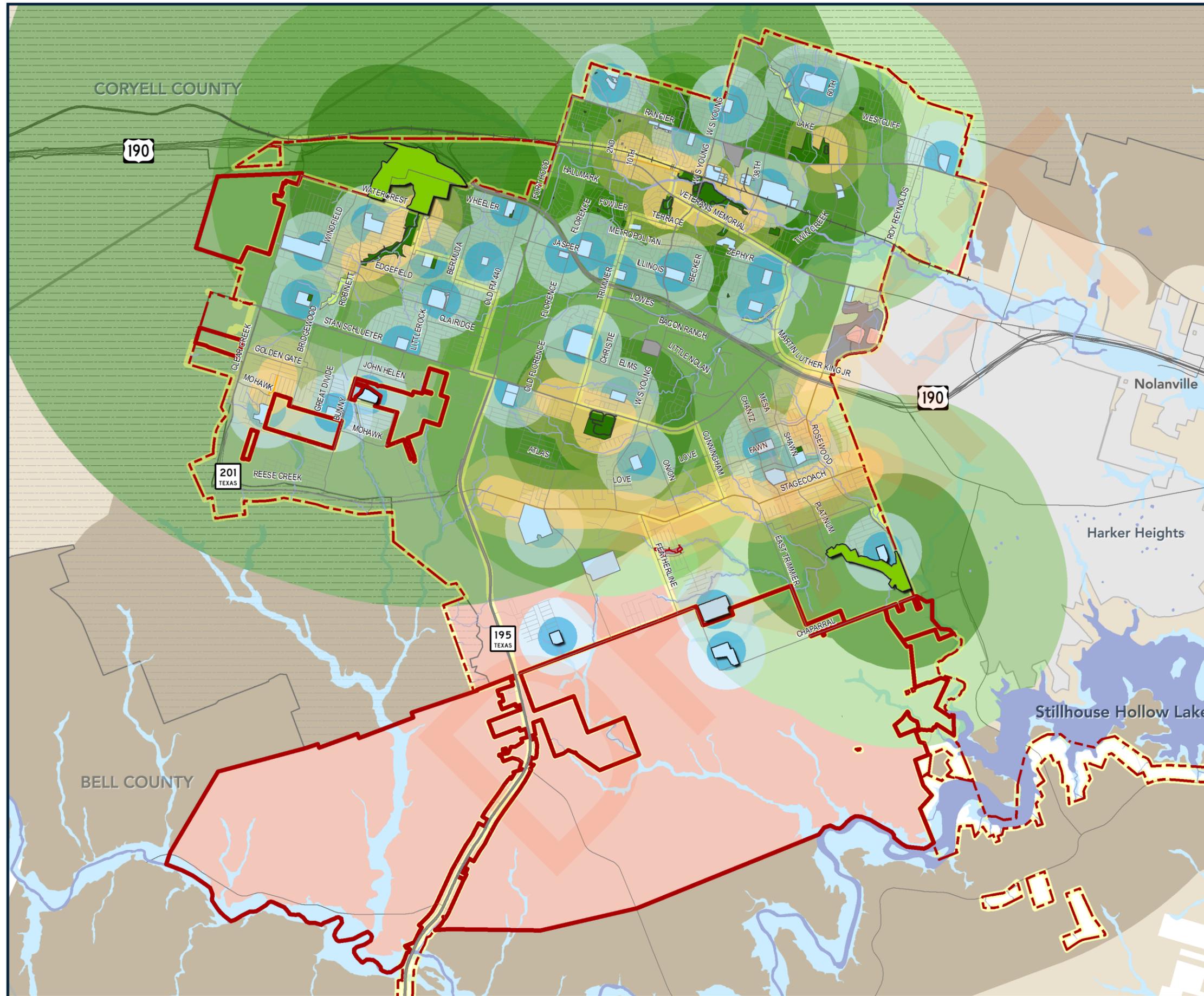
Additionally, the City could pursue potential partnership opportunities with KISD for future development of mutually beneficial facilities and coordinate with the U.S. Army Corps of Engineers to develop a waterfront park along Stillhouse Hollow Lake, similar to Dana Peak Park in Harker Heights.



Stillhouse Hollow Lake is located southeast of the City and presents potential for a waterfront park.

