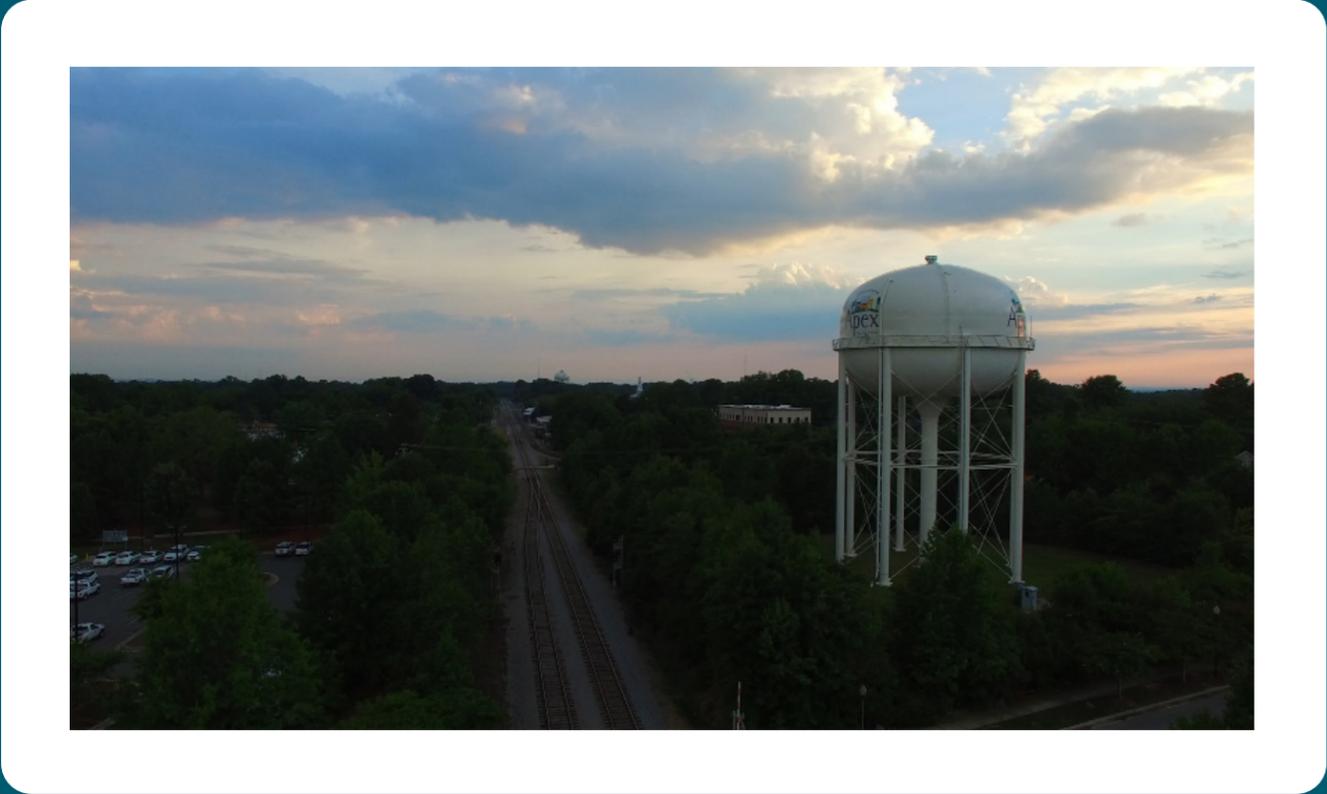


09 | BENCHMARKING + LEVEL OF SERVICE

IN THIS CHAPTER

Level of Service

Summary of Findings





Level of service, benchmarking, and parks and recreation industry standards provide important metrics for guiding future growth in parks and recreation. Considered together, these metrics provide a broad understanding of current parks and recreation conditions in the Town, similar jurisdictions and nationally by providing concrete comparative numbers. This analysis provides detailed metrics and statistics that should be considered within the full context of parks and recreation services the Town of Apex is offering residents. For the purposes of benchmarking, National Recreation and Park Association (NRPA) reporting has been utilized as the organization is the leading non-profit dedicated to the advancement of public parks, recreation, and conservation. Their work draws national focus to the far-reaching impact of successes generated at the local level.

This plan does not adopt any standard wholesale, but considers the full analysis, staff input, and community input to help identify standards and metrics that will be meaningful points of guidance as the Town grows its parks and recreation services to provide for an increasing population

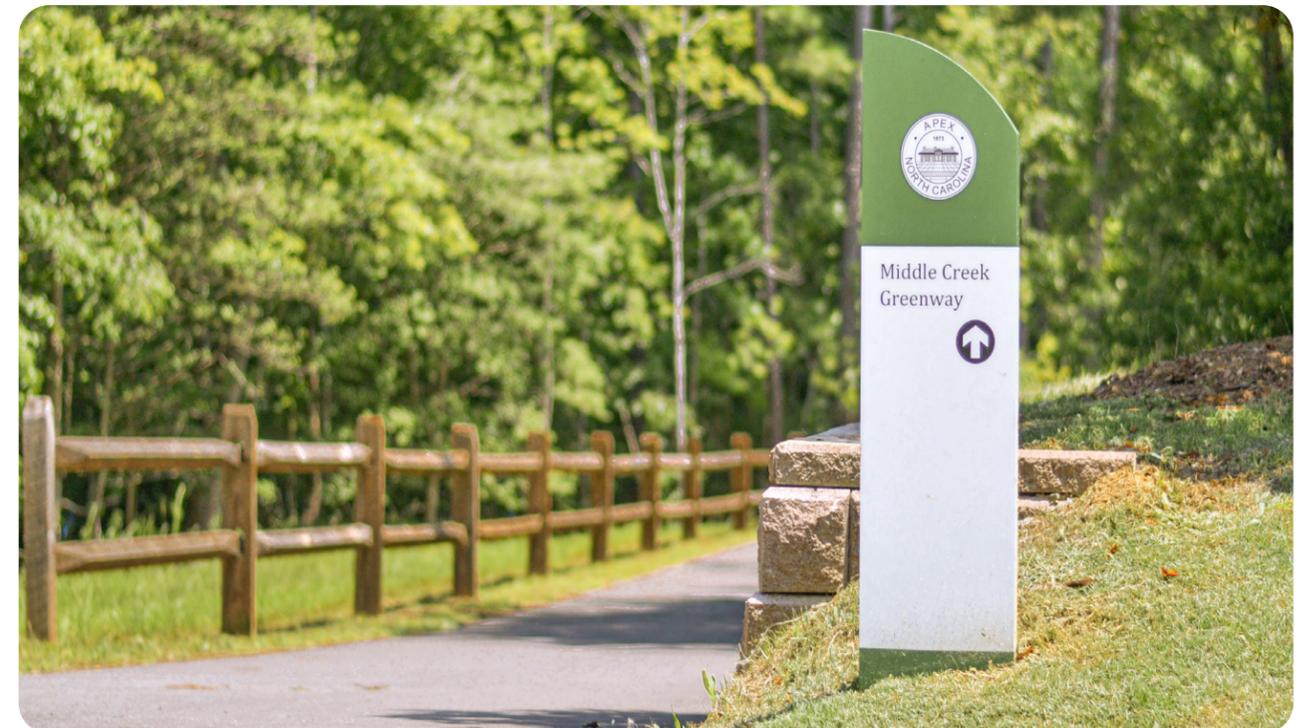


Figure 9.2 - Middle Creek Greenway Signage



CURRENT LEVEL OF SERVICE	NRPA BENCHMARKING	PROPOSED LEVEL OF SERVICE
<p>Measures the Department's current offerings. Analysis is local.</p> <p>This analysis asks: What do we offer?</p> <p>The Level of Service analysis identifies what the Town is currently offering, based on the current population at the time of the review. This metric forms a baseline standard that is population based moving into the future. The analysis answers the questions, what is offered and how much does the Town of Apex offer to the current population?</p>	<p>Compares measures among similar jurisdictions across the US. Analysis is national.</p> <p>This analysis asks: What do others offer?</p> <p>The NRPA benchmarking analysis relies on the annual NRPA Parks Metrics Report to compare Apex with communities across the US that share similar characteristics with the Town. This generates an understanding of the department's strengths and chosen areas of expertise.</p> <p>Shortcomings in benchmarking may represent deficiencies or areas that have been deprioritized in favor of other priorities.</p>	<p>Measures the Department's future offerings based on projected population and growth. Analysis is local.</p> <p>This analysis asks: What should we offer or anticipate to offer in the next ten years?</p> <p>National standards and best practices serve as an "ideal state" for parks and recreation in a community. These standards may account for emerging trends communities are beginning to implement. When compared with the national standards, the Town sets achievable goals for the next ten years. This analysis answers the question, what and how much should the Town of Apex provide over the course of the next ten years to satisfy the needs of the projected population?</p>

