

JUNE 2023 DRAFT

**## halff** 



# **ACKNOWLEDGMENTS**

The following individuals are recognized for their significant contributions to the preparation of the City of Plano Parks, Recreation, Trails & Open Space Master Plan Update.



#### CITY COUNCIL

John B. Muns, Mayor
Kayci Prince, Mayor Pro Tem
Maria Tu, Deputy Mayor Pro Tem
Anthony Ricciardelli, Councilmember
Rick Horne, Councilmember
Shelby Williams, Councilmember
Julie Holmer, Councilmember
Rick Smith, Councilmember

# PARKS AND RECREATION PLANNING BOARD

Hayden Padgett, Chair Justin Adcock Ying Cao Brian Chaput Scott Goebel Patricia Q. Johnson Bob Kehr Neal Liang Gregg A. Miller

#### **CITY STAFF**

Ron Smith, Director of Parks & Recreation Renee Jordan, Park Planning Manager Susie Hergenrader, Recreation Services Manager Liz Del Turco, Senior Park Planner Lance Knox, Trail System Planner Dave Angeles, Parks Services Manager

#### **CONSULTANT TEAM**

Halff Associates Inc.

Lenny Hughes, PLA
Kendall Howard, AICP
Kelsey McNiece
Abel Verdi
Brinkley Sargent Wiginton Architects
Dwayne Brinkley, AIA
ETC Institute

Ryan Murray

# TABLE OF CONTENTS





#### **EXECUTIVE SUMMARY**

- 2 Purpose of Plan
- 4 Context
- 5 Plan Vision and Goals
- 6 Existing System Snapshot
- 7 Key Recommendations
- 10 Top Priority Items

#### INTRODUCTION

- 12 Introduction
- 13 Master Plan Purpose
- 15 Master Plan Concept
- 17 Planning Process
- 19 TPWD Compliance and CAPRA Accreditation Components

#### 2 COMMUNITY CONTEXT

- 22 Planning Area
- 23 City History
- 25 Natural & Cultural Resources
- 25 Physical Development
- 27 Demographics
- 33 Relevant Plans and Studies
- 38 Trends and Lifestyle Benchmarking

#### 3 VISION

- 44 Introduction
- 45 Stakeholders
- 47 Public Input
- 51 Vision
- 53 Master Plan Goals and Objectives





/	D A DIVO	A TI II ETI O C	_	ODENI	CD 4 OI
4	PARKS,	ATHLETICS,	8	OPEN	SPACE

- 56 Introduction
- 59 Park Classification
- 61 Parks Inventory
- 75 Needs Assessment
- 85 System-wide Recommendations

#### 5 RECREATION AND AQUATIC FACILITIES

- 102 Introduction
- 105 Facility Inventory
- 107 Needs Assessment
- 115 Recommendations

#### TRAILS & BIKEWAYS

- 118 Introduction
- 121 Trail and Bikeway Network
- 131 Needs Assessment
- 133 Recommendations

#### **IMPLEMENTATION**

- 142 Introduction
- 143 Action Plan
- 147 Funding Sources
- 149 TPWD Compliance and CAPRA Accreditation Components

#### **APPENDICES**

- 154 Trust for Public Land ParkScore
- 160 Special Area Park Opportunities
- 168 Special Review Park and Recreation Facility Assessment
- 206 Survey Results
- 261 Bibliography

# LIST OF FIGURE AND TABLES

COMMUNITY CONTEXT	RECREATION AND AQUATIC FA
Figure 2.0 Location of Plano in DFW Metroplex22	Figure 5.0 Engagement Results: Desire
Figure 2.1 Plano Natural & Cultural Resources26	Figure 5.1 Engagement Results: Desire
Figure 2.2 Historical Growth in Plano, 1950-202028	Figure 5.2 Engagement Results: Desire
Figure 2.3 Age and Gender, 202028	Figure 5.3 Recreation and Aquatic Fo
Figure 2.4 Plano Park Master Plan (2021)34	Figure 5.4 Recreation Center LOS – Re
	Figure 5.5 Recreation Center LOS – N
Table 2.0 Race and Ethnicity, 2010-202029	Figure 5.6 Senior Center LOS – Region
Table 2.1 Household Characteristics, 2010-202030	Figure 5.7 Senior Center LOS – Nation
Table 2.2 Benchmark Community Comparison39	# TD A II O o DIVELA A VO
	6TRAILS & BIKEWAYS
A PARKS, ATHLETICS, & OPEN SPACE	Figure 6.0 Existing and Planned Trail a
Figure 4.1 Existing Park System Map60	Figure 6.1 Trail Counters in Plano
Figure 4.2 Neighborhood Park Service Area76	Figure 6.2 Bicycle Transportation Plan
Figure 4.3 Community Park Service Area78	
Figure 4.4 Existing Park Service Area80	Table 6.0 Current Trail Network
Figure 4.5 Individual Park Review Sites84	Table 6.1 Trail User Counts - 2021
Figure 4.6 Athletic Fields and Practice Space92	Table 6.2 Benchmark Community Trai
Figure 4.7 2023 Park Master Plan98	Implementation
	7 Implementation
Table 4.0 Current and Target LOS for All Parks79	Table 7.0 Sample Improvements
Table 4.1 Amenities Level of Service81	APPENDICES
	Figure 8.1 TPL Park Accessibility Map.
	Figure 8.2 TPL Priority Areas for New Po

<b>S</b> RE	ECREATION AND AQUATIC FACILITIES	
J	Figure 5.0 Engagement Results: Desire for New Facilities	103
	Figure 5.1 Engagement Results: Desire for New Programs	104
	Figure 5.2 Engagement Results: Desire for New Amenities	104
	Figure 5.3 Recreation and Aquatic Facilities	
	Figure 5.4 Recreation Center LOS – Regional Benchmark Comparison	
	Figure 5.5 Recreation Center LOS – National Benchmark Comparison	
	Figure 5.6 Senior Center LOS – Regional Benchmark Comparison	
	Figure 5.7 Senior Center LOS – National Benchmark Comparison	112
<b>L</b> TR	AILS & BIKEWAYS	
0	Figure 6.0 Existing and Planned Trail and Bikeway Network	124
	Figure 6.1 Trail Counters in Plano	
	Figure 6.2 Bicycle Transportation Plan	
	G : : : - : , : : : : : : : : : : : : : :	
	Table 6.0 Current Trail Network	125
	Table 6.1 Trail User Counts - 2021	
	Table 6.2 Benchmark Community Trail Level of Service	131
- Inc	nolomontation	
III	nplementation Table 7.0 Sample Improvements	1 4 /
	Table 7.0 Sample Improvements	146
ΑF	PPENDICES	
	Figure 8.1 TPL Park Accessibility Map	156
	Figure 8.2 TPL Priority Areas for New Parks	
	Figure 8.3 Legacy Park Concept	
	Figure 8.4 Downtown Park Concept	

# LIST OF ACRONYMS

AASHTO: American Association of State Highway and Transportation

Officials

ACS: American Community Survey

ADAAG: Americans with Disabilities Act Accessibility Guidelines

BAC: Bicycle Advisory Committee BMP: Best Management Practices CIP: Capital Improvement Program

CMAQ: Congestion Mitigation and Air Quality

CRIS: Crash Record Information System

ETJ: Extraterritorial Jurisdiction

**FHWA**: Federal Highway Administration **FTE**: Full-Time Equivalent Employee

FM: Farm-to-Market Road

ITE: Institute of Transportation Engineers

LOS: Level of Service

LWCF: Land and Water Conservation Fund

MUD: Municipal Utility District

**NACTO:** National Association of City Transportation Officials **NCTCOG:** North Central Texas Council of Governments

NPS: National Park Service

NRPA: National Recreation and Parks Association

PD: Police Department

PISD: Plano Independent School District

PROWAG: Public Right-of-Way Accessibility Guidelines

RAISE: Rebuilding American Infrastructure with Sustainability and Equity

ROW: Right-of-Way SH: State Highway

SRTS: Safe Routes to School

TAS: Texas Accessibility Standards

TCEQ: Texas Commission on Environmental Quality TDLR: Texas Department of Licensing and Regulations

TIP: Transportation Improvement Program

**TLOS**: Target Level of Service

TMSP: Texas Main Street Program

TMUTCD: Texas Manual of Uniform Traffic Control Devices

TPL: Trust for Public Land

**TPWD**: Texas Parks and Wildlife Department **TRAPS**: Texas Recreation and Parks Society

TTI: Texas Transportation Institute

**TWDB**: Texas Water Development Board **TxDOT**: Texas Department of Transportation

**USACE**: U.S. Army Corps of Engineers



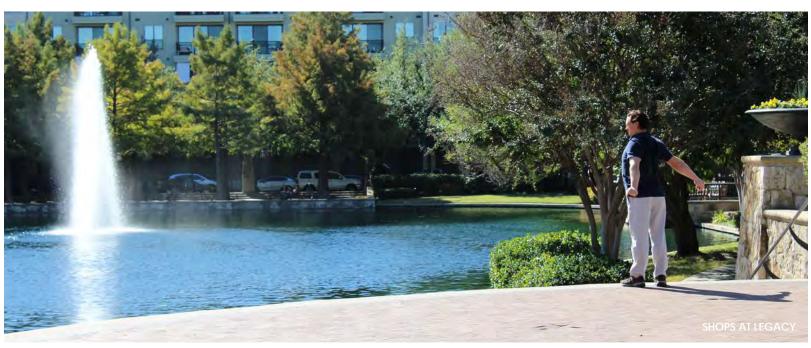




# EXECUTIVE SUMMARY

#### PURPOSE OF PLAN

The City of Plano has long been a leader in parks and recreation. More than thirty years ago, a visionary City Council and Park Board had the foresight to preserve land for parks adjacent to schools and along creeks. This resulted in a strong parks and recreation system that is accessible to residents and that is often used as a model for other communities. Since most of the parks were developed over thirty years ago, much of the park infrastructure is aging and in need of replacement. Additionally, as Plano's population has grown, there is a need for additional parkland to meet the needs of existing residents.



Plano Parks and Recreation must respond to these new realties to ensure that Plano maintains its quality of excellence through a park system that serves the needs of the community today and in the future. Thus, the purpose of this Master Plan Update is to take an objective look at parks, recreation, trails, and open space in Plano and position the city in such a way that future generations will want to continue to live, work, and play in Plano even as competition in the DFW Metroplex continues to increase.

While the Parks and Recreation Master Plan Update makes general suggestions for future improvements to Parks and Recreation facilities, the development and renovation of specific parks is made through a cooperative process with residents. Park Planning staff conduct community outreach meetings, surveys, and design charrettes for each improvement project to ensure the completed park responds to community needs. The Parks and Recreation Master Plan functions as the Department's long-term action plan, providing guidance to the department, establishing goals and recommendations, and identifying needs related to both existing and future facilities. While Chapter 7 discusses available local, state, and federal funding sources, this plan update is not a funding document. All park land acquisitions and improvements are funded through voter-approved bond authority initiatives and the City's annual budget process, with City Council approval.



#### KEY COMPONENTS ADDRESSED BY PLAN:

#### COMPLETING THE PARKS SYSTEM

There are approximately 196 acres of undeveloped parkland within the City. This master plan document includes **priorities** for developing undeveloped parks as well as identifies priority areas for strategic land acquisition to help meet the needs of Plano's growing population.

#### ADDRESSING AGING INFRASTRUCTURE

Just like roadways and utilities, parks and recreation facilities include infrastructure that needs to be replaced over time. Playgrounds, pavilions, and athletic fields are just some of the infrastructure that are aging in parks that need to be replaced. This master plan document identifies updated amenities that reflect parks and recreation trends that can be incorporated into parks when they are renovated.

#### MEETING PARKLAND NEEDS

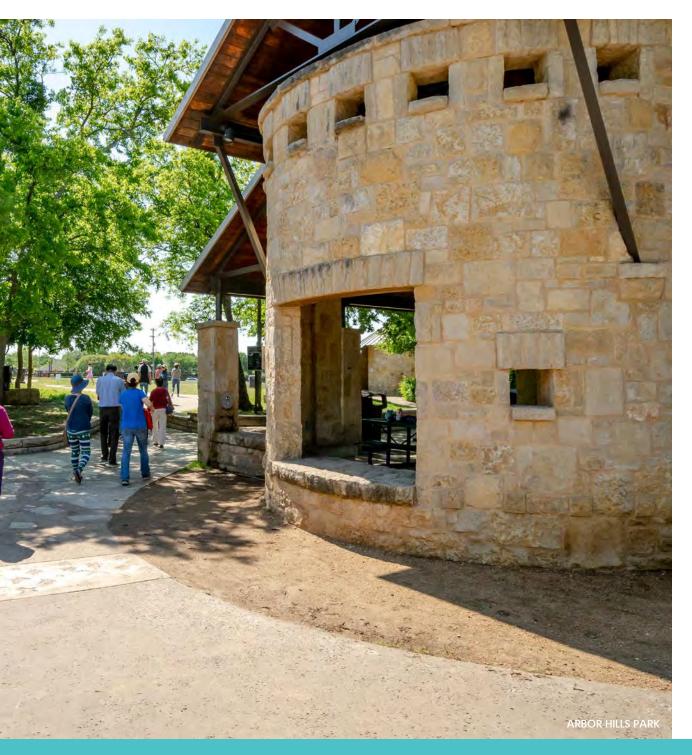
Plano has experienced tremendous growth with the continued concentration of corporate headquarters and establishment of successful commercial centers. This has brought additional residents to the city, which translates into a need for additional parkland. This master plan document assesses the parkland level of service and identifies strategies for incorporating parks and open space with limited land available.

#### MAINTAINING OUALITY OF EXCELLENCE

As evidenced by the City's tagline – City of Excellence – Plano takes pride in providing quality services and programs. This master plan document is based on the vision to provide excellent parks, recreation facilities, trails, and open space and the recommendations reflect strategies to enhance the system.







#### CONTEXT

Plano is nearing build-out, meaning there is a lack of available, affordable land for the City to acquire and develop into parkland. Therefore, the focus of this plan is on improving existing parks and pursuing land acquisition as opportunities arise and increasing accessibility for residents. Additionally, the continued concentration of corporate headquarters taking shape within the northwest quadrant, development of successful mixed-use centers, extension of DART rail service, redevelopment of areas throughout the City, and shifting demographics are all major contributors to growth and change within the city. This growth was addressed in the Plano Comprehensive Plan adopted in 2021, which serves as a long-range guide for future growth, priorities, services, development, and redevelopment in the city. This Master Plan is aligned with the overall vision, policies, and actions of the Comprehensive Plan.

Furthermore, parks and recreation facilities bring extensive economic value to Plano. In 2017, the Trust for Public Land studied the economic benefits that the park and recreation system generates in Plano. The study found that parks in Plano raise the market value of nearby homes by nearly \$337 million annually. Sports and tournament-related tourism generates \$39.2 million annually in direct visitor spending. Finally, exercise at these facilities yields an annual medical cost savings of \$21.2 million. Therefore, investing in parks and recreation in Plano yields tangible economic and health benefits to individuals and the overall community.

# PLAN VISION AND GOALS

Arobust citizen and stakeholder engagement process was initiated to seek input on what the future of parks, recreation, trails, and open space should look like in Plano during the 2018 master plan process. The resulting plan vision and goals are representative of the input heard throughout the engagement process. During the master plan update, the vision and goals were reviewed to ensure they remained consistent with the needs and desires of Plano residents.

#### **VISION**

Complete the Parks and Recreation system by anticipating future needs and providing excellent parks, recreation facilities, trails and open space.

- GOAL: Encourage healthy lifestyles by providing an appropriate mix of facilities and range of activities throughout the city.
- GOAL: Renovate and modernize park infrastructure so they offer similar elements across the city but are unique to the surrounding area.
- GOAL: Provide for park and recreation opportunities that reflect the growing diversity of the city and allow for social interaction.

GOAL: Maintain high standards for planning, implementing, maintaining, and operating quality parks, recreation facilities, trails, and othletic fields.

GOAL: Expand upon trail and bikeway linkages between parks, schools, commercial areas, and other cities.

GOAL: Expand communications and outreach to encourage residents to use facilities and participate in activities.

GOAL: Create exciting and inviting park spaces in special area parks.

GOAL: Utilize environmentally and fiscally sustainable practices for developing and maintaining parks, trails, and facilities.

GOAL: Ensure long-term financial stability of the city's park and recreation facilities.

GOAL: Maintain and promote high standards for athletic facilities.





# EXISTING SYSTEM SNAPSHOT

The total size of the Plano park system is 4,408 acres, which includes undeveloped park sites. This accounts for approximately 10% of Plano's total city limits. The system is made up of a variety of park and facility types:

#### **Neighborhood Parks:**

Plano currently has 31 neighborhood parks, which are generally 7 to 10 acres in size and serve surrounding residents within a ½ mile radius. Typical amenities include playgrounds, picnic tables, pavilions, walking paths, and open areas for free play.

#### **Community Parks:**

Plano currently has 20 developed community parks, which are generally at least 25 acres in size and serve surrounding residents within a 1 mile radius. Both passive and active recreation elements are found in community parks. Of the existing community parks, 16 are designated as athletic complexes featuring baseball, softball, soccer, and other sports.

#### **Linear Parks:**

Plano currently has 16 linear parks, which are narrow stretches of green spaces that link residential areas, schools, public facilities, and other parks. Amenities typically include trails and related amenities.

#### Special Use Facilities:

Plano has 9 special use facilities, which are parks that serve a specific, unique purpose such as memorials and cemeteries.

#### **Special Area Parks:**

Plano has three undeveloped parks located within the greater downtown area and Northwest Legacy area, which were areas of the City assessed in more detail in the 2018 Plan due to lack of green space.

#### **Open Space Preserves:**

Plano has 4 existing open space preserves which provide passive recreation opportunities and also preserve environmentally-sensitive areas. Amenities include trails and nature viewing areas.

#### **Golf Courses:**

Plano has two municipal golf courses each with 18 holes. Pecan Hollow is located in the southeastern corner of Plano and Ridgeview Ranch is in the northernmost part of the City.

#### **Recreation and Aquatic Facilities:**

There are ten recreation and aquatic facilities within the city. This includes recreation centers, aquatic centers, as well as a tennis center, nature center, and senior center.

#### Trails and Bikeways:

There are 98 miles of paved trails, 12 miles of soft-surface trails, and 150 miles of signed bike routes within the City.

Plano currently has 15.09 acres of developed and undeveloped parkland per 1,000 residents. With the expected population growth, by 2050 the parkland level of service will be 13.32 acres per 1,000 residents. According to the needs assessment, by the year 2050, the City will need to acquire 557 acres of parkland to meet established parkland level of service targets. Given that the City is primarily built-out, acquiring additional acreage will likely happen slowly over time and require ongoing coordination and partnerships as new developments and redevelopment occurs in the future. In the interim, many of the plan recommendations focus on enhancing amenities at existing parks and developing strategies to incorporate green space in alternative ways.

#### **KEY RECOMMENDATIONS**

#### RENOVATE NEIGHBORHOOD PARKS

In order to maintain the quality of excellence that Plano residents expect, neighborhood parks should be renovated with new infrastructure and updated amenities that are unique to the setting. Recommended strategies for neighborhood parks include:

- Incorporate bright colors
- Install updated playgrounds
- Replace aging pavilions with ones that are updated and architecturally interesting
- Incorporate updated park signage
- Utilize native landscaping
- Include space for practice fields that serve nearby teams for drop-in practices
- Incorporate flexible space for a growing variety of play
- Fix any ADA accessibility issues





In order for Plano's park system to lead on a regional and state-wide level, community parks should continue to be developed and also enhanced to make them stand out as recreation destinations. The three opportunity typologies identified for community parks in this Master Plan are social, environmental, and active nodes.

Recommended strategies for social nodes in community parks include:

- Incorporate consistently themed wayfinding signage
- Add a splash pad in community parks in each major sector of the City
- Replace and update restrooms and gathering spaces

Recommended strategies for **environmental nodes in community** parks include:

- Encourage **outdoor learning** with outdoor classrooms
- Add interpretative signage that explains unique features of parks
- Incorporate nature viewing areas
- Connect neighborhoods to the nature preserves via trails
- Add unique trail markers along trails within the nature preserves

Recommended strategies for active nodes in community parks include:

- Continue philosophy of providing multipurpose fields at athletic complexes
- Maintain flexibility in programming field space as trends evolve
- Develop practice only spaces that are reservable
- Be strategic in placing goal posts in practice field areas so multiple games can occur at once
- Consider placement of artificial turf fields in different Service Areas of the city where applicable
- Create a stronger partnership with Plano ISD for shared-use of fields
- Continue to coordinate with surrounding cities to project field needs in the future
- Seek partnerships with corporations for shared-use of private fields



Two areas in Plano have experienced extensive development but do not have enough parkland to serve the growing population. These two areas are Downtown Plano and the Northwest Legacy area. For these areas, parks and open space should be strategically located and programmed to serve a diverse range of citizens, while recognizing that land is limited for park development. Recommended strategies for creating special area parks include:

- Work with developers to implement publicly accessible parks, open space, and trails within areas of the city that are undergoing redevelopment or significant new development
- Partner with corporations to carve out publicly accessible green space on corporate campuses
- Acquire land to serve as unique special area parks in areas of high park needs

#### RENEW RECREATION FACILITIES

To further enhance recreation facilities and programming in Plano, the focus should be on looking for opportunities to renew facilities and programs to serve evolving needs. Recommended strategies for renewing recreation facilities include:

- Address near-term demand for adult court space by providing a minimum of six additional indoor courts
- Address near-term demand for additional pool lap lanes
- Incorporate a permanent space for adaptive recreation
- Further define and address senior programming and facility needs
- Explore additional opportunities for senior programming at the existing Sam Johnson Recreation Center for Adults 50+ as well as the existing recreation centers
- Incorporate programs and facility spaces that respond to emerging recreation trends
- Consider options to provide recreation facilities in defined special park areas
- Develop low-cost family recreation programming

#### CONNECT TRAILS AND BIKEWAYS

As more people want to utilize trail and bikeway facilities for both commuting and recreation, additional opportunities for connectivity should be assessed accommodate growing demand. Recommended strategies for connecting trails and bikeways include:

- Complete the design and construction of trails in accordance with the Bicycle Transportation Plan Map
- Determine feasibility of proposed expansions to the trail and bikeway network
- Implement safety treatments at major thoroughfare crossings
- Review on-street signed bike routes
- Capitalize on robust trail network tourism opportunities
- Continue to review local trail standards
- Address ADA accessibility of existing trails
- Conduct a comprehensive trails and bikeways master plan





#### TOP PRIORITY ITEMS

The following list represents action items to be pursued in the first 1-5 years of the plan.

#### LAND ACQUISITION

- Acquire land in accordance with the Park Master Plan Map to provide additional park and open space, particularly in the Collin Creek Redevelopment area and the Northwest Legacy area
- Acquire park land in underserved areas
- Actively coordinate with Plano ISD for future park and recreation opportunities

#### **POLICY ACTIONS**

- Continue interdepartmental collaboration
- Review standards for sidewalks and trail widths

#### MASTER PLANS/STUDIES

- Senior Recreation Need Study
- Trail and Bikeway Master Plan
- Individual Park Master Plans for Moore, Hall, and Rowlett Creek parks
- Conduct an athletics study
- Identify new or additional leisure programming and scheduling needs utilizing 2018 and 2020 assessment findings

#### PARK DEVELOPMENT AND IMPROVEMENT

- Existing neighborhood park infrastructure improvements
- Existing community park infrastructure improvements
- Bruce Glasscock Park development
- Haggard Park renovations
- Continue Los Rios Park development
- Construct one new maintenance facility

 Work with developers to incorporate meaningful open space in the Downtown and Northwest Legacy areas

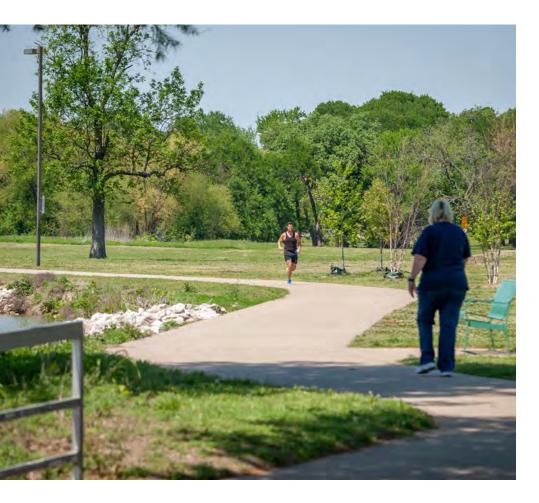
#### RECREATION AND AQUATIC FACILITIES

- Construct renovations to the Muehlenbeck Center in accordance with the master plan
- Address near-term demand for adult court space by providing a minimum of six additional indoor courts
- Explore expanding pickleball court opportunities
- Construct an indoor court facility with a minimum of six courts

#### TRAILS AND BIKEWAYS

- Design and construct trails as funds allow
- Review relevance of planned bikeway connections
- Explore opportunities for off-road bike trails, BMX trails, and pump tracks
- Renovate older segments of trails to bring up to current AASHTO and ADA standards as funding is available









# INTRODUCTION



#### INTRODUCTION

The City of Plano has long been recognized as a thought leader and trend setter in the Dallas-Fort Worth (DFW) Metroplex and beyond. Measuring 71.6 square miles, the City offers diverse housing, schools, employment, and entertainment options, as well as a rich, quality park system. From Oak Point Park and Nature Preserve in the east to Arbor Hills on the western border, the City offers a robust and unique mix of parks, recreation, and open space for residents of all ages to enjoy.



Many of the parks within Plano that are enjoyed today are the result of a visionary Council and Park Board more than 50 years ago setting aside land next to schools for parks. Primarily located within neighborhoods, these parks are easily accessible and provide much needed open space and play areas for surrounding residents. These "neighborhood parks" are prevalent throughout the city, but represent only one category of Plano's overall park system. Larger community parks, linear parks, trail corridors, sports complexes, open space preserves, and recreation centers all contribute to the complete system and are the result of anticipating future needs.

#### MASTER PLAN PURPOSE

The first Parks Master Plan for Plano was completed in 1972, with periodic updates in the years that followed. A major update to the first master plan was completed in 1986 with a minor update occurring in 2014. A new Parks Master Plan was completed in 2018 and this plan serves as a five-year update. The creators of the 1970's plan embarked on a journey to propel their park system to the future. Forward-thinking advocates for the preservation and protection of creeks, streams, and greenbelts elevated Plano to one of the greatest parks system in Texas and the parks have long been used as a model for other communities.

In the last 20 years, Plano has seen tremendous growth and changes that will significantly alter the City for the foreseeable future. The continued concentration of corporate headquarters taking shape within the northwest quadrant, development of successful mixed-use centers, extension of DART rail service, redevelopment of areas throughout the City, shifting demographics, and lifestyle changes following the COVID-19 pandemic are all major contributors to this change.

As more residents move to the City, there is a need to provide additional parkland in areas that are now residential. However, as the City approaches build-out, there is limited land available for additional park development. Additionally, many parks have aging infrastructure and amenities that need to be updated to maintain the quality of excellence that Plano leaders and citizens expect.







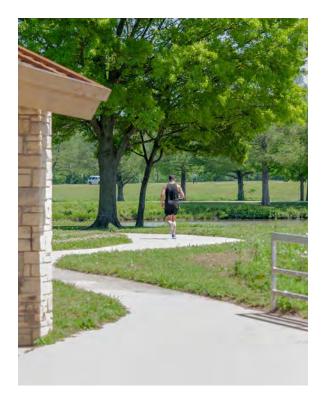
Parks and recreation must respond to these new realities to ensure that Plano continues to have a high-quality parks system that serves the needs of the community today and in the future. Thus, the purpose of this Master Plan Update is to take an objective look at parks, recreation, trails, and open space in Plano and position the City in such a way that future generations will want to continue to live, work, and play in Plano even as competition in the DFW Metroplex continues to increase.



#### MASTER PLAN CONCEPT

The overall vision for this Master Plan is to complete the Parks and Recreation system by anticipating future needs and providing excellent parks, recreation facilities, trails and open space. The major components to realize this vision are to:

Renovate NEIGHBORHOOD PARKS **Develop & Enhance COMMUNITY PARKS Create SPECIAL AREA PARKS Renew RECREATION FACILITIES Connect TRAILS AND BIKEWAYS** 





## **NEIGHBORHOOD PARKS** Renovate



#### RENOVATE NEIGHBORHOOD PARKS

Plano's neighborhood parks are fantastic amenities for its citizens with good access and often close proximity to schools. However, many parks have aging infrastructure and are indistinguishable from one another. In order to maintain the quality of excellence that Plano residents expect, neighborhood parks should be renovated with new infrastructure and updated amenities. When planning for neighborhood parks the City should consider updated amenities and elements to distinguish parks from one another.



#### **COMMUNITY PARKS**

## **Develop & Enhance**





#### **DEVELOP & ENHANCE COMMUNITY** PARKS

Community parks in Plano are extremely popular and there is additional demand for sports complexes and open space preserves. In order for Plano's park system to lead on a regional and even state-wide level, community parks should continue to be developed and also enhanced to make them stand out as recreation destinations. The three opportunity typologies identified for community parks in this Master Plan are social, environmental, and active nodes. When planning for community parks the City should consider embracing social, environmental, and active elements.









Two areas in Plano have experienced extensive development but do not have enough parkland to serve the growing population. For the special area park study areas defined in this Master Plan Update, parks and open space should be strategically located and programmed to serve a diverse range of citizens. When planning for special area parks, the City should consider new strategies to integrate parks and open space that are not traditional neighborhood and community parks.





RENEW RECREATION FACILITIES

Plano has a comprehensive system of recreation and aquatics facilities, many of which have been recently updated in the past decade. In addition to top-notch facilities, the city has diverse recreation programming at many of their facilities. To further enhance recreation in Plano, the focus should be on looking for opportunities to renew facilities and programs to serve evolving needs. When planning for these facilities the city should consider the growing senior population and diverse needs of the community as a whole.