Source: https://en.wikipedia.org/wiki/Stillhouse_Hollow_Lake

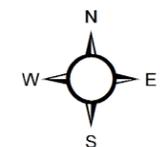




Growth Area Needs

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Existing 8' Oversized Sidewalks
- Killeen's Growth Areas
- Trail & Oversized Sidewalk 1/2-Mile Service Area
- Trail & Oversized Sidewalk 1/4-Mile Service Area
- Parks Nearby Service Area
- Parks Extended Service Area
- KISD Schools 1/4-Mile Service Area
- KISD Schools 1/2-Mile Service Area
- KISD Property
- KISD Future Schools
- City Council District Boundaries
- Killeen City Limits
- Nearby City Limits
- Killeen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- 100-Year Floodplain
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- Railroad
- Need Areas



0 1/4 1/2 1 1 1/2 2 Miles

Summary of Parkland Needs

Killeen’s population and extent of developed area is growing. Considering that the population is projected to increase by approximately 48,000 people in the next 20 years, it is important that the City consider further acquisition, preservation, and development of parkland to ensure that adequate green space is available for future generations. As development occurs in the City, an effort should be made to acquire and/or preserve sufficient lands while they are available, in order to provide for future park needs.

Based on the parkland distribution and acreage analysis, the City is already at a deficit for all categories of parkland. With a target level of service of 10 to 20 acres of parkland and open space per 1,000 residents, the City currently has a deficit of approximately 880 to 2,290 acres. A summary of key parkland acreage and development needs follows and are summarized in Table 4.5, *Summary of Parkland Needs* below. The findings from this analysis as well as the additional assessment conducted later in this chapter form part of the Plan recommendations set out in Chapter 5, *Recommendations & Actions*.

Table 4.5, *Summary of Parkland Needs*

Need type	
Parkland Acreage, Development and Distribution	The City has a notable parkland acreage deficit but has key opportunities to develop large parcels to greatly increase the size of the parks system.
Neighborhood Parks	There is an uneven distribution of neighborhood parks. Additional parkland is needed throughout the entirety of the City south of U.S. Highway 190.
Community Parks	The City currently has a deficit of 450 acres of community parkland. By 2036, if no additional community parkland is developed, that deficit will increase to over 580 acres. Key opportunities provided in Heritage Oaks Park should therefore be pursued by the City.
Special Use Parks	Opportunities exist to add special use amenities (e.g. dog parks, splash pads) to existing parks and enhance the Rotary Club Children’s Park to change it to a special use park.
Regional Parks	Opportunities exist for coordination with Fort Hood to develop Westside Regional Park.
Open Space	As development continues, the City should be on the look out for additional opportunities for preservation of open space and parkland dedication by developers.
Trails	While the beginning of Citywide trail network is in place, key connecting segments are missing.

Neighborhood Parks

Both in terms of acreage and distribution, Killeen is lacking in neighborhood parkland. Based on the target level of service, only 38 to 56 percent of the City’s parkland acreage need is being met. When analyzing the map, only 19% of the community has nearby access to a neighborhood park. This uneven distribution of parkland means that the majority of residents living south of U.S. Highway 190 do not have sufficient access to a neighborhood park. Neighborhood parks should be centrally located in the areas they are meant to serve so that residents have adequate access. As further development occurs in the community, the City could consider requiring parkland dedication as part of private subdivision development approvals to help fill the current location-based deficit.

Community Parks

The City currently has a community parkland acreage deficit of 450 acres. As population increases, use of the existing community parks will also increase, potentially resulting in overuse and deterioration of the existing parks. Killeen is





currently presented with unique opportunities in Heritage Oaks Park and Westside Regional Park which could help reduce the acreage deficit, improve distribution throughout the community, and reduce the potential for overuse at existing parks.

Regional Parks

The City currently has no regional parkland. While many communities do not have the opportunity to develop a regional park, Killeen is currently presented with an excellent opportunity to do just that. In order to meet existing and future parkland acreage and distribution needs, development of Westside Regional Park should be seriously considered by the City.

Special Purpose Parks

While special use parks and amenities do not have a defined level of service, their current distribution in the City is restricted to Council District 1 and 3. As the City considers further development in existing parks and expansion of the parks system, consideration should be given to developing additional special use parks or designing appropriate special uses (e.g., dog park, splash pad) into other parks.

Recreational Facilities

The City's existing recreational and aquatic facilities are very well used, to the point of not being able to handle all those who wish to use them. In order to meet the needs of the growing community, consideration of expansions to the City's existing facilities should be considered and opportunities for development of additional aquatic facilities throughout the City should be explored.

Trails

Based on a location-based analysis of the City's trail network, there are a few standalone recreational trails but overall connectivity has not yet been achieved. With the current level

of use on the existing trails and the public input received, it is safe to assume that development of a well-connected trail system, providing access to key destinations such as parks, schools, etc., would be well-received by the community. Floodplains and drainage corridors throughout the City, in addition to roads with sufficient rights-of-way, create opportunities for additional recreational trails and oversized sidewalks.

