



CITY OF DENISON
**PARKS & TRAILS MASTER
PLAN**



HALFF

Adopted April 4, 2022



ACKNOWLEDGMENTS

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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

BGC: Boys & Girls Club of Denison

BMP: Best Management Practices

CIP: Capital Improvement Program

CMAQ: Congestion Mitigation and Air Quality

CRIS: Crash Record Information System

DDA: Denison Development Alliance

DISD: Denison Independent School District

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

MKT: Missouri-Kansas-Texas Railroad

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

PROWAG: Public Right-of-Way Accessibility Guidelines

RAISE: Rebuilding American Infrastructure with Sustainability and Equity

ROW: Right-of-Way

SDMPO: Sherman-Denison Metropolitan Planning Organization

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

TELS: Texoma Exposition and Livestock Show

LIST OF ACRONYMS

THF: Texoma Health Foundation

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

TSA: Texoma Soccer Association

TTI: Texas Transportation Institute

TWDB: Texas Water Development Board

TxDOT: Texas Department of Transportation

USACE: U.S. Army Corps of Engineers



01 | INTRODUCTION

- ◆ **PLAN OVERVIEW**
- ◆ **PLAN BACKGROUND**
- ◆ **PLAN PROCESS**
- ◆ **PLAN PURPOSE**
- ◆ **PLAN GOALS & OBJECTIVES**

PLAN OVERVIEW

The Denison Park & Trails Master Plan identifies a system of parks, trails, and recreation opportunities to be enhanced or implemented over time. The recommended facilities in this plan focus on providing a comprehensive park and trail system that is well-connected, accessible, and meets the local and regional needs and interests. This is the first comprehensive park and trails master plan the City has developed and will help guide future project implementation and city budgeting.

PLAN BACKGROUND

A Parks and Trails Master Plan helps establish a guide for future development of park and trail amenities in a community. As Denison’s population increases, the demand for these public facilities will increase for both recreation and commuting purposes. In recognition of its growth, in 2021, the City of Denison began the task of creating a Parks and Trails Master Plan which will enhance the efforts established in previous plans and studies.

Primary objectives of the Master Plan:

- Seek **community and stakeholder input** on desired park, trail, and recreation amenities;
- Conduct a **needs assessment** to determine the existing and future needs of the overall system;
- **Identify necessary improvements and expansions** for parks, alternative transportation accommodations, and recreation facilities;
- **Provide guidance** for updating design standards and policies that support a well-connected system; and,
- **Prioritize** implementation of system-wide **recommendations**.

BENEFITS OF A MASTER PLAN

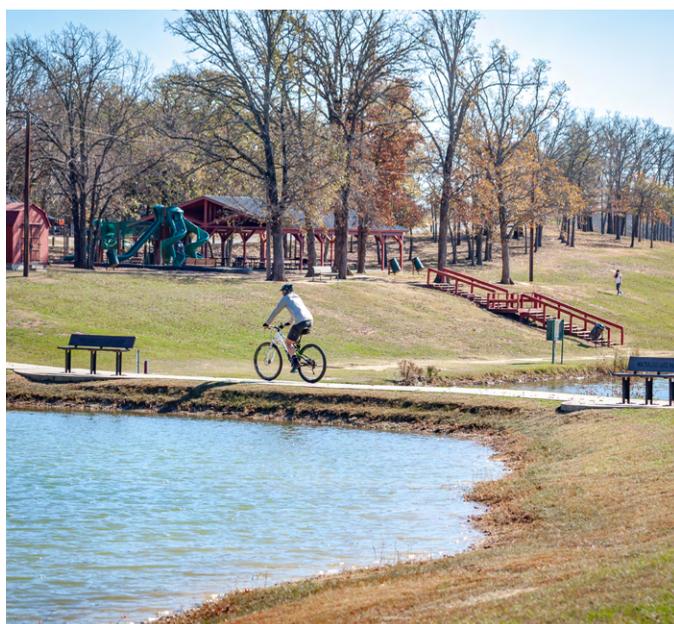
There are multiple benefits in creating a connected parks and trails master plan including healthier lifestyles, boosting the local economy and increased safety. This section will further explain the overall benefits of a master plan.

Health Benefits

Physical activity is key to having a healthier lifestyle and by improving park and trails accessibility, individuals can more easily incorporate exercise into their daily routine. With the increase of obesity throughout the nation physical activity is more important than ever, increasing the significance of public spaces. Besides providing opportunities to increase physical activity in a variety of forms, parks also provide a cleaner air supply for the surrounding areas.



Source: National Recreation and Park Association (NRPA) Research Series - Air Quality Effects of Urban Trees and Parks



Multi-use trail within Waterloo Lake Park



Source: <https://www.nrpa.org/our-work/Three-Pillars/role-of-parks-and-recreation-on-health-and-wellness/>

Economic Benefits

By leveraging natural resources, recreational tourism can help better the local economy by increasing local business consumption. Proximity to parks and trails can have a positive impact on property values. Furthermore, studies have shown the economic impacts parks and trails have include increasing tax revenues, decreasing medical costs, increasing tourism revenue, and decreased stormwater treatment costs.



Multi-use trail within Waterloo Lake Park

In Texas, local parks and recreation agencies supported **62,519 jobs** and generated **\$8.7 billion** in economic activity.



Source: NRPA Economic Impact of Parks 2020 Update

More than **50%** of homebuyers would pay **10% more** for a home close to a park.