#### **CONNECT TRAILS & BIKEWAYS**

The city has an extensive network of shareduse paths and on-street bike routes which enhances overall quality of life in Plano. However, as more people want to utilize trail and bikeway facilities, additional opportunities for connectivity should be assessed to accommodate growing demand. This Master Plan Update identifies additional connections that could be made throughout the city and sets standards for trail design. When planning for additional trails and bikeways, connectivity to the existing system should be the priority.



#### **PLANNING PROCESS**

Plano is a large, complex city with countless variables that shape what we see today. Thus, the development of the Master Plan was a collaborative effort guided by many different entities including interdepartmental city input, focus groups, business owners, city staff, city leaders, and the citizens of Plano.

The Master Plan Update followed a similar process that included additional engagement efforts, review of previous recommendations, and re-prioritizing the implementation of action items.

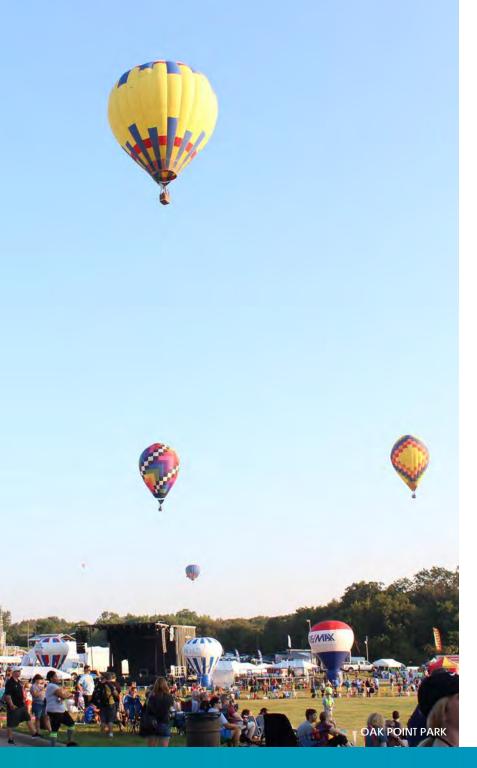
The following steps were used to develop the Master Plan:











Additionally, this Master Plan is composed of seven chapters that describe each step of the planning process.

#### **CHAPTER 1: INTRODUCTION**

Defines purpose of Master Plan and describes the planning process.

#### CHAPTER 2: COMMUNITY CONTEXT

Analyzes factors that influence the parks and recreation system such as natural resources, demographics, lifestyle trends, and other planning efforts.

#### **CHAPTER 3: VISION**

Reviews public and stakeholder input received throughout the plan process and establishes goals for the Master Plan.

#### CHAPTER 4: PARKS, ATHLETICS, AND OPEN SPACE

Assesses the existing park system, determines needs for future parks and open space, and identifies strategies to renovate neighborhood parks, develop and enhance community parks.

#### **CHAPTER 5: RECREATION FACILITIES**

Analyzes recreation needs in Plano and makes recommendations for improvements to existing facilities and potential new facilities.

#### CHAPTER 6: TRAILS AND BIKEWAYS

Reviews the existing trail and bikeway system and identifies corridors for further evaluation for additional trail and bikeway connectivity.

#### CHAPTER 7: IMPLEMENTATION

Includes an implementation action plan that outlines specific actions, priorities, and responsible entities to achieve the plan vision and recommendations.

#### **APPENDICES**

Includes an assessment and recommendations for audit parks and the recreation facilities as well as survey results.

All chapters of the report were reviewed and updated during the fiveyear master plan update process to utilize the latest available data, reflect changes in current and future needs, and acknowledge the completion of priority projects since adoption in 2018.

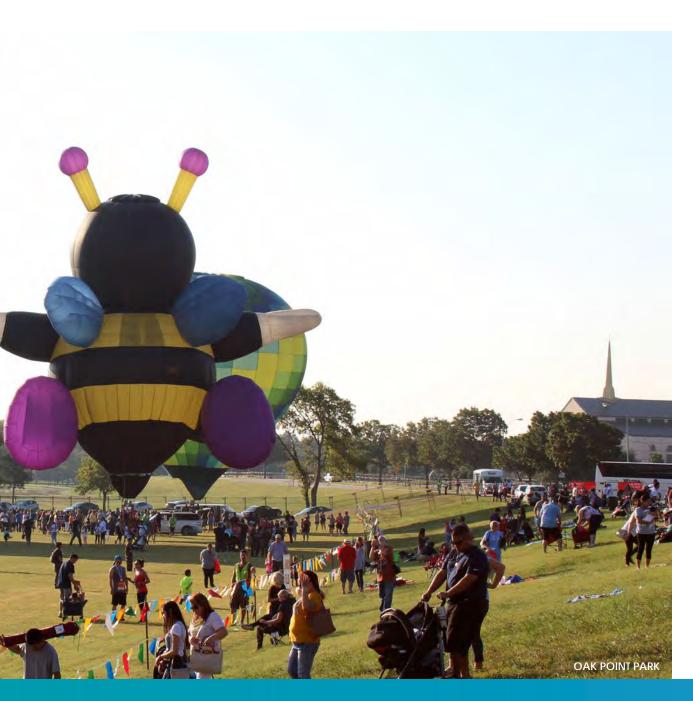
## TPWD COMPLIANCE AND CAPRA ACCREDITATION COMPONENTS

This Master Plan went through a five-year update to remain consistent with the Texas Parks and Wildlife Department's (TPWD) eligibility requirements for Outdoor Recreation grants as well as the Commission for Accreditation of Park and Recreation Agencies (CAPRA) requirements for accreditation for excellence in operation and service. This section describes where the required elements for both TPWD and CAPRA are found in this Master Plan document.

TPWD Compliance: In order to be eligible for TPWD funding, the agency requires that a municipality submit an updated park master plan every five years and a completely new plan every ten years. Minimum requirements for the plan include:

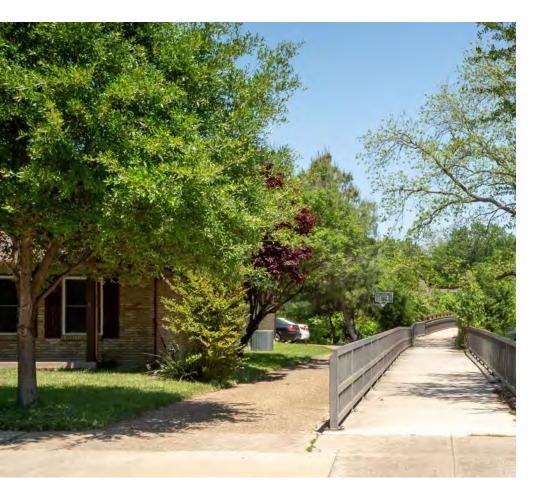
- Summary of accomplishments since previous plan (see Previous Master Plan section in Chapter 2)
- New, pertinent public input (see Public Input section in Chapter 3)
- Inventory data (see Parks Inventory section in Chapter 4)
- Updated needs assessment (see Needs Assessment sections in Chapters 4, 5, and 6)
- Priorities (see High Priority Needs List section in Chapter 7)
- Implementation plan (see Chapter 7)
- Demographics (see Demographics section in Chapter 2)
- Goals and objectives (see Goals and Objectives section in Chapter 3)
- Standards (see Recommendations section in Chapters 4-6)
- Maps (see Figures 4.7 and 6.2 for recommendation maps)

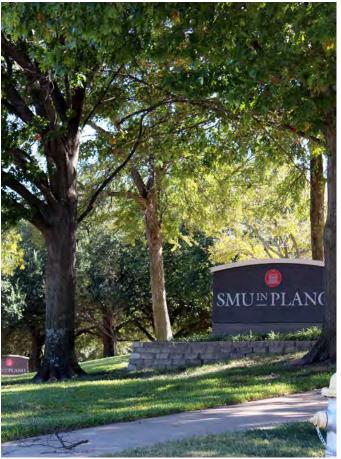




CAPRA Accreditation: This recognition sets parks and recreation agencies apart for excellence in operation and service. Plano has been accredited through CAPRA since 1994 and was re-accredited in 2019. The five-year update to this master plan will allow the City to apply for accreditation again in 2023. The Parks Master Plan is one required element of the accreditation process and plans must include the following items:

- Agency mission and objectives (see Department Mission and Objectives section in Chapter 3)
- Recreation and leisure trends analysis (see Trends and Lifestyle Benchmarking section in Chapter 2)
- Needs assessment (see Needs Assessment sections in **Chapters 4**, **5**, **and 6**)
- Community inventory (see Natural & Cultural Resources, Physical Development, and Demographics sections in Chapter 2)
- Level of service standards (see Needs Assessment section in Chapter 4)







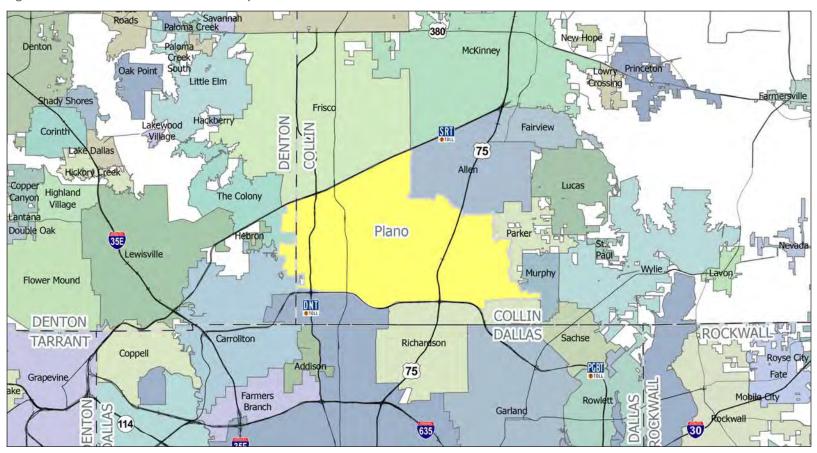
# COMMUNITY CONTEXT



#### PLANNING AREA

At 71.6 square miles, Plano is a large city located about 20 miles north of downtown Dallas. The City is located primarily in Collin County but also reaches into Denton County and is landlocked by other communities on all sides. Major highways include US 75 running through the eastern part of the City, President George Bush Turnpike on the southern boundary, Dallas North Tollway on the western side, and the Sam Rayburn Tollway forming most of the northern city border.

Figure 2.0: Location of Plano in DFW Metroplex



Plano is the fourth largest city in the DFW Metroplex, a region that has experienced tremendous growth in recent decades. That population growth is expected to continue; from 2023 to 2050, the City is expected to grow by 13.3%. Plano has also seen a large increase in the number of people working in the City in recent years. As part of this master plan update, two areas in the City that have experienced increased development and concentration of corporate headquarters were analyzed in more depth to develop recommendations to integrate parks and open space. These two areas are Downtown Plano and the Northwest Legacy area and are discussed in more detail in the **Appendix**.

#### **CITY HISTORY**

Plano is a city rich in history; the downtown was designated as a Downtown Historic District on the National Register of Historic Places in 2017. The first known settler in Plano was McBain Jameson who settled in the area in 1840. John Haggard, whose family still owns large tracts of land in the City today, followed close behind, settling in the area in 1856. In 1873 Plano was officially incorporated and businesses, schools, and churches began to be established. The Haggard family in 1925 made a sizable donation to the Plano Lions Club to construct a park in the downtown area, which was named after the donor when the park was dedicated in 1928. 30 years later, in 1958, the construction of North Central Expressway through Plano was completed which is considered to be a major factor contributing to the City's growth, and as early as 1960 Plano was the fastest-growing city in Collin County.

Since the 1960s, growth in Plano skyrocketed - more and more residential subdivisions were built, major employers constructed headquarters in Plano, and the population boomed. This growth required massive investment from the community through bonds and other sources to construct schools, infrastructure, and quality of life elements such as parks to keep up with the demand. In 1980, Electronic Data Systems (EDS) announced that the company was moving their headquarters to Plano; this ushered in many corporate campuses in the succeeding decades as Plano was, and still is today, viewed as a business-friendly community.





Major public transportation came to Plano in 1985 through DART, and represented the first suburban service in the regional system. Today, the DART light rail serves downtown Plano and goes as far north as Parker Road; there are also bus routes and several bus transfer stations throughout the City. DART has plans to construct the Silver Line Regional Rail and two stations at 12th Street and Shiloh Road, which is anticipated to be complete in 2024 and will connect Plano to the DFW Airport. When new residential and commercial development was approved around the downtown station in the late 1990's a new resurgence of downtown began, leading to the distinct area we see today.

MATHEW CONFIGN STORE

THE MAD NOT CONFIGN STORE

Accolades that the City has received relevant to parks and recreation include:

- CAPRA Agency Accreditation: 1994, 1999, 2004, 2009, 2014, 2019
- NRPA National Gold Medal Award: 1979, 1987, 1997, 2015
- TRAPS Arts and Humanities Award: 2015
- TRAPS Gold Medal Award Winner: 1990, 1996, 2008, 2013
- NRPA National Gold Medal Finalist: 2012, 2013
- NRPA Excellence in Aquatics Award: 1996, 2004
- Tree City USA Designation: 1989 to Present
- TRAPS Administration-Management Award: 1990
- TRAPS Maintenance Award: 1988



## NATURAL & CULTURAL **RESOURCES**

Plano bears its name from the flat plains that exist in the City, however, more undulating topography can be found at Arbor Hills Nature Preserve in the western part of the City. Additionally, almost the entire eastern border of Plano is parkland or open space, creating a scenic greenbelt for natural relief. The centerpiece of this eastern greenbelt is Rowlett Creek which eventually ends at Lake Ray Hubbard. Additional natural and channelized streams exist in Plano, including: Brown Branch; Bowman Branch; Russell Creek; Watters Creek; Spring Creek; Pittman Creek; White Rock Creek; and, Indian Creek. The City had the foresight to develop trails along many of these creeks and preserved them as open space.

In addition to natural resources, there are also significant cultural resources within the City. There are five sites listed on the National Register of Historic Places, including: Plano Downtown Historic District; the Plano Station/ Texas Electric Railway; the Ammie Wilson House; the Saigling House; and, the Texas Pool. Additionally, there are nine sites that are designated as Historic Landmarks and an additional ten cemeteries designated as Historic Cemeteries by the Texas Historic Commission.<sup>1</sup>

Plano is home to many festivals and events hosted on parkland throughout the year that add to the unique and diverse culture, including the Plano International Festival,

1Texas Historic Commission, Texas Historic Sites Atlas. https://atlas.thc.state.tx.us/.



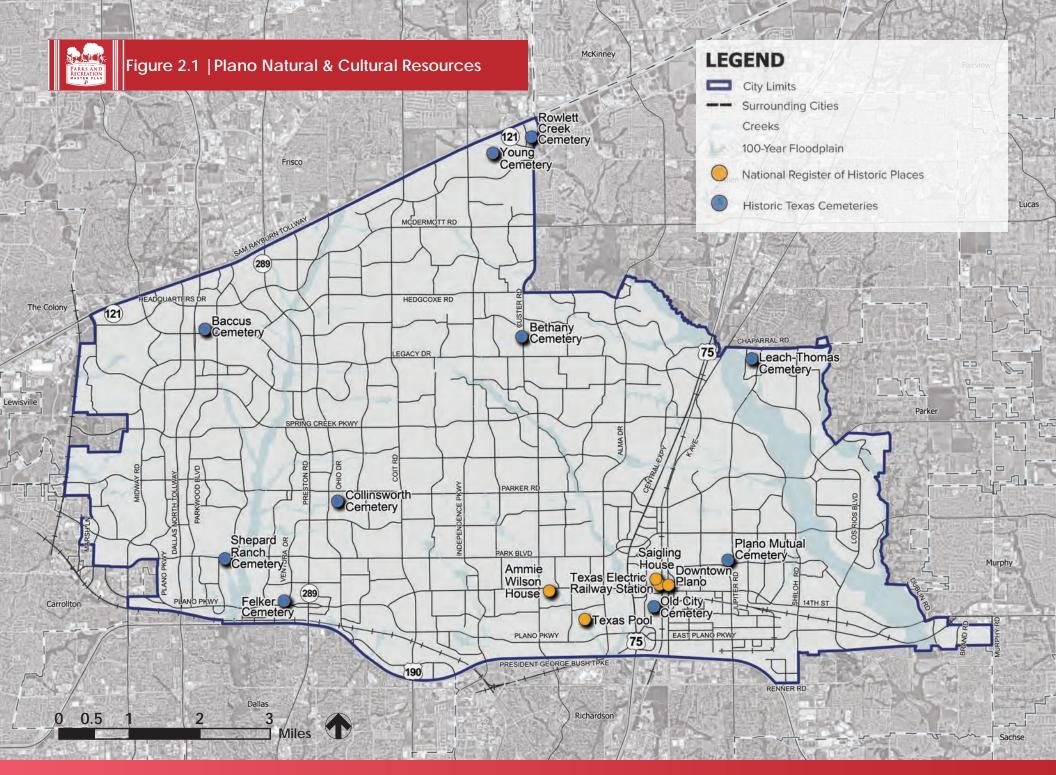




Plano Balloon Festival, Asia Fest, and All-American Fourth. These events typically draw thousands of attendees from around the region, creating a boon for the local economy. The Arts, Culture and Heritage Division is housed under the Parks and Recreation Department. The arts and theater community is also very active; Downtown Plano houses the ArtCentre of Plano, Plano Repertory Theatre, Plano Courtyard Theater, and Cox Playhouse. The McCall Plaza Stage is a public performance space down the street from Haggard Park.

#### PHYSICAL DEVELOPMENT

As previously discussed, the City transformed into a bedroom community in the 1960s and 1970s so the development pattern that emerged was relatively typical for the period: commercial development at major roadway intersections with low-density, single family residential development and associated uses filling in the rest of the square mile block. Parks, however, were typically established adjacent to schools, which created a neighborhood unit design that served as a model for many other communities. As Plano matured and grew, the demand for different types of housing increased; a variety of residential types are now found in Downtown Plano and the Legacy area in Northwest Plano. Today, Plano is about 94% built out, so opportunity for substantial growth is limited, but opportunities for redevelopment exist.



#### **DEMOGRAPHICS**

The demographic make-up of a community is important to understand at the outset of any planning process. For parks system planning specifically, growth trends are used to determine need for new facilities and race and ethnicity make-up can affect which sports will be in high demand. This section describes the past, current, and, where applicable, projected population trends in Plano. The source of the data is from the U.S. Decennial Census, the 2016-2020 American Community Survey (ACS) Five-Year Estimates, the City of Plano, and the North Central Texas Council of Governments (NCTCOG).

#### **GROWTH TRENDS**

Plano started booming in the late 1970s as the DFW area as a whole began to grow. Plano was known as a bedroom community and growth skyrocketed as families looking for a quality place to raise their families moved to the City. In 1980, the population was about 72,331; in 2010, the population was 259,841. This is a 260% increase in just thirty years. NCTCOG estimates Plano's 2023 population to be 292,066. Figure 2.2 shows the growth in Plano over time.

Looking to the future, NCTCOG projects that the 2045 population will be 322,580 and that there will be 385,300 employees working in Plano in 2045. The City adopted a new comprehensive plan in 2021, which projects the population to reach 331,000 by 2050.

While Plano is primarily built out, development projects over the last decade have shown that redevelopment and additional population growth is possible in the City.

#### POPULATION PROFILE

#### **Age and Gender Characteristics**

Evaluating population by age and gender helps to ensure that a community has an appropriate mix of parks and recreation facilities. Figure 2.3 shows the current age and gender composition of Plano. As of 2020, the largest population cohort is made up of 40-45 year olds, followed by 30-34 year olds. These age groups will be seeking active adult facilities in the next few decades, which is important to note for future recreation programming. There is also a substantial number of children from 5 to 19 years while the number of 0-5 year olds is less, indicating that the population of Plano is plateauing.





Figure 2.2: Historical Growth in Plano, 1950-2020

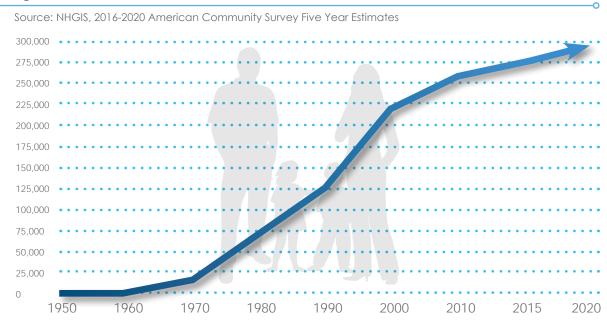
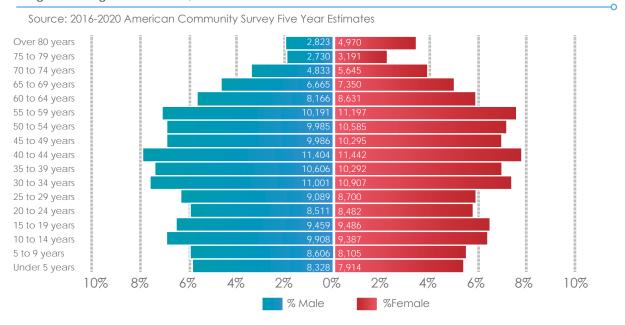


Figure 2.3: Age and Gender, 2020



#### **Race and Ethnicity Characteristics**

Plano has become a diverse, even international city, yet most of the parks and recreation system reflects older park and recreation trends. Different cultures like to play sports such as cricket and table tennis, and as Plano continues to evolve, the parks and recreation system should reflect the growing diversity. According to 2020 American Community Survey data, 49% of Plano is a minority; this figure has continually increased since 2010. Additionally, 27% of residents in Plano were born in other countries, which is much higher than many other DFW area cities. Table 2.0 shows changes in race and ethnicity over time.

Table 2.0: Race and Ethnicity, 2010-2020

1.0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1							
	2010	2015	2020				
Total Population	259,841	275,645	288,870				
% White	66.9%	68.1%	61.7%				
% Black	7.6%	7.9%	8.6%				
% American Indian/Alaskan Native	0.4%	0.4%	0.4%				
% Asian	16.9%	19.1%	21.8%				
% Pacific Islander	0.1%	0.1%	0.1%				
% Other Races	5.1%	1.7%	1.7%				
% Multiple Races	3.0%	2.3%	5.6%				
% Hispanic or Latino Ethnicity*	14.7%	14.3%	15.0%				
Total Minority	41.7%	43.8%	49.0%				

Source: 2010 and 2020 Decennial Census, 2011-2015 and 2016-2020 ACS Five-Year Estimates \*Hispanic and Latino Ethnicity is not considered a race. Percentages may not add up to 100%.





#### **Household Characteristics**

Another important component of a population profile is household characteristics which can indicate what type of facilities or amenities residents may demand. The percentage of renter occupied homes has increased as has the average household size. These trends are consistent with nationwide trends of millennials who tend to put off buying a home and having children. The median household income in 2020 was \$96,348, which is much higher than the regional and statewide median. Table 2.1 shows additional household characteristics over time.

Table 2.1: Household Characteristics, 2010-2020

	2010	2015	2020			
Total Housing Units	103,672	108,527	113,254			
% Occupied	95.6%	95.8%	94.8%			
% Owner Occupied	64.1%	62.4%	58.9%			
% Renter Occupied	32.2%	37.6%	41.1%			
% Vacant	4.4%	4.2%	5.2%			
Average Household Size	2.67	2.64	2.88			
Single-Person Home	24.4%	24.4%	12.6%			
Median Home Value	\$210,500	\$231,600	\$341,800			
Median Rent	\$815	\$976	\$1,447			
Median Household Income	\$81,822	\$83,793	\$96,348			

Source: 2010 and 2020 Decennial Census, 2006-2010, 2011-2015 and 2016-2020 ACS Five-Year Estimates

Other Population Characteristics: Additional population characteristics can help create a more comprehensive picture of a community. As communities become more diverse, limited English speaking ability, poverty, and households without cars are characteristics that may become more prevalent.

- Poverty: The percentage of individuals that are living below the federallyestablished poverty level has slowly decreased in recent years. In 2015, 7.5% of residents were considered impoverished and in 2020, that percentage decreased to 6.3%.
- Educational Attainment: In 2020, nearly 94% of residents 25 and older had at least a high school degree. This percentage has increased slightly since 2015. Additionally, in 2020, 58% of residents 25 and older had at least a bachelor's degree, which has increased from 54% in 2015.
- Limited English Proficiency: The percentage of individuals that have difficulty speaking, reading, writing, or understanding English in 2020 is 12.6%, which is a slight increase from 12.1% in 2010. The largest LEP groups are those that speak Asian Languages (11.6%) and Spanish (11.4%).
- Zero-Car: The percentage of households without a car has dropped from 1.4% in 2015 to 1.3% in 2020. This figure represents individuals that cannot afford a working car as well as those that choose to not own a car for lifestyle reasons.





ESRI Tapestry Segmentation: ESRI, a mapping technology company, has developed a product called Tapestry Segmentation to help identify consumer markets at the zip code level. Using Tapestry Segmentation, residential areas in the U.S. are divided into segments based on the socioeconomic and demographic composition. The following represents the most common tapestry segments found in the City of Plano.

Professional Pride: This segment is composed of residents who are well-educated and have upscale suburban lifestyles. Most residents are homeowners and homes are valued at more than twice the US median home value. The median household income is also high – just above \$138,000.

<u>Savvy Suburbanites</u>: This segment is composed of residents who are well-established empty nesters or that have adult children living at home. Almost 51% are college graduates and the median age is 45 years old. The average household size is 2.85.

Enterprising Professionals: This segment is composed of residents that are well educated and climbing the ladder in STEM occupations. Renters make up nearly 50% of all households and many choose to live in condos, townhomes, or apartments.

<u>Boomburbs</u>: This segment is composed of young professionals with families that live in newer housing in the suburbs. Over 50% are college educated and most households have more than two workers. The median household income is \$113,400.

<u>Home Improvement</u>: This segment is composed of primarily married couple families in single-family homes. The median household income is \$72,100 and the median age is 37.7. Many households have 2 or more workers.



## RFI FVANT PLANS AND **STUDIES**

#### PLANO COMPREHENSIVE PLAN

Adopted in 2021, the Plano Comprehensive Plan is entirely online as opposed to the traditional document format. The plan is a long-range guide for future growth, priorities, services, development, and redevelopment of the City. The overall vision for the plan is: Plano is a global leader, excelling in exceptional education, abounding with world class businesses and vibrant neighborhoods. The plan is guided by five Pillars that cover topical categories with subsequent components:

- Built Environment
- Social Environment
- Natural Environment
- Economic Environment
- Regionalism

The Parks and Recreation Policy falls under the Quality of Life Component within the Social Environment Pillar.

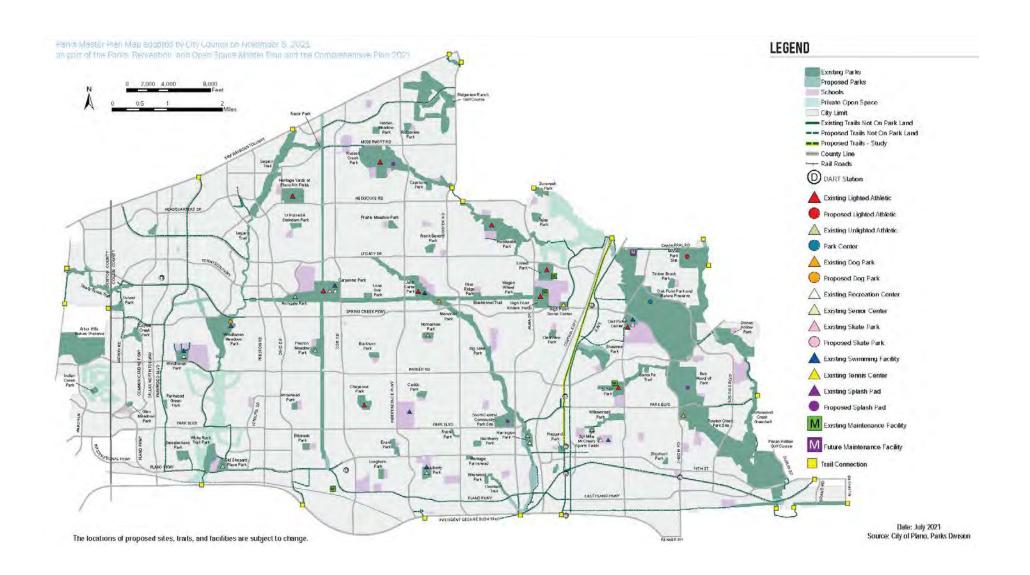
The Parks and Recreation Policy documented in the Plano Comprehensive Plan is:

Plano will develop and maintain a comprehensive system of park, trail, recreational, fitness, and sports facilities and programs that keeps pace with the City's changing demographics, creates multiuse destinations, and improves the health, wellness, and morale of the citizens. Figure 2.4 represents the Parks Master Plan map adopted as part of the 2021 Comprehensive Plan.





## Figure 2.4 | Plano Park Master Plan (2021)

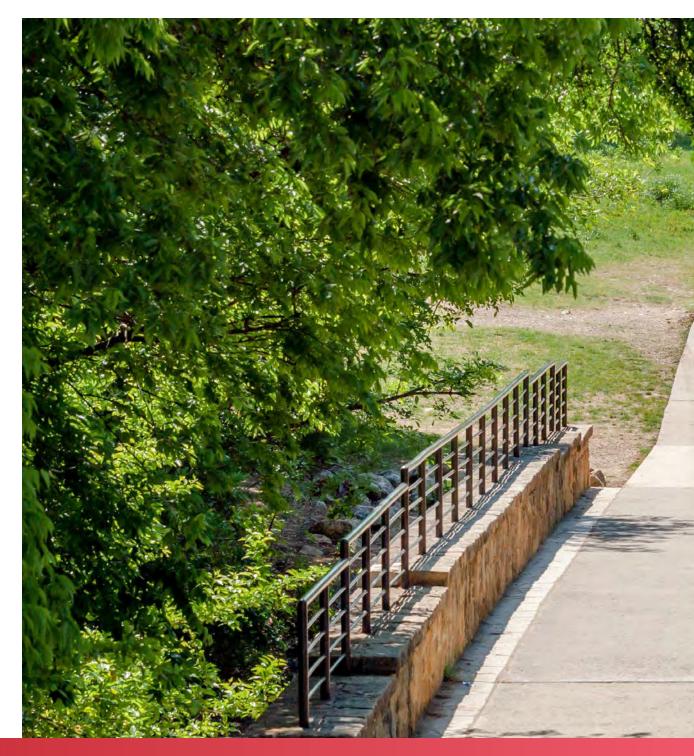


#### OTHER RELEVANT STUDIES

Heritage Preservation Plan (2018): The plan serves as a guiding document for Plano's Heritage Preservation Program. Key issues presented in the plan include heritage resource identification, preservation and interpretation, designation, promotion, reinvestment in historic assets, education, and implementation of programs. The plan also discusses the potential for establishing conservation districts in Downtown and Haggard Addition areas to preserve the historical character.