Future Growth Area

Above and beyond the parkland needs within the existing City limits, as the ETJ is developed, there will be additional parkland, facility, and trail needs in those areas as well. In order to ensure that adequate parkland is designated as part of development both within the municipal limits and Killeen's ETJ, the City should consider incorporating a parkland dedication ordinance as part of its subdivision regulations.



Drainage corridors provide potential opportunities for trail connections.



Table 4.6, Target Level of Service for City-Owned Park Facilities

Facility		Current Availability (City-owned)	Current LOS (1 Facility per Residents)	Target LOS (Per Residents)	2016 Need Based on 140,800 Population	2016 Deficit or Surplus	2026 Need Based on 164,000 Population	2026 Deficit or Surplus	2036 Need Based on 188,300 Population	2036 Deficit or Surplus
Active Recreation	Baseball Fields	6	23,468	1 per 12,000	12	Deficit of 6	14	Deficit of 8	16	Deficit of 10
	Softball Fields	10	14,081	1 per 12,000	12	Deficit of 2	14	Deficit of 4	16	Deficit of 6
	Backstop	0	None	1 per 5,000	29	Deficit of 29	33	Deficit of 33	38	Deficit of 38
	Basketball Courts	15.5	9,084	1 per 4,000	36	Deficit of 20.5	41	Deficit of 26	48	Deficit of 33
	Basketball/Volleyball Indoor Courts	3	46,935	1 per 15,000	10	Deficit of 7	11	Deficit of 8	13	Deficit of 10
	Community Center	1	140,806	1 per city	1	No deficit	1	No deficit	1	No deficit
	Disc Golf	1	140,806	2 per city	2	Deficit of 1	2	Deficit of 1	2	Deficit of 1
	Dog Park	1	140,806	1 per planning area	4	Deficit of 3	4	Deficit of 3	4	Deficit of 3
	Fitness Equipment Circuit	2	70,403	1 per planning area	4	Deficit of 2	4	Deficit of 2	4	Deficit of 2
	Football Fields	6	23,468	1 per 20,000	7	Deficit of 1	9	Deficit of 3	10	Deficit of 4
	Golf Course (public)	1	140,806	Varies	Varies	Varies	Varies	Varies	Varies	Varies
	Recreation Center	3	46,935	2 per city	2	Surplus	2	Surplus	2	Surplus
	Skate Park (permanent)	0	None	2 per city	2	Deficit of 2	2	Deficit of 2	2	Deficit of 2
	Skate Park (above ground)	2	70,403	2 per city	2	No deficit	2	No deficit	2	No deficit
	Soccer Fields	8	17,601	1 per 10,000	12	Deficit of 4	17	Deficit of 9	19	Deficit of 11
	Tennis Courts	6	23,468	1 per 8,000	18	Deficit of 12	21	Deficit of 15	24	Deficit of 18
	Trails (miles)	6	23,468	1 per 10,000	15	Deficit of 9	16.4	Deficit of 10	19	Deficit of 13
Multi-purpose Practice Fields	13	10,831	1 per 5,000	29	Deficit of 16	33	Deficit of 20	38	Deficit of 25	
Volleyball Courts (Outdoor)	2	70,403	1 per 8,000	18	Deficit of 16	21	Deficit of 19	24	Deficit of 22	
Passive Recreation	Amphitheater or Outdoor Event Space	1	140,806	2 per city	2	Deficit of 1	2	Deficit of 1	2	Deficit of 1
	Horseshoe Pits	0	None	2 per planning area	8	Deficit of 8	8	Deficit of 8	8	Deficit of 8
	Picnic Pavilions	45	3,129	1 per 3,500	41	Surplus	47	Deficit of 2	54	Deficit of 9
	Covered Picnic Tables	118	1,193	In all parks	In all parks	Deficit in 10 parks	In all parks	Deficit in 12 parks*	In all parks	Deficit in 12 parks*
	Picnic Facilities (Tables, Benches, BBQ Grills, Fountains, Trash Bins)	22 parks	6,400	In all parks	In all parks	Deficit in 2 parks	In all parks	Deficit in 4 parks*	In all parks	Deficit in 4 parks*
	Playgrounds	27	5,215	1 per 5,000	29	Deficit of 2	33	Deficit of 6	38	Deficit of 11
Water Rec.	Canoe/Kayak Launch	0	None	Where feasible	Where feasible	Feasible	Where feasible	Feasible	Where feasible	Feasible
	Fishing Piers	1	140,806	Varies	Varies	Varies	Varies	Varies	Varies	Varies
	Swimming Pool (per population)	3	46,935	1 major pool per city	1	No deficit	1	Surplus	1	Surplus
	Splash Pad	2	70,403	1 per planning area	4	Deficit of 2	4	Deficit of 2	4	Deficit of 2
Parking areas	12 parks	11,734	Where needed	Where needed	Needed	Where needed	Needed	Where needed	Needed	
Restrooms/Portable	19	7,411	Where feasible	Where feasible	Feasible	Where feasible	Feasible	Where feasible	Feasible	