Source: <https://www.hrg-inc.com/5-economic-benefits-of-parks-and-recreational-facilities/>



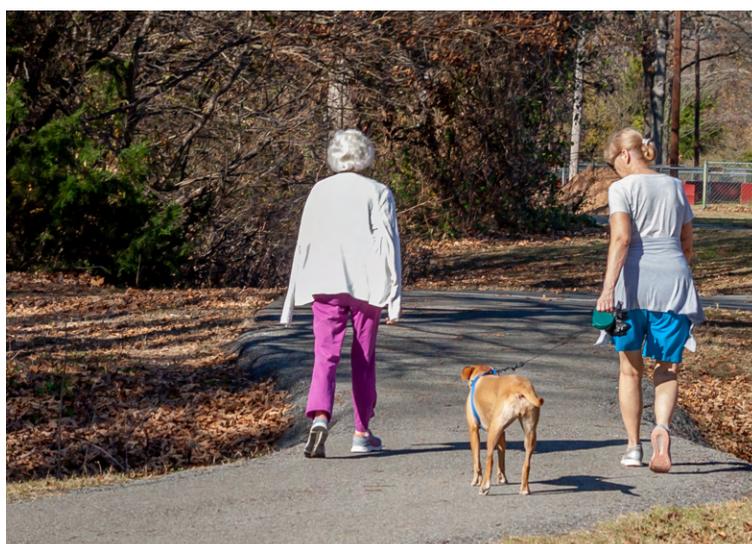
Forest Park

Safety Benefits

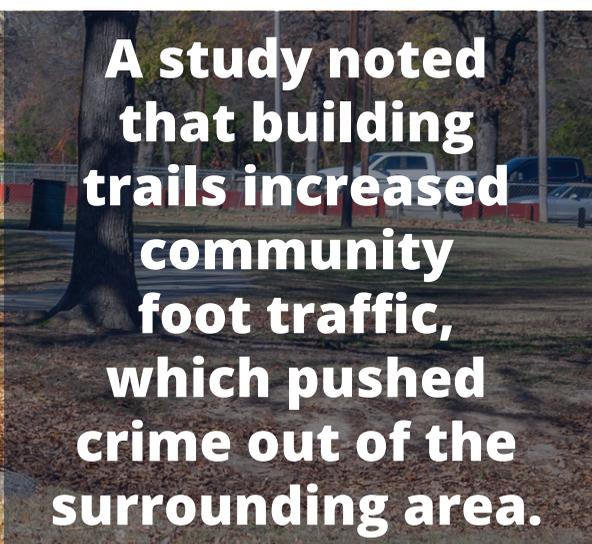
Park improvements not only provide residents a safe location to gather and play but can also reduce crime in the surrounding area by increasing community foot traffic. Often times when bicycle accommodations are introduced into a roadway, lanes are reduced thus lowering travel speeds and improving safety for all users. Additionally, intersections, which are the most dangerous spots for pedestrians and cyclists, are also improved to include more defined crosswalks or pedestrian activated signals.



Soft-surface trail around Waterloo Lake Park



Waterloo Cave Trail

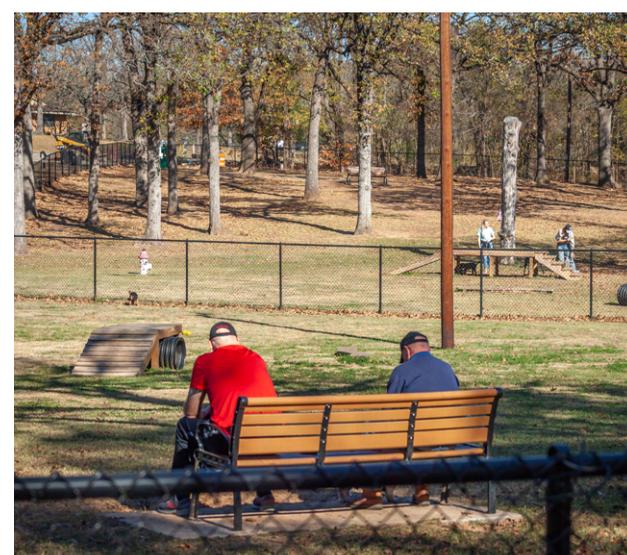


<https://www.miracle-recreation.com/blog/benefits-of-parks-in-your-community/#safe-places>

A pedestrian struck by a motorist at 45 mph has a **41%** chance of surviving; that likelihood increases to **87%** when the vehicle is traveling 25 mph.



Source: "Impact Speed and a Pedestrian's Risk of Severe Injury or Death," Brian Teft, September 2011, <http://aaafoundation.org/wp-content/uploads/2018/02/2011PedestrianRiskVsSpeedReport.pdf>



Waterloo Dog Park

PLAN PROCESS

The planning process took approximately 12 months, which involved various public and stakeholder engagement methods and assessment of existing conditions to develop a comprehensive set of recommendations for parks, recreation, and trails in Denison. **Figure 1.1** illustrates the phases and timelines followed for the plan process.

- **Assessment of Existing Conditions:** After developing a community profile the project team created an inventory of existing park facilities and amenities.
- **Community Engagement:** Through a variety of engagement strategies feedback was collected from residents, stakeholders, staff, civic leaders, and appointed officials.
- **Evaluation of System Needs:** By using a series of quantitative and qualitative methods, current and future needs for additional parks and recreation facilities were determined.
- **Development of Recommendations:** A series of recommendations to improve and expand the park system was developed based on the community feedback and assessment of needs.
- **Prioritization of Actions:** This phase involved prioritizing the actions into a short, medium, and long-term implementation program based on their relative importance and ease of implementation.