Figure 9.3 - Level of Service Framework

LEVEL OF SERVICE (LOS)

The Level Of Service measures how much access to parks, greenways and indoor facility space residents have based on the park system's current inventory and the jurisdiction's total population. Parks and Recreation LOS metrics cannot be used as absolute recommended standards, but they can be helpful in determining deficits or surpluses within what the Department provides in anticipation of the growth the town will experience over a period of ten years. The level of service, combined with benchmarking and best practices, will provide the foundation for this plan's recommendations of how much parkland, trails, and indoor facility space the department should acquire or construct to meet the recreation needs for the future, based on population growth.

Methodology

In this Benchmarking and Level of Service Analysis, data was obtained from the 2022 National Agency Performance Review by NRPA, the leading not-for-profit organization dedicated to park agencies throughout the United States. The NRPA obtains data from thousands of park and recreation agencies nationally and shares their information to assist park agencies to improve their park system and to meet the needs of the residents in the communities they serve.

For this analysis, Apex data and data from the National Recreation and Parks Association was organized by ten metrics for the areas to be compared. The population for the Town of Apex and the NRPA Parks Metrics Data are paralleled by relating to "per 1,000 residents" rather than the total population. Some data for residents are calculated per capita and in percentages, and the overall comparison must be viewed with this in mind. The benchmark analysis used the most up-to-date information possible and is a sample of operating metrics that factor budgets, staffing levels, sports fields, and parkland data. In order to compare as close as possible to NRPA's population data, the population segment (50,000 to 99,999) was used for the population comparison to the Town of Apex.

The PRCR Department benchmark data was derived from the following information:

- › 2021 Population - 62,689
- › 2031 Population projection - 81,986
- › Total parkland acres - 629 (311 Developed Acres / 117 Acres Future Parkland / 181 Acres Conservation Land)
- › Miles of trails - 25.9 (4 miles natural surface trails, 19 paved, 2.9 miles of paved loop trail in parks)
- › Total indoor recreation space - 86,294 sq. ft.
- › Total operating expenditures in parks and recreation budget - \$6,039,900
- › Full Time Employees (FTE's) for all park operations - 46
- › FTE staff members dedicated to operations and maintenance -27

The level of service is a ratio that includes the current offering of parkland, trails, and facility space, divided by a portion of the current population. Parkland and trails are calculated based on a rate per 1,000 residents, and indoor facility space is based on a per capita rate, or rate per 1 resident. This difference reflects reporting standards created by the National Recreation and Parks Association. Numbers have been rounded to two decimal places.

This formula is used to determine the current level of service for any given population number. Current level of service is determined using the current population, and the future level of service is determined based on future population projections. This plan determines the 2031 level of service using population projections determined in the Demographics and Trends chapter.

$$\frac{\text{parks and recreation offering}}{\text{portion of population*}} = \text{Level of Service}$$

(*EITHER per 1,000 population OR per capita)

Current Level of Service

The Department's current level of service is summarized in the table below. The table shows the Department's offering for parkland, trails, indoor facility space, outdoor fields and courts, and selected park amenities.

The purpose of the level of service analysis is to establish a baseline level of service standard for the Department's current and future offerings, based on the existing and projected population. Using a population-based metric such as LOS results in a standard used to project future needs based on population growth, for parkland, trails, indoor facility space, outdoor fields and courts, and park amenities based on future population.

Analysis

This benchmarking analysis summarizes data for the following categories:

- › Parkland
- › Trails
- › Indoor Facility Space
- › Finances
- › Capital Improvement Budget
- › Staffing



It is a common tendency to believe that numbers above the median indicate positive performance and numbers below the median, deficiencies. Another common tendency is to believe that numbers below the median must be increased to the standard, while numbers above the median indicate a jurisdiction is over-providing a service or a high-performing provider. A better interpretation is to consider metrics as a representation of services the jurisdiction has chosen to currently invest. A high metric may indicate a service particularly important to the Town. A low metric may indicate an area in need of additional investment, or an area that is not considered a priority. A benchmarking and level of service analysis may identify areas where the department is excelling or falling behind, but it is essential to understand the context and connections between all metrics rather than focus on one isolated fact.

APEX PARKS, RECREATION & CULTURAL RESOURCES (POPULATION= 62,689; PROJECTED = 81,986)
NATIONAL RECREATION AND PARKS ASSOCIATION & BEST PRACTICE RECOMMENDATIONS
(NRPA POPULATION RANGE = 50,000-99,999)

Metrix	Town of Apex	NRPA (Low Quartile)	NRPA (Median)	NRPA (Upper Quartile)
Acres of park land per 1,000 residents (Includes 117 Ac undeveloped land)	10.03 acres	4.7 acres	9.2 acres	15.9 acres
Total trail miles	25.9 miles	7 miles	14 miles	29 miles
Total operating expenditures for the park budget	\$6,039,000	\$4,330,118	\$7,330,336	\$11,824,509
Operating Expenditure per park operations FTE	\$131,283	\$79,952	\$103,272	\$142,340
Operating Expenditure per acre of Parkland	\$9,600	\$5,527	\$9,642	\$20,766
Operating Expenditures per capita	\$96	\$61	\$104	\$180
Parks and recreation agency staffing (FTEs)	46	38.7	64.1	117.3
Staffing (FTEs) per 10,000 residents	7.3	5.3	9.6	14.4

Figure 9.4 -NRPA Parks Metrics Data Comparison

INDOOR RECREATION SPACE: BEST PRACTICES*		
Metrix	Town of Apex	Best Practice Standard
Space	1.37 sf/ person	2.0 sf/ person*

*Note: Best Practices standard provided by PROS Consulting

Figure 9.5 -Indoor Recreation Space Best Practice Standard

Park Land

NRPA Parks Metrics calculates acres of park land per 1,000 residents. Town of Apex's level of service for parkland is calculated using the same ratio of total park acreage within the system to the number of residents. Apex currently has 10.03 acres per 1,000 residents. This is nearly 6 acres per 1,000 residents less than agencies in the NRPA high quartile (15.9 acres per 1,000 residents) and 0.83 acres per 1,000 residents higher than the NRPA median (9.2 acres per 1,000 population). The Town currently has 629 Total acres in park system (311 Developed Acres / 117 Acres Future Parkland / 181 Acres Conservation Land). It is anticipated that the 117 undeveloped acres could become future park development. This includes the two recently acquired parklands and the additional undeveloped acreage within existing parks. If the current undeveloped parkland were to be removed from the acres per population calculation, the current level of service would be 7.84 acres/ 1,000 residents which is still higher than the NRPA lower quartile data.



Town of Apex
10.03 acres/ 1,000 population



NRPA
15.9 acres/ 1,000 population



Figure 9.6 - Disc Golf at the Nature Park

	CURRENT OFFERING	CURRENT LOS	RECOMMENDED LOS	NEEDED TO MEET RECOMMENDED LOS (CURRENT POP.)	NEEDED TO MEET RECOMMENDED LOS (FUTURE POP.)
	Total Acres	(Acres / Per 1,000 Population)		Acres	
(Current LOS Maintained)	629	10.03	10.03	629	822
Option 2 (LOS Upper Quartile)	629	10.03	15.9	997	1,304

Figure 9.7 - Level of Service- Parkland



As shown in the chart above, as Town of Apex continues to grow over the 10-year planning horizon, an additional 193 acres of parkland would need to be acquired in order to continue providing the current level of service of 10.03/ 1000 population, bringing the total parkland acreage to 822 acres. If the Town would like to increase the LOS to 15.9/1000 population, the parkland needs increase by 997 total acres for the current population and 1,304 total acres for the 2031 projected population.