*Assumes potential future parks have been appropriately designated and programmed for parks

KISD Facilities

In many communities, certain types of recreational facilities are more commonly provided by schools than by cities (e.g., tennis courts). In Killeen, KISD owns, operates, and maintains a variety of recreational facilities which may have the potential to meet some of the community's needs. Illustrated in Table 4.7, *Target Level of Service Including City-Owned and KISD Facilities*, the same level of service ratios depicted in Table 4.6 are once again analyzed. However, the facilities provided by KISD throughout the community are now factored in. When compared to the deficits illustrated in the previous table, it is evident that KISD provides a variety of facilities which are currently key deficits in City-owned parks. Through cooperative agreements with KISD, their facilities may be able to help meet key City needs such as basketball courts, tennis courts, and multi-purpose practice fields. Further discussions with KISD to determine the potential for additional joint-use agreements would be beneficial.



Athletic facilities at KISD schools may have the potential to meet some of the community's recreational needs.



Table 4.7, Target Level of Service Including City-Owned and KISD Facilities

	Facility	Current Availability	Current LOS (1 Facility per Residents)	Target LOS (Per Residents)	2016 Need Based on 140,800 Population	2016 Deficit or Surplus	2026 Need Based on 164,000 Population	2026 Deficit or Surplus	2036 Need Based on 188,300 Population	2036 Deficit or Surplus
Active Recreation	Baseball Fields (6 KISD)	12	11,734	1 per 12,000	12	No deficit	14	Deficit of 2	16	Deficit of 4
	Softball Fields	10	14,081	1 per 12,000	12	Deficit of 2	14	Deficit of 4	16	Deficit of 6
	Backstop	0	None	1 per 5,000	29	Deficit of 29	33	Deficit of 33	38	Deficit of 38
	Basketball Courts (37 KISD)	52.5	2,682	1 per 4,000	36	Surplus	41	Surplus	48	Surplus
	Basketball/Volleyball Indoor Courts	3	46,935	1 per 15,000	10	Deficit of 7	11	Deficit of 8	13	Deficit of 10
	Community Center	1	140,806	1 per city	1	No deficit	1	No deficit	1	No deficit
	Disc Golf	1	140,806	2 per city	2	Deficit of 1	2	Deficit of 1	2	Deficit of 1
	Dog Park	1	140,806	1 per planning area	4	Deficit of 3	4	Deficit of 3	4	Deficit of 3
	Fitness Equipment Circuit	2	70,403	1 per planning area	4	Deficit of 2	4	Deficit of 2	4	Deficit of 2
	Football Fields (9 KISD)	15	9,387	1 per 20,000	7	Surplus	9	Surplus	10	Surplus
	Golf Course (public)	1	140,806	Varies	Varies	Varies	Varies	Varies	Varies	Varies
	Recreation Center	3	46,935	2 per city	2	Surplus	2	Surplus	2	Surplus
	Skate Park (permanent)	0	None	2 per city	2	Deficit of 2	2	Deficit of 2	2	Deficit of 2
	Skate Park (above ground)	2	70,403	2 per city	2	No deficit	2	No deficit	2	No deficit
	Soccer Fields (4 KISD)	12	11,734	1 per 10,000	12	Surplus	17	Deficit of 5	19	Deficit of 7
	Tennis Courts (48 KISD)	54	2,608	1 per 8,000	18	Surplus	21	Surplus	24	Surplus
	Trails (miles)	6	23,468	1 per 10,000	15	Deficit of 9	16.4	Deficit of 10	19	Deficit of 13
Multi-purpose Practice Fields (16 KISD)	29	4,855	1 per 5,000	29	Surplus	33	Deficit of 4	38	Deficit of 9	
Volleyball Courts (Outdoor)	2	70,403	1 per 8,000	18	Deficit of 16	21	Deficit of 19	24	Deficit of 22	
Passive Recreation	Amphitheater or Outdoor Event Space	1	140,806	2 per city	2	Deficit of 1	2	Deficit of 1	2	Deficit of 1
	Horseshoe Pits	0	None	2 per planning area	8	Deficit of 8	8	Deficit of 8	8	Deficit of 8
	Picnic Pavilions	45	3,129	1 per 3,500	41	Surplus	47	Deficit of 2	54	Deficit of 9
	Covered Picnic Tables	118	1,193	In all parks	In all parks	Deficit in 10 parks	In all parks	Deficit in 12 parks*	In all parks	Deficit in 12 parks*
	Picnic Facilities (Tables, Benches, BBQ Grills, Fountains, Trash Bins)	22 parks	6,400	In all parks	In all parks	Deficit in 2 parks	In all parks	Deficit in 4 parks*	In all parks	Deficit in 4 parks*
	Playgrounds (37 KISD)	64	2,200	1 per 5,000	29	Surplus	33	Surplus	38	Surplus
Water Rec.	Canoe/Kayak Launch	0	None	Where feasible	Where feasible	Feasible	Where feasible	Feasible	Where feasible	Feasible
	Fishing Piers	1	140,806	Varies	Varies	Varies	Varies	Varies	Varies	Varies
	Swimming Pool (per population)	3	46,935	1 major pool per city	1	Surplus	1	Surplus	1	Surplus
	Splash Pad	2	70,403	1 per planning area	4	Deficit of 2	4	Deficit of 2	4	Deficit of 2
	Parking areas	12 parks	11,734	Where needed	Where needed	Needed	Where needed	Needed	Where needed	Needed
	Restrooms/Portable	19	7,411	Where feasible	Where feasible	Feasible	Where feasible	Feasible	Where feasible	Feasible