Collin County Regional Trails Master Plan (2012): This plan focused on identifying opportunities to better connect cities in Collin County via trails and bikeways. Key components of the plan were the identification of high-priority corridors for regional linkages and identification of critical gaps that should be filled in the network. Eleven key inter-city connections involved Plano. The resulting plan serves as guidance for which trails and bikeways each city can pursue in the future.

Trail/Bike Master Plan (2015): This plan was included as an element in the 2015 Plano Comprehensive Plan. The plan identified major issues facing cyclists in the city, such as crossing major roadways via bike, as well as major initiatives to pursue, such as connecting the Chisholm Trail south to Richardson, the Preston Ridge Trail south to Dallas, and trails in the Rowlett Creek area to Allen and Frisco.











Regional Study of Sports (2016): The cities of Allen, Frisco, McKinney, Plano, and Richardson worked together for this planning effort to identify current athletic needs, use and allocation of fields, and recommended improvements. In Plano, the primary need was identified as more practice fields as well as fields for newer sports, such as cricket, lacrosse, and ultimate Frisbee. Additionally, the study recognized that Plano has taken on the role as a regional provider of fields for leagues and tournaments of which other area cities take advantage. Major recommendations included reclassifying fields in Plano based on their size and primary uses, establishing a Youth Sports Council, and establishing a Five-Cities Athletic Fields Council.

Parks and Recreation Marketing Plan (2016): The Marketing and Community Engagement department at the City oversees communication functions for all Plano departments. The plan documented trends in Plano, including increasing diversity, plateauina population, and increasina median age. The goals that the team seeks to emphasize in coming years include being a community of choice, offering something for everyone, and educating citizens.

Trust for Public Land Report (2017): The report analyzed and quantified the economic benefits of parks, recreation, and trails in Plano. Overall, parks in Plano raise values of nearby homes by \$337 million. Additionally, sports-related tourism generates \$39.2 million annually in direct visitor spending. The benefits to human health amount to \$21.2 million annually, since healthier residents spend less on medical costs.

Urban Forestry Master Plan (2017): This plan provides goals and actions to improve and grow the urban forest in Plano. The plan found that the replacement value of the urban forest in Plano is more than \$1.6 billion. Additionally, the urban forest represents approximately \$11.4 million in environmental, economic, and infrastructure benefits each year. The three areas of focus for plan actions were growing a healthy and resilient urban forest, branding and outreach, and program organization and funding.

Performing Arts Facility Needs Assessment (2017): This assessment analyzed what additional cultural facilities are needed in the city and was initiated due to increased demand for existing performance spaces. Based on the assessment, the report recommended a new community arts center and a partnership with PISD for access to the school district facility.

Parks and Recreation Marketing and Communications Plan (2020): This plan's marketing and communications strategy has two main goals: to promote and encourage participation in the many high-quality programs, services, and facilities that are available to Plano residents, in addition to raise awareness of how vital Plano Parks and Recreation is to the community's health and quality of life.

Plano 55+ Survey (2020): This study was completed as an online survey for residents of Plano ages 55 and up designed to assess their needs, awareness and their usage of Plano's recreational facilities. The survey showed that Plano's seniors are more aware of the services available compared to previous years.





## TRENDS AND LIFESTYLE BENCHMARKING

#### TRENDS IN PARK AND RECREATION

Like many other community aspects, parks and recreation trends change over time, so individual parks and recreation agencies should be flexible and proactive.

Greater emphasis on health outcomes. As obesity rates rise nationwide, people have become more cognizant of and concerned about opportunities to improve their health. Parks and recreation provide a vital role in access to open space and trails for recreation and exercise. As a result, trails and biking paths are in high demand in many communities which was made even more evident since the start of the COVID-19 pandemic. There is also more funding available from the state and federal government to improve health outcomes in communities, which can be used to improve parks and recreation facilities. In Plano, the Trust for Public Land found that approximately 16,500 adult residents get exercise by using Plano's park and recreation system and associated annual medical cost savings amount to \$21.2 million.<sup>2</sup>

Demand for open space protection. In general, people are more aware of their impact on the environment now more than ever. This has led to an increased emphasis on protecting open space and natural areas in communities to balance the everexpansive impervious cover. In Plano, Arbor Hills and Oak Point are two natural areas that offer scenic relief and are subsequently two of the most visited parks in the City. Los Rios Park has also been a significant acquisition for the east side of Plano; however, there remains a need for open space protection east of US-75 in the downtown area, due to the continued increase in residential land uses.

Changing participation rates. Sports participation trends are constantly changing. The Sports & Fitness Industry Association stated in their 2016 annual report that the biggest shift in the past 10 years has been a move from core to casual participation, meaning that fewer people are participating in organized leagues. The study also found that growth in 'niche' sports such as lacrosse, rugby, and field hockey continue to grow in popularity while growth in traditional team sports remained fairly steady.<sup>3</sup> These trends are evident in Plano's participation rates in recent years. The expanding popularity of online fitness classes corresponding with the COVID-19 pandemic has also affected participation rates.

Emerging sports. As Plano becomes more diverse in terms of culture and age, the number of sports will continue to increase. Sports popular in other countries such as cricket and table tennis have experienced massive growth in Plano. Pickleball has also boomed in popularity as the median age has increased. To accommodate these newer sports, flexibility in field space and within recreation centers is important. Plano currently rotates different activities through sports turf fields and multi-use courts in recreation centers throughout the year. Furthermore, a Plano specific athletics sports study will soon be underway to assess current and future demands of sports and infrastructure.

<sup>2</sup>Trust for Public Land. The Economic Benefits of Plano's Park and Recreation System. 2017.

<sup>3</sup>Sports and Fitness Industry Association. U.S. Trends in Team Sports Report. 2016.

#### BENCHMARK COMMUNITIES

To compare Plano with similar communities, five benchmark communities across the country were identified. These five communities are similar to Plano in terms of size, demographics, and income profile. Table 2.2 shows the most recent population figures, acres of developed parkland, and associated acreage level of service for the five benchmark communities and Plano.

One element that is used to compare parks systems in communities is the Trust for Public Land's ParkScore tool which ranks the park systems in the 100 largest cities based on a variety of factors. These factors include overall park acreage, access to parks, per capita spending, and availability of various recreational amenities. In 2023, Plano was ranked 16th out of the 100 largest cities and was the highest ranked community in Texas.

## Naperville, IL

The Naperville Park District oversees 134 parks that serve the community's approximately 149,000 residents. Within the Parks District there are five operational departments: Golf, Parks, Planning, Recreation, and Marketing and Communications. Special amenities found in the system include a Riverwalk, beach, disc golf course, skate parks, nature center, community garden plots, two golf courses, and paddleboats and kayaks available for rent. The District's website also discusses the current green initiatives going on in the City, including maintaining natural areas, propane fueling stations for fleets, and solar panels at one of the community centers. The level of service for parks in Naperville exceeds the level of service in Plano just slightly.

Table 2.2: Benchmark Community Comparison

City*	Population (2020)	Total Acreage (Developed and Undeveloped)	Percentage of Residents within a 10-Minute Walk	ParkScore 2023 Ranking
Plano, TX	288,870	4,588	80%	16
Arlington, VA	236,434	1,759	99%	5
Chandler, AZ	275,987	1,518	62%	73
Frisco, TX	200,509	2,164	66%	N/A
Henderson, NV	317,610	5,504	75%	19
Naperville, IL	149,540	2,263	90%	N/A

<sup>\*</sup>Data provided by Trust for Public Land ParkScore 2023 Rankings.4



<sup>&</sup>lt;sup>4</sup>Trust for Public Land. ParkScore 2023. https://www.tpl.org/parkscore



#### Henderson, NV

The Las Vegas suburb's population is approximately 317,000 and the parks system includes 156 parks. Special amenities that are found in the parks system include sixteen dog parks, two BMX parks, seven skate parks, and sixteen splash pads. Henderson also features a bird preserve and an adoptapark program. According to ParkScore 2023, Henderson is ranked 19th out of the top 100 largest cities in the country. The City scored high on spending, basketball hoops, splash pads, and dog parks per capita.

#### Arlington County, VA

With a population of approximately 236,000, the County oversees 184 parks and facilities. Special amenities include an amphitheater, community garden, bocce ball, climbina wall, skate park, nature center, splash pad, dog park, and an ornamental rose garden. The County is currently updating their public spaces master plan and they have a quarterly publication dedicated to nature and history. The level of service is much lower in Arlington County than in Plano, however the County ranks 5th in ParkScore's 2023 rankings out of the top 100 most populated cities. Arlington scored high on spending, basketball hoops, dog parks, and splash pads per capita and in the categories of access to and investments in parks.

#### Chandler, AZ

This Phoenix suburb has a population of approximately 276,000 and includes over 83 parks. Special amenities in the system include a BMX park, skate park, four dog parks, and three splash pads. The City also has an 'adopt-a-park' program. The level of service is much lower than Plano. According to the 2023 ParkScore Rankings, Chandler is ranked 73rd out of the largest 100 cities in the country. Chandler scored high in median park size and dog parks per capita.

#### Frisco, TX

This North Texas suburb boasts a population of approximately 200,000 and has 65 parks. What is unique about Frisco is that it has nearly 750 acres of undeveloped parkland that will be developed in the future. The City has an impressive sports complex and opened a skate park in late 2017. The parkland level of service is lower than Plano, which is likely a result of the significant population growth the city has recently experienced.

Additionally, the National Recreation and Parks Association (NRPA) collects data from park agencies across the country and annually produces a report containing park and recreation agency performance benchmarks.<sup>5</sup> The 2022 report stated that the typical park and recreation agency has 9.9 acres of parkland per 1,000 residents and 1 park for every 2,277 residents. Plano exceeds the parkland acreage level of service with 15.05 acres per 1,000 residents but more residents are served by each park (1 park per 3,243 residents). Another statistic included in the report is annual per capita spending per resident; nationwide the average is \$88.30; in Plano, the annual operating expenditures per capita is \$219.

#### PARKS AS ANCHOR INSTITUTIONS

Many communities have anchor institutions which historically have been universities and hospitals. These institutions create strong social, economic, and healthy bonds within communities. The National Recreation and Parks Association (NRPA) is leading a charge to expand the definition of anchorinstitutions to add parks and recreation facilities as 'community wellness hubs.' These facilities are vital to a community by providing a place for social gathering, improving the overall economy with increased property values and sports tourism, and offering places for people to exercise. This helps reinforce that parks and recreation facilities as essential, vital spaces and infrastructure within communities.

#### INTERNATIONAL COMMUNITIES

Since Plano has evolved into a diverse, culturally-rich community, lessons can be learned from the parks systems of international communities. In Europe, grand plazas and gardens make up the majority of space in many city parks. The Garden of Mont Des Arts in Brussels, Belgium is composed of grand gardens that are lit up in dramatic colors at nighttime. There are also open-air theaters to attract formal and informal events like in the Vondelpark in Amsterdam. Finally,

landscape architects in Germany created a unique park that was integrated into a former industrial site at Landscahftspark in Duisbura-Nord. Perhaps most striking about these and other parks found in great cities is that, when visited during particularly pleasant times of vear, there is a real sense that these parks are destinations frequented by many residents and travelers from around the world.



<sup>&</sup>lt;sup>5</sup>National Recreation and Park Association, 2022 NRPA Agency Performance Review: Park and Recreation Agency Performance Benchmarks. www.nrpa.org.









## VISION







## **INTRODUCTION**

The 2018 plan and the update to the plan conducted in 2023 were developed for the citizens of Plano, both today and in the future. Therefore, community engagement was a very important component throughout the entire plan development process. This chapter defines the stakeholders, summarizes the results of the various outreach techniques and surveys, and presents the established vision, goals, and objectives of the plan.

## **STAKEHOLDERS**

Stakeholders were engaged throughout the planning process for the 2018 master plan via visioning sessions as well as one-on-one meetings. A visioning week was held in June 2017 that engaged over 100 people total at focus group meetings and a public open house. For this plan update process meetings with key department staff and the Park and Recreation Planning Board were held to gain insight about changes in park and recreation needs and recording completion of projects and recommendations outlined in the 2018 plan.

City Staff: In addition to Parks and Recreation staff, several other departments were engaged to get their input on how their department interacts with parks and recreation and what they would like to see in the future. During the 2018 visioning week, department heads from Parks and Recreation, Planning, Engineering, Visit Plano, Neighborhood Services, Community Outreach, and the Assistant City Manager met as a focus group to discuss their vision for the plan. Major elements staff sought for this plan include increasing awareness of the parks systems, developing standards for new types of parks, completing the parks and trails system, raising the status quo for parks, and strengthening collaborative standards amongst departments.

Parks and Recreation Planning Board: The project team met with the Parks and Recreation Planning Board four times throughout the 2018 plan development. This included an opening visioning session, presentation of preliminary recommendations, draft final recommendations, and the approval meeting. During the visioning





session, Parks Board members noted that they want the plan to incorporate creative solutions, be based on analytics, compare benchmarks to other cities, and support efficient use of funds. During the master plan update the Parks Board was briefed on the update process and invited to provide input on changes in parks and recreation needs and interests in Plano.

Sports Associations: During the visioning week in June 2017, all sports associations active in Plano were invited to a focus group meeting. Meeting attendees noted that they think Plano needs to stay ahead of growth, make updates, and modernize fields in order to maintain great athletic services. Attendees included leaders from the following organizations:

- Plano Sports Tourism Department
- Plano Walking Club
- Plano Pacers Running
- USA Softball
- North Texas Co-Ed Soccer Association
- North Texas Premier Soccer Association
- North Texas Soccer
- North Texas Women's Soccer Association
- USA Softball
- Plano ISD
- Plano Sports Association

Special Interest Groups: Special interest groups were also invited to a focus group meeting during the visioning week in June 2017. When asked what was the one thing they wanted to see the plan accomplish, attendees noted that it should get people to use the parks, call for updates to parks, and create a foundation for exciting spaces. Attendees included members of the following organizations:

- Senior Advisory Board
- Plano Moms
- Arts Centre of Plano
- Plano Symphony
- North Texas Performing Arts
- Chamberlain Performing Arts
- Plano Chamber of Commerce
- Plano Economic Development Corporation
- Plano Heritage Commission
- Plano Neighborhood Services Department
- City of Richardson Parks and Recreation
- Plano Parks and Recreation

Additional meetings with Sports Associations or Special Interest Groups were not held during the five-year plan update. However, the input received during the 2018 plan remains valid and reflective of the communities needs and interests.

## **PUBLIC INPUT**

A critical stakeholder in any planning process is the public; for the 2018 Master Plan the public was engaged in a variety of ways in order to gain the most public input possible. During the 2023 update a statistically valid survey and online community survey were conducted to gain public perspective about changes in park and recreation needs and preferences.

#### STATISTICALLY VALID SURVEY RESULTS

During the summer months of 2022, a statistically valid survey was conducted by mailing in survey packets to a random sample of Plano households. Residents who received the survey were given the option of returning the survey by mail or completing it online. To be statistically valid the target was to have 400 completed surveys by Plano residents. The goal was exceeded with 518 completed surveys collected. This input is still important to consider along with all of the other input methods. Key results include:

> 68% of respondents enjoy NATURAL, WOODEN OPEN SPACES the most.

**MOST IMPORTANT AMENITIES** to respondents are SHARED-USE TRAILS, **ADULT RECREATION** CENTERS, AQUATIC FACILITIES, and SENIOR **RECREATION CENTERS.** 

## The TOP THREE

areas that respondents think the City should prioritize include

## additional BICYCLING **OPPORTUNITIES**

connecting to EXISTING TRAILS, assisting TRAIL CROSSINGS at major roads, and CONNECTING TO SCHOOLS.

90% of respondents were most supportive of Plano IMPROVING maintenance at existing PARK AND RECREATION FACILITIES.

A summary of the statistically valid survey results is included in the Appendix.



#### **ONLINE SURVEY RESULTS**

In addition to the statistically valid survey, a 28-question online survey was developed and administered over the course of two months in 2022. The City advertised the survey at the visioning meetings and in local newsletters. As a result of this outreach, over 500 people took the survey - a very high number for this type of survey relative to other cities' parks plans. 52% of respondents have lived in Plano for more than 20 years. Key results include:

- The most important amenities to respondents are shared-use trails, adult recreation centers, aquatic facilities, and senior recreation centers.
- 90% of respondents think it is important or very important to improve maintenance at existing parks and recreation facilities.
- 70% of respondents selected city parks as the most important amenity to their household.
- The top four features that respondents think the City could use more of are natural open spaces, peaceful attractive areas, shared-use trails and clean park space.

A summary of the full online survey results is included in the Appendix.

#### VIRTUAL PUBLIC ENGAGEMENT ROOM

During the 2023 update a virtual public engagement room was created to provide an overview of the master planning process for parks, recreation, trails, and open space in the City of Plano and to receive input about current and future park and recreation needs. Key results include:

- The most important neighborhood park updates are prioritizing native landscaping within planting areas at neighborhood parks, improving walking paths within parks to address safety issues and to connect to the larger sidewalk and trail networks, and providing more pavilions and shade structures.
- 85% of respondents think it is important or very important to update outdated amenities as needed to continually provide attractive and welcoming park spaces.
- 83% of respondents think it is important or very important to continue to support a variety of sports through flexible programming of field space.
- 93% of respondents think it is important or very important to improve trail connections from surrounding neighborhoods to nature preserves.
- The most important recreation and aquatic priority to respondents is to prioritize flexible space that accommodates a variety of uses.

A summary of the full virtual public engagement room results is included in the Appendix.

#### **OUTREACH EVENTS**

#### **Visioning Public Meeting**

June 29, 2017

At the end of the visioning week, a public meeting was held and over 50 citizens attended. An introductory presentation was made and then seven break-out stations were set up for attendees to interact with and provide input. Key input heard from these stations include:

Park Amenities: Top amenities that attendees wanted to be added were more shade, softsurface trails, and fitness stations.

Open Space & Natural Areas: The most frequently mentioned ways that attendees interact with open space in Plano included walking on trails, viewing wildlife/animals, and visiting creeks and streams.

Sports & Athletic Fields: The top three noted athletic field facilities that attendees noted were pickleball, volleyball, and lacrosse.

Indoor Recreation & Aquatics: The top three preferred indoor recreation and aquatic facilities noted were cardio rooms, indoor courts, and senior activities.

Trails & Bikeways: Attendees noted that more shade trees, bike lanes, and pet waste stations were ways to improve the trail and bikeway experience in Plano.

Special Area Parks – Downtown Area: Most frequently mentioned amenities that attendees wanted to see in a park downtown included seating, water features, and greenery.

Special Area Parks - Legacy Area: Most frequently mentioned amenities that attendees wanted to see in a park in the Legacy area included natural areas, places to park, activities for kids, and bike trails.

#### Plano Balloon Festival

September 23, 2017

The Plano Balloon Festival is a highlyattended event held each year at Oak Point Park and Nature Preserve. A booth was set up to solicit input from festival attendees about their preferences for parks, recreation, open space, and trails in Plano. Attendees were also given the opportunity to fill out a brief questionnaire; 62 people responded to it during the festival.

#### Plano International Festival

October14, 2017

The Plano International Festival is held each year in Haggard Park and is meant to celebrate the cultural diversity of the City. Again, a booth was set up to solicit input from festival attendees and a total of 133 people filled out the questionnaire.









#### **Preliminary Recommendations Meeting**

January 30, 2018

To seek feedback on the preliminary recommendations for the park system, a public open house was held in January 2018. The project team gave a brief presentation and then participants were invited to visit the six open house stations to view the preliminary recommendations and interact with staff and the project team. Key input heard from these stations include:

<u>Master Plan Vision and Goals</u>: Attendees were generally in favor of the overall plan vision and had comments about specific parks or facilities

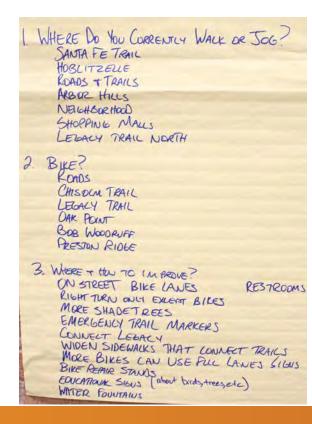
Renovate Neighborhood Parks: The most frequently mentioned comments were related to creating better access to parks and providing more shade.

<u>Develop & Enhance Community Parks</u>: Comments related to community parks included considering artificial turf and recreating the success of Arbor Hills elsewhere.

<u>Create Special Area Parks</u>: The most frequently mentioned comments related to special area parks were to add safe bicycle parking and consider flexible open space in park areas for gathering.

Renew Recreation Facilities: Comments related to recreation facilities included the need for more court space and senior recreation space.

<u>Connect Trails & Bikeways</u>: The most frequently mentioned comments regarding trails and bikeways were to better identify the on-street bike routes and include prioritization of planned trails.



## **VISION**

This section discusses the master plan vision in more detail and defines the specific goals of the plan as determined through the stakeholder and public input process.

#### **AGENCY MISSION AND OBJECTIVES**

Prior to establishing the vision, goals, and objectives for a particular effort, it is important to understand what the mission statement of the overarching agency is. Below are the current mission statements for the City, Department, and Parks Board.

City of Plano Mission Statement: The City of Plano is a regional and national leader, providing outstanding services and facilities through cooperative efforts that engage our citizens and that contribute to the quality of life in our community.

City of Plano Strategic Vision for Excellence: Plano is a global economic leader bonded by a shared sense of community where residents experience unparalleled quality of life.

Parks and Recreation Department Mission: Through a fun and innovative team, we enrich Plano by providing inviting spaces, caring service, outstanding value, and memorable experiences.

Parks and Recreation Planning Board Mission: Provide visionary planning resulting in an outstanding parks and recreation system that positively impacts the quality of life in the Plano community.





#### MASTER PLAN VISION

As discussed in Chapter 1, the overall vision for this Master Plan is to...

Complete the Parks and Recreation system by anticipating future needs and providing excellent parks, recreation facilities, trails and open space.

In order to realize this vision, the following components are discussed in this plan:

Renovate Neighborhood Parks: Represents the notion that all neighborhood parks should be updated with new, state-of-theart features and technology to continue to attract residents to Plano. Recommendations related to this concept are discussed in more detail in Chapter 4.

Develop and Enhance Community Parks:
Represents categories for community parks
to focus improvements. The three categories,
or nodes, are: environmental, which includes
open space preserves and natural areas;
active, which includes large athletic
complexes; and social, which includes
non-athletic focused community parks.
Recommendations related to this concept
are discussed in more detail in Chapter 4.

Create Special Area Parks: Represents parks and open space in the designated special area park study areas (downtown and the Legacy area) that should be pursued. Recommendations related to this concept are discussed in more detail in the Appendix.

Renew Recreation Facilities: Represents the notion that the city should continue to look at opportunities to renew facilities and programming based on evolving recreation trends. Recommendations related to this concept are discussed in more detail in Chapter 5.

Connect Trails and Bikeways: Represents the need for additional trail and bikeway connections in the city. The identified connections could be a variety of bicycle accommodations from shared-use-paths to sidepaths. Recommendations related to this concept are discussed in more detail in Chapter 6.

## MASTER PLAN GOALS AND OBJECTIVES

In order to achieve the overall Master Plan vision, ten goals that represent the desired objectives of the plan were developed. Each goal is accompanied by more specific, achievable objectives. These goals support the overall vision of the Plano Comprehensive Plan.

GOAL: Encourage healthy

lifestyles by providing an appropriate mix of open space, facilities and range of activities throughout the city.



**OBJECTIVE 1A:** Develop and maintain a comprehensive program of facilities in accordance with the Master Plan.



**OBJECTIVE 1B:** Approximate future locations for future facilities and acquire land in accordance with the Master Plan.



GOAL: Renovate, repurpose and modernize existing parks so that they offer similar elements across the city but are unique to the surrounding area.



**OBJECTIVE 2A:** Identify and prioritize the needs of existing and proposed facilities through the annual Community Investment Program (CIP) budget process.



**OBJECTIVE 2B:** Update park components to be unique and reflect the surrounding community.



GOAL: Provide for park and recreation opportunities that reflect the growing diversity of the city and allow for social interaction.



**OBJECTIVE 3A:** Maintain flexibility of spaces so as to not limit the type of activities that can occur.



**OBJECTIVE 3B:** Design and locate park facilities that support formal and informal gatherings.



**OBJECTIVE 3C:** Enhance park accessibility and make progress toward 100% of residents being within a 1/2 mile walk of a park or trail.



GOAL: Maintain high standards for planning, implementing, maintaining, and operating quality parks, recreation facilities, trails, and athletic fields.



**OBJECTIVE 4A:** Periodically evaluate maintenance standards and schedules as the park system evolves.



**OBJECTIVE 4B**: Place equal importance on maintenance of existing facilities and system expansion.



GOAL: Expand upon trail and bikeway linkages between parks, schools, commercial areas, and other cities.



**OBJECTIVE 5A:** Acquire remaining properties to complete the trail system within Plano and link with systems in other cities, incorporating the master plan.



**OBJECTIVE 5B:** Address any safety or ADA accessibility issues in the trail and bikeway system.



**GOAL**: Expand communications and outreach to encourage residents to use facilities and participate in activities.



**OBJECTIVE 6A:** Expand the department's media presence to reach more followers.



**OBJECTIVE 6B:** Translate resources into common languages other than English such as Spanish.

7

GOAL: Create exciting and inviting park spaces in special area parks.



OBJECTIVE 7A: Incorporate public art, gathering areas, and event spaces to create social spaces in downtown Plano and the Legacy area.



**OBJECTIVE 7B:** Increase parkland level of service in special area park areas.



GOAL: Utilize environmentally and fiscally sustainable practices for developing and maintaining parks, trails, and facilities.



**OBJECTIVE 8A:** Explore alternative water sources and more efficient use of existing water resources.



**OBJECTIVE 8B:** Incorporate native plants in parks, along trails, and in open space areas.



GOAL: Ensure long-term financial stability of the city's park and recreation facilities.



OBJECTIVE 9A: Improve efficiency and cost effectiveness through privatization, public/private partnerships, and joint operations with other public entities.



**OBJECTIVE 9B:** Seek grant funding to complement other funding sources.

10

GOAL: Maintain and promote high standards for athletic facilities.

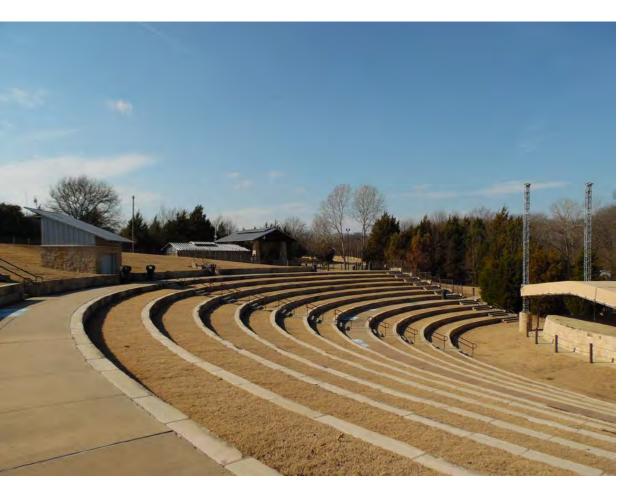


OBJECTIVE 10A: Maintain efficient guidelines and procedures to enable park staff to manage usage of athletic facilities.



**OBJECTIVE 10B:** Provide additional practice space throughout the city.

These goals are referenced in the beginning of Chapters 4-6 as they relate to those topics.





# PARKS, ATHLETICS, & OPEN SPACE



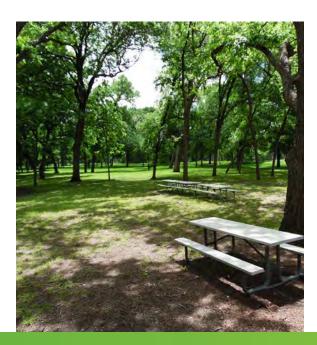


## **INTRODUCTION**

One of the first parks established in Plano was Haggard Park, dedicated in 1928. The quaint park served around 1,500 total residents at the time, but has long since been enveloped by the changes brought on by modernity – surrounded now by mixed-use developments, homes, trendy restaurants, and a light rail station. In 2023, however, one can still look over at the park on a pleasant afternoon and see people enjoying their lunch breaks, kids playing, and people out for a quiet stroll. This is a testament to the longevity and importance of quality parks in cities.

#### **GOALS AND PURPOSE**

The purpose of this chapter can best be imagined by the passing of a baton between two runners. Now is the time to take an already well-established system of parks, athletics, and open space and carry it forward into the next 100 years. As we have previously stated, the face of Plano is changing. Populations are shifting, new developments are happening, and the next generation of citizens have different wants and needs than their parents and grandparents. This chapter establishes a classification system of parks in Plano, inventories existing parks, assesses needs based on established standards, and outlines system-wide recommendations for neighborhood parks, community parks, open space preserves, athletic complexes, and special area parks in Plano.



First presented in **Chapter 3**, the overall master plan goals that are relevant to this chapter are to:

GOAL 1: Encourage healthy lifestyles by providing an appropriate mix of open space, facilities and range of activities throughout the city.

GOAL 2: Renovate, repurpose and modernize existing parks so that they offer similar elements across the city but are unique to the surrounding area.