It is necessary to emphasize contextualization of existing conditions and resources that are readily available in the local environment to make an informed decision regarding the level of service standards. Every agency has its own unique set of realities that may present barriers to achieving a baseline level of service. This is particularly true of parkland acquisition. Many local governments have a limited ability to acquire land. The Town of Apex is constrained by a limited availability of land overall, lack of reasonably priced property for sale, and development site suitability where the land is in high demand for other types of land uses. It should also be considered that as Apex grows towards build-out, the Town will have more challenges to acquire new parkland and the level of service will start to decline as the population continues to grow beyond the next ten years. This plan recommends the Town of Apex maintain their current level of service of 10.03 acres of parkland per 1000 population which would require acquisition of 193 acres of parkland within the ten-year planning horizon. As an aspirational long-term goal, the Town can plan to increase the level of service to 15.9 acres/ 1,000 population and acquire an additional 675 acres as a land banking strategy. To accomplish this goal, the Town will have to evaluate the current land dedication and fee-in-lieu policy to ensure they acquire land suitable for park development.

Conservation Lands

Conservation lands are distinct from developed parkland because their emphasis is on preserving or enhancing the natural environment rather than providing active recreation. Conserved open space protects important cultural, natural, historic, ecological, scenic, and other community values. These may include areas of significant vegetation, important and sensitive habitats, scenic areas, wetlands, or areas that are otherwise considered undevelopable, too expensive to develop, or important to protect. They provide opportunities for wildlife habitat connections, and when access is provided via natural surface trail connections can offer opportunities such as hiking, photography, bouldering, and access to local flora and fauna with minimal impact to the natural features. These properties also provide significant environmental educational opportunities. Conservation lands additionally provide the environmental benefits of mitigating stormwater impacts, reducing heat island effects, and carbon sequestration.

The Town of Apex currently holds 28% (181 acres) of its total parkland as conservation land. As the town continues to grow, the PRCR Department should establish a goal for protecting its sensitive natural areas as conservation lands. While NRPA does not have a standard established for conservation vs. developable parkland, the industry accepted standard is 30% of parkland to be conservation land.

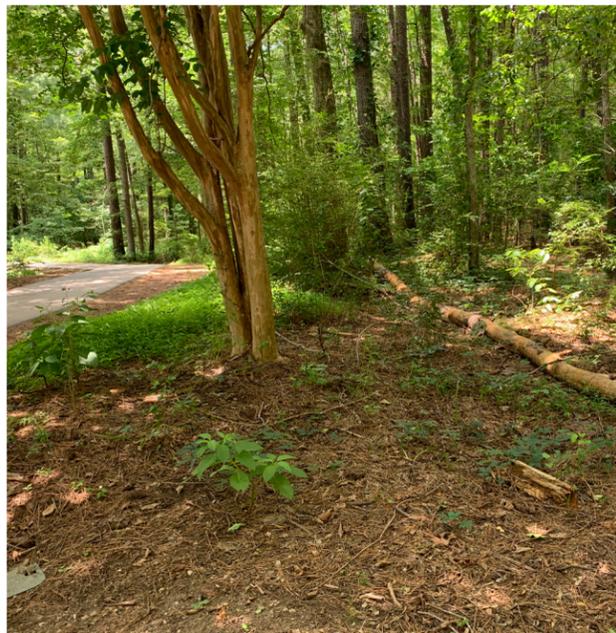


Figure 9.8 - Apex Community Park Greenway Trail

Current Total Parkland	Current Con- conservation Lands	Current LOS (Conservation land/Total Parkland)	Recommended LOS	Needed to Meet Recommended LOS (Current Pop.)	Needed to Meet Recommended LOS (Future Parkland if LOS is maintained at 10.03 ac/1000 pop = 822Ac)
629 Ac	181 Ac	28.8%	30%	188 Ac	246.6 Ac

Figure 9.9 - Level of Service - Conservation Lands

Applying this standard, the Town will need an additional 7 acres for current conservation acreage and an additional 65 acres in the next ten years if the future parkland acreage goal continues to be 10.03 acres per 1,000 population. The Town of Apex has a Resource Conservation Area (RCA) requirement outlined in the Unified Development Ordinance (UDO). This ordinance states RCA is required to protect sensitive environments including the floodplains, floodways, riparian streams and buffers, wetlands, mature forest areas, significant wildlife and plant habitats, and steep slopes when developing the land for all land uses. The UDO does allow for RCA to be dedicated to the Town and requires off-site RCA to be dedicated to the Town or other land conservancy organization, so there could be significant sites where the Town would prefer the dedication of RCA property. RCA requirement also includes historic and cultural sites, scenic views, farm ponds, rock outcrops, and cemeteries. Private open play lawns required by the UDO are not counted towards the total parkland acreage.

The PRCR Department should continue to pursue opportunities to acquire and protect areas for conservation, and where possible, link areas to form corridors for the benefits that they provide, ensuring high ecological functionality for future generations.

Greenway Trail Miles

The residents in the Town of Apex currently have use of 25.9 miles of trails in the park system compared to 29 miles per NRPA's upper quartile data. Greenway trails have grown in popularity as communities recognize the recreational, transportation, and quality-of-life benefits they provide. This analysis indicates that similar to many communities across the US that are undertaking the challenging task of constructing greenway trails, Town of Apex is also actively working to continue to develop trails and connect gaps in the current network.



Figure 9.10 - Level of Service- Greenway Trail Miles Benchmark



Current Offering	Current LOS per 1,000 Pop.	NRPA LOS (Upper Quartile)	Recommended LOS	Needed to Meet Recommended LOS (Current Pop.)	Needed to Meet Recommended LOS (Future Pop)
Total Miles	(Miles / Per 1,000 Population)			Miles	
25.9	0.41	0.46	.46	28.8	37.71

Figure 9.11 - Level of Service - Greenway Mileage

As shown in the chart above, the Town of Apex is currently offering greenway trail mileage very close to the NRPA's upper quartile recommendation. In order to meet the NRPA upper quartile recommendation current population, Apex will only require building a little over two miles of greenways and an additional 11.81 miles over the next ten years to meet the needs of the community. Apex already has more than 33 miles of additional greenways in the planning and design stage which shows that the Department is focusing on the demand for more greenway mileage. Greenway development, connectivity, and closing gaps in the overall system have long been goals of the department that are highly supported by residents. This should continue and PRCR staff should work closely with long-range planning and transportation staff to implement adopted plans.

Indoor Facility Space

Park and recreation agencies offer various indoor facilities to their residents. According to the 2022 NRPA Agency Performance Report, more than three in five agencies offer community centers and recreation centers. Also common are senior centers, performance amphitheaters and nature centers. NRPA Parks Metrics provides recommended level of service based on population served per facility. Based on the analysis shown in the chart above, the Town currently needs to add a minimum one recreation center and one nature center to meet the

Type of Indoor Facilities	NRPA Median Number of Residents Per Facility	Town of Apex	Needed to Meet Recommended LOS (Current)	Needed to Meet Recommended LOS (Future Pop)
Recreation Centers	40,817	0	1.5	2
Community Centers	44,933	1	1.3	1.8
Senior Centers	71,927	1	0.87	1.13
Nature Center	72,210	0	0.86	1.13
Cultural Arts Center	N/A	1	N/A	N/A
Aquatic Center	60,495	0	1.03	1.35

Figure 9.12 - Level of Service- Indoor Recreation Facility Types

recommended Level of Service by 2031, they will need two recreation centers and one additional community center. The computations shown in the table above reflect fractions of various types of indoor facilities that may be needed to support the projected needs of a growing community.

Based on population projections, the perspective of departmental staff, and community voices expressed during the engagement process, there is no doubt additional indoor recreation space is in demand.

While NRPA does not provide benchmarking data for indoor facility space per population, the project team has developed an industry standard based on the experience gained through working with communities across the US. The Town of Apex offers a variety of indoor recreation spaces including a community center, a cultural arts center, and a senior center. The Town of Apex provides 1.77 square feet of indoor recreation space per capita, which is below the benchmarking median of 2.0 square feet of indoor recreation space per capita.