*Assumes potential future parks have been appropriately designated and programmed for parks

Demand-Based Assessment

In addition to analyzing facility quantities and parkland acreage and distribution, it is essential to identify public demand for parks and recreation opportunities. Identifying the wants and needs of Killeen's residents allows the City to plan accordingly in order to best serve the community. A demand-based assessment is based on the actual level of use of the parks, where available, and the preferences voiced by residents during the public survey, stakeholder meetings, and public open house. In the parks planning process, public input helps identify what types of existing facilities are being used, where key deficiencies may occur, and where the residents would like to see their funding targeted.

Most Frequent Activities

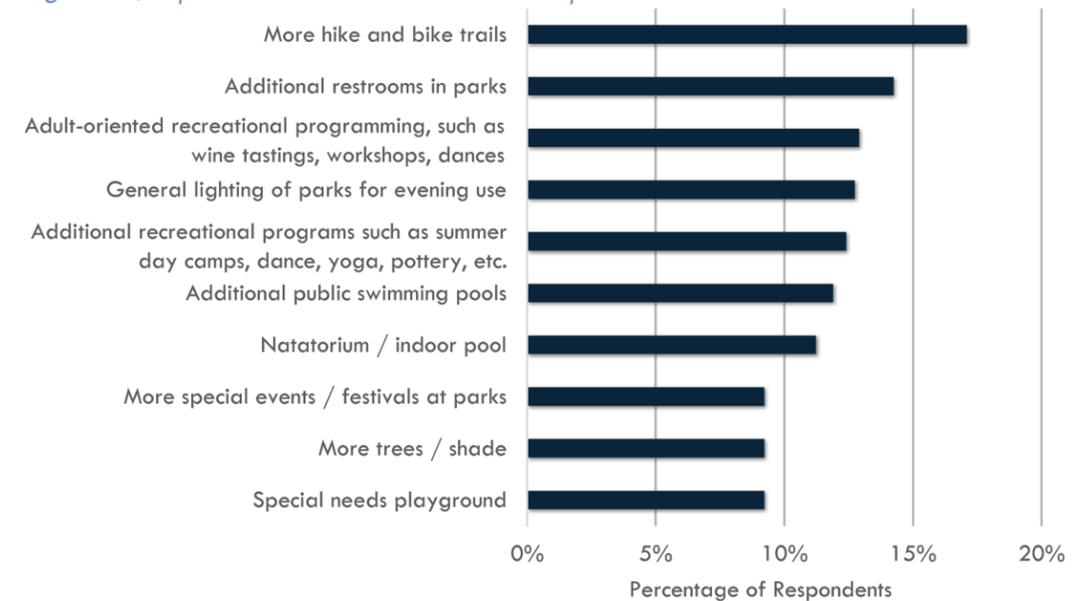
Public survey respondents were asked how often they participated in activities or used a variety of facilities. The top five activities participated in or facilities used at least

weekly were walking for fitness or to get somewhere in the City, visiting a City park or facility, using a private gym, using the City's hike and bike trails, and visiting a City playground. As described by survey responses and witnessed in the parks system on a daily basis, Killeen residents highly value parks and use the trails and playgrounds heavily. Further development of these elements would undoubtedly be supported by the community.