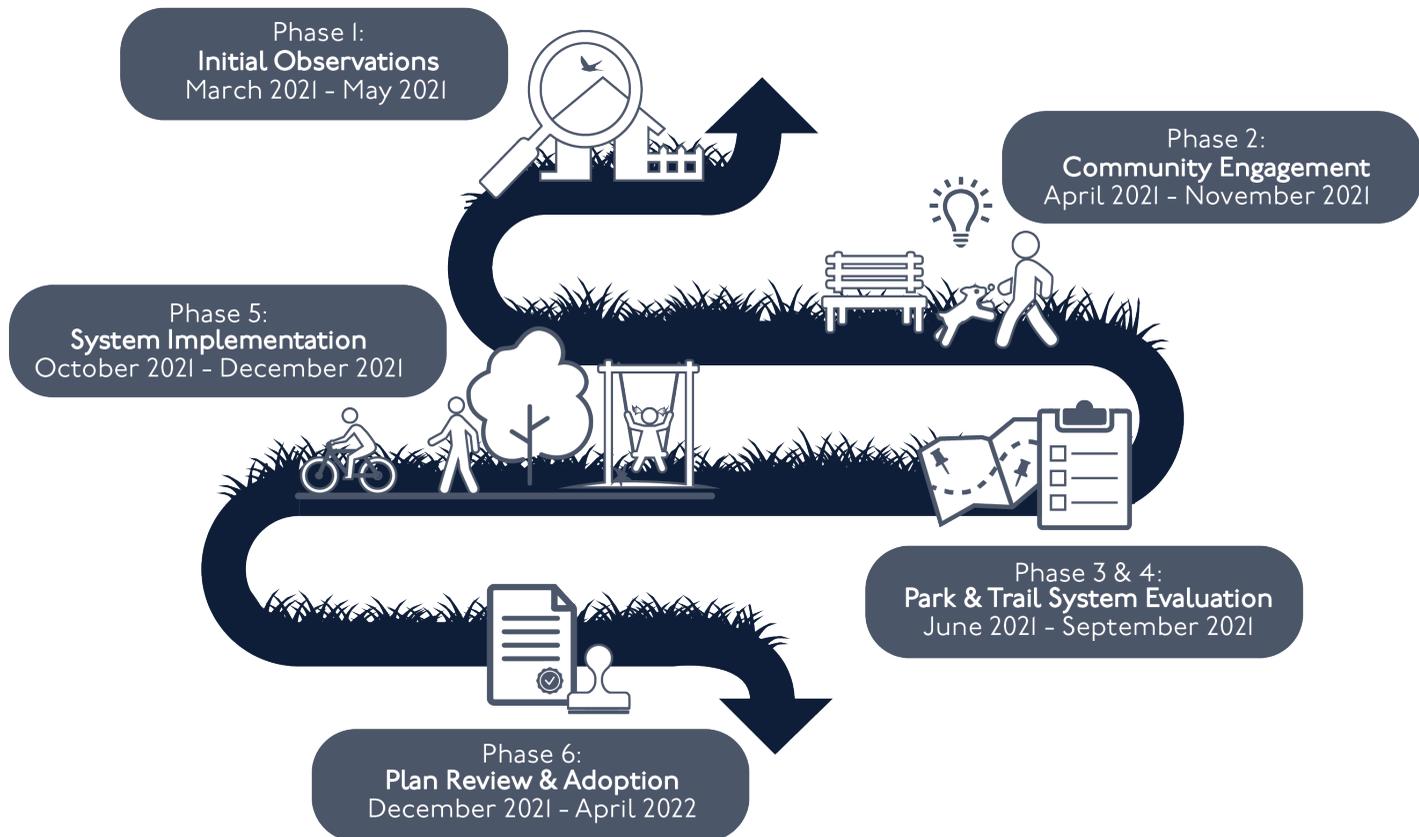


Figure 1.1 | Plan Process

PLAN PURPOSE

The purpose of this master plan is to guide the improvement and expansion of park, trail, and recreation facilities; provide guidance for design standards and policies, and prioritize implementation recommendations for the park and trail system in Denison.

PLAN CONTENTS

Chapter 1 | Introduction: Introduce the plan purpose and background to set up the plan vision and goals.

Chapter 2 | Community Context: Analyze the context in Denison that can influence the establishment of parks and trails, including demographics, the built environment, and natural resources. Evaluate past planning efforts that relate to parks and trails.

Chapter 3 | Parks & Open Space: Present a park system inventory that establishes the different park classifications and determine the need for additional parks through access, demand, and resource-based assessments.

Chapter 4 | Trails: Present an inventory of existing and proposed trails in order to assess the need for additional trails through analysis of demand, standards and benchmarks.

Chapter 5 | Recommendations: Provide guidance for updating design standards and policies that support a well-connected park and trail system.

Chapter 6 | Implementation: Provide an implementation plan that prioritizes recommended actions based on short, medium, and long-range improvements.

PLAN GOALS & OBJECTIVES

The following goals and objectives were developed based on the input received from the city and community.

Goals are meant to be comprehensive statements that reflect the City's desired course of action.

Objectives are specific actions needed to achieve the specific goal.

PLAN GOALS & OBJECTIVES

1 | Park Access

Create an accessible and connected system of parks.

Objective 1.1 | Improve existing park space and develop undeveloped park acreage.

Objective 1.2 | Establish park system branding to help users locate park and recreation amenities and programs.