Many times, the terms "recreation center" and "community center" are used interchangeably. While the services offered at these facilities can overlap, the primary purpose of a community center is more social gathering space compared to recreational services at a recreation center. For example, community centers offer amenities like meeting rooms, classrooms, conference rooms, and spaces for large group gatherings for larger community. They could include some indoor recreation amenities like gym, basketball court etc. Recreation centers focus on indoor recreation amenities and program offerings such as indoor fitness classes, art classes, or even an aquatic facility in a safe, inclusive environment.

Total indoor recreation space	Current LOS per capita	Recommended LOS	Needed to Meet Recommended LOS (Current Pop.)	Needed to Meet Recommended LOS (Future Pop.)
SQ FT			SQ FT	
86,294	1.37	2.0	125,378	163,972

Figure 9.13 - Level of Service- Indoor Recreation Space

Based on the calculations shown in the table above, Apex needs an additional 39,084 sq. ft. of indoor space for the current population and will need 77,678 sq. ft. additional space by 2031 to serve the growing population. The types of indoor facilities could include two small recreation centers at the two new park properties, a new nature center at the Nature Park, and a multigenerational community center to serve all ages and abilities.

Sports Fields and Other Park Amenities

The number of sports fields in Apex are benchmarked with NRPA Park Metrics data. Calculations are made from the 50,000 to 99,000 population categories to create a ratio to that of the current and projected population of Apex for the fields and facilities listed in the chart on the next page.

The NRPA divides soccer fields into youth and adult fields (7.6 and 4 respectively). Apex exceeds the NRPA in terms of the number of tennis courts, out of which 8 are also overlaid for pickleball. The LOS calculations for Apex include combined tennis/pickleball courts, whereas the NRPA makes a distinction for pickleball only. Additionally, Apex PRCR Department also uses 4 additional tennis/pickleball courts through Apex Elementary School level 4 use agreement which are not accounted for in the LOS calculations.

For other park amenities, Apex exceeds the NRPA standards for outdoor basketball courts and dog parks but shows deficit for playgrounds.

Field/ Facility	NRPA Parks Metrics	Town of Apex	LOS (Current Population)	LOS (Future Population)
Baseball/Softball	1/17,228 – Adult	6	3.6 – Adult	4.7 – Adult
	1/11,688 – Youth		5.3 – Youth	7.0 – Youth
Multipurpose fields (Turf)	1/13,151	3	4.8	6.2
Multipurpose fields (Synthetic)	1/34,104	10	1.8	2.4
Outdoor Basketball	1/8,477	9.5	7.4	9.6
Tennis courts	1/6,431	17	9.7	12.7
Pickleball courts	1/11,999	14*	5.2 pickleball only	6.8
Dog Parks	1/56,084	2	1.1	1.4
Playgrounds	1/3,807	13	16.4	21.5

* Out of 14 pickleball courts, 8 are combined tennis/ pickleball courts and 6 are exclusively pickleball courts at Pleasant Park.

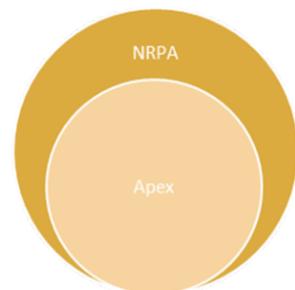
Figure 9.14 - Level of Service- Recreation Amenities

Operating Expenditures

Level of Service metrics can help assess if the PRCR Department is adequately funded to manage, operate, and maintain its parks and recreation facilities. Operating expenditure includes direct and indirect costs incurred by the Department to provide parks and recreation services to the community. This includes the staff salaries, benefits, tools and equipment, repairs and replacements of materials, and the actual expenses of managing a facility.

Apex has \$6,039,900 in operating expenditures while the National Recreation and Parks Association (upper quartile) reports \$11,824,509 which is almost twice that of Town of Apex. The Town of Apex is growing at a pace that is difficult for the PRCR Department to provide appropriate level of service within approved budgets and it appears that the department is underfunded for the services it currently provides. This plan will recommend funding strategies to help the Town increase their spending capacity.

Apex \$6,039,000
Total Operating
Expenditure



**National Recreation
and Parks Association
\$11,824,509**
Total (upper quartile)
Operating Expenditure

Figure 9.15 - Level of Service- Operating Expenditure Benchmark

Operating Expenditures per Full Time Equivalent

Another metric to demonstrate adequacy of expenditures for a park system is a ratio of expenditures per full time equivalent employee. This ratio shows the comparison for benchmarking other agencies, not only by the size of their park or population, but the cost per employee for maintaining the system.

As the chart to the right shows, Apex's operating expenditure is \$154,869 per FTE. This amount is \$12,529 more than National Recreation and Parks Association agencies at for the dollars per FTE in the upper quartile. The National Recreation and Parks Association agencies operating expenditures per FTE is \$142,340.

\$154,869/ FTE **\$142,340/ FTE**

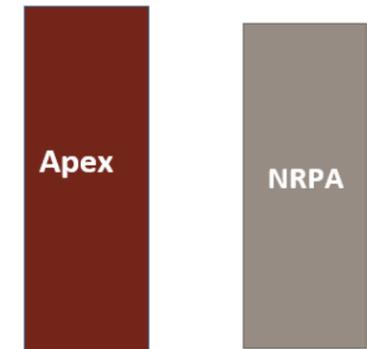
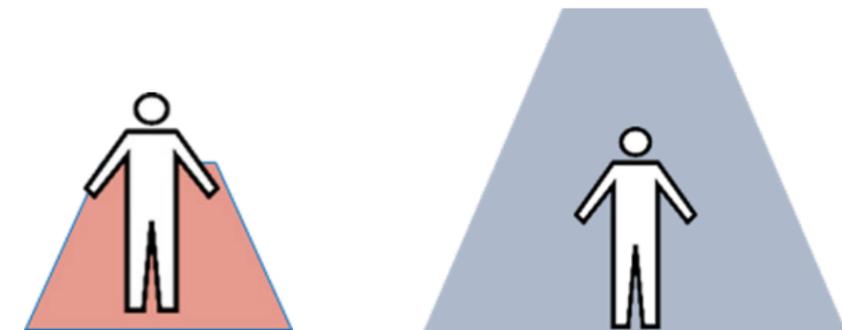


Figure 9.16 - Level of Service- Operating Expenditure per FTE

Operating expenditure per FTE is a metric that inversely relates total operating expenditures to the total FTE. As the PRCR Department is considered understaffed, the operating expenditures are naturally higher than the NRPA metrics. A parallel increase in the number of staff hired and the higher operating budget will help ensure that the Department continues the positive trend of operating expenditure per FTE ratio.

Operating Expenditures Per Capita

Using the same ratio calculation and the population of Apex, the per capita spending (\$96.35) is just over half that spent for operations expenditure per capita (upper quartile) as compared to National Recreation and Parks Association (\$180). According to the NRPA Parks Metrics data, per capita operations spending is inversely related to the population of the served which means as the population of the Town increases, the operating expenditure per capita ratio reduces if the operating budget number is constant. The funding strategies recommended in this plan can assist the Town in increasing investment in the parks and recreation system. An increased budget for a growing population will help the Department catch up to the NRPA parks metrics standard.



TOWN OF APEX
\$96.35 Operating
Expenses per Capita

NRPA
\$180 Operating
Expenses per Capita

Figure 9.17 - Level of Service - Operating Expenditures per Capita

Operating Expenditure per Acre of Parkland

The Town exhibits a significant difference between their per acre expenditure for parkland when compared to National Recreation and Parks Association per acre expenditure for parkland. Apex spends \$9,602 per acre of parkland on operating expenditures, and NRPA Agencies in upper quartile segment spend \$20,766 per acre and median at \$9,642. Apex is lower per acre than the NRPA upper quartile by \$11,164 but right at the median. As the parks use continues to increase and new parks are added to the system, the Department should expect to see a rise in expenditures related to parks maintenance, additional staff and resources, and program offerings.