Top Requested Facilities and Activities

Survey respondents were shown a series of 60 facilities and activities and asked to rate their level of importance. They were then shown the same list of facilities and activities and asked to choose their top three priorities. The top 10 most frequently chosen items and the percentage of respondents who chose each item are illustrated in Figure 4.2, *Importance of Park and Recreation Improvements*, below.

Figure 4.2, Importance of Park and Recreation Improvements





Summary of Stakeholder Meetings

During the initial meetings at the beginning the project, stakeholders voiced a variety of desires and concerns. Some of the key themes which were continually brought up both during these meetings and throughout the remainder of the planning process are listed below.

- There is a need for more equal park distribution.
- There is a desire for greater Citywide connectivity via trails, oversized sidewalks, and bicycle lanes.
- There is a need for unprogrammed active recreational space to allow for pick up athletic games among residents.
- There is a desire for more shade, water-based recreation, family recreation opportunities in the parks system.
- There are significant concerns about safety in parks and inadequate park lighting.
- The Family Recreation Center is well-loved and would benefit from expansion.
- There is a desire for increased recreational opportunities for seniors.

Additional highlights from the stakeholder meetings are discussed in Chapter 2, *Understanding the Community*.

Summary of Open House Results

The public open house held in November 2015 solicited feedback on a variety of resident priorities and preferences. Highlights of the recreational amenities and facilities that were most supported by the meeting attendees are listed below.

- Indoor facilities, neighborhood parks, and community parks were the types of parks voted as most needed.
- A challenge course, community garden, public art in parks, and mini golf were the top choices for special amenities in parks.

- An indoor pool was the most desired new water-based recreation facility.
- Park lighting, internal loop trails, and sports courts were the most highly desired park design elements.
- Integrating sustainable, “green” design solutions into parks and using crime prevention through environmental design (CPTED) techniques were the most highly supported park design policies.
- Attendees prioritized building connector trails over internal loop trails, with connections from Heritage Oaks Park and Westside Regional Park to Texas A&M University Central Texas as the highest priority trail segments.
- Arts, athletics, and health and fitness related recreation were the most desired types of program.
- Entertainment, social exercise, adult sports, and adventure races were the most preferred adult recreation activities.
- A teen recreation center was the highest ranked new “grand idea.”



Stakeholder meetings were held with various groups including the community's senior citizens.



Resource-Based Assessment

The resource-based assessment identifies key physical features of the City that may be incorporated as potential recreational opportunities, including both natural and man-made features. Killeen's natural resources, including floodplains, the shores of Stillhouse Hollow Lake, and untouched native landscapes in the potential Westside Regional Park and Heritage Oaks Park, are areas that should be preserved and/or adapted for recreational use and open space preservation where feasible (see, Map 4.11, *Open Space Resources*). Additionally, man-made features including overhead utility rights-of-way and key public rights-of-way provide potential for further Citywide connectivity. The use or development of each of these resources should be determined on a case-by-case basis, depending on the unique characteristics of each location and the opportunities that can be supported without damaging environmentally sensitive features. It is important to approach the use and development of these various resources in a unified, coordinated manner in order to realize the best results from each.

Lake and Floodplain System

While it is not located adjacent to the main portion of the City, Stillhouse Hollow Lake is situated along the southern extent of the City limits. The lake is maintained by the U.S. Army Corps of Engineers. Potential recreation opportunities associated with the lake could be explored through coordination with the U.S. Army Corps of Engineers to continue the preservation of the shoreline and floodplain areas while also providing recreational access in select locations. Key opportunities include:

- The 100-year floodplain along undeveloped shore areas provides the opportunity for preserved open space and recreational areas. Any floodplain or drainage channel areas in the City not already preserved and maintained by the U.S. Army Corps of Engineers should be preserved and analyzed for potential trail corridors.
- Any non-City owned property which is regularly subject to flooding has potential, if acquired by the City, to be preserved and allow for restoration of the floodplain.