GOAL 3: Provide for park and recreation opportunities that reflect the growing diversity of the city and allow for social interaction.

GOAL 4: Maintain high standards for planning, implementing, maintaining, and operating quality parks, recreation facilities, trails, and athletic fields.

GOAL 8: Utilize environmentally and fiscally sustainable practices for developing and maintaining parks, trails, and facilities.

GOAL 10: Maintain and promote high standards for athletic facilities.





#### PERTINENT CITIZEN INPUT

Feedback heard throughout the plan development process related to parks, athletics, and open space included:

- Feedback for the engagement process indicated increasing and preserving open space in Plano as a high priority
- Need for more amenities at parks (e.g. shade, walking trails, fitness stations, etc.)
- Like quality of athletic fields in the city
- Need more practice fields



## PARK CLASSIFICATION

The established park classification system in Plano includes neighborhood parks, community parks, linear parks, special use facilities, open space preserves, special area parks, and golf courses. However, many parks can be classified as multiple kinds of parks. For example, some community parks and linear parks also have a neighborhood park component. This multi-purpose nature is reflected in the subsequent inventory.

Neighborhood Parks in Plano typically serve neighborhoods within a one square mile area and are generally seven to ten acres in size. The service area that these parks reach is approximately ½ mile radius, or a ten minute walk. Many neighborhood parks in Plano were developed adjacent to an elementary school to share amenities and parking. Amenities typically include playgrounds, picnic tables, pavilions, walking paths, and open areas for free play. They function as activity centers and focal points for the neighborhood. In Plano there are 31 developed neighborhood parks. Neighborhood park amenities generally do not provide restroom facilities.

Community Parks typically serve a group of neighborhoods or portion of a city and are generally at least 25 acres in size. Community Parks have a higher level of service than Neighborhood Parks. The service area that these parks reach is approximately one mile radius. Both passive and active recreation elements are found in community parks. Overall, more amenities are included in community parks, including competitive athletic fields, recreation centers, concession

stands, and permanent restroom facilities. Plano currently has 20 developed community parks and two undeveloped park sites slated to be community parks.

Of the existing and planned community parks, 16 are designated as athletic complexes featuring baseball, softball, soccer, and other sports. Athletic complexes in Plano are unique because the majority of fields are multi-purpose; their use changes based on the season. This reduces maintenance needs and allows more efficient use of space yearround.

Linear Parks are long, narrowstretches of green spaces that link residential areas, schools, public facilities, and other parks. These parks are often located along creek corridors, utility easements, and rail corridors. They provide breaks in the urban development pattern, conserve ecologically unique areas, and are often contiguous with Community Parks and Open Space Preserves. There is no typical size nor service area since these parks vary in size. Amenities in linear parks typically include passive recreation elements like trails and associated amenities. In Plano there are 16 linear parks.

Special Use Facilities are differentiated from other park classifications because they draw more attendance from across the city and tend to serve a specific, unique purpose. Examples include memorials and cemeteries, as well as facilities or sites managed by the Parks and Recreation Department that do

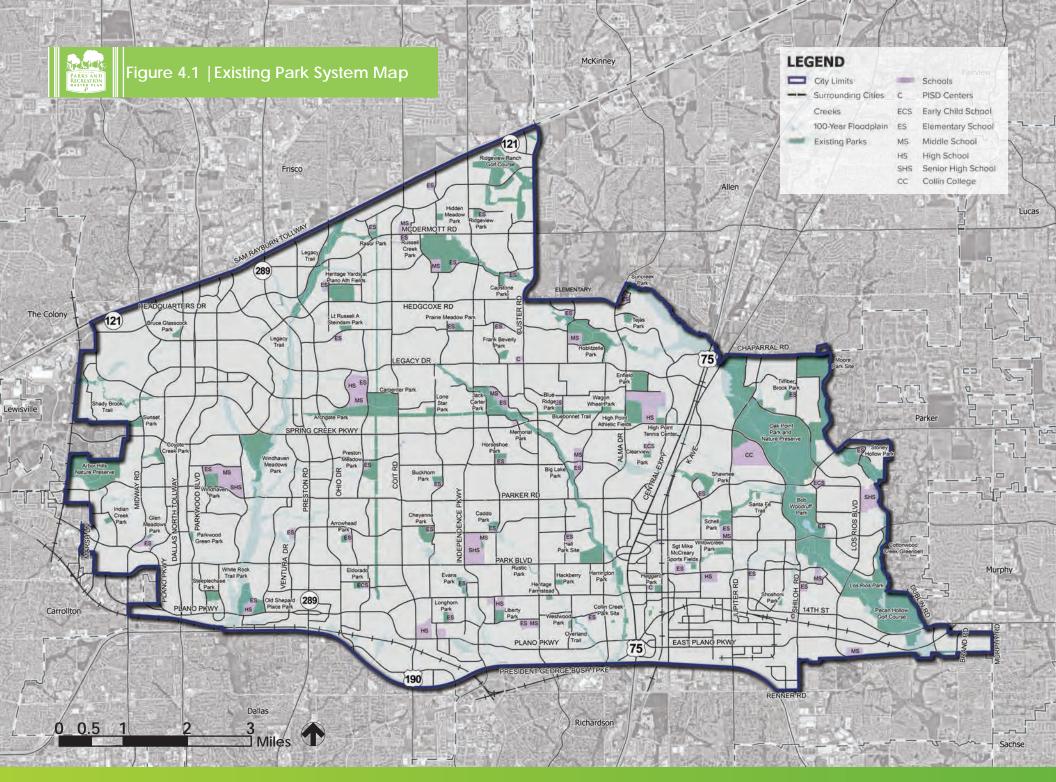
not easily fit into other categories. In Plano there are currently nine facilities or sites managed by the Parks and Recreation Department that are considered Special Use Facilities.

Open Space Preserves have a dual purpose to both preserve environmentally-sensitive sites and provide passive recreation. In Plano there are currently four open space preserves. Amenities in open space preserves are focused on passive recreation, including trails and nature viewing areas.

Golf Courses provide spaces to socialize and be active. In Plano there are two municipal golf courses: Pecan Hollow and Ridgeview Ranch. For a nominal fee, anyone can play golf at these facilities.

Special Area Parks are parks located within areas designated as special area park areas - Collin Creek redevelopment area and the Northwest Legacy area. Within these two areas, available land is scarce and expensive, so strategies for park space in these areas does not follow traditional park development. Types of parks could include carving out linear park spaces on the edges of corporate campuses. Currently there are three undeveloped special area parks in Plano.

The Park System Map shown in Figure 4.1 shows the location of all existing parks and undeveloped park sites in the Plano Parks System.



## PARKS INVENTORY

Inventorying the existing park facilities is an important step in the master planning process. This section lists the address and size of each of the developed and undeveloped parks in Plano.

## **NEIGHBORHOOD PARKS**

There are 31 developed neighborhood parks totaling 267.78 acres.

Indicates that neighborhood park is intersected by one or more linear parks.



ARROWHEAD PARK 2500 Millington Road 6.04 acres



BLUE RIDGE PARK<sup>1</sup> 6409 Blue Ridge Trail 5.02 acres



BUCKHORN PARK 3601 Mission Ridge Road 8.00 acres



CADDO PARK 2701 Round Rock Trail 7.72 acres



CAPSTONE PARK<sup>1</sup> 2325 Harrisburg Lane 8.85 acres



CLEARVIEW PARK 4000 Eagle Pass 6.88 acres



COPPER CREEK PARK<sup>1</sup> 3100 Copper Creek Drive 4.00 acres



COYOTE CREEK PARK
5801 Communications
Parkway
16.74 acres



ELDORADO PARK 1704 Iowa Drive 6.87 acres

## EXISTING INVENTORY | NEIGHBORHOOD PARKS



EVANS PARK 1601 Mollimar Drive 11.00 acres



FRANK BEVERLY PARK 7112 Quarry Chase Trail 10.13 acres



GLEN MEADOWS PARK 6300 Park Meadow Lane 2.91 acres



HACKBERRY PARK 1600 Rio Grande Drive 5.63 acres



HIDDEN MEADOW PARK 3500 Kimble Drive 6.76 acres



INDIAN CREEK PARK 2701 La Costa Drive 5.31 acres



LONE STAR PARK<sup>1</sup>
6450 Mission Ridge Road
8.27 acres



LONGHORN PARK 1100 Colgate Place 7.00 acres



PARK
4501 Quincy Lane
8.29 gcres



PARKWOOD GREEN PARK 2500 Parkwood Boulevard 4.13 acres



PRAIRIE MEADOW PARK 3225 Caravan Drive 8.14 acres



RIDGEVIEW PARK 2903 Elsinore Drive 7.56 acres

## EXISTING INVENTORY | NEIGHBORHOOD PARKS



SHOSHONI PARK 1501 Del Sol Drive 2.80 acres



STEEPLECHASE PARK<sup>1</sup> 1500 Balcones Drive 18.65 acres



PARK
1212 H Avenue
0.41 acres



STONEY HOLLOW PARK<sup>1</sup> 4030 Coldwater Creek Lane 41.00 acres



SUNSET PARK<sup>1</sup> Shady Brook Trail 14.92 acres



TEJAS PARK 920 Bass Drive 10.96 acres



TIMBER BROOK PARK 6622 Norwood Lane 8.57 acres



W.H. BUZZ RASOR PARK<sup>1</sup> 8942 Rockledge Lane 6.28 acres



WAGON WHEEL PARK<sup>1</sup>
Rainier Rd
4.94 acres



WESTWOOD PARK 1001 Westwood Drive 4.00 acres

## EXISTING INVENTORY | NEIGHBORHOOD PARKS



## **COMMUNITY PARKS**

There are 20 developed community parks totaling 1,092.31 acres and two additional undeveloped park sites totaling 164.04 acres.

\*Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park is indicated in parentheses.

<sup>1</sup>Indicates that community park is intersected by one or more linear parks.



ARCHGATE PARK\*1
6600 Archgate Drive
49.37 acres (8)



CARPENTER PARK\*1 6701 Coit Road 103.51 acres (8)



CHEYENNE PARK\* 2501 Mission Ridge Road 24.79 acres (5)



ENFIELD PARK\*
700 Legacy Drive
46.28 acres (8)



HALL PARK SITE\* (undeveloped) 50.93 acres (8)



HARRINGTON PARK\*1
401 West 16th Street
20.21 acres (2)



HERITAGE YARDS AT PLANO ATHLETIC FIELDS\* 4525 Hedgcoxe Road 61.28 acres (8)



HIGH POINT ATHLETIC
FIELDS<sup>1</sup>
6500 Alma Drive
55.41 acres



HOBLITZELLE PARK\*1
7500 Red River Drive
139.25 acres (6)



JACK CARTER PARK\*1 2800 Maumelle Drive 70.84 acres (14)



LIBERTY PARK\*
1200 Mill Valley Drive
17.00 acres (10)

# EXISTING INVENTORY | COMMUNITY PARKS



MOORE PARK SITE\*1 (undeveloped) 113.11 acres (8)



OAK POINT CENTER
6000 Jupiter Road
24,70 acres
(Does not include recreation
facility)



OLD SHEPARD PLACE PARK\*1 1301 Winding Hollow Lane 17.95 acres (2)



PRESTON MEADOW PARK\*1 4243 Lorimar Drive 25.53 acres (7)



RUSSELL CREEK PARK\*1
3500 McDermott Rd
184.72 acres (10)



SCHELL PARK\*1 2305 Laurel Lane 31.26 acres (5)



SGT. MIKE MCCREARY SPORTS FIELDS<sup>1</sup> 1601 19th Street 4.15 acres



SHAWNEE PARK\*
3380 Sherwood Drive
43.87 acres (8)



WILLOWCREEK PARK\*1
2101 Jupiter Road
23.93 acres (8)



WINDHAVEN PARK\* 3300 Clark Parkway 25.14 acres (10)



WINDHAVEN MEADOWS

PARK<sup>1</sup>

5400 Windhaven Parkway

123.14 acres

## SPECIAL USE FACILITIES

There are nine special use facilities totaling 44.56 acres.

\*Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park is indicated in parentheses.

<sup>1</sup>Indicates a trail intersects or connects to park



**BOWMAN CEMETERY** Oak Grove Drive 3.61 acres



**DOUGLASS COMMUNITY CENTER (LEASED SITE)** 1111 H Avenue

2.42 acres



**HAGGARD PARK\*** 901 E. 15th Street 6.88 acres (2)





HERITAGE FARMSTEAD SITE 1900 W. 15th Street 3.91 acres



**CENTER** 421 W. Spring Creek Parkway 6.75 acres



**HORSESHOE PARK\*** 4012 Roundrock Trail 9.40 acres (7)



MEMORIAL PARK 1 2101 Bay Hill Drive 8.59 acres



PLANO AQUATIC CENTER (LEASED SITE) 2301 Westside Drive

2.00 acres



HARRY ROWLINSON **COMMUNITY NATATORIUM** (SCHOOL-BASED) 1712 P. Avenue 1.00 acre

# SPECIAL AREA PARKS

There are three special area parks totaling 12.95 acres.

\*Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park is indicated in parentheses.

<sup>1</sup>Indicates a trail intersects or connects

# **GOLF COURSES**

There are two municipal golf courses in Plano totaling 463.14 acres.



PECAN HOLLOW GOLF COURSE 4901 14th Street

257.80 acres

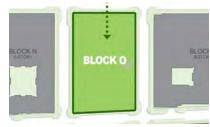


RIDGEVIEW RANCH GOLF CLUB

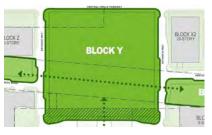
2701 Ridgeview Drive 205.34 acres



BRUCE GLASSCOCK PARK (undeveloped) Legacy at Communications Pkwy 7.12 acres (2)



STARLIGHT PARK\* (undeveloped) Lot O 1.87 acres (0.5)



SUNRISE PARK\*1 (undeveloped) Lot Y 3.96 acres (1)

# OPEN SPACE PRESERVES

There are four existing open space preserves totaling 1528.42 acres. There are Park and Special Event Areas within Oak Point Park and Nature Preserve.

\*Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park(s) is indicated in parentheses.



ARBOR HILLS NATURE
PRESERVE\*
6701 W Parker Road
210.98 acres (8)



BOB WOODRUFF PARK\* 2601 San Gabriel Drive 324.16 acres (16)



LOS RIOS PARK\*
1700 Country Club Drive
196.50 acres (16)



OAK POINT PARK AND NATURE PRESERVE\* 5901 Los Rios Boulevard 796.78 acres (8)

# **LINEAR PARKS**

There are 16 linear parks totaling 835.08 acres. There is one undeveloped linear park that is 20 acres.

\*Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park(s) is indicated in parentheses.





BIG LAKE PARK\* 3800 Rainier Road 13.71 acres (3) 1 mile of walking path



BLUEBONNET TRAIL Midway Road to K Avenue 102.63 acres 8.3 mile trail



BRECKINRIDGE TRAIL
Murphy Road to Bradshaw Dr.
34.94 acres
2.7 mile trail



CHISHOLM TRAIL\* Legacy Drive to 15th Street 126.50 acres (4) 5.4 mile trail



COTTONWOOD CREEK GREENBELT\* Parker Road to City Limits 124.31 acres (4)



ROWLETT CREEK PARK (undeveloped) 20.00 acres



LEGACY TRAIL\*

Rockledge Lane to W. Spring

Creek Parkway

147.40 acres (6)

1.6 mile trail



OVERLAND TRAIL
1600 Janwood Drive
6.87 acres
0.1 mile trail



PRESTON RIDGE TRAIL
Ridgeview Drive to
Eldorado Drive
108.22 acres
6.2 mile trail

# EXISTING INVENTORY | LINEAR PARKS



ROWLETT TRAIL
Rowlett Cemetery Rd.
& SH 121
3.59 acres



RUSSELL CREEK GREENBELT 3500 McDermott Road 28.56 acres 2 miles of walking path



RUSTIC PARK 1900 Rustic Drive 1.84 acres



SANTA FE TRAIL\*

Adjacent to Oak Grove Drive
28.05 acres (6)

1.6 mile trail



SHADY BROOK TRAIL Kings Manor Lane to Midway Road 34.80 acres 1.9 mile trail



SUNCREEK PARK
Near Alma Road and Rollins
Drive
13.87 acres





WHITE ROCK TRAIL PAR
5500 Channel Isle Drive
39.79 acres
2 miles of walking path



# **NEIGHBORHOOD PARKS**

ARROWHEAD PARK	2500 Millington Road	6.04 acres
BLUE RIDGE PARK <sup>1</sup>	6409 Blue Ridge Trail	5.02 acres
BUCKHORN PARK	3601 Mission Ridge Road	8.00 acres
CADDO PARK	2701 Round Rock Trail	7.72 acres
CAPSTONE PARK <sup>1</sup>	2325 Harrisburg Lane	8.85 acres
CLEARVIEW PARK	4000 Eagle Pass	6.88 acres
COPPER CREEK PLAYGROUND <sup>1</sup>	3100 Copper Creek Drive	4.00 acres
COYOTE CREEK PARK	5801 Communications Parkway	16.74 acres
ELDORADO PARK	1704 Iowa Drive	6.87 acres
EVANS PARK	1601 Mollimar Drive	11.00 acres
FRANK BEVERLY PARK	7112 Quarry Chase Trail	10.13 acres
GLEN MEADOWS PARK	6300 Park Meadow Lane	2.91 acres
HACKBERRY PARK	1600 Rio Grande Drive	5.63 acres
HIDDEN MEADOW PARK	3500 Kimble Drive	6.76 acres
INDIAN CREEK PARK	2701 La Costa Drive	5.31 acres
LONE STAR PARK <sup>1</sup>	6450 Mission Ridge Road	8.27 acres
LONGHORN PARK	1100 Colgate Place	7.00 acres
LT RUSSEL A STEINDAM PARK	4501 Quincy Lane	8.29 acres
PARKWOOD GREEN PARK	2500 Parkwood Boulevard	4.13 acres
PRAIRIE MEADOW PARK	3225 Caravan Drive	8.14 acres
RIDGEVIEW PARK	2903 Elsinore Drive	7.56 acres
SHOSHONI PARK	1501 Del Sol Drive	2.80 acres
STEEPLECHASE PARK <sup>1</sup>	1500 Balcones Drive	18.65 acres
STIMPSON AND DRAKE PARK	1212 H Ave	0.41 acres
STONEY HOLLOW PARK <sup>1</sup>	4030 Coldwater Creek Lane	41.00 acres
SUNSET PARK <sup>1</sup>	Shady Brook Trail	14.92 acres
TEJAS PARK	920 Bass Drive	10.96 acres
TIMBER BROOK PARK	6622 Norwood Lane	8.57 acres
W.H. BUZZ RASOR PARK <sup>1</sup>	8942 Rockledge Lane	6.28 acres
WAGON WHEEL PARK <sup>1</sup>	Rainier Rd	4.94 acres
WESTWOOD PARK	1001 Westwood Drive	4.00 acres

# **COMMUNITY PARKS**

ARCHGATE PARK*1	4400 Archaeta Drive	10 27 garas (0)
	6600 Archgate Drive	49.37 acres (8)
CARPENTER PARK*1	6701 Coit Road	103.51 acres (8)
CHEYENNE PARK*	2501 Mission Ridge Road	24.79 acres (5)
ENFIELD PARK*	700 Legacy Drive	46.28 acres (8)
HALL PARK SITE*	(undeveloped)	50.93 acres (8)
HARRINGTON PARK*1	401 West 16th Street	20.21 acres (2)
HERITAGE YARDS AT PLANO*	4525 Hedgcoxe Road	61.28 acres (8)
HIGH POINT ATHLETIC FIELDS <sup>1</sup>	6500 Alma Drive	55.41 acres
HOBLITZELLE PARK*1	7500 Red River Drive	139.25 acres (6)
JACK CARTER PARK*1	2800 Maumelle Drive	70.84 acres (14)
LIBERTY PARK*	1200 Mill Valley Drive	17.00 acres (10)
MOORE PARK SITE*1	(undeveloped)	113.11 acres (8)
OAK POINT CENTER**	6000 Jupiter Road	24.70 acres
OLD SHEPARD PLACE PARK*1	1301 Winding Hollow Lane	17.95 acres (2)
PRESTON MEADOW PARK*1	4243 Lorimar Drive	25.53 acres (7)
RUSSELL CREEK PARK*1	3500 McDermott Rd	184.72 acres (10)
SCHELL PARK*1	2305 Laurel Lane	31.26 acres (5)
SGT. MIKE MCCREARY SPORTS FIELDS <sup>1</sup>	1601 19th Street	4.15 acres
SHAWNEE PARK*	3380 Sherwood Drive	43.87 acres (8)
WILLOWCREEK PARK*1	2101 Jupiter Road	23.93 acres (8)
WINDHAVEN PARK*	3300 Clark Parkway	25.14 acres (10)
WINDHAVEN MEADOWS PARK <sup>1</sup>	5400 Windhaven Parkway	123.14 acres



<sup>\*</sup>Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park(s) is indicated in parentheses.

<sup>\*\*</sup>Indicates that the acreage does not include the recreation facility.

<sup>&</sup>lt;sup>1</sup>Indicates that neighborhood park is bisected by one or more linear parks.



# **SPECIAL USE FACILITIES**

BOWMAN CEMETERY	Oak Grove Drive	3.61 acres
DOUGLASS COMMUNITY CENTER (LEASED SITE)	1111 H Avenue	2.42 acres
, ,	901 E. 15th Street	6.88 acres (2)
HARRY ROWLINSON COMMUNITY NATATORIUM (SCHOOL-BASED)	1712 P. Avenue	1.00 acre
HERITAGE FARMSTEAD SITE	1900 W. 15th Street	3.91 acres
HIGH POINT TENNIS CENTER	421 W. Spring Creek Parkway	6.75 acres
HORSESHOE PARK*	4012 Roundrock Trail	9.40 acres (7)
MEMORIAL PARK <sup>1</sup>	2101 Bay Hill Drive	8.59 acres
PLANO AQUATIC CENTER (LEASED SITE)	2301 Westside Drive	2.00 acres

# SPECIAL AREA PARKS

BRUCE GLASSCOCK PARK* (UNDEVELOPED)	Legacy at Communications	7.12 acres (2)
STARLIGHT PARK* (UNDEVELOPED)	Lot O	1.87 acres (0.5)
SUNRISE PARK*1 (UNDEVELOPED)	Lot Y	3.96 acres (1)

# **GOLF COURSES**

PECAN HOLLOW GOLF COURSE	4901 14th Street	257.80 acres
RIDGEVIEW RANCH GOLF CLUB	2701 Ridgeview Dr	205.34 acres

\*Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park(s) is indicated in parentheses.

<sup>1</sup>Indicates a trail intersects or connects to park

# **OPEN SPACE PRESERVES**

ARBOR HILLS NATURE PRESERVE *	6701 W Parker Road	210.98 acres (8)
BOB WOODRUFF PARK*	2601 San Gabriel Drive	324.16 acres (16)
OAK POINT PARK AND NATURE PRESERVE*	5901 Los Rios Boulevard	796.78 acres (8)
LOS RIOS PARK*	1700 Country Club Drive	196.5 acres (16)

# **LINEAR PARKS**

BIG LAKE PARK*	3800 Rainier Road	13.71 acres (3)
BLUEBONNET TRAIL	Midway Road to K Avenue	102.63 acres
BRECKINRIDGE TRAIL	Murphy Road to Bradshaw Dr.	34.94 acres
CHISHOLM TRAIL*	Legacy Drive to 15th Street	126.50 acres (4)
COTTONWOOD CREEK GREENBELT*	Parker Road to City Limits	124.31 acres (4)
ROWLETT CREEK PARK	(undeveloped)	20.00 acres
LEGACY TRAIL	Rockledge Ln to W. Spring Creek	147.40 acres (6)
OVERLAND TRAIL	1600 Janwood Drive	6.87 acres
PRESTON RIDGE TRAIL	Ridgeview Drive to Eldorado Drive	108.22 acres
ROWLETT TRAIL		3.59 acres
RUSSELL CREEK GREENBELT SITE	3500 McDermott Road	28.56 acres
RUSTIC PARK	1900 Rustic Drive	1.84 acres
SANTA FE TRAIL*	Adjacent to Oak Grove Drive	28.05 acres (6)
SHADY BROOK TRAIL	Kings Manor Lane to Midway Road Near Alma Road and	34.80 acres
SUNCREEK PARK	Near Alma Road and Rollins Drive	13.87 acres
WHITE ROCK TRAIL PARK	5500 Channel Isle Drive	39.79 acres

<sup>\*</sup>Indicates that a neighborhood park is contained within the facility. The number of acres devoted to the neighborhood park(s) is indicated in parentheses.

Additionally, the Parks Department manages approximately 37.12 acres associated with recreation facilities, which are discussed in **Chapter 5**.



<sup>&</sup>lt;sup>1</sup>Indicates a trail intersects or connects to park

### **NEEDS ASSESSMENT**

Needs for additional parkland and facilities in a parks system is partially determined by analyzing level of service (LOS) for park acreage and service area. For this plan, three approaches are used to determine current and future needs: the acreage and service area level of service approach, demands-based approach, and resource-based approach.





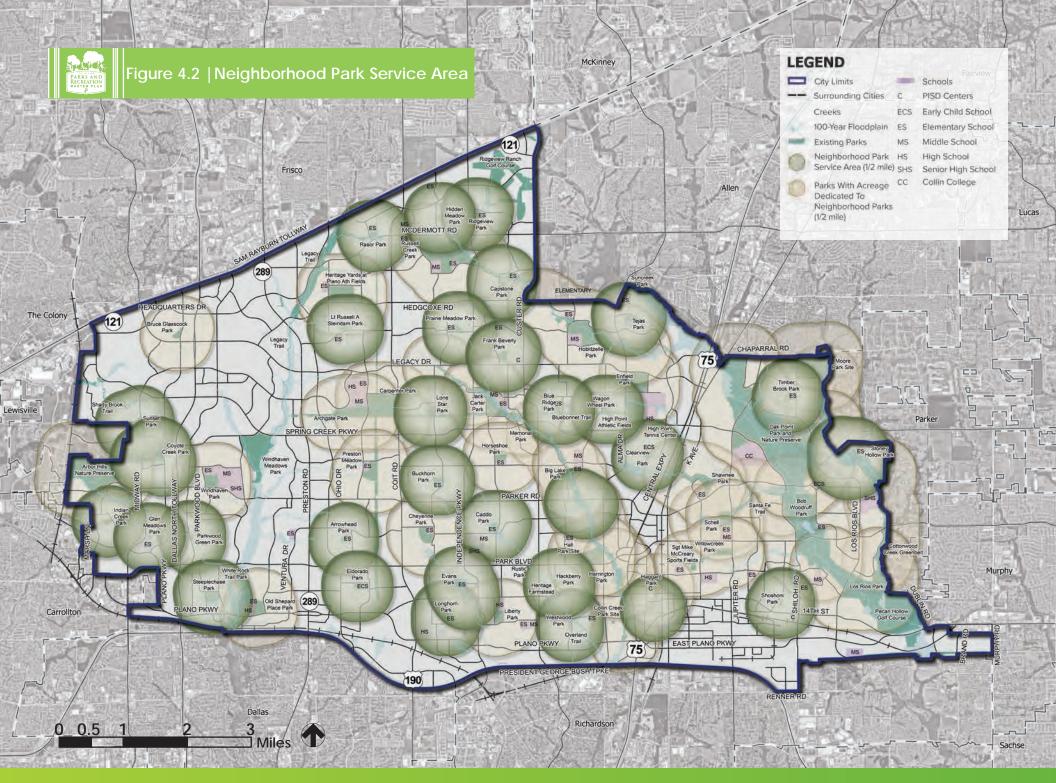
# ACREAGE AND SERVICE AREA LEVEL OF SERVICE

#### **NEIGHBORHOOD PARKS**

An important figure to consider is Park Service Area LOS, which spatially represents how much of a community is served by parks. The regional benchmark for park service area TLOS for neighborhood parks is:

 Neighborhood Park Service Area: ¼ to ½ mile radius, or approximately a five to ten minute walk

As shown in Figure 4.2, much of the city is within a five to ten minute walk of a neighborhood park, with the exception of the Legacy Area and downtown Plano area. As Plano continues to grow and more areas of the city includes housing, it is important that additional neighborhood parks are constructed. It is also important to note that this service area is general; physical barriers such as roads or bodies of water limit connections between parks and the service areas they are meant to serve. As indicated on page 76 the service area map also includes community parks that serve as 'de-facto' neighborhood parks for areas of the city that are served by community parks instead of neighborhood parks. See page 79 for additional discussion on 10-minute walk to a park access.