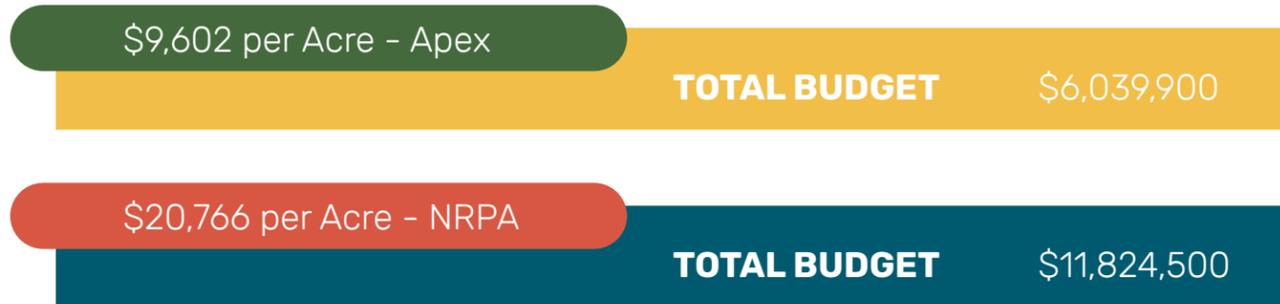


Figure 9.18 - Operating Expenditure per Acre of Park and Non- Park Sites

STAFF PER 10,000 RESIDENTS

The number of staff per 10,000 residents indicates the population served by the staff operating the parks and recreation services. NRPA agencies report 14.4 staff members per 10,000 residents while Apex is considerably less with 7.3 staff per 10,000 residents, showing a deficiency in the Apex staff members serving the residents of the Town. As Apex's population is projected to increase to 81,986 by 2031, the Department will need an additional 72 staff members to ensure high quality recreation services are continued to be offered. It should be noted that NRPA Parks Metrics provides the data-driven objective baseline comparison at national level which needs to be contextualized for Apex and measured against other subjective criteria such as staffing workload, interdepartmental collaborations, contracted services, joint-use agreements, and level of expectations for quality of service.

The Apex PRCR Department has been proactive in requesting additional positions. As of June 2022, the Department will add eight new positions by next year, bringing the total FTE to 54 and LOS number to 8.6, closer to NRPA median number. Additional staffing positions are suggested in the recommendations chapter.

Town of Apex Total Current Staff	Staffing LOS Staff/ 10,000 Pop	NRPA Parks Metrics LOS	Staffing Need (Current Population)	Staffing Need (Future Population)
46	7.3	14.4	90	118

Figure 9.19 - LOS - Staffing Benchmark

STAFF DEDICATED TO PARK OPERATIONS AND MAINTENANCE

Comparing the National Recreation and Parks Association agencies to Apex, 117.3 staff members are on the staff of agencies in the upper quartile of those with populations of 50,000 to 99,999. Apex has a staff of 27 members, while the National Recreation and Parks Association agencies have four times that amount of personnel dedicated to operations and maintenance. The PRCR Department plans to add three new full-time positions in the coming year. While this is progress, the department is still significantly understaffed and will have to continue the efforts to bring in new positions to ensure the current staff is not overwhelmed with work arising from new park and greenway facilities.

DEDICATED MAINTENANCE STAFF

The National Recreation and Parks Association does not provide data for the upper quartile or lower quartile for the percent of staff dedicated to operations and maintenance. This metric will use the median population for the comparison. According to the 2022 Parks Metrics report, on average, an agency's full-time staff dedicated their time to the following general activities:

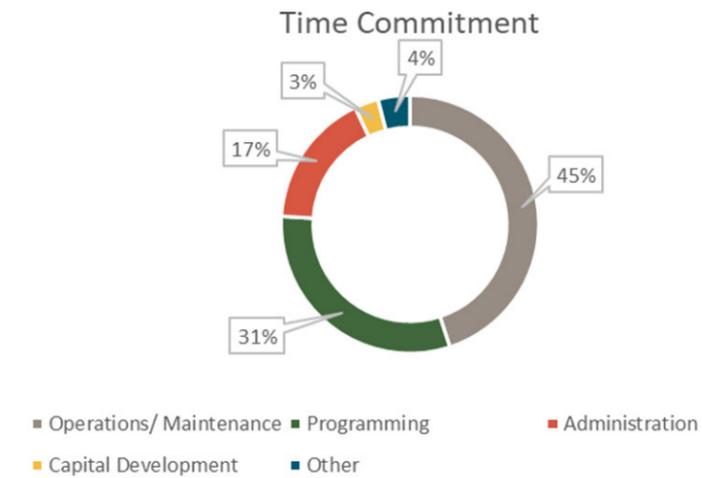


Figure 9.20 - Staffing Responsibilities per 2022 NRPA Parks Metrics Data

APEX
27
staff members dedicated to
operations + maintenance

NRPA Parks Metrics
117.3
staff members dedicated to
operations + maintenance

NRPA median for the percent of total FTEs dedicated to operations and maintenance is 45%. Apex has a larger percentage of operations and maintenance staff at 58% of all agency staff. The PRCR Department currently does not have a balanced staff distribution which is the result of the PRCR Department being understaffed. The visioning sessions conducted with the staff underscored the need for additional hiring in the administrative and planning areas. This will also help reduce the current gap that shows heavy focus on operations and maintenance.



Apex has **58%** staff as operations and maintenance

NRPA's Parks Metrics data shows **45%** of staff in operations and maintenance



Figure 9.21 - Town of Apex Staff

GEOGRAPHIC DISTRIBUTION OF PARKS, FACILITIES, AND AMENITIES

Understanding the existing geographic distribution of parkland and facilities helps identify gaps in the current level of service provided and aims to offer more recreation opportunities to areas that appear underserved. This component of the Level of Service analysis looks at where parks, recreational amenities, and indoor facilities are located across the Town of Apex, identifies gaps, and speculates on why gaps occur to inform recommendations for enhancing the equitable distribution of recreation opportunities.

Parkland Distribution

The Town of Apex's planning boundary is determined from previous planning efforts such as the Transportation Plan and the Future Land Use Map. Based on our analysis, the Town of Apex's parkland appears to be well distributed throughout the Town. The two largest parks, Apex Community Park and the Nature Park, serve the northeast and western areas respectively. Hunter Street Park offers unique programming opportunities in the center of downtown and Salem Pond Park offers a balance of athletic programs and passive recreation in the northern part of the Town. As the Town is growing towards the south and west, Apex has invested in a 92-acre destination facility, Pleasant Park, and has acquired two large tracts of land to provide access to parks and open space in the northwest and western sections, there is also an approved planned development which will provide additional park acreage in the south section of the Town. While the Town has been proactive and is making concerted efforts to ensure equitable access to parks and facilities for the rapidly growing community, a closer look at the distribution reveals gaps. For example, southeastern and southwestern sides of the town are significantly devoid of any parkland or indoor facilities. While the Southwestern portion is closer to the fingers of Jordan lake conservation areas, the eastern side is land locked with Town of Cary and Town of Holly Springs jurisdictions. Through this analysis, it is apparent gaps in access to public parks exist, however, it is important these gaps be further investigated to determine if providing parks/ land is possible and/or truly needed in these areas.

Access to Parks

The Trust for Public Land (TPL), Urban Land Institute, and NRPA joined hands in creating a 10-minute walk to a park campaign with a goal that everyone should be able to reach the nearest park or open space within ten minutes or half a mile distance from their home. This initiative is being embraced by parks and recreation agencies across the US to achieve equitable access to parks, recreation facilities, and programs to help residents achieve positive health outcomes related to walkability and access to spaces that encourage physical activity.