Objective 1.3 | Create a balance between active and passive park programming.

2 | Amenities

Provide park, trail, and recreation amenities that serve users of all ages and abilities.

Objective 2.1 | Ensure that parks provide amenities that meet the demands and interests of the community.

Objective 2.2 | Integrate Denison's history throughout the park and trail network.

Objective 2.3 | Establish consistent and equitable amenities appropriate for each park type.

3 | Park Access

Expand the trail and bikeway network to connect to key destinations throughout the City.

Objective 3.1 | Ensure that trail and bikeway facilities are safe and appropriate for all ages and user groups.

Objective 3.2 | Implement wayfinding signage to increase awareness of the trail and bikeway system for residents and visitors.

Objective 3.3 | Increase mobility in the City through alternative transportation options.

4 | Recreational Tourism

Leverage the park, trail, and recreation system to encourage tourism.

Objective 4.1 | Leverage lake access by supporting water recreation opportunities.

Objective 4.2 | Make Denison a park, trail, and recreation destination of North Texas.

Objective 4.3 | Utilize park space spaces in ways that generate revenue.

5 | Maintenance & Administration

Update policies to improve efficiency of park, trail, and recreation services.

Objective 5.1 | Review maintenance standards to ensure parks, trails, and recreation facilities are equitably maintained based on the type of facility.

Objective 5.2 | Review staffing needs to ensure park and recreation facilities are adequately maintained.

Objective 5.3 | Increase convenience and transparency of the Parks & Recreation Department initiatives, amenities, and programs for system users.



02 | COMMUNITY CONTEXT

- ◆ PLANNING AREA
- ◆ DEMOGRAPHIC PROFILE
- ◆ REVIEW OF EXISTING STUDIES
- ◆ INPUT STRATEGIES

DEMOGRAPHIC PROFILE

GROWTH TRENDS

Similar to many neighboring cities, Denison experienced an increase in population during the period between 1950 - 1970. The growth rate during this three-decade time period was 42.4%, however, in more recent years, population growth slowed. In 1980 the City experienced a slight decline in population of about 4% and further decline in 1990 with the population totaling 21,505. Upon entering the 21st century Denison's population experienced steady growth, with the population increasing by 13% from 1990 to 2019. As of 2019 the population of Denison was 24,340, representing 18.6% of the total population for Grayson County.

Looking towards the future, the North Central Texas Council of Governments (NCTCOG) anticipates a 26.3% population increase from 2019, with 30,731 people living in Denison by 2040. Grayson County is also predicted to have a substantial 12.3% increase in population within the next 20 years. The projected population growth will ultimately create an increased demand for an expanded park, recreation, and trail system.

For this section, the 2019 American Community Survey (ACS) Five-Year Estimate was used. This represents the latest data available at the time of report development.