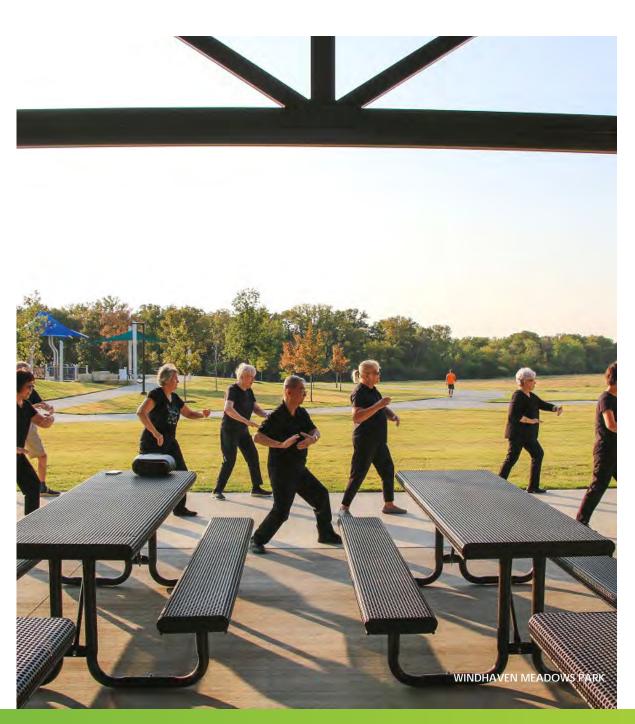


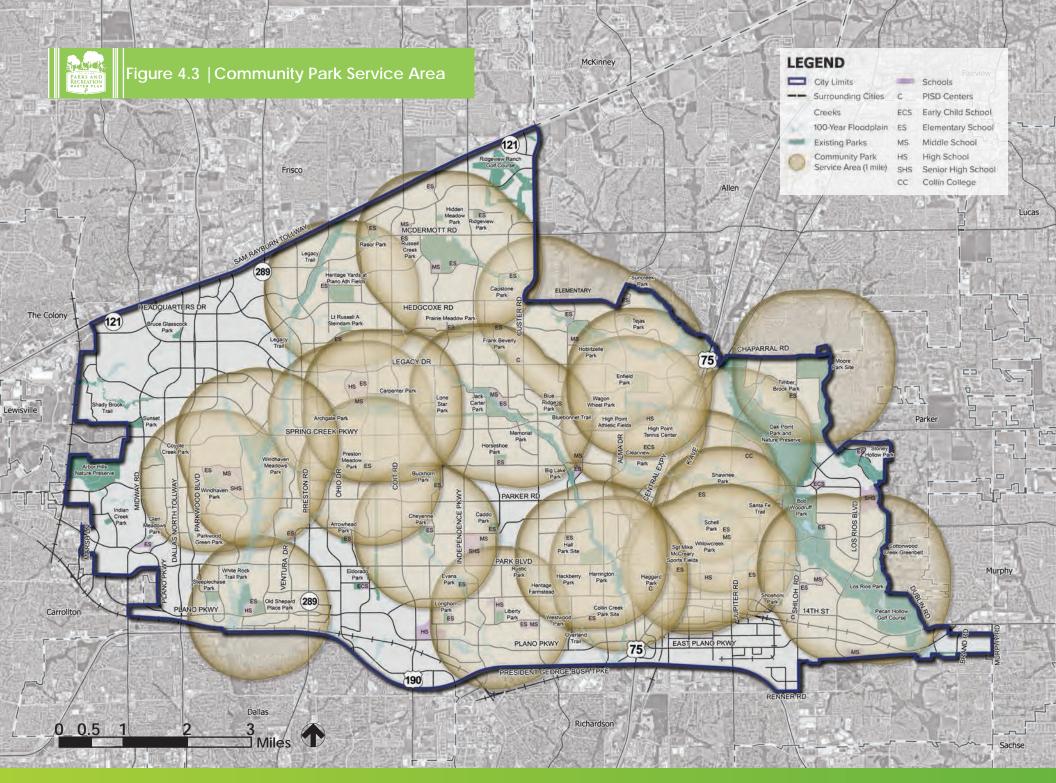
#### **COMMUNITY PARKS**

Park Service Area LOS spatially represents how much of a community is served by parks. The regional benchmark for park service area TLOS is:

 Community Park Service Area: one mile radius, or approximately a five minute drive

The majority of residential areas in Plano are served by community parks as shown in Figure 4.3. Most of the areas that are not included are served by open space preserves. It is important to note that this service area is general; physical barriers such as roads or bodies of water limit connections between parks and the service areas they are meant to serve.





#### **PARK SYSTEM**

Today, the acreage of the total park system is approximately 4,211 acres and when undeveloped park sites are included, the acreage increases to 4,408 acres. This translates to an LOS of 15.09 acres per 1,000 residents today and 13.32 acres per 1,000 residents in 2050. This far exceeds the NRPA average LOS of communities nationwide (10.8 acres per 1,000 in 2023), but is just short of the target the City of Plano established for themselves in previous plans of 15 acres per 1,000.

Table 4.0: Current and Target LOS for All Parks

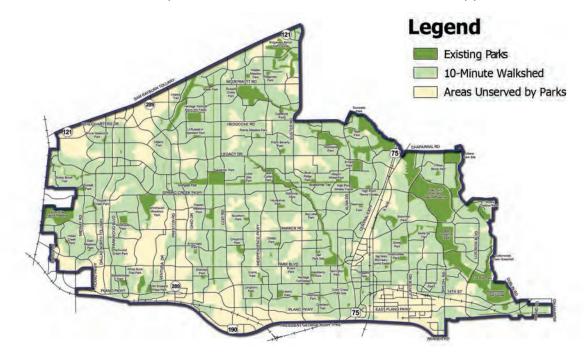
	2023	2050
Population	292,066	331,000
Acreage*	4,408.28	4,408.28
Current LOS	15.09 acres per 1,000 residents	13.32 acres per 1,000 residents
NRPA Target LOS	10.8 acres per 1,000 residents	10.8 acres per 1,000 residents
NRPA Target Acreage Surplus/Deficit	1,253.97 acre surplus	833.48 acre surplus
City of Plano Target LOS	15 acres per 1,000 residents	15 acres per 1,000 residents
Plano Target Acreage Surplus/Deficit	27.29 acre surplus	556.72 acre deficit

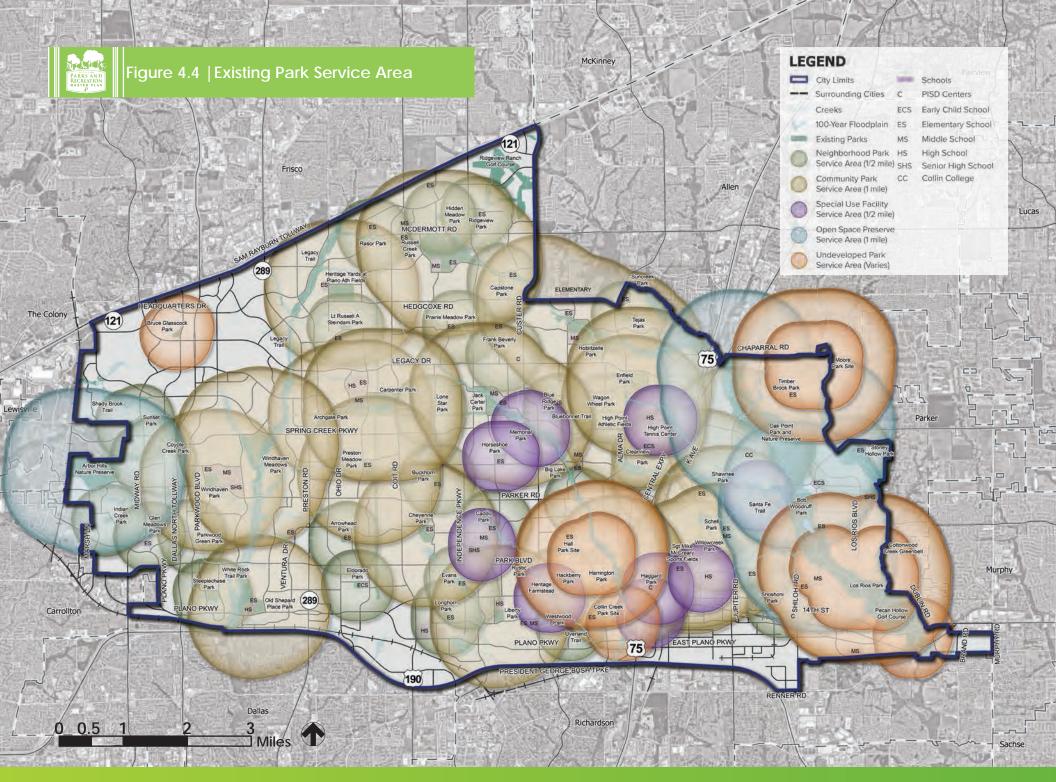
<sup>\*</sup>Acreage includes developed and undeveloped park acreage

**Figure 4.4** shows the service area for all developed parks and currently undeveloped parks within the city. This shows a service area of ½ mile for neighborhood parks, 1 mile for community parks, 1 mile for open space preserves, and ½ mile for special use facilities. Most of the city is served by parks, with the exception of the northwest Legacy area and parts of downtown.

It is important to note that private parks, such as HOA-maintained parks and golf courses, are not included in this assessment since they are not accessible to the general public. Additionally, the service area is general; physical barriers such as roads or bodies of water limit connections between parks and the service areas they are meant to serve.

An additional national park service evaluation tool used is the Trust for Public Land (TPL) 10-Minute Walk to a Park, which assesses access to parks by determining the percentage of residents that are able to reach a park within a half-mile walk, which roughly equates to ten minutes. This assessment of park access takes into account potential obstructions and barriers such as freeways, rivers, and fences that a general service area does not. In the 2023 analysis, TPL determined that 80% of residents in Plano were able to access a park within a ten minute walk. More details on TPL's park service evaluation can be found in the Appendix.





#### **AMENITIES**

The National Recreation and Park Association (NRPA) is an independent agency advocating for equitable and inclusive parks and recreation service for communities nationwide by looking at a series of park and recreation metrics. NRPA publishes a Park Metric Report which provides comprehensive data standards to guide communities in the planning, operations, and management of park and recreation facilities. Within this report NRPA provides per capita LOS metrics for park and recreation amenities maintained by jurisdictions based on a population.

This Level of Service metric assesses the need for additional amenities within parks. A current and future LOS for each major amenity is calculated based on the current population and projected population. While the NRPA has established target LOS for certain amenities, these vary greatly among communities so the NRPA suggestions are just provided as a reference. Table 4.1 inventories the existing amenities and the current and future level of service. This amenities inventory only includes city-owned facilities; it does not include amenities at schools or private fields or court space.

As presented in **Chapter 2**, Plano currently ranks 16th out of the top 100 cities in the Trust for Public Land's ParkScore rankings. Amenities that are incorporated into the rankings include the number of basketball goals, playgrounds, dog parks, and recreation centers per capita. In 2023 Plano scored 48 points out of a possible 100 for the amenities section of the TPL ParkScore. The lowest scoring amenities were senior/recreation centers, splash pads and dog parks. Adding any of these amenities would increase the overall Park Score ranking.



Table 4.1: Amenities Level of Service

Amenity	Existing	Current LOS	Future LOS	NRPA Median LOS**
Baseball/Softball Fields*	58	1 per 5,036	1 per 5,707	1 per 26,826
Soccer Fields*	89	1 per 3,282	1 per 3,719	1 per 47,204
Football Fields*	4	1 per 73,017	1 per 82,750	1 per 73,556
Lacrosse Fields*	3	1 per 97,355	1 per 110,333	N/A
Cricket Grounds*	8	1 per 36,508	1 per 41,375	N/A
Backstops	86	1 per 3,396	1 per 3,849	N/A
Basketball Courts	61	1 per 4,788	1 per 5,426	1 per 15,214
Sand Volleyball Courts	11	1 per 26,551	1 per 30,091	N/A
Tennis Courts	29	1 per 10,071	1 per 11,414	1 per 12,033
Playground Units	74	1 per 3,947	1 per 4,473	1 per 10,811
Pavilions	81	1 per 3,606	1 per 4,086	N/A

<sup>\*</sup> The number of fields available for a sport varies depending on the season. The numbers in this table represent the maximum number of fields during the season that has the most activity for that particular sport.

<sup>\*\*</sup>Represents the median number of residents per facility for jurisdictions with more 250,000 residents. Source: 2023 NRPA Agency Performance Review.



#### **DEMAND-BASED APPROACH**

In addition to the acreage and service area level of service approach, considering current usage and demand for facilities is also a key part of an overall needs assessment. This section summarizes demand for parks, open space, and athletics based on past assessments, public workshops, and public input surveys. As discussed in **Chapter 3**, over 500 people responded to the 2022 survey and about 100 people attended the virtual engagement room for this Master Plan Update; key input related to demand for facilities is discussed below.

Park Amenities: Feedback that was heard consistently throughout the plan development process was the desire for more shade within parks. Specific amenities that the virtual engagement room survey respondents selected as important or very important include splash pads, pavilions, and natural open spaces. Additionally, 85% of respondents thought it was important to update outdated amenities as needed to continually provide attractive and welcoming park spaces.

Open Space: Natural habitat or nature areas were identified as the top priority for desired amenities by both online and virtual engagement room survey respondents. Additionally, 93% of virtual engagement room survey respondents found improving trail connections from surrounding neighborhoods to nature preserves as important or very important. The Parks and Recreation Master Plan is supported by the Urban Forest Master Plan, a document that examines the existing tree canopy throughout the City and provides strategies for tree species diversity and maintenance, and provides guidance for future Park plans.

Athletics: A Regional Study of Sports conducted in 2016 estimated which sports leagues would experience the greatest increase in participation in the five cities (see pg 37); soccer was first, followed by baseball and then softball. As of 2022, there were seven youth sports organizations and eleven adult sports organizations operating leagues in Plano. Within these organizations, there were 449,468 participants in Plano sports leagues.

According to the online survey conducted in 2016, the most highly rated sport fields that respondents wanted more of were multipurpose fields (65% ranked very important or important), followed by youth soccer (50%), and then tennis (47%). Similarly nearly 83% of the 2022 virtual engagement room survey respondents considered continuing to support a variety of sports through flexible programming of field space as important or very important.

#### **RESOURCE-BASED APPROACH**

Resources considered in a Parks Master Plan are areas in a city that could potentially be parks, trails, or open space in the future; these potential resources include greenbelts, bodies of water, city-owned property, and vacant land. In Plano only a small percentage of the city is not developed – primarily falling within the eastern and western zones of the city. Larger parcels that are vacant are either already planned for new development or are valued at a cost that is prohibitive to the city for acquisition.

The city proactively preserved much of the area in the floodplain around Rowlett Creek in the eastern part of the city. Today, Oak Point Park and Nature Preserve and Bob Woodruff Park cover a substantial part of the eastern greenbelt and the city has completed a master plan to convert the Los Rios Golf Course into another to complete the greenbelt park space.

Another good example of the city proactively preserving areas around creeks for open space or trails is Chisholm Trail that follows Spring Creek. The trail follows the naturalized creek for about 5.4 miles in the center of the city. Additionally, Legacy Trail is adjacent to White Rock Creek in the western part of the city. Plano also made use of undevelopable areas around a major utility easement by constructing the Preston Ridge Trail.



The city has already identified many of the remaining resources as future parks or trails. Trails are proposed along the Silver Line rail line and installed along the DART Red Line. Additionally, the utility easement in the southeastern corner of the city is an opportunity to extend the existing Breckinridge Trail. Finally, if any private golf course were to be repurposed as another use in the future, trails could be extended where they currently do not connect.

#### INDIVIDUAL PARK REVIEW

Since there are over eighty parks in the city's system, the project team worked with staff to identify several parks that would be reviewed more closely. The recommendations for these parks could be applied to other parks in the system as well. The discussion of these several park sites are included in the Appendix.

#### Neighborhood parks:

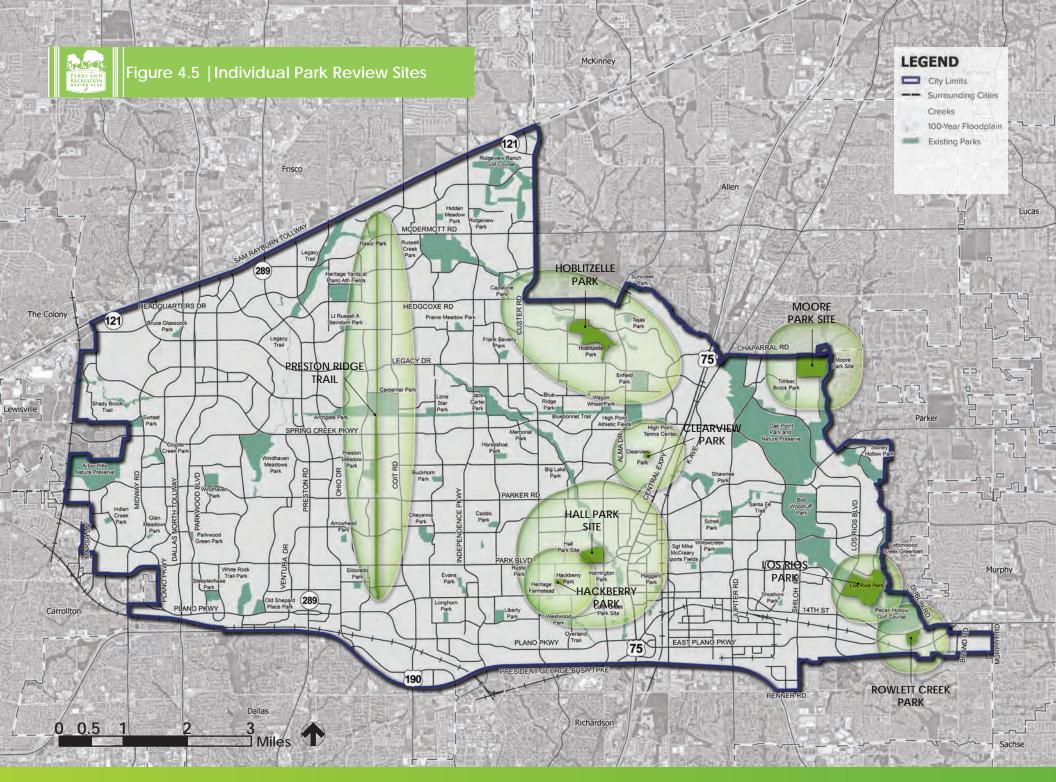
- Clearview Park
- Hackberry Park

#### Community parks:

- Hall Park
- Hoblitzelle Park
- Moore Park Site

#### Linear parks, trails and bikeways:

- Preston Ridge Trail
- Rowlett Creek Park



# SYSTEM-WIDE RECOMMENDATIONS

This section describes strategies to renovate neighborhood parks, and to develop and enhance community parks, including active, environmental, and social focused community parks. An analysis of the two special area park zones is included in the Appendix.

#### RENOVATE NEIGHBORHOOD PARKS

As first discussed in Chapter 1, part of the overall vision for the future of parks and recreation in Plano is to renovate neighborhood parks. Neighborhood parks in Plano long served as a model for other communities. Located near the center of a roughly square mile neighborhood bounded by major roadways, the city was proactive by locating parks adjacent to elementary schools and did not include parking. The amenities that are typically found in each park include a playground, walking path, pavilion, and open area, but while this model offers convenient access to parks close to home, most of the parks are now indistinguishable from one another.

Additionally, Plano's parks were developed quickly to meet the basic needs of rapidly developing residential areas. As a result, the improvements are of a similar age, in need of replacement, and the improvements needed to provide services require extensive updates to existing amenities. Some of the issues that are evident in neighborhood parks in Plano are lack of accessibility, lack of identity, and need to utilize engagement methods such as virtual outreach options to continue to increase citizen involvement in the planning process.





#### **EXISTING PARK IMPROVEMENTS**

To stay ahead of the curve and once again be the leading community in the region and state, the city should focus on renovating neighborhood parks to replace aging infrastructure and reestablish the excellent quality. As new amenities are needed in parks, they should be updated with new, state-of-the-art features and technology that continues to attract residents to Plano. The following strategies should guide future updates.

#### Color

A relatively inexpensive way to give parks new life is **incorporating bright colors**. Updating park elements such as playground equipment, benches, picnic units, and signage with new, vibrant colors can make neighborhood parks unique.

#### **Unique Play and Structures**

Manufacturers today offer unique playgrounds that can be customized to individual parks in Plano. When playgrounds in neighborhood parks are scheduled to be replaced, elements that should be considered include all-abilities play equipment like that found at Jack Carter Park and themed playgrounds like W.H. "Buzz" Rasor Park and Liberty Park. While some customization is desired, maintenance is more feasible when products are more similar.

#### **Pavilions and Shade Structures**

The City of Plano should implement a program with the goal of providing custom, rather than off-the-shelf, shade structures and pavilions to its parks. Visitors are naturally drawn to these structures in parks because of the shade, so making pavilions that are interesting architecturally is well worth the investment and will distinguish Plano from other cities in the region.

#### Signage

The standard sign for neighborhood parks in Plano is a simple wooden sign with white lettering. While it is important that these signs are consistent throughout the system, they could be updated to make each park feel more unique. Materials to consider include architecturally-finished concrete, stone, metal and wood.

#### **Native Landscaping**

In order to keep maintenance needs to a minimum, native landscaping should be prioritized for all planting programs at neighborhood parks. Additionally, the Urban Forestry Master Plan should be referenced whenever new trees are needed in neighborhood parks.

#### **Practice Fields**

A citywide need identified in this master plan is for more practice fields. Such fields at neighborhood parks should serve nearby teams for drop-in practices and not serve as a site for scrimmages or games. These practice areas should be fertilized and treated for weeds and watered regularly to produce acceptable turf.

#### Flexible Spac€

Access to unprogrammed, flexible space is also important for Plano residents as identified in the outreach methods. In general, parks can help meet this need by including space that can be used for a variety of drop-in uses, such as a permitted fitness class, game of tag, or picnic.

#### **Walking Paths**

Finally, many park users visit their neighborhood park to walk their dog or go for a jog. The majority of neighborhood parks in Plano have a perimeter walking path that either connects to the exterior sidewalk network or to a larger trail. A critical component to address is to fix any ADA accessibility issues with existing walking paths and to add crosswalks to connect to the exterior sidewalk or trail networks.

Completed Park Enhancements Since 2018:

Constructed Windhaven Meadows Park playground and splashpad in accordance with the master plan and design for the park.

Master plan and outreach for Bruce Glasscock Park.





# CONSIDERATIONS FOR FUTURE NEIGHBORHOOD PARKS

If more infill development occurs in Plano, some areas will increase in population and warrant additional parkland. Not all neighborhood parks need to include the amenities typical of a traditional neighborhood park, however. For example, young professionals living in a home with little to no yard and without children would likely seek green space to take their dog outside rather than to use a playground structure.

# DEVELOP & ENHANCE COMMUNITY PARKS

In addition to renovating neighborhood parks, another focus of this master plan is to develop & enhance community parks. In order for Plano's park system to remain a leader on a regional and statewide level, these parks should stand out as destinations for sports, open space, or events. The three opportunity typologies identified for community parks are active, environmental, and social nodes. This section describes strategies to develop and enhance athletic complexes, open space preserves, and community parks.

#### **ACTIVE NODES - ATHLETICS**

Youth and adult sports are a key component of the overall Plano parks system. Between 2021 and 2022, there were 937,472 participants in league games and 699,048 tournament participants. Additionally, the Trust for Public Land found that sports and tournament related tourism resulted in \$39.2 million annually in direct-visitor spending.

Within the 16 parks that include an athletic complex, many of the sports fields are multipurpose; depending on the season, they are used for soccer or baseball/softball. This results in a more efficient use of space and less maintenance with fewer fields lying vacant during off-seasons. This philosophy of multi-purpose fields has worked well in the past and should continue in the future.





The strategies discussed below can further enhance athletics in Plano and reinforce the city's prominence in youth and adult sports in the Metroplex.

Variety of Sports: It is evident in Plano that new sports are gaining in popularity. While traditional sports like baseball, softball, and soccer are still prevalent, sports such as cricket and lacrosse are gaining in popularity. Within Plano, there are eight cricket and three lacrosse fields, however Plano continues to review the current needs for a variety of sports including cricket and lacrosse. As more fields are being replaced and the new athletic complex at Moore Park is designed, consideration for a variety of sports should be given. Development of a master plan and construction of new fields at Moore Park will begin once funding is available. When funding is available the City will be conducting an athletics study to inform needed changes over the next ten years. It is also recommended that the City remain flexible in programming field space since sports trends continue to evolve.

Practice Space: Another need identified in the Regional Sports Study was practice fields. Currently, drop-in practice spaces are only available at neighborhood parks and at elementary and middle school open spaces on a first-come, first-serve basis. Additionally, when not scheduled for games, athletic fields can be reserved for practices for a fee.

A needed addition to the system would be to develop practice only spaces that are reservable. This would fill an immediate need for leagues that are wanting to practice during times when games are occurring so they can't reserve a field at an athletic complex and are also spread out across the city so it doesn't make sense to practice at a neighborhood park that doesn't have parking. These reservable practice-only fields should incorporate defined areas for different sports with quality turf, but should not be the same quality as game fields. These sites should also include restrooms, parking, and regularly closed days for maintenance.

Additionally, in order to make the most efficient use of space at neighborhood park drop-in fields, the backstops and soccer goals should be strategically placed so sports that take up more room don't commandeer multiple practice spaces.

**Figure 4.6** shows the location of current and future athletic complexes and drop-in fields, as well as potential reservable practice-only sites.

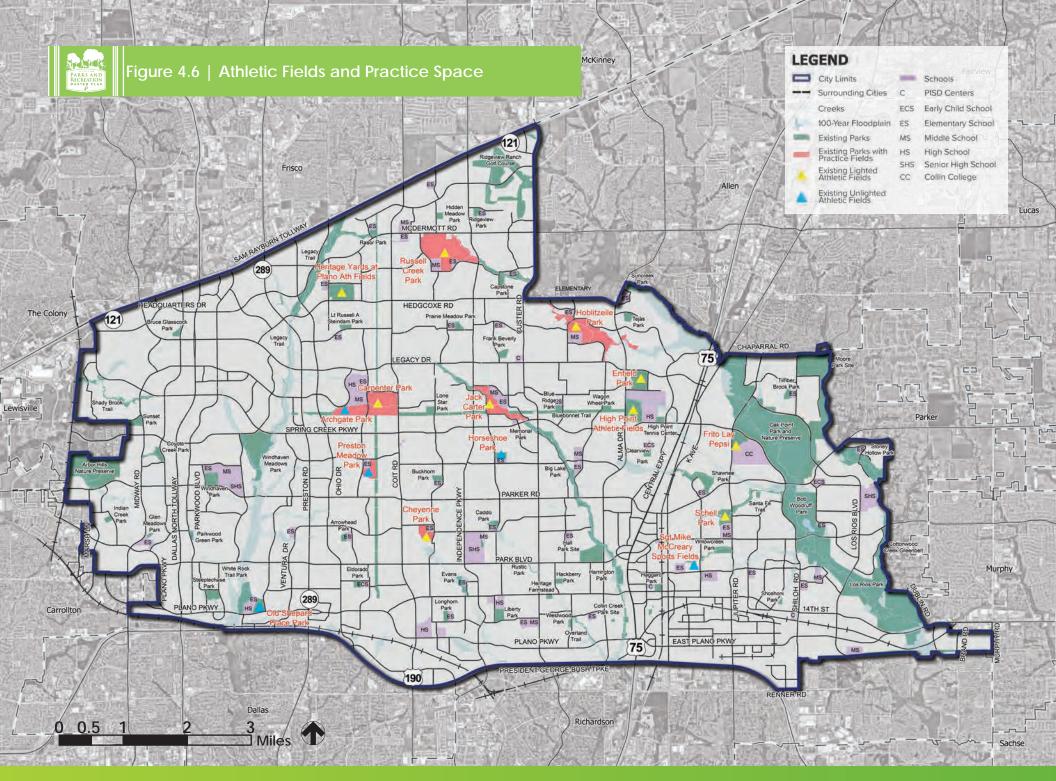
Turf: With the exception of six fields at Carpenter Park, all sports fields in Plano are grass. There has, however, been a push from league participants in recent years to install artificial turf. This is beneficial to both the city and sports participants. From the city standpoint, it results in water conservation and has lower operating costs over time. Sports participants benefit because the amount of down time following a heavy rain event is reduced, thus leading to more playing time. There are relatively high costs to install and replace artificial turf, however. Should the City decide that artificial turf is worth the upfront cost and that sports participants prefer it, the following items should be considered when installing artificial turf elsewhere in the city:

- Consider placement of artificial turf fields in each quadrant of the City. Provide when possible for sports with high wearand-tear such as lacrosse.
- Artificial turf fields should be lighted to get the most use.
- The turf requires replacement about every eight years; a revolving fund could be set up to fund replacement of the fields.
- Consider allowing time during the week for reservable practice use of the fields.

Partnerships: In addition to municipal leagues, Plano ISD and Plano Sports Authority (PSA) also play a large role in youth sports in Plano. PSA provides year-round recreational and competitive leagues for over 100,000 youth in the Metroplex with facilities in Plano, Murphy, and McKinney. An opportunity exists for a stronger partnership with Plano ISD for shared-use of fields. For example, school's with sports fields that are in poor condition can pursue partnerships that consist of public access to the fields for practice in exchange for the City helping to maintain the fields.

Additionally, the increasingly regional nature of sports means that youth that live in Plano may play games in Frisco, Allen, or McKinney, and vice versa. Therefore, continued coordination with surrounding cities is important to project field needs in the future. The priority of athletic fields in Plano has always been to focus on local residents needs first, then youth recreational sports, adult sports, elite sports, and finally tournaments. Implementation of additional turf fields, beyond what has been installed at Russell Creek Park and Carpenter Park. can provide for more tournament spaces in the future. To support regional tournaments coordination with other cities is crucial.

Finally, with the increasing number of corporations headquartered in Plano, there are opportunities for partnerships to manage fields on corporate campuses in exchange for public access at certain times. This would increase access to athletic fields particularly in the park-deficient northwest Legacy area. Sponsorship opportunities like the Frito Lay Ballpark near Oak Point Park is another great way to partner with corporations.

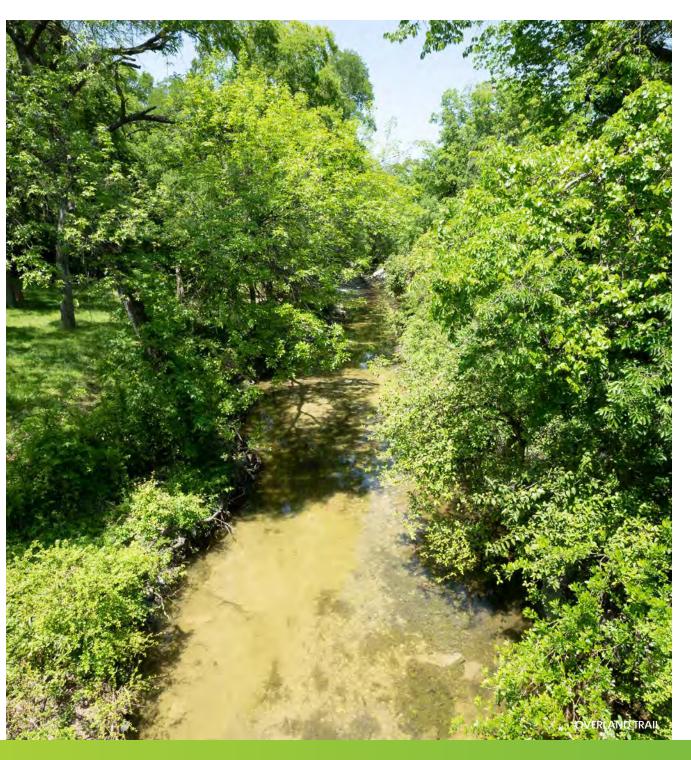


#### **ENVIRONMENTAL NODES**

Another key component to the overall park system is the network of open space preserves. As previously mentioned, previous generations of Plano leaders proactively preserved the areas around Rowlett Creek in the eastern part of the city and Arbor Hills in the west. Arbor Hills, Oak Point, Bob Woodruff, and Los Rios comprise roughly 1,500 acres and provide much needed open space within the highly urbanized DFW Metroplex. Most other communities in the area did not have the foresight to preserve large swaths of land for passive recreation and habitat preservation. The strategies discussed in this section can enhance the existing preserve areas and help make them more accessible for all users.