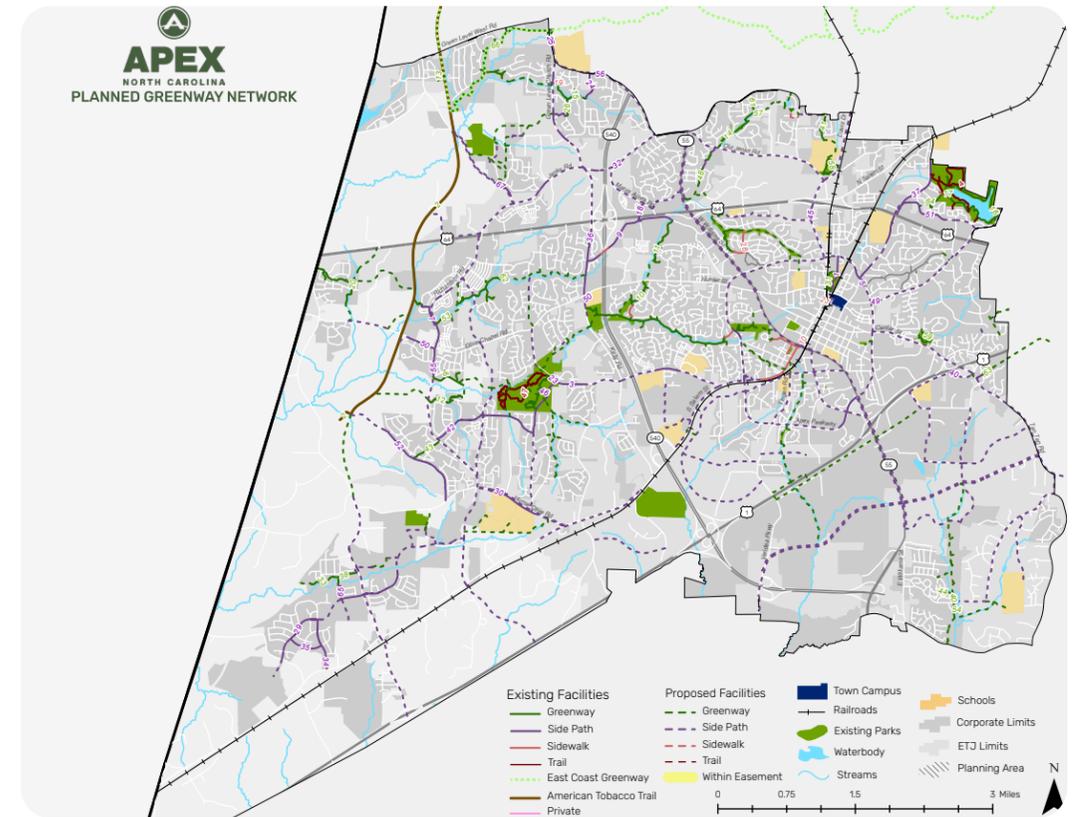


Figure 9.22 - Current Geographic Distribution of Parks, Facilities, and Amenities

The Trust for Public Land shares a database that tracks park-related data for communities around the country. The analysis is based on census data and it provides metrics for community-wide walkability including demographic characteristics of those living within a 10-minute walk of a park. For each park, TPL created a 10-minute walkable service area using a nationwide walkable road network dataset provided by ESRI. The analysis identifies physical barriers such as highways, train tracks, and rivers without bridges, and chooses routes without barriers.

According to the 2022 TPL report, 46.5 percent of Apex residents are within a 10-minute walk of a park, which is below the national average of 55 percent. If this deficit were to be addressed, the Town of Apex would prioritize connectivity to make parks and facilities accessible by walking which provides the following benefits:

- Increased opportunities for exercise
- Enhanced quality of life
- Expanded access for at-risk youth and low-income families
- Improved connections and social relationships among community members

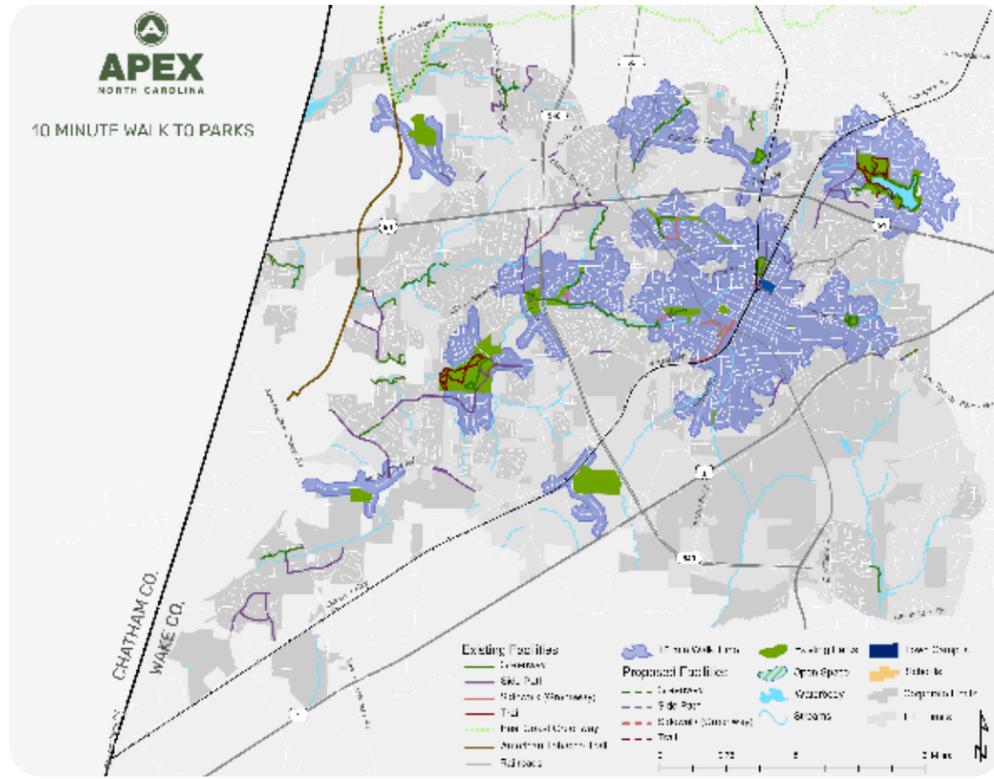


Figure 9.23 - 10-minute Walk Map

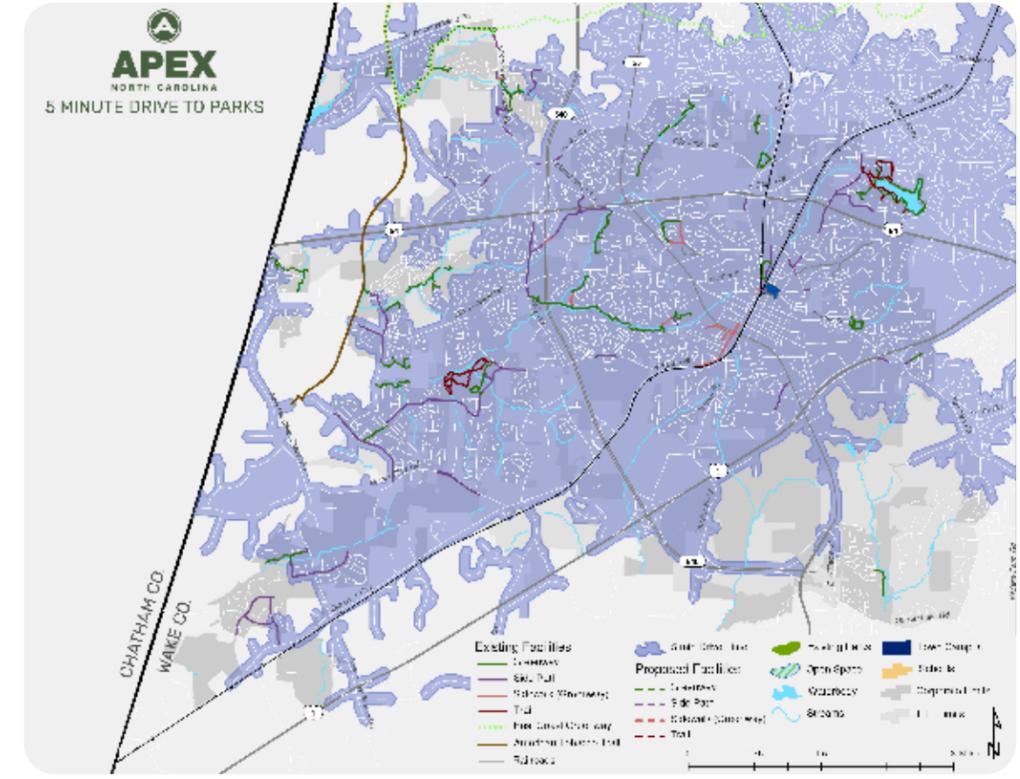


Figure 9.24 - 5-minute Drive Time Map

As shown in the 10-minute walk to a park map above, the older part of the Town shows better connectivity to parks and open spaces. This is partly due to the density of the older town and well-developed roads and sidewalk connections to parks. Community Park and Nature Park have isolated 10-minute walk clusters around the access points, whereas the future Pleasant Park has limited access because the railroad and highway 540.