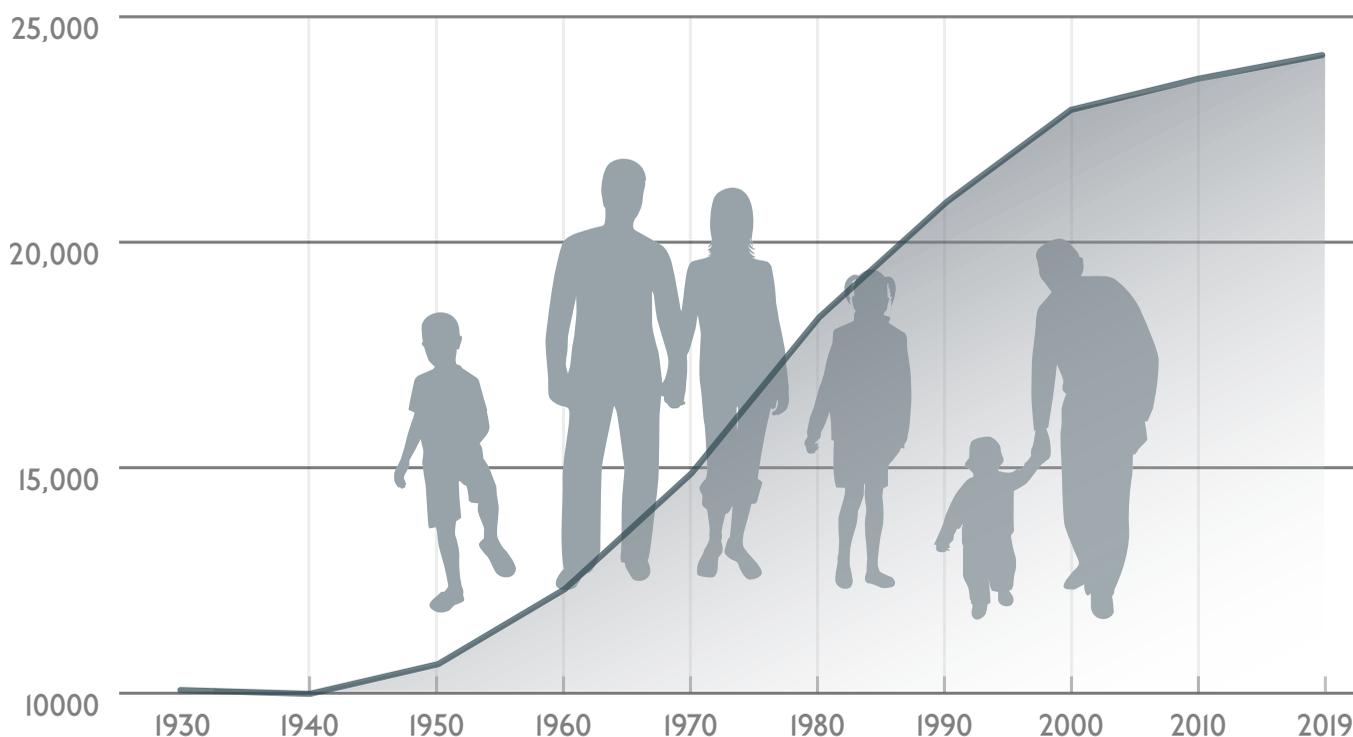


Figure 2.1 | Historic Population Growth

AGE & GENDER CHARACTERISTICS

In 2019, the age cohorts with the largest percentages were evenly distributed between the ages of 0-5 years, 25-29 years, 50-59 years, and 60-64 years with each age group equal about 7% of Denison’s population, collectively making up 29% of the total population. With 41.8% of people in the 20-54 age group, Denison has a significant part of its total population within the labor force participation age group. The next largest age cohort is the 55 years old and older population, making up 31.5% of the total population, indicating a significant senior population. Not far behind however is the 0-19 age cohort, that makes up 26.7% of the total population for Denison.

Recent population growth combined with a large labor force age population indicates there are a significant number of growing families living in the city. Males make up 47.5% of the overall population, while females make up to 52.5% of the population. The median age of Denison residents in 2019 was 38.9 years, which is about 10% higher than the Texas median age of 34.6 years. Over time the median age for Denison has steadily decreased with a 4% decrease in median age from the 2010 figure of 40.6 years, indicating an influx of younger families.

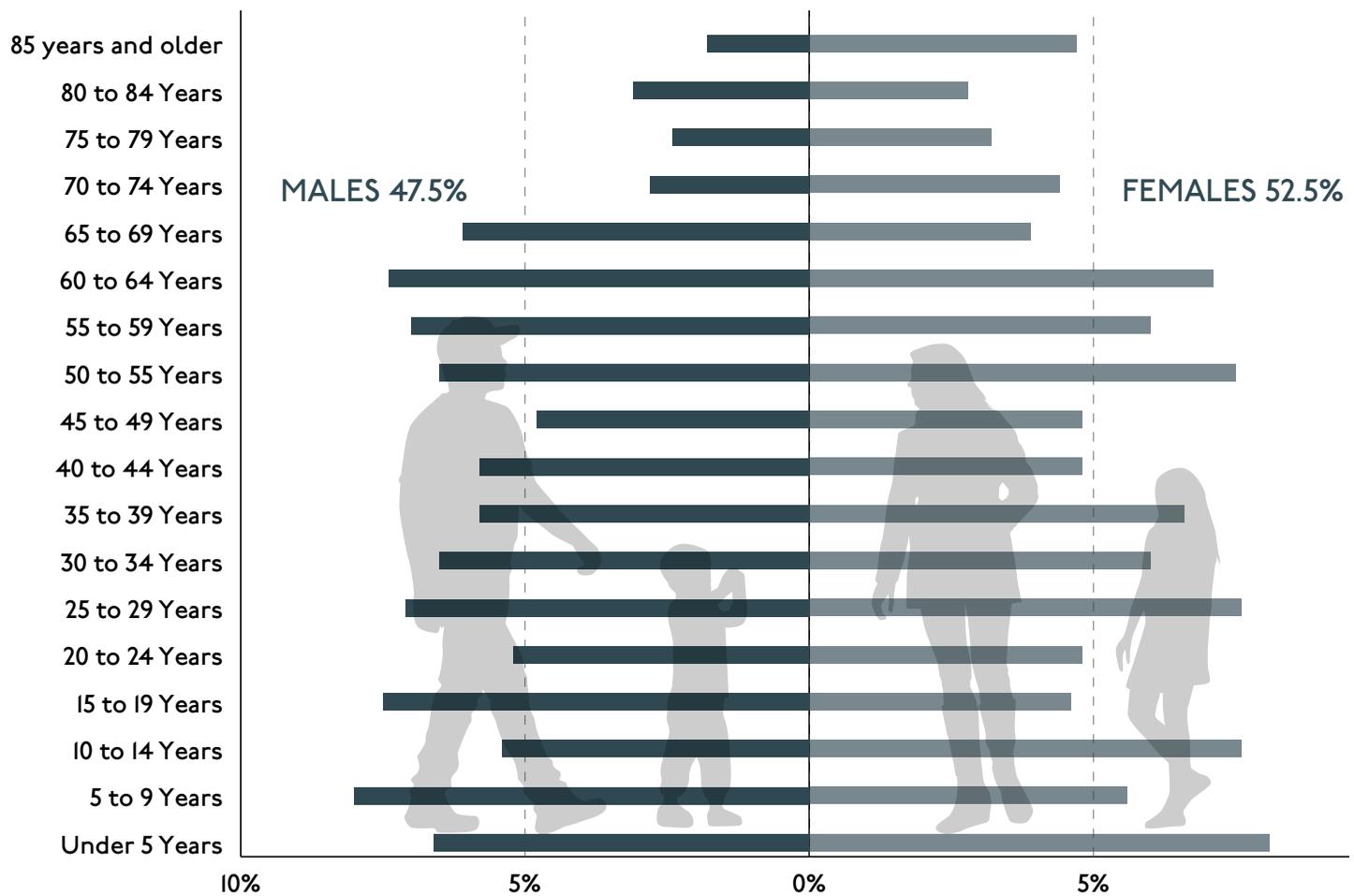


Figure 2.2 | Population Age & Gender Composition (2020)

RACE AND ETHNICITY CHARACTERISTICS

According to the 2019 ACS estimates, most Denison residents (85%) identified as White, followed by 7.5% of residents identifying as Black or African American. From 2010-2019 there has been a noticeable increase in the percentage of residents identifying as White and a diminishing number of residents identifying as Black or African American, Asian, or two or more races.