Outdoor Learning: Outdoor learning is a positive opportunity for students to interact with nature near their school. An opportunity to encourage outdoor learning would be to add an outdoor classroom where teachers can instruct outdoors surrounded by nature. Characteristics that are important to consider include making the outdoor classroom fit in with the surrounding setting. Additionally, open space preserves often protect wildlife habitat. For example, Arbor Hills includes reconstructed remnants of the Blackland Prairie habitat, which has almost completely disappeared. Interpretative signage that provides additional information about what makes the preserve unique can provide learning opportunities for visitors.





Nature Viewing Areas: A major draw of open space preserves are the scenic views that can often be capitalized upon. The observation tower located within Arbor Hills is an iconic example that is well-used by both casual visitors and even as a backdrop for wedding proposals - indicating the value people place on quality design and nature. Those types of viewing areas should be incorporated in preserves in other parts of the cities where applicable. Additionally, the DFW Metroplex is located within the migratory path of monarch butterflies. The City should leverage amenities such as the Monarch Waystation at Oak Point Nature Preserve as a nature viewing attraction within the region and continue to seek opportunities for implementing additional nature viewing areas, when feasible, within existing and future open space preserves.

Trails: Within the existing preserves, there is a strong network of soft-surface and concrete trails. However, trail connections from surrounding neighborhoods to the preserves could be improved. This is particularly important at Arbor Hills where parking is hard to find on a nice day. Improved bicycle and pedestrian connections would allow for more people to walk or bike instead of driving and reduce the need for more parking. Additionally, unique trail markers could be added along the trail within the preserves like the ones that exist at Arbor Hills. This gives a unique brand or theme to the area.

#### **SOCIAL NODES**

The final community park branding concept is social nodes; these represent all remaining community parks that are not athletic complexes and are meant to be spaces for gathering, events, exercise, and more passive activities as well. The strategies discussed in this section are focused on park elements that make it even easier to interact with other park users.

**Technology:** Parks are usually viewed as a respite from the everyday grind and our growing dependence on technology. However, when used strategically, technology can make parks smarter and even easier to maintain.

Wayfinding: In large community parks there are often many amenities spread out across a large area. Signage that directs to various amenities, also known as wayfinding signage, is important to include in community parks to make park users aware of different parts of the park. The Wayfinding Signage Design Study conducted for Plano in early 2018 came up with options for distinctive wayfinding signage to direct to city amenities and districts. The final concepts developed in that study should be used as a framework for wayfinding signage within community parks in Plano.





Splash Pads: Many communities in the DFW Metroplex are installing splash pads in parks and they are quickly becoming a popular and sought-after amenity. Most splash pads located in the City currently are at outdoor pool areas that are part of recreation or aquatic centers. Since these centers require residents to pay a membership fee, there are no splash pads that are open to general park visitors, except for the newly constructed Windhaven Meadows splash pad. The City should look at the feasibility to add a splash pad at a community park in each major sector of the city so residents can access them closer to home. Potential locations the City is currently considering include Russell Creek Park, Bob Woodruff North, and the Hall Park site; these proposed locations are shown on the overall Park Master Plan map presented on page 98.

Other Amenities: Amenities that should be replaced and updated as needed in community parks include restrooms and gathering spaces. An outdated restroom or pavilion structure detracts from the overall appeal of a park and can dissuade people from using the park. Like neighborhood parks, pavilions in community parks should be architecturally interesting and also highly functional since they require reservations at community parks. There was also quite a bit of feedback related to the need for more disc golf holes at parks; there is only one disc golf course in the city currently located at Shawnee Park east of US 75. The City should prioritize adding a disc golf course in the western part of the city so more residents can easily access a course.

#### Completed Park Enhancements Since 2018:

Constructed Enfield Maintenance Facility.

Constructed Arbor Hills restroom and maintenance room.

Completed master plan and engagement for the Los Rios Park in accordance with the master plan.

#### **CREATING SPECIAL AREA PARKS**

Plano has experienced commercial, office, and residential growth over the past few decades, particularly in **Downtown Plano** and a concentration of corporate headquarters in the **Legacy area**. There is a need for additional parkland in these areas to serve new residents especially due to higher densities of housing and concentration of commercial, industrial, and technology areas. A detailed study of these two areas is included in the Appendix.

#### 2023 PARK MASTER PLAN MAP UPDATE

Figure 4.7 represents the updated Park Master Plan map that is to be adopted by City Council. This incorporates additional proposed park areas, maintenance facility changes, and additional proposed trails not on parkland. The map serves as a guide for future acquisition and park development. The listing of the City-owned lots, or any other City-owned property, as future park sites is not a current designation of such sites as park or recreational areas.

Specific areas to be acquired in accordance with the Park Master Plan Map include the following areas:

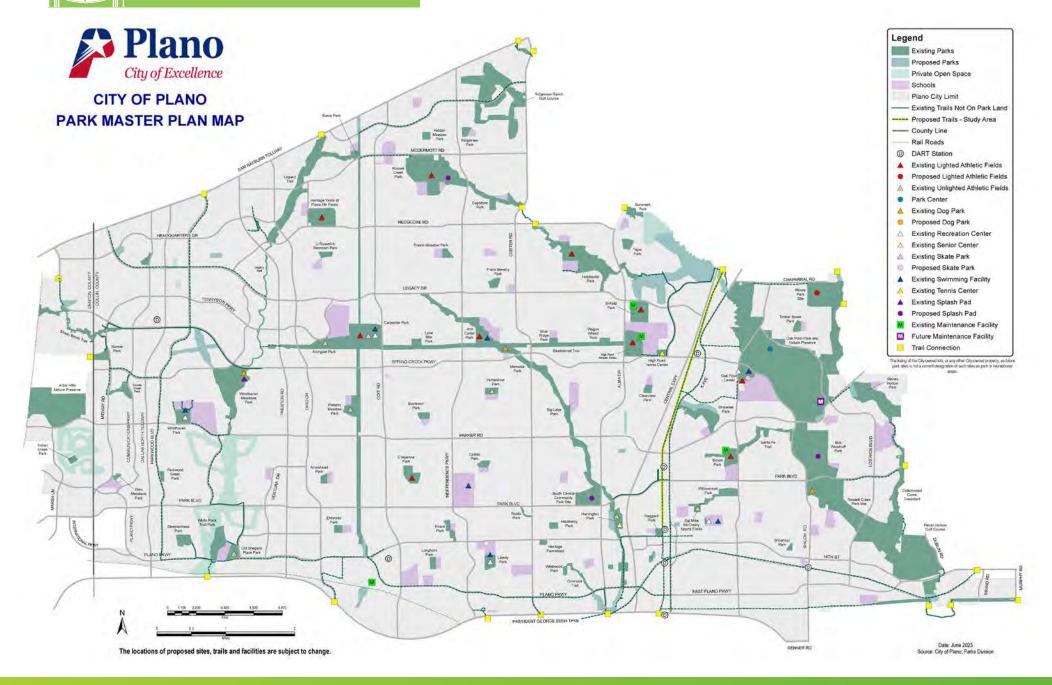
- Greenbelt that follows overhead transmission line (north of Spring Creek Parkway between Windhaven Parkway and Midway Road).
- Greenbelt along White Rock Creek west tributary (north of Spring Creek Parkway and south of Windhaven Meadows Drive).
- Completion of Chisholm Trail south from Park Boulevard to the President George Bush Tollway through the existing Collin Creek Mall site.
- Coordination with new development and redevelopment planned for the future to incorporate park space that is publicly accessible.



- Proposed park opportunity west of Coit Road, south of Plano Parkway, east of Ohio Drive, and north of President George Bush Tollway.
- Continued acquisition of floodways, utility easements, and easements adjacent to street rights-of-way to complete the trail system in accordance with the Park Master Plan Map and the Bicycle Transportation Plan Map (see Chapter 6).
- Complete acquisition of land fragments adjacent to existing parks and greenbelts needed to complete or enhance existing parks.

Acquisition that should be pursued as opportunities present themselves include:

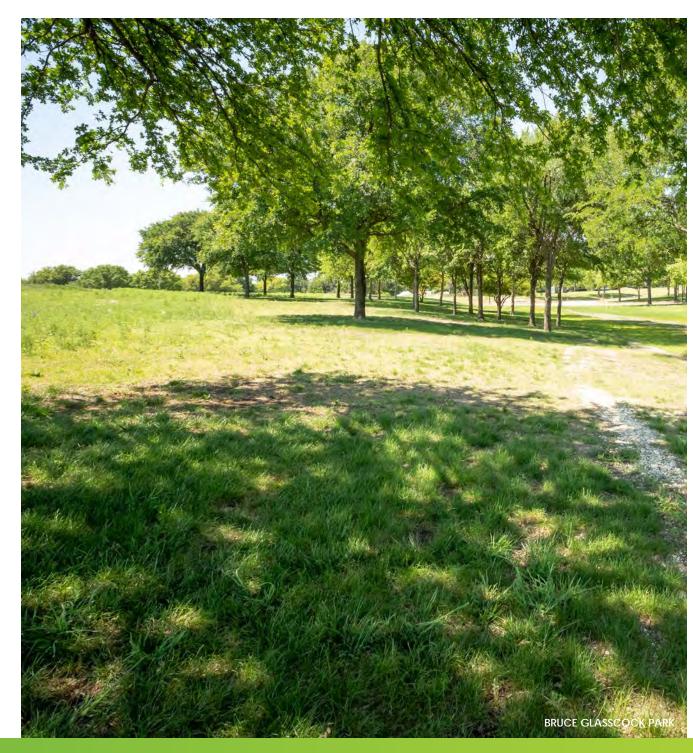
- Acquire additional land within and in the vicinity of downtown Plano as opportunities present themselves to alleviate overcrowding and overuse of Haggard Park.
- Acquire land as opportunities are available east of downtown and south of 14th Street as redevelopment occurs to ensure open space needs of potential residents in this area are met. Consider areas adjacent to future DART stations to meet this need.
- Acquire additional open space in the Northwest Legacy Area when opportunities arise to meet open space needs and to reduce overcrowding of existing parks west of Preston Road.

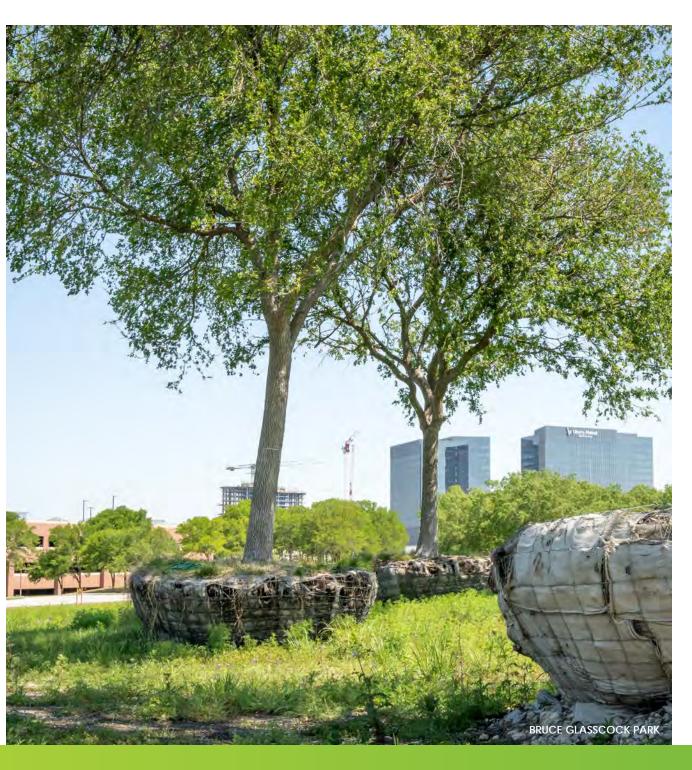


#### **OPERATIONS AND MAINTENANCE**

During the visioning sessions, stakeholders continuously mentioned that they want to maintain the high-level of commitment to maintenance of park and recreation facilities. Additionally, since Plano is nearing build-out, the focus will eventually shift from development to completing and enhancing existing facilities. However, as growth in the parks system occurs in accordance with population growth over time, additional operations and maintenance staff may be needed. One way to assess if the current staffing levels are adequate is to look at the ratio of parkland acreage to the number of staff. Using the total parkland acreage versus number of staff, the city can evaluate its current performance and determine what an ideal ratio should be.

Furthermore, there are existing satellite maintenance facilities throughout the city to decrease the amount of driving required of maintenance crews. As the amount of parkland on the western side of the city grows over time, there will be a need for an additional satellite maintenance facility to be built. Since the 2018 plan, a new maintenance facility at Enfield Park was constructed and the 2021 bond program included funds for an additional maintenance facility on the eastern side of the city. Maintenance facilities should be strategically located to reduce the number of cross-city trips, move locations outside of neighborhoods where possible, and provide additional equipment storage locations to reduce costs and increase staff efficiency.





As shown in Figure 4.7 on page 98, existing maintenance facilities that are located adjacent to single-family neighborhoods should be phased out over time and replaced with facilities that are further from residential areas. A new maintenance facility is proposed at Oak Point Park and a new satellite maintenance facility at Arbor Hills is funded.

Finally, funding for park maintenance may vary over time, especially if sales tax revenues decrease. Alternative maintenance sources such as a revolving fund for field maintenance or donations from organizations like the Plano Parks Foundation may play a larger role than they do today. The city should remain flexible in both creating and accepting alternative sources of funds for park development and maintenance.

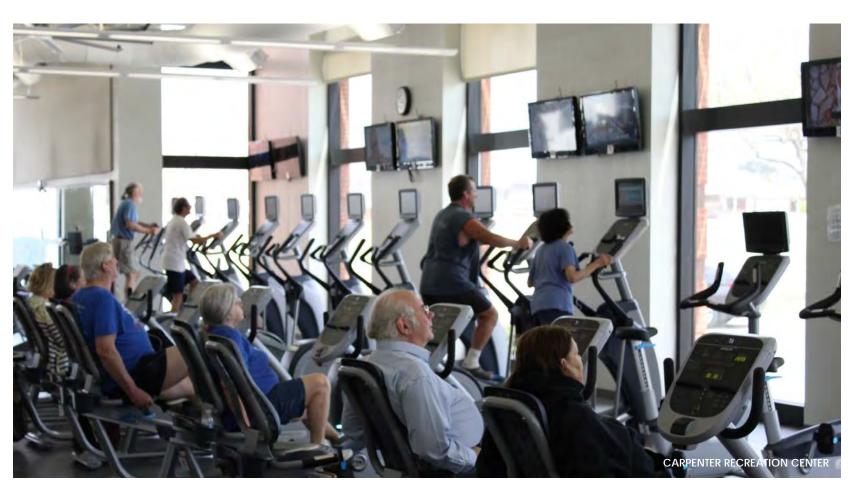




# RECREATION AND AQUATIC FACILITIES







# INTRODUCTION

Another key component of the Plano parks system is the recreation and aquatic facilities. City leaders and voters have shown support for recreation and aquatics through continuous investments in improving the facilities. The majority of the facilities have either been built or undergone a major renovation in the past decade. However, as Plano continues to become more diverse and trends in the wellness and recreation industry continue to evolve, there is a need to continuously evaluate recreation space and programming to ensure that the greatest number of residents are being reached and served. This chapter focuses on strategies to 'Re-New' Recreation Facilities within Plano. In addition to recreation and aquatic facilities, the Recreation Division also oversees the High Point Tennis Center, two municipal golf courses, the Nature and Retreat Center, Adapted Recreation, and Adult Sports. The impact of the COVID pandemic impacted operations on all facilities. This in turn affected staff and staff retention. Many options were explored to maintain connection with membership holders and the community at-large, including practices such as online classes, contact free check-ins, smaller classes, use of social media and others. Many of these practices have continued as the centers have returned to full operations.

#### **GOALS AND PURPOSE**

The purpose of this chapter is to assess the condition of the existing facilities, to understand how these facilities respond to current demands and future trends, and to develop a vision for how the facilities can keep pace with dynamic changes within the community. The overall master plan goals that are relevant to this chapter are to:

GOAL 1: Encourage healthy lifestyles by providing an appropriate mix of open space, facilities and range of activities throughout the city.

GOAL 2: Renovate, repurpose and modernize existing parks so that they offer similar elements across the city but are unique to the surrounding area.

GOAL 3: Provide for park and recreation opportunities that reflect the growing diversity of the city and allow for social interaction.

GOAL 4: Maintain high standards for planning, implementing, maintaining, and operating quality parks, recreation facilities, trails, and athletic fields.

GOAL 6: Expand communications and outreach to encourage residents to use facilities and participate in activities.

**GOAL 8: Utilize environmentally** and fiscally sustainable practices for developing and maintaining parks, trails, and facilities.

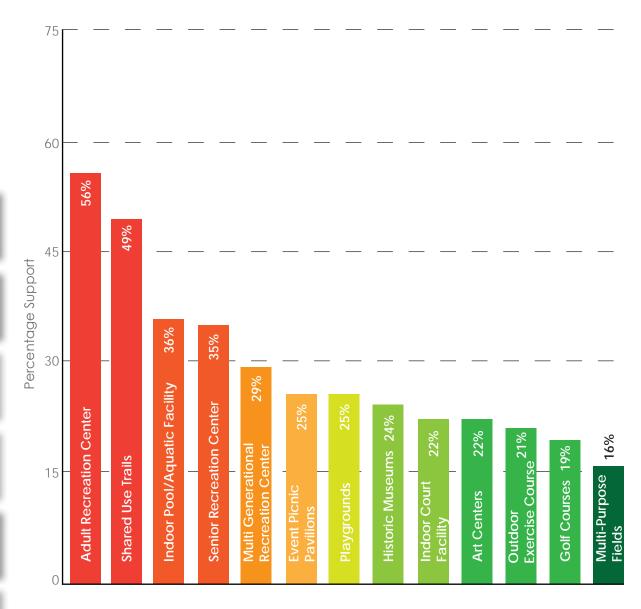


Figure 5.0: Engagement Results: Desire for New Facilities



Figure 5.1: Engagement Results: Desire for New Programs



Figure 5.2: Engagement Results: Desire for New Amenities

#### CITIZEN INPUT

Feedback on recreation and aquatics was gathered during the 2018 plan visioning public workshop and through the 2022 statistically-valid survey and online survey. At the open house, open-ended questions that facilitators asked meeting attendees included:

- What centers do you attend?
- What new facilities do you think are needed?
- What improvements are needed?
- What new programs do you think are needed?

In addition, individuals attending were asked to review a list of amenities and to place a vote on the top three amenities they judged to be most important. Figure 5.0 – 5.2 show the results of the facilities, improvements, and programs that meeting attendees thought were most needed.

The responses to the plan update statisticallyvalid survey provided valuable insight on what residents felt were the most pressing facility needs. Following are the most highly rated facility related needs:

- 56% Adult Recreation Center
- 36% Indoor Pool/Aquatic Center
- 35% Senior Recreation Center
- 29% Multi-generational Center
- 22% Indoor Court Facility

Since Adult Recreation and Senior Recreation overlap in terms of how people discern the two, this is obviously a highly rated amenity. These findings are also consistent with data provided from the 2018 Parks Master Plan.

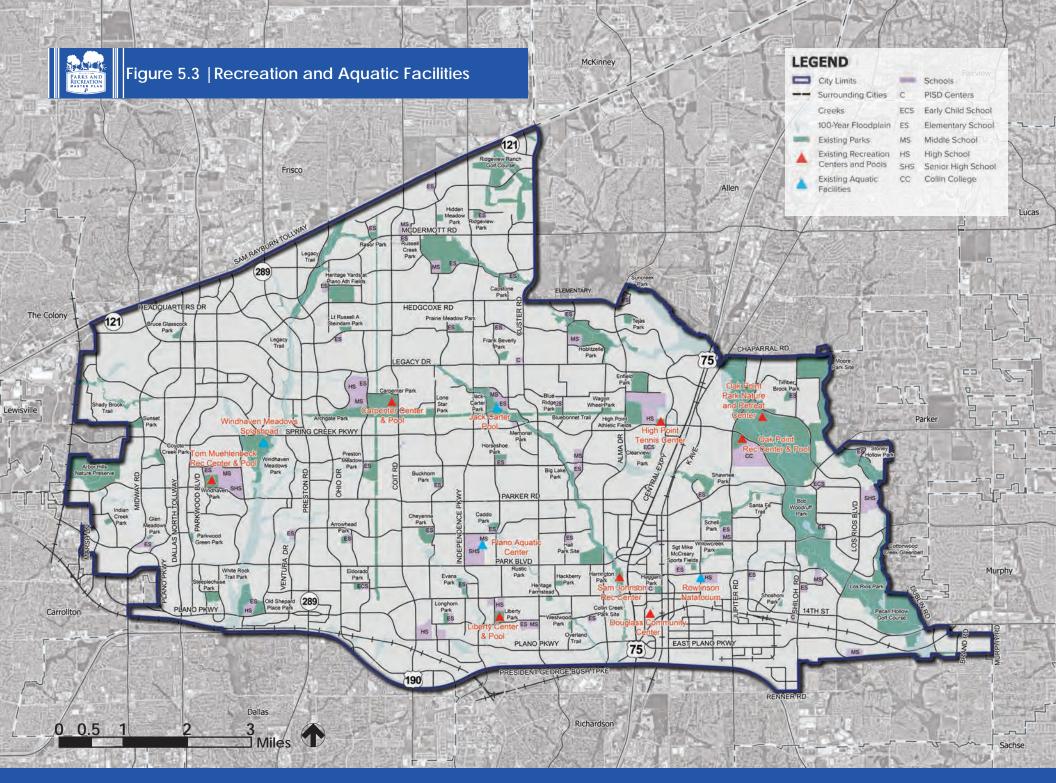
# **FACILITY INVENTORY**

Within Plano there are ten total recreation and aquatics facilities, as shown in Figure 5.3. While they are depicted on the map, High Point Tennis Center and Douglass Community Center are considered special use facilities as discussed in Chapter 4. The Appendix includes a description of the existing recreation and aquatic facilities within Plano and provides an assessment of their condition.







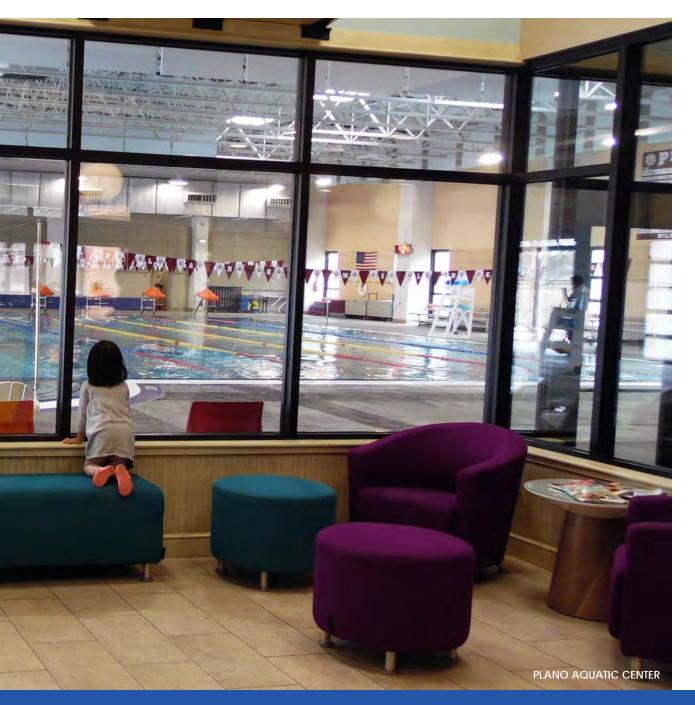


# **NEEDS ASSESSMENT**

The goal of this section is to assess the facility needs of Plano in comparison to other cities. This allows city staff to determine if they provide facilities to the level provided by their peers. It also helps the city to make informed decisions on the optimal set of service and facility offerings based upon this comparative analysis.







#### **DEMAND-BASED APPROACH**

In addition to the public input and survey results discussed in the citizen input section, staff input is very critical to determine demand for facilities since they are the ones interacting with facility users on a daily basis. According to parks and recreation staff, the most critical recreation and aquatics needs include:

- Additional adult court space: Within the existing recreation centers, gymnasiums are multi-purpose to be used for a variety of sports. In recent years, the City has experienced a significant increase in demand for open, drop-in play for sports such as pickleball, badminton, table tennis, and volleyball. This has impacted members' ability to use gymnasium courts for traditional basketball drop-in play. The City should fully evaluate the demand for court space and respond accordingly.
- Defining and addressing senior programming needs: This master plan update identified a demand for an additional Senior Center on the west side of the city.
- Additional pool lap lanes: Conduct a study to evaluate current pool allocations and update to accommodate current and future needs.
- Additional programming space: Demand has exceeded capacity at many of the facilities for programming and classroom space.

#### STANDARDS-BASED APPROACH

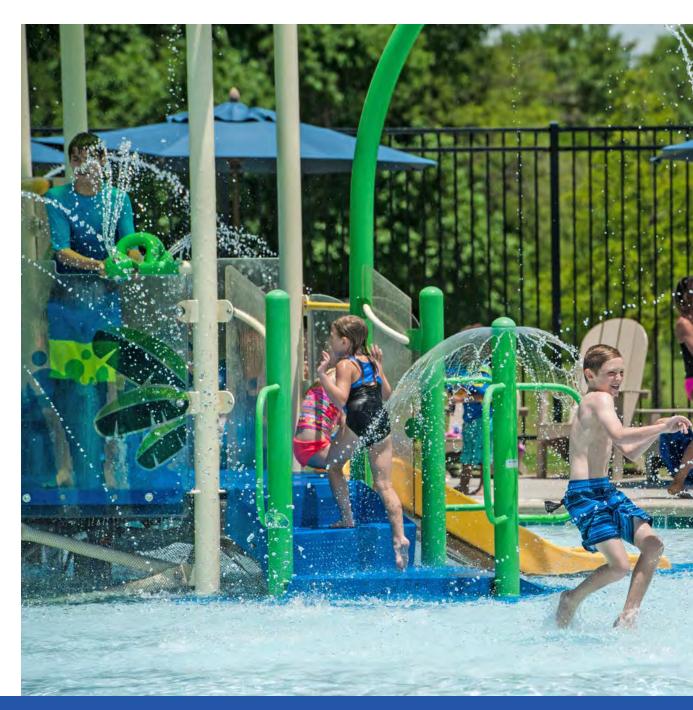
The National Recreation and Parks Association (NRPA) had previously set standards for recommended recreation improvements. These standards became outdated over time with more emphasis on quality of life by municipalities. The NRPA recently published The 2022 NRPA Agency Performance Review which provides benchmarks expressed around operations without speaking to recommended standards.

Because of this, the planning team has benchmarked the City against cities with similar demographics, growth characteristics, and population. This will then allow the City of Plano to establish its own standards in consideration of expressed needs of residents and the city's economic, administrative, operational, and maintenance capabilities.

# **Indoor Facility LOS**

Indoor facility level of service (LOS) defines the number of recreation facilities that serve the population. They are expressed as the square footage of indoor facility per capita. In 2023, Plano's indoor facility LOS was 1.04 SF per resident, which exceeds the regional average of 0.86 SF per resident. This includes the recent square footage expansions. In 2050, with the expected population growth, the LOS is reduced to 0.90 SF per resident.

Additionally, Plano's senior center LOS in 2023 was 0.10 SF per resident, which is less than the regional average of 0.18 SF per resident. In 2050, with the expected population growth, the LOS is reduced to 0.09 SF per resident.





#### **Aquatics**

Developing benchmarking data from other cities is more difficult because of the various ways aquatics is quantified. Through research the planning team has found the unofficial general standard of 1 pool per 50,000 residents; Plano currently exceeds this standard. The following aquatic facilities are available to the public:

- 9 Total Pools, including 5 Leisure Pools and 4 Fitness/Lap Pools
- 2 Splash Pads

Additionally, USA Swimming has established a standard that recommends 22 lap lanes per 100,000 population. Plano currently has 55 lanes combining both indoor and outdoor lanes. With the projected population at 331,000 this would indicate Plano should consider an addition of approximately 18 lanes in future aquatic planning to be close to the USA Swimming recommendations. This accounts for the leisure pool areas that are not included in the USA Swimming standards. A leisure pool is a type of swimming pool that is designed for recreational use rather than competitive swimming or diving. Leisure pools often have a variety of features such as water slides, diving boards, and interactive play structures that are intended to provide entertainment and enjoyment for swimmers of all ages. This would also be consistent with some comments made by citizens about need for more lap lane time.

This discussion about needs in aquatics does not address leisure pool areas. There are no standards for leisure pools due to the broad variations of use. Leisure pools are often used by families and play an important role in both socializing as well as a first introduction to swimming for many young children.

Plano provides a range of leisure pools which includes both indoor and outdoor facilities. A larger outdoor aquatic facility was recently completed at Oak Point Center which should satisfy future outdoor aquatic needs.