The existing greenway network is considerably fragmented and through recommendations in this plan, the Town will adopt a long-term vision for a system-wide connected network. Existing greenway trails connect parks and residential areas to their surroundings. However, many greenway trails currently dead end and provide only out-and-back walking opportunities. This situation will be rectified as the network expands and offers additional connections. The map illustrates how the greenway system effectively expands the residents within a 10-minute walk of a park or greenway facility. Though the smaller segments show larger 10-minute walkshed coverage, there are many gaps created by typical suburban development patterns. Various challenges regarding connectivity and gaps are addressed in the greenway chapter of this document. As shown on the map for greenway walkability, the southeastern portion of Town still shows an absence of parks, open space, and greenways.

While the 10-minute walk campaign is often used as a tool to measure level of service to access parks and open space, many suburban communities across the country have noted that the lack of density presents challenges in developing the necessary infrastructure to achieve this goal. For this reason, we included a 5-minute drive time analysis to Apex's existing parks. As shown in the drive time map below, the majority of Apex's population is within a 5-minute drive of an existing park. A close look at the map still shows a significant gap in the southeastern area and minor gaps in the north and southwest planning boundary.

Social Vulnerability and Access to Parks and Greenways

The equitable distribution of parks, open spaces, and greenways can be analyzed through the lens of a 10-minute walk time map overlaid with socially vulnerable areas of the Town. Government investment in parks is intended to create benefits for the whole community. For example, providing places to exercise in parks creates an individual benefit for those who use the space, but provides expanded benefit to the community by improving health outcomes and minimizing health care costs that individuals with sedentary lifestyle habits tend to incur. In areas with higher social vulnerability, a park may provide a valuable resource to an individual who may not otherwise have access to these resources.

The Social Vulnerability Index combines demographic characteristics commonly used as indicators for areas considered at risk of experiencing negative social or health outcomes. Social vulnerability includes an analysis of socioeconomic status, household composition and disability, minority status and language, and housing and transportation to determine the area's vulnerability. The dataset for this analysis was created by the Center for Disease Control and Prevention with the intention of assisting communities after a natural disaster, now also used for community planning in the areas of public health, parks and recreation, and greenways.

The 10-minute walk areas are overlaid with the social vulnerability index information to identify connections between social vulnerability and park location. The map indicates that the Town of Apex has overall low social vulnerability West of highway 540 and higher socially vulnerable areas concentrated in the older part of the town and the southeastern part. As mentioned earlier, the older part of the town has overall higher walkability because of the developed infrastructure whereas areas south of US 1 have higher socially vulnerable population and no parks, open spaces, or greenways.

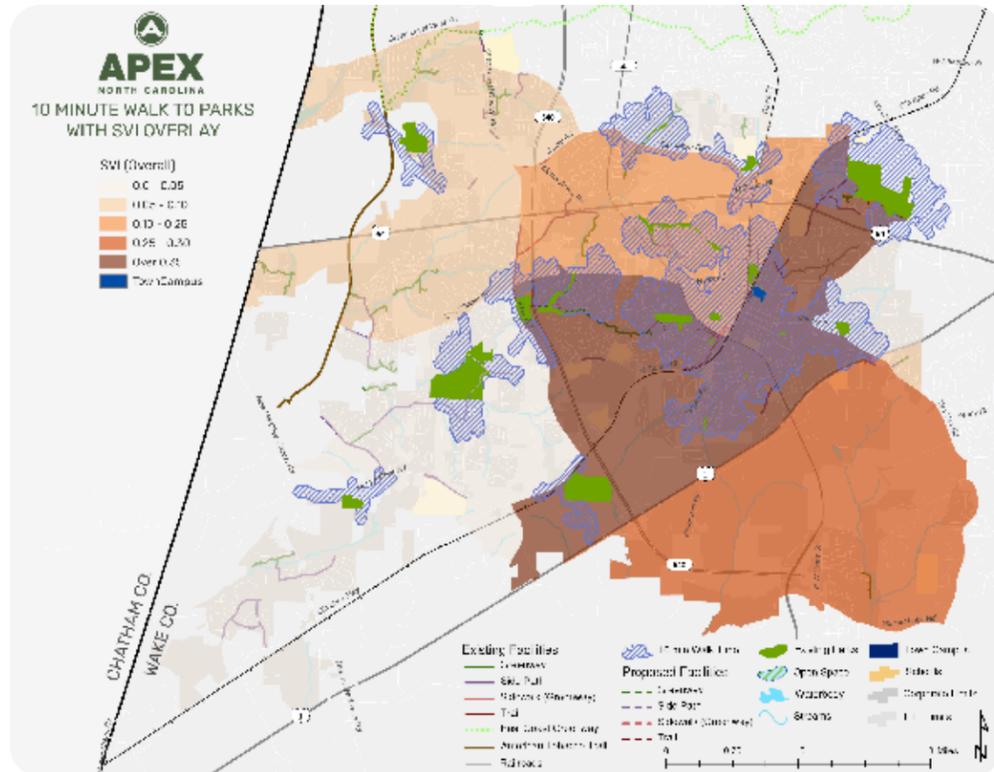


Figure 9.25 - 10-minute walk with SVI Overlay Map

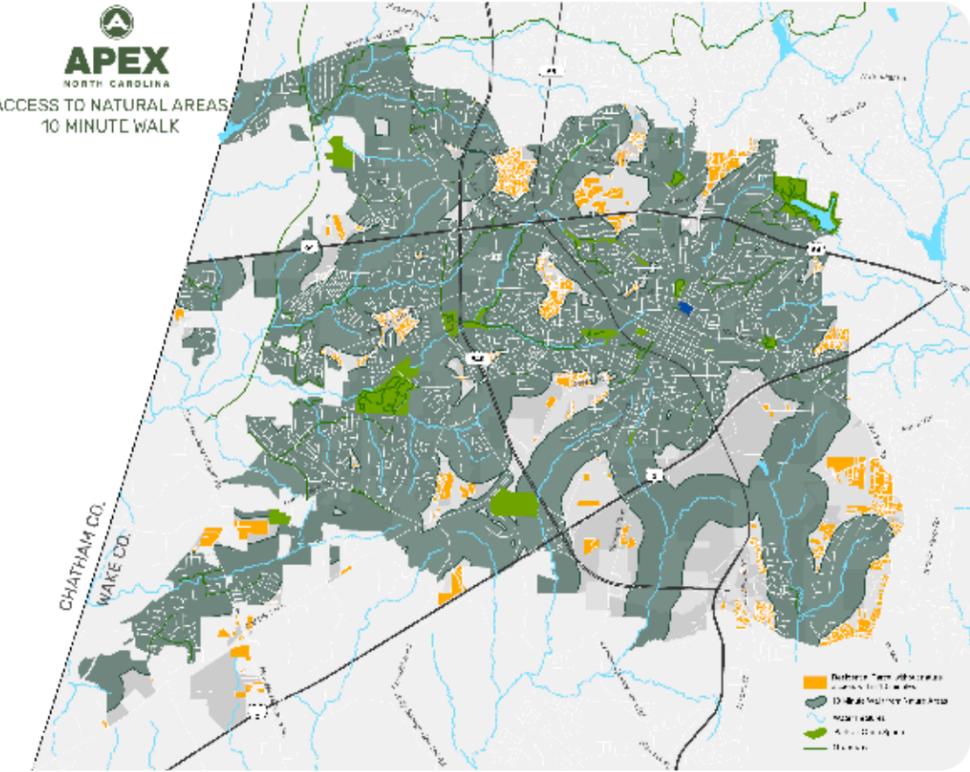


Figure 9.26 - Access to Nature Map

Access to Nature

Several studies in recent years have shown the positive correlation between access to nature and public health outcomes. High quality green spaces in the form of parks and conservation areas are widely viewed as health promoting infrastructure investments and have been linked to benefits such as recovery from mental stress, reduction in crime, reduced morbidity in multiple disease categories, and overall social cohesion¹. Additionally, a growing body of research suggests that children disproportionately suffer the long-term developmental consequences of limited experiences in nature. Increased urbanization combined with limited access to natural spaces and increased time indoors has resulted in children’s diminishing direct contact with nature. Evidence that children are spending more time indoors and less time in nature has also sparked research across the health and psychological sciences that links children’s diminished contact with nature to important childhood health trends, including increased levels of depression and increased incidences of cognitive disabilities, obesity, and diabetes. The positive effects of nature exposure include improved cognitive functioning (including increased concentration, greater attention capacities, and higher academic performance), better motor coordination, reduced stress levels, increased social interaction with adults and other children, and improved social skills².