Rights-of-Way/Easements

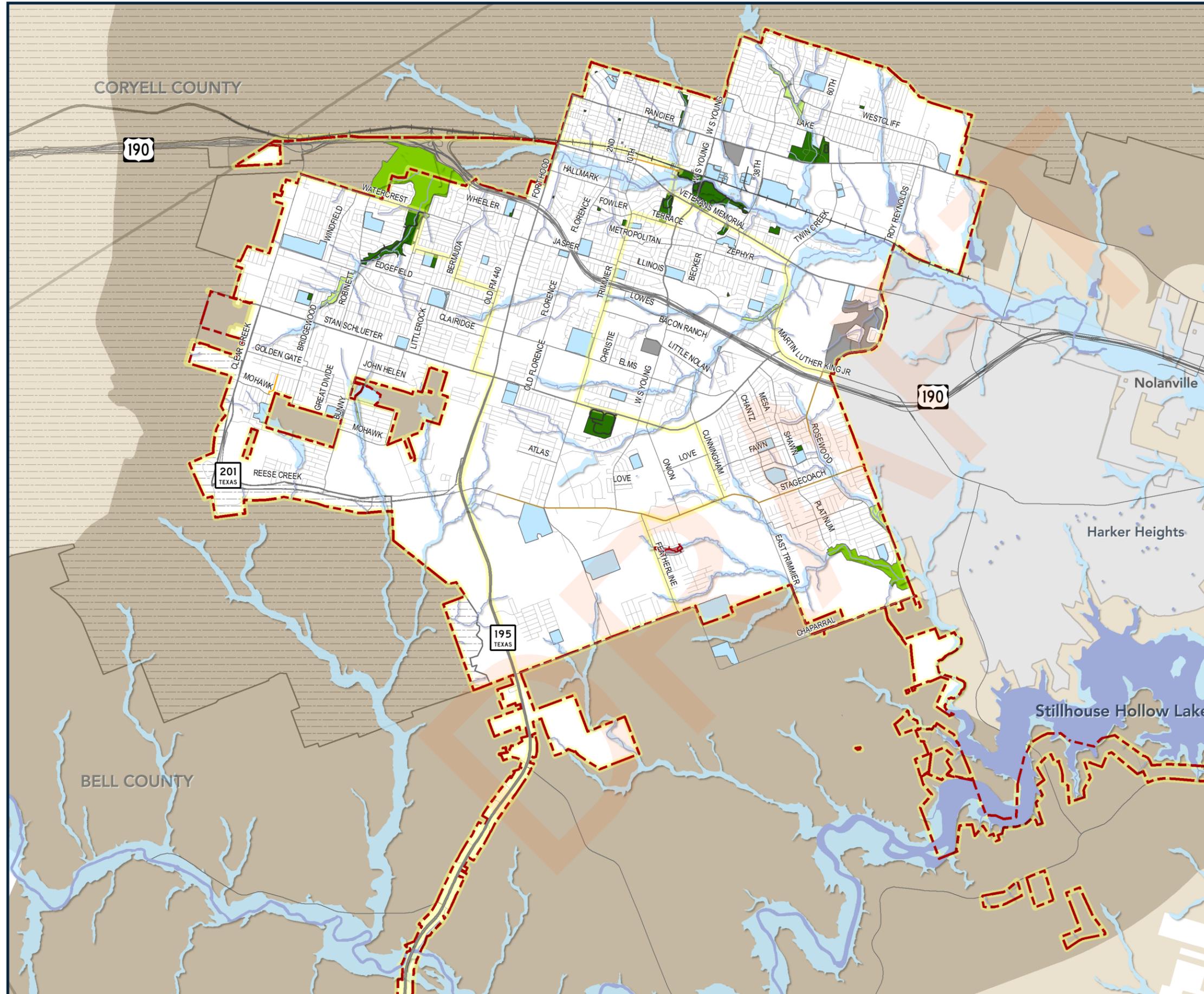
Utility rights-of-way and drainage easements are linear in nature which makes them ideal for walking paths. The drainage easements running throughout the City provide ample opportunity for wildlife habitat, stormwater filtration, overall City beautification, and potential trail connections.

There are a number of streets in the City already equipped with oversized sidewalks. Where there are adequate rights-of-way, opportunities should be pursued to further develop the sidewalk network. Consideration should be given to providing a planting buffer between the road and the sidewalk to allow for increased pedestrian and bicycle safety.



Wide rights-of-way in the City, such as along E. Stan Schlueter Loop, should be considered for oversized sidewalks.