# COMPARISON TO BENCHMARK COMMUNITIES

This section includes a summary of comparative benchmarking that was performed for this plan. The communities included in the benchmark analysis are comparable in growth, size, demographics and location to Plano. Benchmarks were established by developing ratios of square footage per capita for each of these cities and were based upon existing facilities as well as facilities planned for the near future. In instances where indoor aquatic areas were part of a recreation center, that square footage was included in the study.

It is important to understand that data is a valuable tool, but not the final answer in terms of decision-making for the unique characteristics of Plano. It provides a good sense for others when evaluating what is needed in Plano. However, no two parks and recreation agencies are the same. A successful agency is one that combines this information along with consideration of the unique elements of their city in formulating a forward looking master plan.

Recreation Centers: As shown in Figures 5.4 and 5.5, Plano exceeds other communities in the region for recreation center square footage per resident. The average of the regional benchmark communities is 0.63 square feet per resident, and in Plano the ratio is 1.04 square feet per resident in 2023. When comparing to the national benchmarks, the average was 0.81 square feet per resident and Plano comes in second after Arlington, VA.



Figure 5.4: Recreation Center LOS- Regional Benchmark Comparison

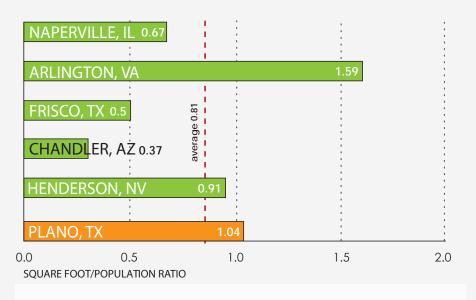


Figure 5.5: Recreation Centers LOS- National Benchmark Comparison

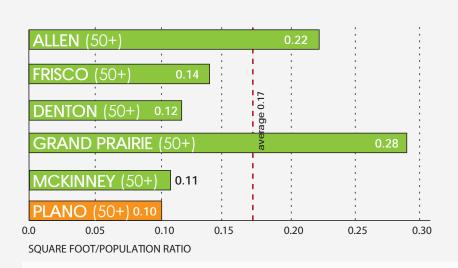


Figure 5.6: Senior Centers LOS- Regional Benchmark Comparison

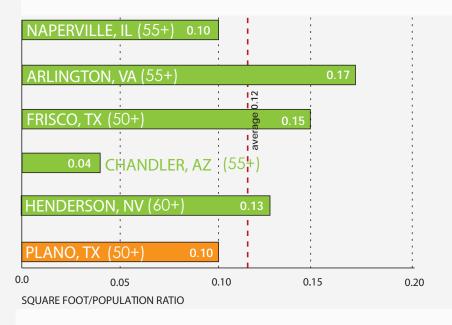


Figure 5.7: Senior Centers LOS- National Benchmark Comparison

Senior Centers: As shown in Figures 5.6 and 5.7, Plano does not fare as well in terms of senior center square footage per resident. In 2023, the ratio in Plano is 0.10 square feet per resident, while the average for the regional benchmark communities is 0.17. When compared to the national benchmark communities, the average is 0.12 square feet per resident, of which Plano falls short.



#### RECREATION TRENDS

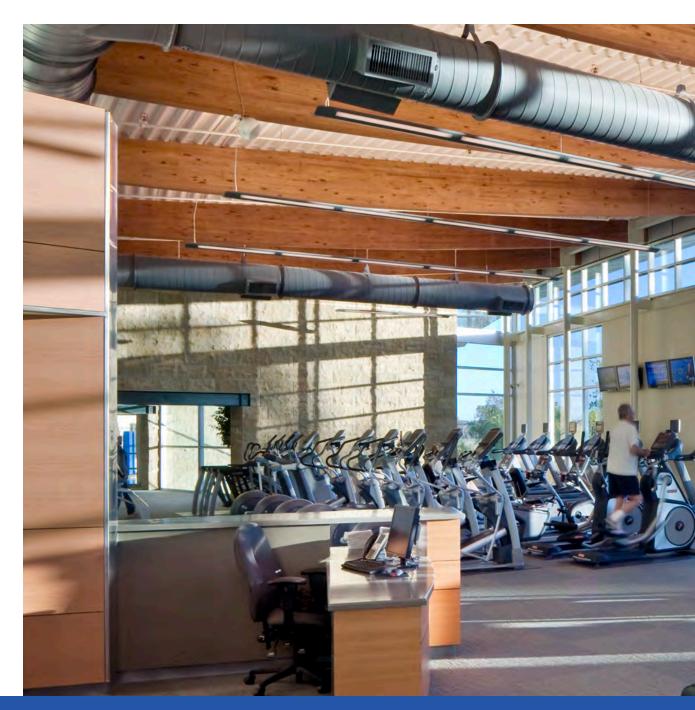
As a community seeking to remain a leader in recreation, the City should understand the many elements of change, often referred to as trends, that are currently impacting the municipal recreation marketplace. That being said, Plano is unique and must judge which trends are valuable to consider in the future. This section describes these trends and what impacts these trends may have on the way recreation facilities are designed and the types of programs that are offered.

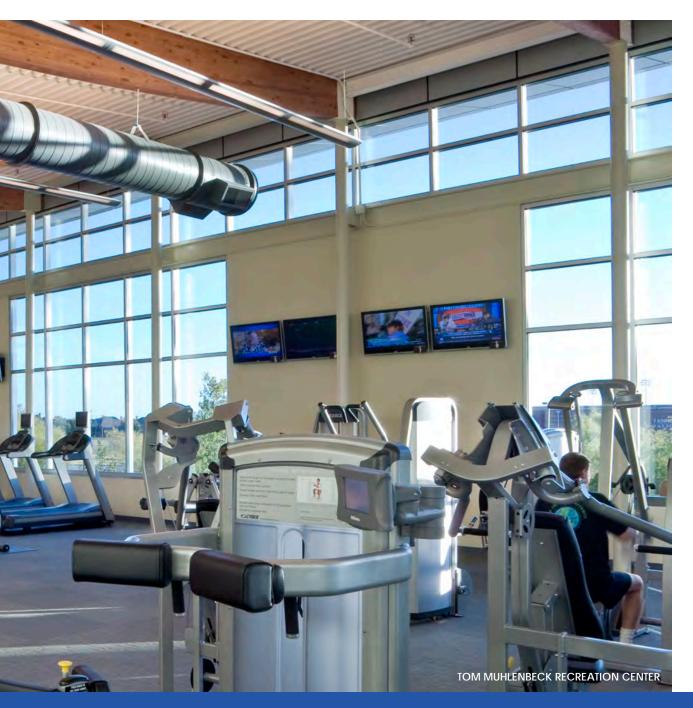
# **Technology Growth**

- Leveragelatest technology advancements to improve customer experience and efficient and effective operations. This includes self check-in, additional cameras, and an app that facilitates reservations and schedules.
- Consider technology upgrades when replacing fitness equipment.

# Responding to Social, Demographic, and **Ethnic Changes**

- Consideration should be given to the design and configuration of areas such as pools and locker rooms. Some religions require more modest use of these areas impacting some community members ability to utilize the spaces.
- Being sensitive to preferences of different nationalities for activities such as table tennis, futsol, or badminton.
- Growing need for recreational activities that break down barriers to socialization across ethnically and financially diverse citizens.





- Creating health education and prevention for certain diseases that are high among certain ethnic groups.
- Recruiting bilingual recreation center staff and class instructors.
- Offering more diverse programs.
- Developing inclusionary programs.
- Responding to interest in an adult-only (21+) recreation center.
- Demand for more adult fitness and senioronly programming.

# **Flexibility of Spaces**

- Growing demand for more flexible spaces that can easily be reconfigured to meet a particular demand.
- Competitive socializing the combination of sports and socializing has resulted in a growing demand for structured (nonleague) play that addresses competition in a fun and engaging manner.
- Use of fiber optics and LEDs for quick change of field of plays for more flexibility.
- Making facilities more financially sustainable through memberships and program fees.

# **Life-Long Learning**

- Utilizing leisure time to attend courses on language, cooking, learning new sports, and higher education courses.
- Special Activities for Senior Adults.
- Increasing demand for continuing education for adults 50+ and larger recreational offerings for the growing senior demographic.

# RECOMMENDATIONS

Based on the analysis of existing facilities and overall needs assessment, a series of recommendations were developed to enhance recreation and aquatic facilities in Plano.

# Address near-term demand for adult court space.

City staff has identified the need for a minimum of six additional indoor courts for pickleball, badminton, table tennis, volleyball, etc. Since expanding court space at existing facilities is likely not feasible, the City should construct a facility for use as a stand-alone sports court facility.

#### Address near-term demand for pool lap lanes.

Demand on City pools comes from several sources; these include public and private schools, City of Plano Swimmers (COPS), learn to swim campaign, fitness classes, and dropin users. While there is increased demand for lap lanes, there needs to be a more formal analysis done to seek input from pool users and determine if the City could sustain another pool or if reallocation of lane usage would address the issue. Another opportunity would be if the COPS program were to build a pool, which would free up space in the existing municipal aquatic facilities.

#### Address near-term demand for adaptive recreation.

The City should include permanent space for adaptive recreation that is accessible to all ages and also increase the number of inclusionary programs. Additionally, the City should explore the use of activity modifications and assistive technologies.

#### Further define and address senior programming needs.

Plano provides both a senior-specific center, which was recently renovated, as well as senior programs dispersed at other centers throughout the city. Through the public input for this master plan update, it was determined that residents want additional senior programming, but there needs to be a clearer definition of what exactly that entails (additional senior center, multi-generational center, different types of programming, etc.).

This would include evaluating the option of developing an adult only recreation center with a dedicated senior component. This would also include an aquatic center to address the need for more indoor lap lanes. Location would be in the western section of Plano.

Additionally, the City should explore additional opportunities for senior programming at the existing Sam Johnson Recreation Center for Adults 50+ and at the Tom Muehlenbeck Recreation Center, Carpenter Park Recreation Center, Liberty Recreation Center, and Oak Point Recreation Center. Consideration should also include evaluation of the need for additional programming space at any or all of these facilities as well as possible future facilities.





# Incorporate programs and facility spaces that respond to emerging recreation trends.

This includes:

- Adding outdoor programming such as crossfit, extreme sports, and yoga
- Developing a new or repurposing an existing center into a multi-generational facility with flexible spaces
- Incorporating technology to better understand how users interact with the facility
- Adding higher education courses
- Consider outdoor programming when renovating community parks
- Explore the feasibility of an additional senior facility in the western side of the City
- Explore the possibility of a dedicated space for adults only (21+)

# Maintain appropriate staffing levels and set targets for cost recovery.

As the number and variety of programs increase at a facility, staffing should be assessed to ensure consistent service. The City should also explore options for reorganization of staff to reduce staffing costs.

# Develop low-cost family programming.

Develop options for those that cannot access programs because of financial constraints.

# Consider options to provide facilities in the defined special area parks.

As more development occurs in the downtown and northwest Legacy areas. there will be a need for recreation facilities in these areas in addition to the parks and open space discussed in **Chapter 4**. The downtown area is currently served by the Sam Johnson Recreation Center for Adults 50+ and the Douglass Community Center, both of which have restricted attendance. Therefore, the City should evaluate the recreational needs of new and future residents in the downtown area and determine what the City's role should be in meeting those recreation needs. One option could be a new center constructed in the downtown area that would serve both downtown residents and the Douglass Community. Such a facility could include multi-purpose courts, meeting spaces, and group fitness spaces that can accommodate a variety of classes. Additionally, the existing facilities at the Douglass Community Center run by the Bovs and Girls Club should be evaluated and a long-term strategy should be developed for the facility.

As for the northwest sector of the city, the city should first determine where residents currently go for active and senior recreation. If there is not demand for another facility, then programs at the Muhlenbeck Center could be reassessed and include more programming for both young professionals and seniors.

As with all parts of the parks system, recreation and aquatic facilities and programs should continue to be evaluated to determine needs, demands, and potential improvements.







# TRAILS & 6 BIKEWAYS







# INTRODUCTION

A critical component of the City of Plano's parks and recreation system is the network of trails and bikeways that connect key destinations, parks, schools, and city facilities. The City offers diverse options for commuting and recreational cyclists, joggers, and pedestrians including trails in utility easements, along creeks, and within parks. Today, there is a comprehensive network of signed on-street bike routes, 98 miles of shared-use paths, and several more miles planned for additional connectivity. This chapter reviews the existing trail and bikeway system, assesses needs, and identifies additional opportunities for connectivity.

#### **GOALS AND PURPOSE**

The purpose of this chapter is to identify strategies to complete the trail system in Plano and to identify needed improvements to the existing system. While this chapter does not serve as a formal trail and bikeway master plan that would analyze and prioritize trail segments in detail, the information presented can be used as a foundation to determine trail and bikeway corridors to analyze in more detail.

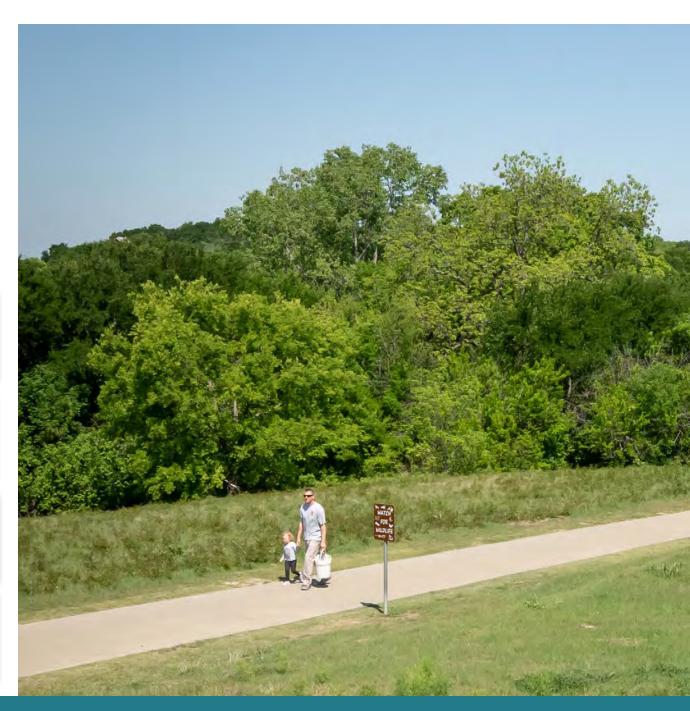
The overall master plan goals that are relevant to this chapter are to:

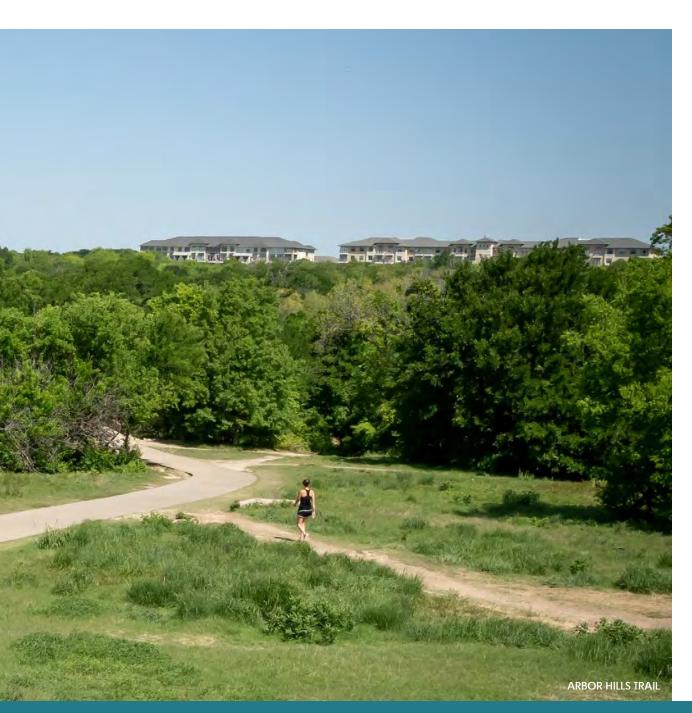
GOAL 1: Encourage healthy lifestyles by providing an appropriate mix of open space, facilities and range of activities throughout the city.

GOAL 4: Maintain high standards for planning, implementing, maintaining, and operating quality parks, recreation facilities, trails, and athletic fields.

GOAL 5: Expand upon trail and bikeway linkages between parks, schools, commercial areas, and other cities.

**GOAL 8**: Utilize environmentally and fiscally sustainable practices for developing and maintaining parks, trails, and facilities.





## **CITIZEN INPUT**

The engagement process for the plan update revealed that Plano residents prioritize the following:

- Filling in the remaining gaps in the trails and bikeways system.
- Implementing safety countermeasures at crossings and intersections to enhance safety for pedestrians and bicyclists.
- Reviewing on-street bike routes to make sure connections are still relevant and comprehensive.
- Connecting trails and bikeways to schools.

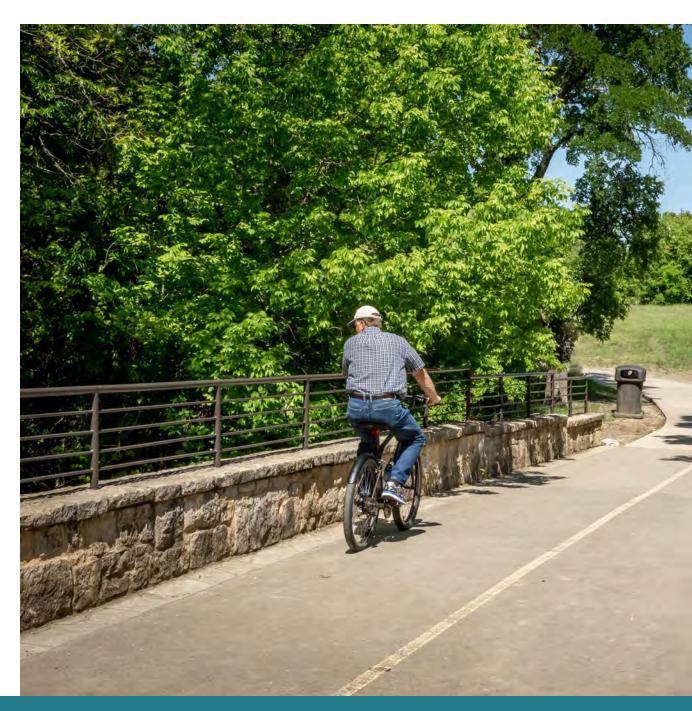
# TRAIL AND BIKEWAY **NETWORK**

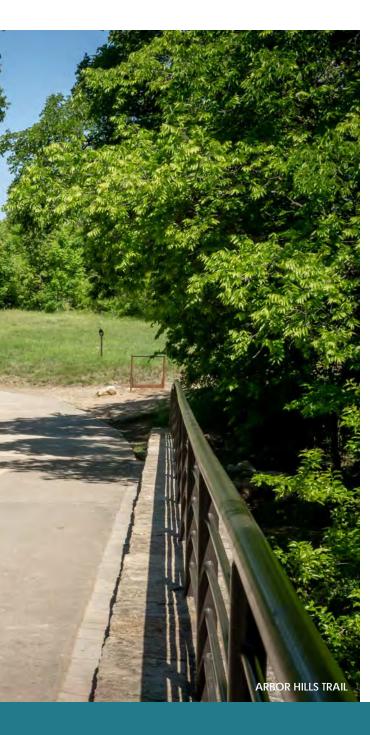
It is important to establish the existing network to identify gaps and opportunities prior to making recommendations for new facilities. This section describes the user groups in Plano, the universe of trail and bikeway facility types, the existing and planned network, and identifies opportunities and constraints to expand the system.

## **USER GROUPS**

Due to their multi-purpose nature, shareduse paths in Plano serve a variety of users including, but not limited to; walkers, joggers, hikers, inline skaters, casual and avid bicyclists, and bicycle commuters.

Comfort of bicyclist users is directly correlated to the level of stress of the facility. Elements that influence stress include separation between motor vehicle traffic and motor vehicle traffic speed. Users that are more confident in their ability are more likely to feel comfortable in a higher stress environment. For example, you typically see bicycling groups like the Plano Bicycle Association and Plano Athletic Cycling Club riding on the street rather than on a trail. National research into interest in bicycling has shown that the majority of people are 'interested, but concerned' in bicycling and do not want to interact with motor vehicle traffic when riding a bicycle.





Feedback on trails and bikeways was gathered through the statistically-valid survey and online survey. The major findings of the survey included:

79% of respondents agreed or strongly agreed that the City of Plano should prioritize developing additional bicycling opportunities to connect existing trails.

68% of respondents agreed or strongly agreed that the City of Plano should prioritize bicycle opportunities that connect to schools.

44% of respondents selected shared-use trails as the most important amenity to their household.

77% of respondents selected reviewing on-street bike routes to make sure connections are still relevant and comprehensive as important or very important.

74% of respondents selected implementing more safety countermeasures at trail crossings and intersections to better protect pedestrians and bicyclists as important or very important.

84% of respondents selected prioritizing filling in the remaining gaps in the trail and bikeway system as important or very important.

#### **BICYCLE FACILITIES**

A bicycle facility is a provision to accommodate or encourage bicycling, including all types of shared-use paths and bikeways specifically designated for bicycle use on the Bicycle Transportation Plan Map, including but not limited to trails, sidepaths, bike routes, bike lanes, and cycle tracks. Bicycle facilities also include shared lanes and shared lane markings, as well as other associated design elements such as crossings, bicycle detection, wayfinding, and bicycle parking and storage facilities. The following describes the different trail and bikeway facility types; some of which exist in Plano today while others do not.

#### SHARED-USE PATHS

Shared-use paths, including off-street trails and sidepaths, should be wide enough to be used jointly by pedestrians and bicyclists and allow for recreational, leisure, and mobility uses. User groups include but are not limited to: bicyclists, pedestrians, and other recreational transportation modes (e.g. wheelchairs, in-line-skating, electric scooters and bikes, etc.).

#### Trails

A trail is a type of shared-use path that is located away from the street typically in an independent right-of-way such as a creek or river corridor, greenway, utility corridor, or railroad corridor. Plano's current standards for off-street trails are 12 feet in width however in accordance with AASHTO guidelines trail widths can be reduced in constrained areas. Examples of off-street trails in Plano are the Preston Ridge Trail that is in a utility easement and the Chisholm Trail that follows Spring Creek.

#### **Sidepaths**

A sidepath is a type of shared-use path that is within the public right-of-way of an adjacent roadway. Sidepaths can be used along roadways that have higher volumes or speeds where dedicated bikeways are impractical. Sidepaths often present increased conflicts between users and vehicles due to the number of intersections and driveway crossings, but these conflicts can be reduced by providing grade-separated or highly visible crossing treatments. Plano's current standards for sidepaths are 10 feet in width however in accordance with AASHTO guidelines trail widths can be reduced in constrained areas. AASHTO recommends sidepaths to have a 3-5' separation from the roadway wherever possible. An example of a sidepath in Plano is the portion of Bluebonnet Trail that runs adjacent to Spring Creek Parkway.

#### BIKFWAYS

Bikeways include facilities within a roadway that are designated for the exclusive use of bicyclists through a variety of design interventions such as pavement markings, striping, signage, and traffic calming elements.

#### **Bike Lanes**

A bike lane is a type of bikeway that designates space on-street for the preferential or exclusive use of bicyclists typically through a combination of striping, signage, and pavement markings. AASHTO standards require that a bike lane be a minimum of 5 feet, but wider lanes are recommended on higher volume or speed roadways. A variation of bike lanes is the





buffered bike lane, which installs a buffer (minimum three feet wide) between the vehicle travel lane and the bike lane and protected bike lanes, which uses a physical barrier to separate the vehicle travel lane from the bike lane. Buffered and protected bike lanes are the preferred on-street bikeway treatment in Plano due to the added separation and safety benefits for cyclists. Additionally, when on-street parking is prevalent, a buffer between the bike lane and parking lane is recommended to minimize bicyclists being hit by car doors. Currently there are bike lanes planned and under construction as part of the Shiloh Road widening project.

#### Cycle Tracks

As per the National Association of City Transportation Officials (NACTO) guidance, a cycle track is an exclusive bikeway that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A cycle track is physically separated from motor traffic and distinct from the sidewalk. Currently there is a cycle track on Legacy Drive across Dallas North Tollway, connecting the Shops at Legacy and Legacy West.

# **Bicycle Boulevards**

As per NACTO guidance, a bicycle boulevard is a designation for a street with low traffic volumes and speeds that gives priority to cyclists and local motor vehicle traffic. These boulevards typically have signs, shared lane markings, and traffic calming treatments such as speed humps, medians, traffic circles, chicanes, or curb extensions. Enhanced bicycle boulevards benefit neighborhoods by reducing cut-through traffic and speeding without limiting access

by residents. There are currently no bicycle boulevards within the City of Plano, but there are examples in Grapevine and McKinney.

#### **ON-STREET SHARED LANES**

#### **Shared Lane Markings**

Also known as 'sharrows,' these are markings that are added to a roadway to indicate that the road is meant to be shared by motorists and cyclists. Shared lane markings are not intended to be a standalone bike facility, but rather are meant to be applied in combination with other types of treatments to indicate a bike facility and increase awareness of the presence of bicyclists, such as on bike boulevards, bike lanes, and bike routes. There are no shared lane markings in Plano currently. Recently TxDOT has indicated a strong preference for a minimum 14' outside lane when implementing shared lane markings on federally-funded projects.

#### **Bikes Routes**

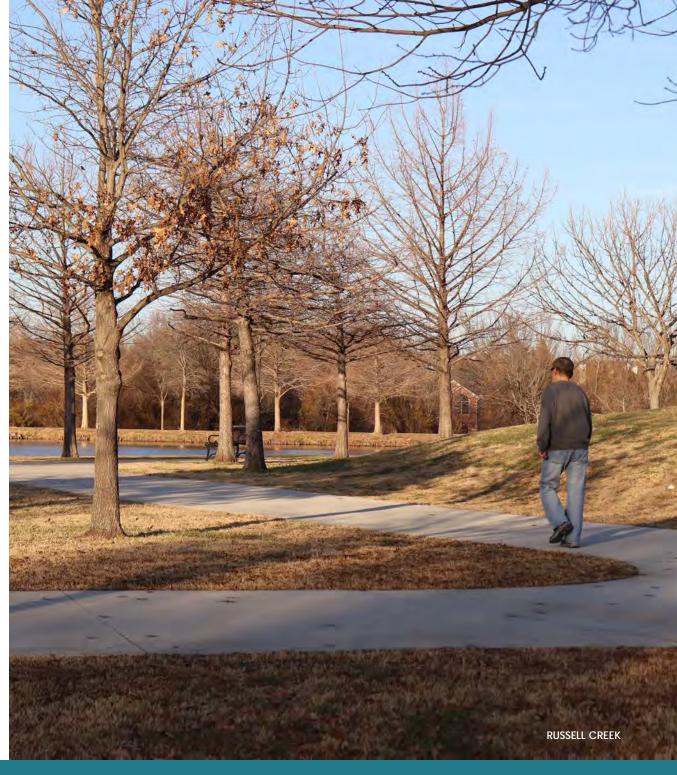
A bike route is an on-street bike facility comprising a road segment or a series of road segments identified for bicycle use of a full roadway lane due to their lower volumes of traffic, such as residential or collector streets. State law allows bicyclists to use the full lane when the driving lane is less than 14 feet wide or when roadway conditions make it unsafe to ride next to the right edge of the roadway. The placement of 'Bikes May Use Full Lane' signs increase awareness of the law but are not required. In Plano, Bikes May Use Full Lane signs are positioned along bike routes in addition to Plano's unique bike route wayfinding to notify both drivers and bicyclists.

#### EXISTING AND PLANNED NETWORK

As mentioned previously, the City has a robust system of trails and on-street bike routes. Major trails in the City include Preston Ridge, Bluebonnet, Chisholm, Breckinridge, Shady Brook, and Legacy. There are also significant trail systems within Oak Point Park and Nature Preserve, Bob Woodruff Park, and Arbor Hills Nature Preserve and smaller trail loops in numerous parks. Some trails also connect to neighboring cities including Allen, Frisco, and Murphy. NCTCOG has designated several trails in Plano as part of the Regional Veloweb, which is a network of over 2,000 miles of shared-use paths in the Dallas-Fort Worth region. Table 6.0 depicts the approximate mileage of each type of existing trail or bikeway facility and Figure 6.0 shows the existing and planned trail and bikeway system.

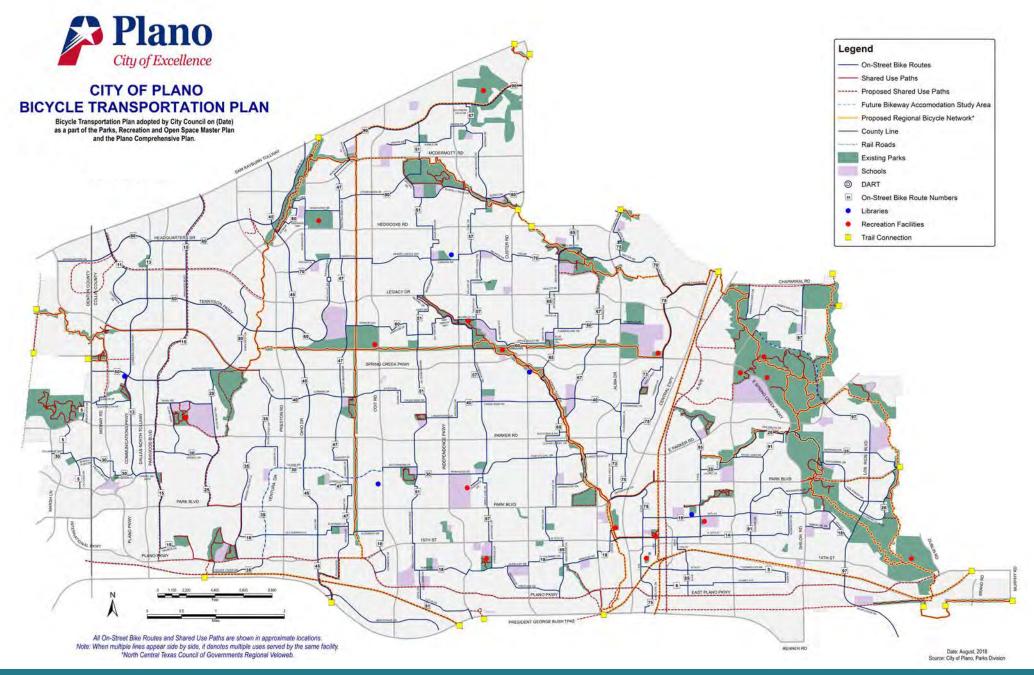
Table 6.0: Current Trail Network

Category	Miles (approximate)
Primary Trails	91.79
Secondary Trails	6.17
Total Primary & Secondary Trails	98
Soft Surface Trails	12.33
Signed Bike Routes	150.97
Unsigned Bike Routes	13.43





# Figure 6.0 | Existing and Planned Trail and Bikeway Network



As of 2022, 11 trail counters exist in different parts of the city to collect user counts for both bicyclist and pedestrian activity. The counts for the eight locations in 2021 are listed in Table 6.1. Chisholm Trail experienced the most bicyclist and pedestrian activity from 2017 to 2021. In 2021, there were an average of 258 pedestrians and 241 bicyclists that passed by the trail counter on the Chisholm Trail at Jack Carter Park daily. Additionally from 2019 to 2021, Legacy Trail experienced the greatest percentage growth in both pedestrian and bicyclist users.