¹ Beyer Kirsten M. M., et.al; “Exposure to Neighborhood Green Space and Mental Health: Evidence from the Survey of the Health of Wisconsin”; International Journal of Environmental Research and Public Health; 2014.

² Strife Susan and Downey Liam; “Childhood Development and Access to Nature: A New Direction for Environmental Inequality Research”; National Institute of Health; 2009.

For these reasons, the project team mapped access to natural spaces including parks, greenways, open spaces, and buffer areas around blue-line stream corridors to understand the current gaps in providing access to nature within the limits of the Town of Apex. As shown in the map below, there are several pockets of residential areas that currently do not have access to natural areas. Again, the majority of gaps are seen in the south and southwest part of the Town and towards the west, close to Jordan Lake conservation areas. Future greenway development through the stream corridors’ buffers and overall growing greenway network connectivity will help the Town provide better access to nature for Apex residents. The Town is also making efforts to increase the overall tree canopy within the corporate limits on private residential properties through the efforts by the Planning Department and Tree Citizen Advisory Panel. The PRCR department can join forces in these efforts through innovative programming such as community planting days on park properties or vegetation management through volunteerism.

There is mounting evidence that suggests playing in nature also has positive outcomes in social skills development and an increased awareness regarding environmental protection amongst children. Apex residents expressed the interest and inclination for environmental education and natural resources protection through community engagement. There is a great opportunity for the PRCR department to leverage the research findings in developing new nature-based programs for Apex youth and multi-generational nature-based facilities and programs. There is also an opportunity to investigate public health grant funding options to support these programs.



Play Equity

According to the available research data, there is a positive correlation between access to open space and play opportunities and positive health outcomes for younger populations. During the COVID pandemic, play areas with barriers to easy access contributed to rising rates of children’s mental stress and depression and rising obesity rates because of a lack of physical activity. The concept of play equity considers equitable access to play areas and structured and non-structured recreational activities within easy reach of children that are safe and welcoming. The project team used existing play areas within parks and schools within the Town of Apex as an example to show the current state of play equity.

As shown in the map below, older parts of the Town have better access to play areas. The residential areas along the periphery of the Town do not have access to public play areas. These subdivisions may have HOA-owned play areas and central open spaces that are not part of this analysis. The town should investigate opportunities for joint-use agreements with public and private educational institutions, and libraries to increase equitable access to play for its younger residents.

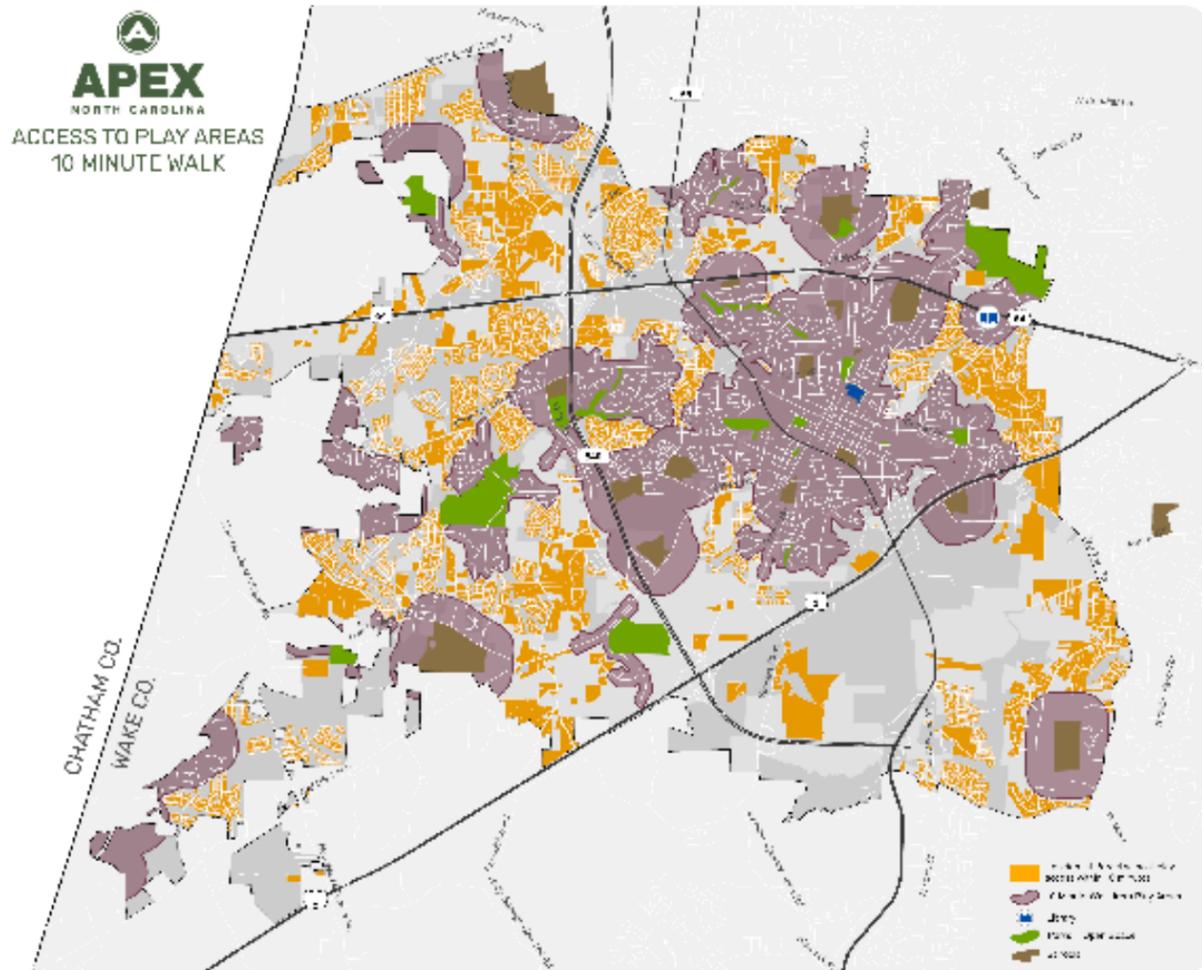


Figure 9.27 - Play Equity Map

SUMMARY OF FINDINGS

Benchmarking results indicate that, for many metrics, the Town of Apex excels when compared with the low quartile and median data sets. The town has been proactive in securing future parkland to provide a higher level of service for its growing population. Similarly, the Town is intentionally focused on developing a robust greenway network demonstrated by the number of miles constructed that are in the planning and design stage.

Town of Apex ranks low for indoor facility space and currently does not offer indoor recreation space for aquatics or a dedicated nature center or environmental education center. The plan recommendations will suggest strategies to close these gaps.

This analysis reflects the Town of Apex lacks staffing levels per capita and total FTE for the given population range. While the Department is planning to add more recreation staff in the coming years, there are additional staffing resources needed for administrative and planning areas.

While several Level of Service metrics revealed needs for additional resources such as parkland acquisition, conservation lands, additional greenway mileage, and staffing, these standards should not be considered absolute; but contextualized by the PRCR Department annually to ensure that they reflect the values and guiding principles identified in this plan. The standards can be changed or updated based on the changing priorities or new projects to truly reflect the needs of the community and the Department’s capacity to deliver high quality services.



Figure 9.28 - Town of Apex Staff