Table 2.1 shows the change in composition of Denison's population from 2010 to 2019. As shown in **Table 2.1**, the percentage of residents that identify ethnically as Hispanic or Latino has also decreased; since 2010 there has been a 1.1% decrease in Hispanic or Latino residents, which composed 8.1% of the population in 2019.

Table 2.1 | Race & Ethnicity (2010-2019)

	2010	2019
Total Population	22,728	24,340
White	78.2%	85.0%
Black or African American	9.8%	7.5%
American Indian and Alaska Native	2.1%	1.5%
Asian	0.8%	1.1%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%
Some Other Race	5.2%	0.8%
Hispanic or Latino Ethnicity (of any race)	9.2%	8.1%

Source: U.S. Census Bureau, 2010-2019 American Community Survey 5-Year Estimate



Heritage Park



Downtown Denison gateway

HOUSEHOLD CHARACTERISTICS

Compared to the state of Texas, Denison’s housing has about the same percentage of occupied housing units, totaling 89.2%. The majority of occupied housing units are owner-occupied, equaling 60.6% and the remaining 39.4% are renter-occupied units. **Table 2.2** shows that over time the percentage of owner-occupied and renter-occupied housing units has remained fairly consistent with only a 1.9% increase from 2010 to 2019.

A large percentage of owner-occupied housing units correlates with the large number of family households, which accounts for 63.4% of all households. Of the total housing units in Denison in 2019, only 10.8% are vacant, which reflects past and anticipated population growth. The median household income for the City of Denison in 2019 was \$31,438, which has increased from the \$28,613 figure in 2010. This is lower than the Sherman-Denison, TX Metro Area median household income of \$48,454.

Table 2.2 | Household Characteristics (2010-2019)

	2010	2019
Total Housing Units	10,219	10,343
Occupied Housing Units	87.4%	89.2%
Vacant Housing Units	12.6%	10.8%
Owner Occupied Units	5,367	5,598
Renter Occupied Units	3,566	3,633
Median Household Income	\$37,014	\$43,856

Source: U.S. Census Bureau, 2010-2019 American Community Survey 5-Year Estimate



Texoma Health Foundation Park

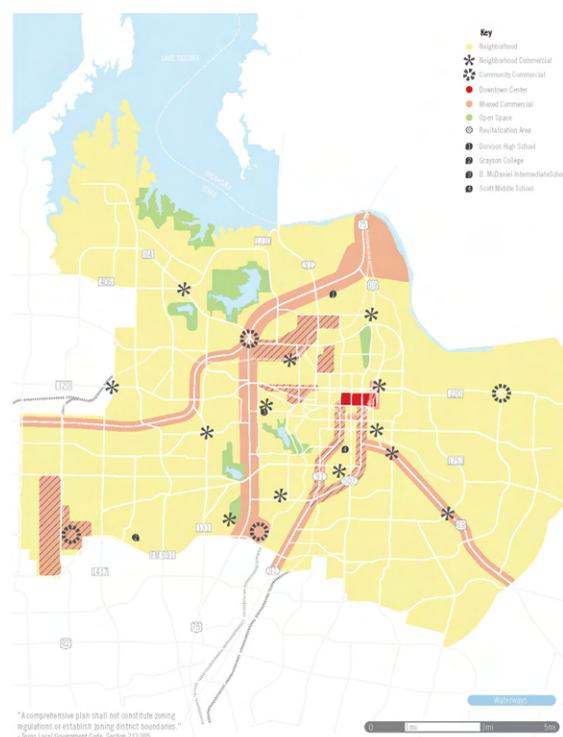
REVIEW OF EXISTING STUDIES

COMPREHENSIVE PLAN (2018)

The Denison Comprehensive Plan was adopted in 2018 and serves as the City's policy document to guide new development. The plan is structured into four main sections:

- About the Plan
- History & Existing Conditions
- Vision, Goals & Actions
- Planning

Within multiple sections of the comprehensive plan the city showcases the focus of developing infrastructure for bicycles and pedestrians and the importance of having accessible and inclusive recreation opportunities. This highlights the importance of parks, trails, and bikeways as quality of life amenities for the residents of Denison. Furthermore, some of the primary concerns that were shared in the public engagement section were the need for linear parks and trails, alternate transportation options, and the improvement of streets. The comprehensive plan is utilized to inform long-term decision making for the City's expenditures and become a guide for future development within Denison.



Denison Future Land Use Map (2018)

DESIGNING DOWNTOWN DENISON (2017)

The 2017 Designing Downtown Denison Report was an initiative of the Denison Main Street Program and was funded by the City of Denison. The primary focus was to create design concepts for the redevelopment of Denison's downtown core. Concepts were developed for Main Street, the 700 Block, Heritage Park, Pocket Park, and the alleys adjacent to Main Street. Two of Denison's parks are found on Main Street in downtown. Heritage Park is at the intersection of Touchdown Alley and Main Street, which is the location of a historic building fire. The design was intended to provide an adaptable space for multiple types of events and as a memorial space, connecting the park's design to the City's history. The concept for Pocket Park illustrates how underutilized park space can help guide redevelopment to support a gathering space in downtown. By encouraging the public, stakeholders, and city staff to provide input, it is evident that Denison as a whole recognizes the need and values investments in transportation and infrastructure improvements, and preservation of natural areas.