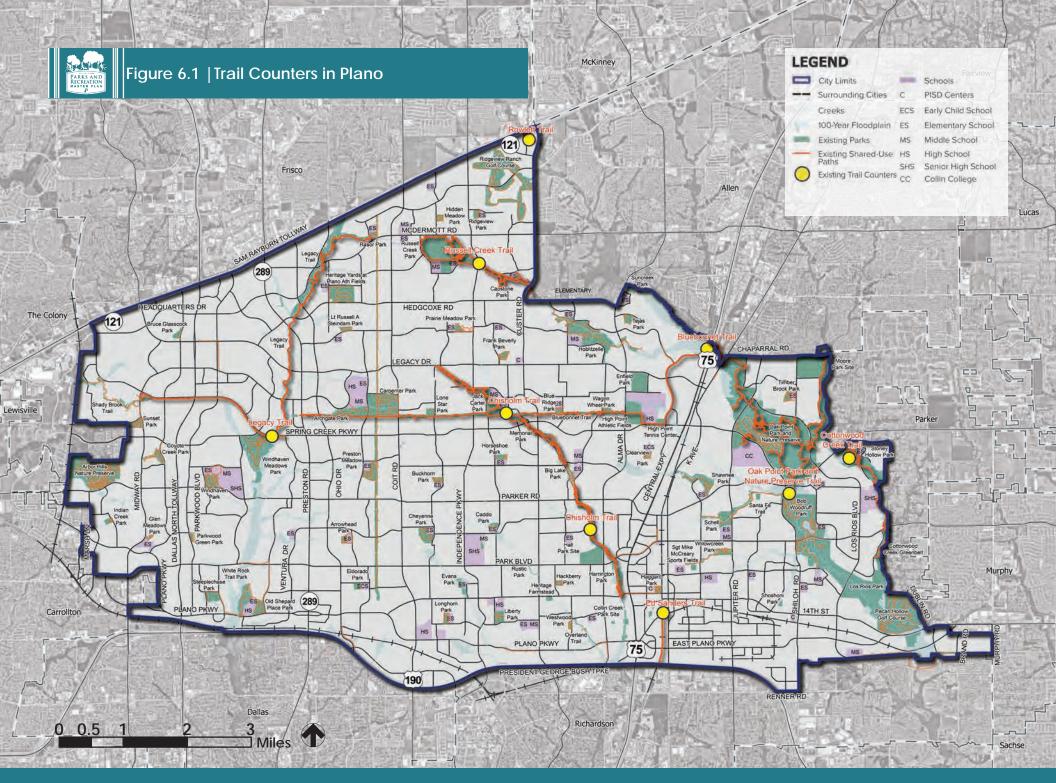
Even with 98 miles of existing trail, there are still some gaps within the City. Major gaps in existing trails include portions of the Preston Ridge Trail, Cottonwood Creek Trail and the connection between the Bluebonnet Trail and the Legacy Trail. The City has opportunities to better connect to surrounding cities, including Dallas, Richardson, and Frisco. Overall there are approximately 66 miles of planned trail in the current Bicycle Transportation Plan, but the segments are in various stages of development and most are not designed or funded yet.

Table 6.1: Trail User Counts - 2021

Trail Counter Location	Pedestrians	Bicyclists
Bluebonnet Trail	28,292	51,376
Chisholm Trail	156,286	148,674
Cottonwood Creek Trail	35,891	11,248
Ed Sanders Trail	14,014	4,925
Legacy Trail	75,817	82,807
Oak Point Park and Nature Preserve Trail	72,778	66,883
Rowlett Creek Trail	37,806	29,022
Russell Creek Trail	73,155	35,273
Total	494,039	430,188

Source: City of Plano. 2022.





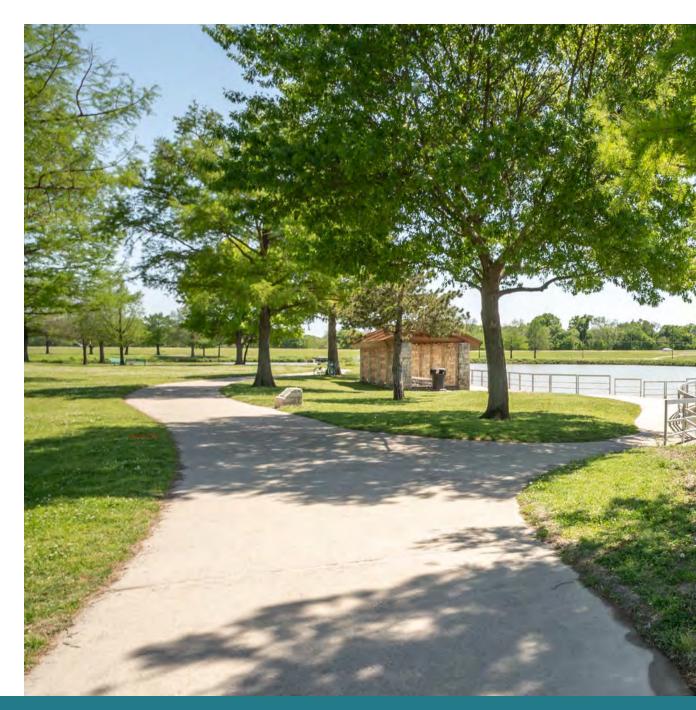
#### OPPORTUNITIES AND CONSTRAINTS

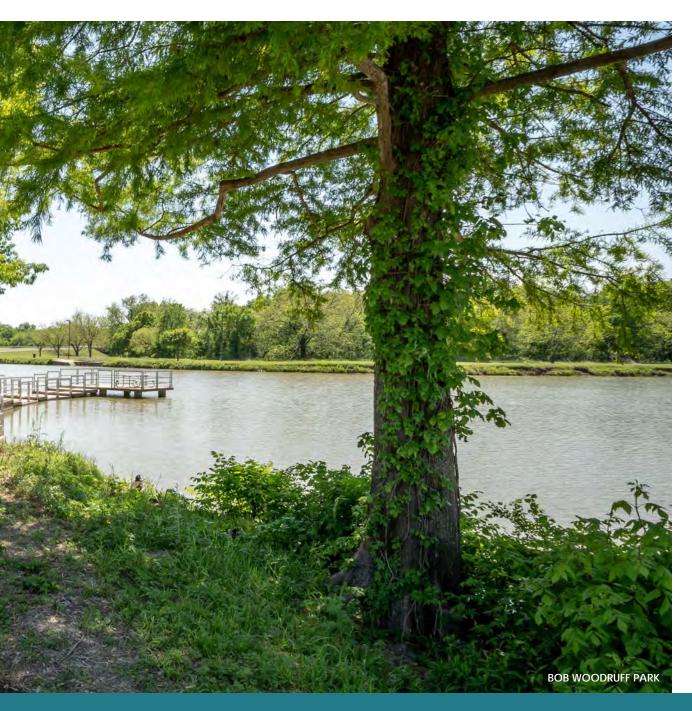
Plano has already taken advantage of many of the existing trail and bikeway opportunities in the community such as utility easements and creek corridors. While additional opportunities exist, several constraints to trail and bikeway developments should be taken into consideration by the City.

## **OPPORTUNITIES**

The major opportunities in Plano are filling in the remaining gaps in the trail system to create a better connected system. This includes Preston Ridge Trail, Cottonwood Creek Trail and Bluebonnet Trail. Additionally, existing trails could be extended, including Preston Ridge Trail, Legacy Trail, and Chisholm Trail. Connections to other communities should also be seen as an opportunity to increase trail and bikeway connectivity. Finally, the DART Silver Line that is planned through the southern part of the City presents an additional trail opportunity to provide an east-west connection. Since stations are proposed at 12th Street and Shiloh Road, connections should be prioritized around these future stations.

Other opportunities include partnerships with developers, surrounding cities, and other agencies such as Collin County, DART, TxDOT, and NCTCOG to construct trails.





# **CONSTRAINTS**

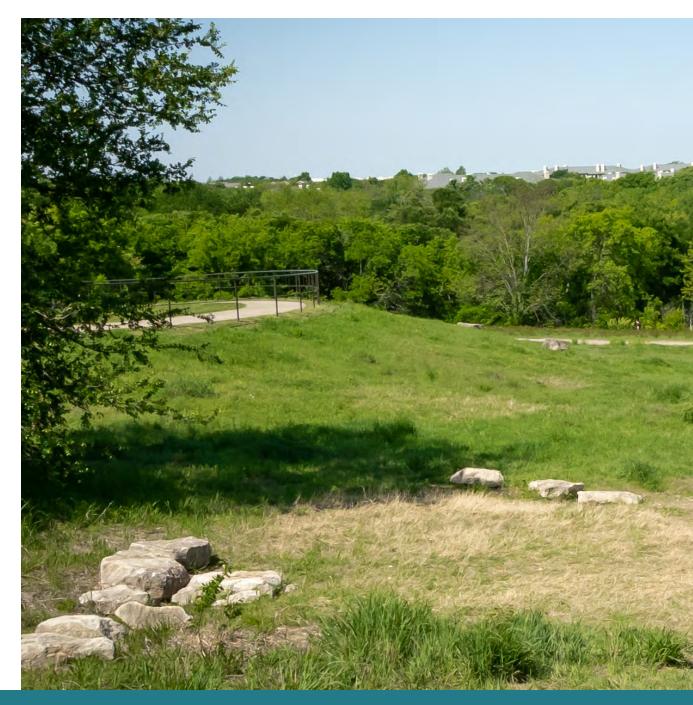
Potential obstructions to additional trail and bikeway connectivity include private property, barriers such as roadways and railroads, and trail intersections with major thoroughfares. In the southwestern part of the City, the Gleneagles Country Club Golf Course imposes a barrier to connecting White Rock Park Trail to Windhaven Meadows Park and Legacy Trail to the north. The current Bicycle Transportation Plan shows this as a sidepath along Willow Bend Drive, but right-of-way is limited. Additionally, Central Expressway, Dallas North Tollway, President George Bush Turnpike, Sam Rayburn Tollway, and the BNSF Railway are major barriers for bicycle and pedestrian connectivity. Finally, there are many trail intersections with major roadways in the city where additional safety measures could be implemented.

# **NEEDS ASSESSMENT**

Similar to the analysis conducted for parks and recreation facilities, a needs assessment is also conducted for trails. This section includes an assessment of trail needs using a standards-based approach, considering demand from public input, and a comparison to the benchmark communities introduced in the Community Context chapter.

#### STANDARDS-BASED APPROACH

Trail level of service is expressed as '1 mile per X number of residents'. In 2023, the trails level of service was 1 mile per 2,970 residents. If all of the currently planned trails are built, in 2050 the trails level of service would be 1 mile per 2,006 residents. The DFW Metroplex average is about 1 mile per 2,000 residents. In 2023, the City is approximately 48 miles deficient of meeting that regional target and in 2050, if all of the currently planned trails are built there would be less than a mile trail needed to meet the regional average of 1 mile per 2,000 residents.





#### **DEMAND-BASED APPROACH**

Trails were one of the most frequently mentioned desired amenity by both the statistically valid survey and online survey respondents. 79% of the statistically valid survey respondents agreed or strongly agreed that the City of Plano should prioritize developing additional bicycling opportunities to connect existing trails. Additionally, 74% of online survey respondents selected implementing more safety countermeasures at trail crossings and intersections to better protect pedestrians and bicyclists as important or very important. Pertinent feedback from the stakeholder and public meetings was related to trail amenities. Desired amenities included more shade, water fountains, and safety countermeasures.

# COMPARISON TO BENCHMARK COMMUNITIES

As discussed in the Community Context chapter, this plan defines five benchmark communities across the country to compare Plano's park system. As shown in **Table 6.2**, the trails level of service in Plano falls in the middle of the benchmark communities. Henderson, Nevada has the highest level of service with 1 mile of trail per 1,035 residents and Frisco has the lowest level of service with 1 mile per 8,460 residents.

**Table 6.2:** Benchmark Community Trail Level of Service

City	Trail Level of Service (2023)
Plano, TX	1 mile per 2,970 residents
Arlington, VA	1 mile per 3,284 residents
Chandler, AZ	1 mile per 6,000 residents
Frisco, TX	1 mile per 8,461 residents
Henderson, NV	1 mile per 1,035 residents
Naperville, IL	1 mile per 2,450 residents

# RECOMMENDATIONS

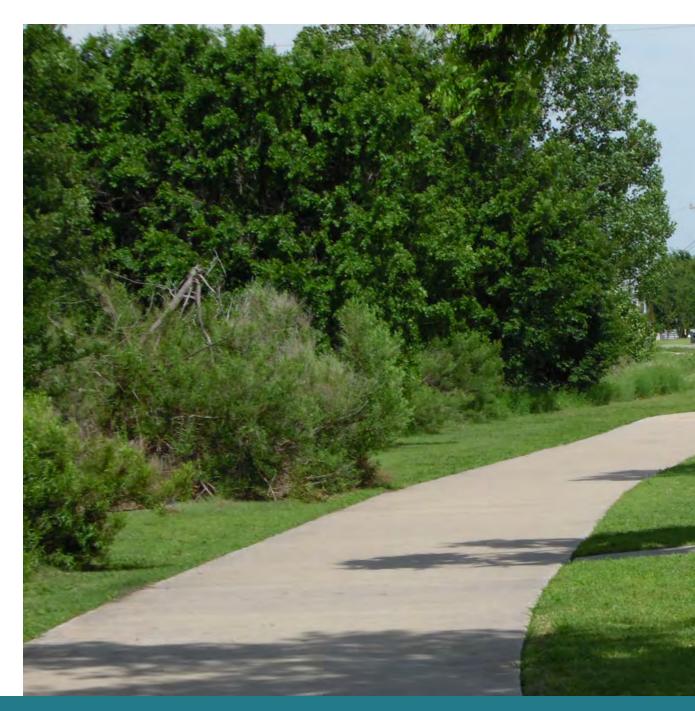
Based on the analysis of the existing and planned system, additional opportunities for trail and bikeway connectivity were identified. This section presents the recommended updates to the Bicycle Transportation Plan and other recommendations related to trail and bikeway development.

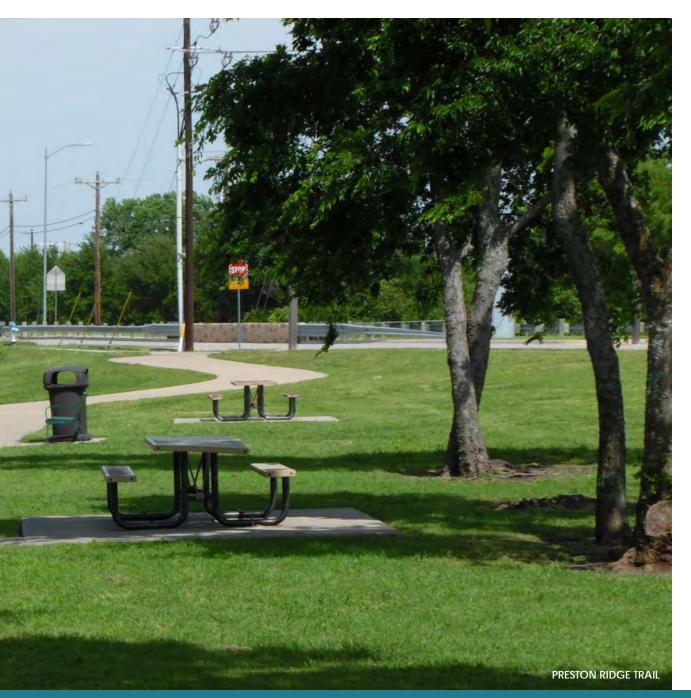
#### **EXPANSIONS TO TRAIL NETWORK**

The following recommendations for expanding the trail network were developed by assessing the remaining gaps in the overall trail and bikeway system. Each of these recommendations are conceptual in nature and should be reviewed in more detail in a specific trail and bikeway master plan to determine feasibility and cost of implementing the trail and bikeway corridors.

SHARED-USE PATHS (A paved trail located away from the street typically in an independent right-of-way)

**Legacy Drive**: There is a shared-use path currently connecting the Shops at Legacy to the Legacy West shopping area. This includes a cycle track constructed across the Dallas North Tollway. The shared-use path along Legacy Drive should be extended farther to the east and west to connect to the Sam Rayburn Tollway as well as Legacy Trail in order to provide additional connectivity to the Legacy West area. Given the characteristics of the Legacy West area and its regional significance, this shared-use path should be a minimum of 12 feet wide where possible.





Parkwood Boulevard: This corridor serves as the eastern boundary of the Shops at Legacy development and is also a reliever road for the Dallas North Tollway. The existing Bicycle Transportation Plan identified a shared-use path on the eastern side of the roadway from the Sam Rayburn Tollway to Spring Creek Parkway. As more development occurs along the Dallas North Tollway, it will be critical to provide bicycle and pedestrian connectivity in the area. Therefore, this plan recommends extending the planned shared-use path from Spring Creek Parkway to Plano Parkway. This shared-use path should be a minimum of 10 feet wide.

Plano Parkway: Currently the only major eastwest bicycle and pedestrian connection in Plano is the Bluebonnet Trail, which is in the northern half of the city. Therefore, in order to provide connectivity in the southern portion, the feasibility of adding a shared-use path on one side of Plano Parkway should be assessed. This plan recommends a shared-use path from Parkwood Boulevard to the eastern city boundary. Depending on right-of-way this path should be a minimum of 10 feet wide and refer to AASHTO standards when considering reduced widths in constrained areas.

K Avenue: This roadway serves as a core linkage through downtown to northern parts of the city. This plan recommends a shareduse path from President George Bush Turnpike to the northern city boundary. As expansion of the DART rail corridor moves forward, a study for future trails within the ROW should be pursued to determine if it has potential for adjacent trail development. This shared-use path should be a minimum of 12 feet wide on both sides of the road where possible.

Legacy Business Park: If the opportunity arises, the City should partner with existing property owners in the Legacy Business Park area to provide additional trail connectivity. The corridor that is shown on the map is the existing perimeter walking path near the Frito Lay campus. The city/corporation partnership could include the City widening the path and maintaining it if made publicly accessible.

# **ON-STREET BIKEWAY ACCOMMODATIONS**

(shared lane markings or bike lanes)

Old Shepard Place/Preston Ridge Trail/ Cheyenne Park Connection: Ventura Drive and Tulane Drive are four-lane roadways with no residential frontage which makes them ideal candidates for further evaluation and study for an on-street bikeway accommodation such as a bike lane or shared lane marking. This would provide a connection between Old Shepard Place Park and White Rock Trail Park (via the future Plano Parkway shared-use path) and Preston Ridge Trail. This connection could be extended past Coit Road on Matterhorn Drive to connect to Cheyenne Park, although Matterhorn is only a two-lane road and has residences fronting the street on one side.

Los Rios Boulevard from Jupiter Road to Parker Road: Los Rios Boulevard is a two-lane road with no sidewalks or trail adjacent to the street. With increased bicycle traffic for commuters, it is an ideal candidate for further evaluation and study for on-street bicycle accommodations such as a dedicated bike lane.

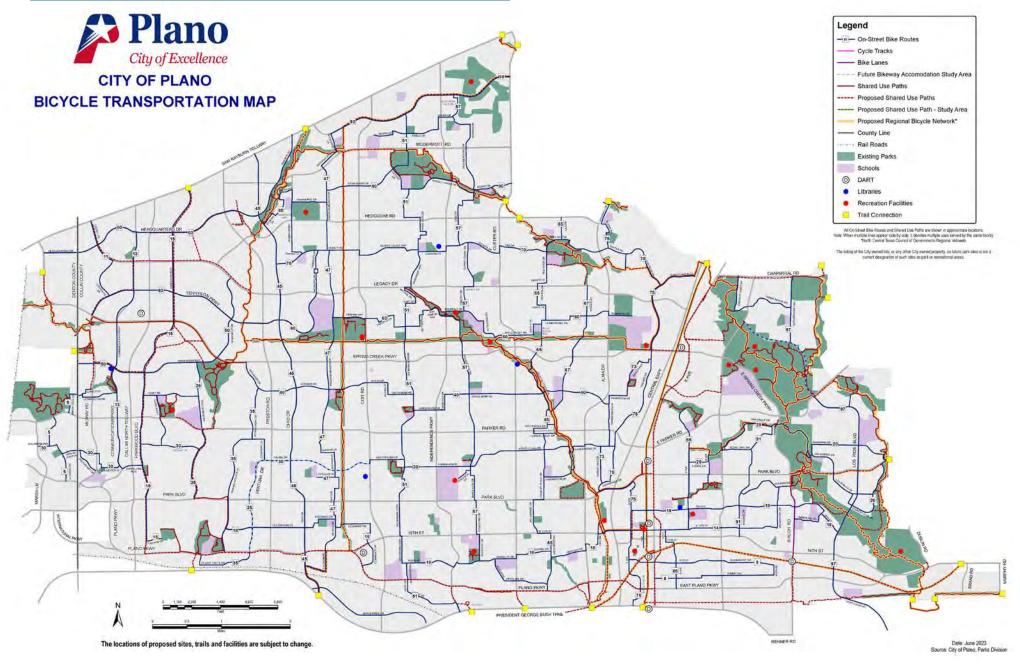








# Figure 6.2 | Bicycle Transportation Plan



#### MAJOR THOROUGHFARE CROSSINGS

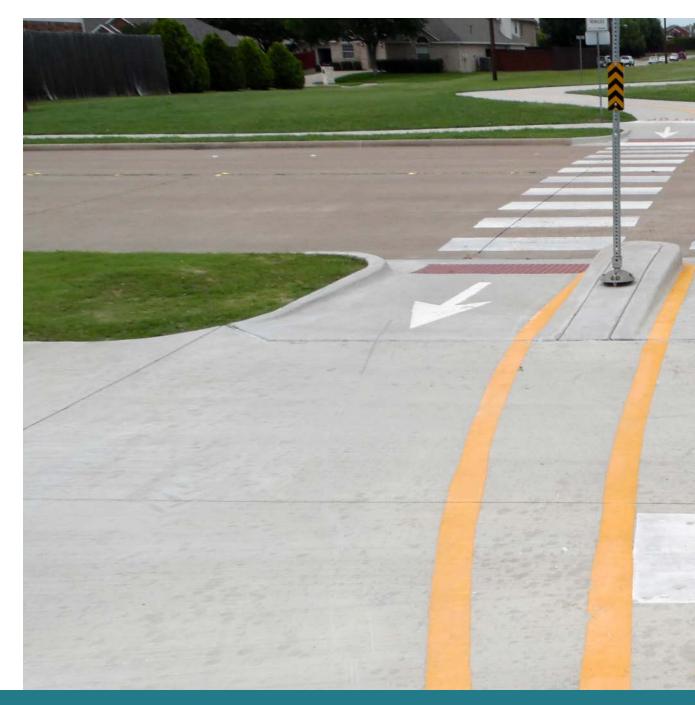
Many of the existing trails cross major thoroughfares and the City currently uses a range of strategies to provide safe crossings. Current treatments on roadways include crosswalk striping, signage, median refuges, pedestrian signals, and textured pavement. Additional treatments to consider for roadways include:

## Speed tables:

These are flat-topped speed humps designed to slow traffic but still allow cars to maintain slightly higher speeds than regular speed bumps. When accompanied with appropriate signage, speed tables can help alert motorists to be aware of bicyclists and pedestrians.

# Pedestrian hybrid beacons (PHB):

A pedestrian hybrid beacon is a traffic control device to aid in mid-block crossings or uncontrolled intersections. A trail user activates the beacon by pushing a call button, which then turns on the red lights on the beacon to alert motorists to allow for a person on the trail to cross. According to the Manual on Uniform Traffic Control Devices (MUTCD), PHBs are appropriate for areas where vehicle speeds are too high for pedestrians to safely cross. Placement of these devices must be coordinated with and vetted through the Transportation Department.





Additionally, other safety control measures can be implemented on the trail to alert trail users of an upcoming major intersection. In Plano, features such as trail bollards, pedestrian-scaled stop signs, and paint are used. Additional treatments to consider for trails include:

#### Medians:

The City has limited its use of trail bollards at trail access points and instead has started to install low medians at road intersections. This helps to alert trail users of the upcoming intersection and reduces the chance of crashing into the bollard while distracted.

Whichever of these crossing treatments the City uses in the future for both roadways and trails, there should be consistency throughout the City so both motorists and trail users know where a crossing occurs.

#### **FUTURE RECOMMENDATIONS**

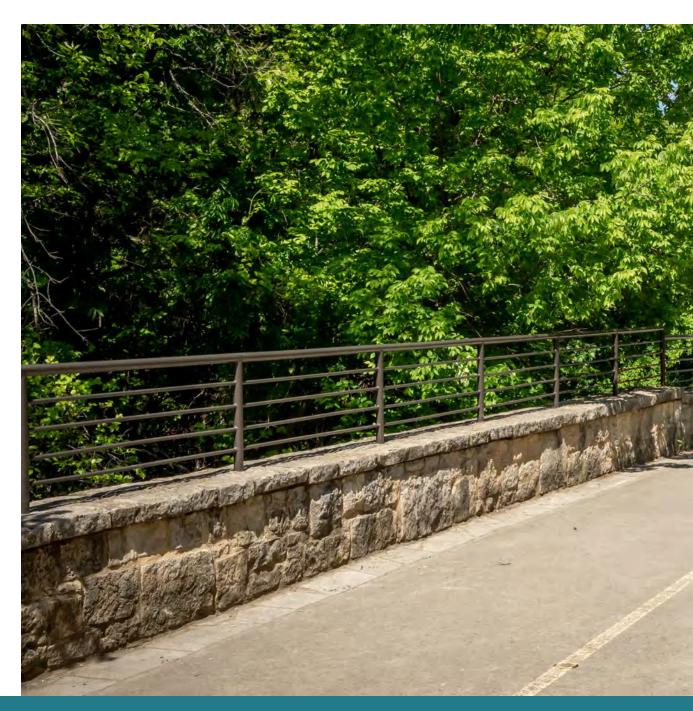
This final section includes additional considerations for the City as the planned network is built out.

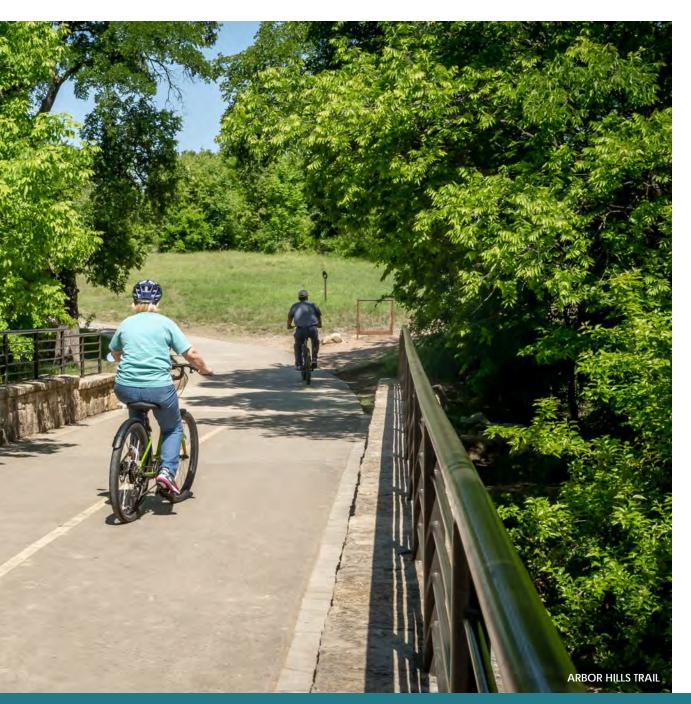
## Review on-street signed bike routes:

The system of on-street signed bike routes has not been updated in over ten years. Since more development has occurred in Plano and traffic has increased, a detailed review of all the designated signed routes needs to be conducted.

# Capitalize on robust trail network tourism opportunities:

As more of the trail network is built out, there will be long stretches on continuous trail. The City could capitalize on this feature by hosting marathons and half marathons completely on trails. Most cities in the Metroplex that host long races rely on using parts of roads, so this would be a unique selling point for Plano and further enhance the economic benefit of parks and trails.





#### Continue to review local trail standards:

NCTCOG has adopted design considerations for regional and community pathways. For regional pathways, which are defined as trails that travel through cities and provide connections to major destinations, NCTCOG recommends 12-14 feet minimum width. For community pathways, which are generally shorter in length and may terminate within a community, NCTCOG recommends 10-14 feet width. When the City of Plano reviews trail standards in the future, staff should consider adopting these regional design standards.

#### Address ADA accessibility of existing trails:

As trails age, distressed and crumbling pavement can become an ADA issue. The City should maintain an inventory of trail pavement condition and repair ADA concerns as they arise, consistent with the ADA Transition Plan.

# Conduct a trails and bikeways master plan:

This plan should look at both the recreational and mobility purposes that trails and bikeways support to develop a more comprehensive network.