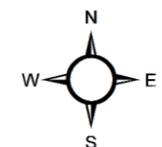




Open Space Resources

Legend

- Existing Parks/Recreation Spaces
- Potential Future Parks
- Other
- City-owned Open Space
- Private Parks
- Existing Trails
- Existing Private Trails
- Existing 8' Oversized Sidewalks
- KISD Property
- City Council District Boundaries
- Killeen City Limits
- Nearby City Limits
- Killeen ETJ
- Nearby City ETJs
- Fort Hood
- Counties
- 100-Year Floodplain
- Water Bodies
- Principle Arterial
- Collector & Minor Arterials
- Local Streets
- ++ Railroad



0 ¼ ½ 1 1½ 2 Miles

Benchmarking

Benchmarks are used as a further reference point for where one particular city ranks when compared to other cities with similar characteristics. A list of benchmark cities throughout Texas was compiled for Killeen. These cities were chosen based on similar location or population size. For the purpose of this planning process, the benchmark cities are identified as:

- Temple
- Harker Heights
- Waco
- Abilene
- Midland
- Round Rock

Once the benchmark cities were identified, they were then compared to Killeen in terms of city-owned park acreage,

miles of trails, number of city-owned swimming pools, budget dollars per capita, and number of full-time equivalent employees in the Parks and Recreation Department. Data from 2015, the most recent available for all of the cities, was used for this comparison. A summary of the benchmark cities and how Killeen compares is shown in Table 4.8, *2016 Benchmarking for Killeen's Parks and Recreation System*, below. Significant findings from the benchmark study include:

- All cities except Harker Heights have more parks and park acreage than Killeen.
- When comparing the ratio of park acres to number of residents, Killeen ranked last, with less than three acres of parkland per 1,000 residents. The next highest city was Harker Heights, with 6.66 acres of parkland per 1,000 people.
- When comparing the amount of parkland as a percentage of each city's overall land area, Killeen once again ranked last. Killeen's parkland currently accounts for 1.15 percent of the City's land area.

Table 4.8, 2016 Benchmarking for Killeen's Parks and Recreation System

City	2015 Census Population Estimate ¹	Total Number of City-owned Parks	Total City-owned Park Acreage	Acres per 1,000 Residents	Park Acreage as % of City Land Area
Killeen	140,806	24	410	2.91	1.15%
Temple	72,277	41	718	9.93	1.62%
Harker Heights	29,142	8	194	6.66	1.99%
Waco	132,356	60	1273	9.62	2.08%
Abilene	121,721	31	1002	8.23	1.42%
Midland	132,950	41	1172	8.82	2.56%
Round Rock	115,997	34	1368	11.79	8.13%

¹ U.S. Census Bureau





- In comparing the total length of trails in each city, two comparisons were run for Killeen. When not counting the oversized sidewalks, Killeen's total length of trail system ranks lowest, with only six miles of trails or one mile per 23,468 people. The city with the next highest per capita trail ratio was Abilene, with one mile of trail per 10,584 people. If Killeen's oversized sidewalks are counted as trails, the City ranks sixth in total trail length with 13 miles, but still ranks last in miles of trails per capita.
- City-operated swimming pools are starting to become a controversial issue in municipalities across the country. The financial burden, maintenance and staffing requirements, and safety issues are frequently voiced concerns among city staff. As private gyms, HOAs, and school districts often provide swimming facilities, cities have to determine what type of pool, if any, they should operate. All but one benchmark city had at least one city-operated pool. Killeen was tied for the second highest number of pools, with three.
- Killeen ranked sixth out of seventh in terms of budget dollars per capita. Aside from Abilene, most of the other cities had a parks and recreation budget that was significantly higher on a per capita basis. Considering population numbers, Killeen has the highest number of residents. The next lowest city, Waco, has nearly 8,500 less people but a park and recreation budget that is almost five million dollars more than Killeen's.
- When considering the parks and recreation budget as a percentage of the overall general fund, Killeen's Community Services Department budget ranked sixth out of eight.
- In terms of full-time equivalent staff persons, Killeen ranked fourth.

Table 4.8, 2016 Benchmarking for Killeen's Parks and Recreation System (cont.)

Total Miles of City Trails	1 Mile of Trails per Capita	# of City-owned Swimming Pools	FY 2015/2016 Adopted PARD Budget	PARD Budget Dollars per Capita	PARD % of General Fund Budget	PARD Staff FTE
6 (13*)	23,468 (10,831*)	3	\$6,102,464**	\$43.34	7.78%	62
18	4,015	4	\$7,006,017	\$96.93	10.34%	110.65
8	3,643	1	\$2,344,100	\$80.44	11.72%	34
35.05	3,776	0	\$11,029,062	\$83.33	8.94%	142.96
11.5	10,584	2	\$4,626,070	\$38.01	5.30%	51
57.7	2,304	2	\$7,510,092	\$56.49	6.95%	48
15	7,733	3	\$10,605,768	\$91.43	10.89%	96

*Including oversized sidewalks ** Includes the entire Community Services Department



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