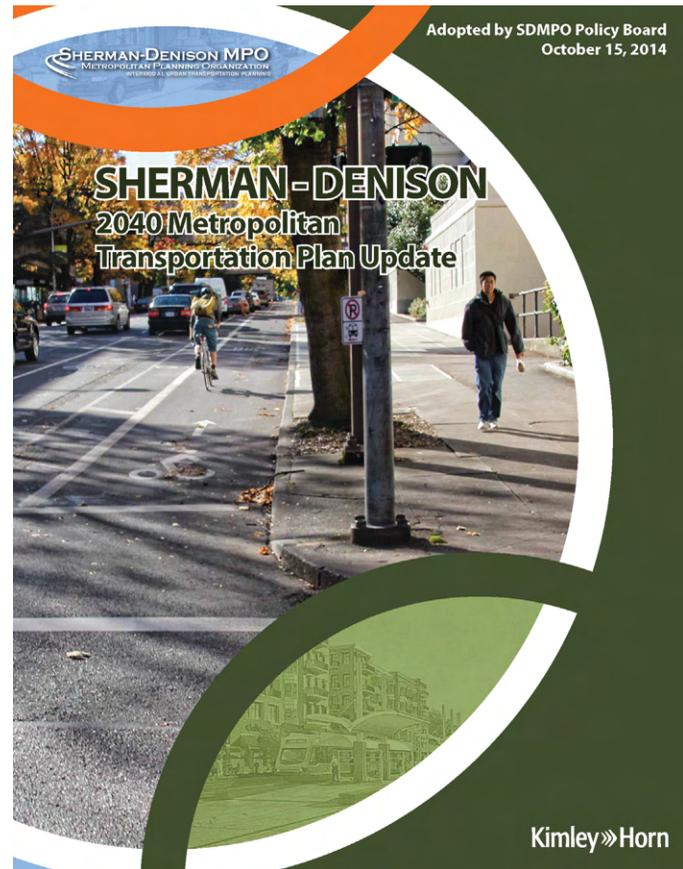


Designing Downtown Denison Report (2017)

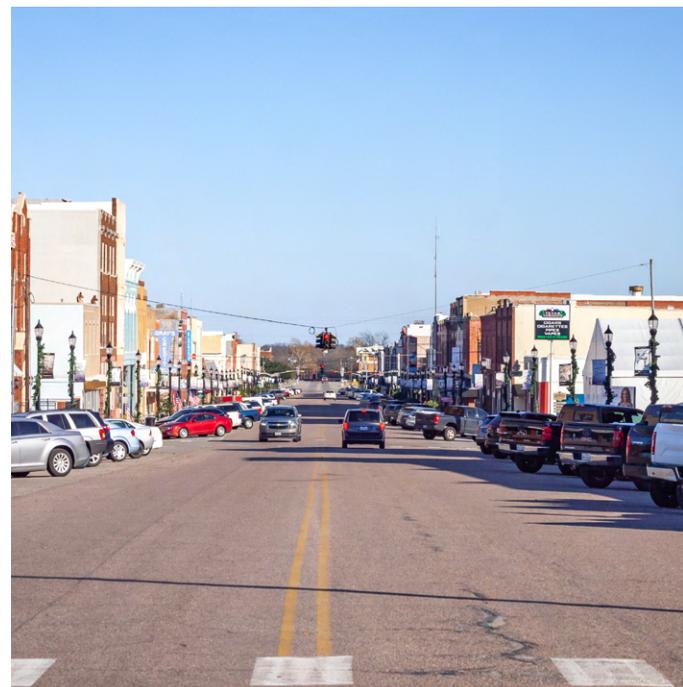
2040 METROPOLITAN TRANSPORTATION PLAN UPDATE (2014)

The Sherman-Denison 2040 Metropolitan Transportation Plan Update creates a cohesive set of guidelines in the vision of long-range transportation improvements within the Sherman-Denison Metropolitan Planning Organization (SDMPO). In combination with existing conditions, goals and objectives, environmental justice analysis and financial resources, plan the report developed a bike and pedestrian plan that identifies the development of non-motorized transportation connections throughout the SDMPO. Whether walking or biking, the plan has identified a lack of access to and from schools with their current infrastructure layout. Through the creation of this plan there was a strong focus on expanding and developing a regional multi-modal transportation network. Additionally, this plan goes deeper into proposing a criteria framework in order to evaluate, select and prioritize bicycle and pedestrian infrastructure. This is achieved by focusing on facility types and proposes the following criteria for project prioritization:

- Ability to access schools, parks, large employers, multifamily or mixed-use residential, or shopping within approximately 1/2-1 mile for pedestrians, 2-3 miles for bikeways, depending on barriers
- Densities surrounding/within ¼ to ½ mile of a candidate corridor
- Supported by City leadership
- Right of way availability or potential availability
- Roadway improvements are included in current or future TIP or CIP
- Access to transit stops with bike racks and/or buses with bike racks
- Serves both bicyclists and pedestrians
- Meets Regional or MPO funding criteria



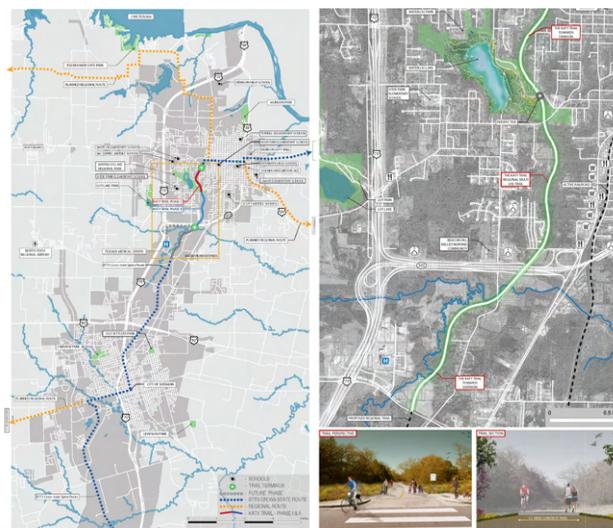
Sherman-Denison 2040 Metropolitan Transportation Plan Update (2014)



Downtown Denison

KATY TRAIL LONG DISTANCE BICYCLE ROUTES (2019)

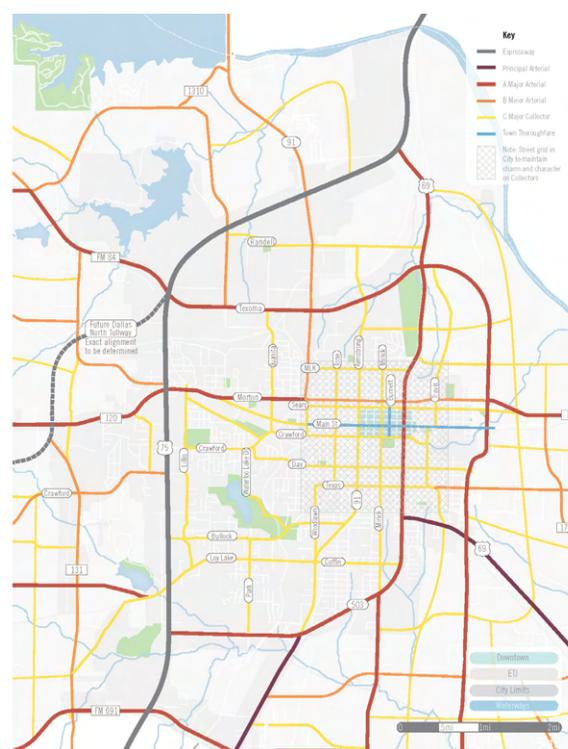
The Katy Trail Long Distance Bicycle Routes design is a proposed development of a multi-use trail, spanning almost 3.7 miles connecting Denison and Sherman. Phase I is approximately one mile in length while Phase II is planned to stretch 1.3 miles, from Loy Lake Road to Theresa Drive just passing Spur 503. Denison is planning to leverage private development for the remaining 1.4 miles of the trail in order to connect to the future trail infrastructure. The design recognizes a lack of current pedestrian and bicycle infrastructure and looks to connect Sherman with Denison via trail systems. It not only identifies the location of a new trail but connects the proposed trail to the future regional vision of the area. Referencing the proposed future location of regional trails, the Katy Trail extends multi-modal infrastructure, which connects Sherman and Denison residents to multiple parks and recreational amenities, with the intention of enhancing overall quality of life.



Katy Trail Long Distance Bicycle Routes (2019)

DENISON MASTER THOROUGHFARE PLAN (2018)

The Denison Master Thoroughfare Plan helps illustrate and classify the existing and future networks of major roadways and street connections. Additionally, the plan identifies key safe pedestrian connections including, bike trails, bike paths and bike lanes. The plan identifies a wide range of planning needs in Denison's roadway network including specific recommendations and implementation strategies to help alleviate some of the recognized planning issues. As illustrated in the plan's action prioritization section, a trail system is of critical importance to achieve Denison's goals.



Master Thoroughfare Plan (2018)

INPUT STRATEGIES

The public engagement strategies utilized during the development of this master plan aimed to be far reaching and easily accessible to gain feedback from a diverse range of Denison residents, City staff, and key stakeholders. These strategies included: steering committee meetings, stakeholder listening sessions, public meetings, and an online survey. The input gained throughout the plan process informed the development of this master plan in a manner that affirmed the vision of the community. This section showcases the key findings from these input opportunities.

STEERING COMMITTEE MEETINGS

A steering committee was created at the beginning of the plan process through city staff invitation and included elected and appointed officials, representatives from city departments, sports and athletic organizations, and park and trails users and advocates. The role of this committee was to guide outcomes of the plan, provide intermediary reviews of recommendations, and to ensure the plan aligns with community goals. During the planning process this steering committee met and reviewed at three key project milestones: initiation of the project, review of preliminary recommendations, and review of the final master plan.



Initial steering committee meeting held on June 9, 2021

STAKEHOLDER LISTENING SESSIONS

At the start of the planning process there was also a series of stakeholder listening sessions that were held to gather insight from key stakeholders representing various groups within Denison. Attendees included representatives from the Eisenhower Birthplace, Frontier Village, Grayson County, Texas Parks and Wildlife Department (TPWD), the development community, the school district, sports leagues and associations, and active trail and park users.



Stakeholder listening sessions held on June 9 & 10, 2021

PUBLIC MEETINGS

An initial public open house meeting was held on June 10, 2021. At the open house, attendees listened to an overview presentation about the plan process and were able to provide input on various aspects of parks, recreational facilities, and trails in Denison through interactive exercises. The feedback obtained primarily included existing concerns, needs, preferences for facilities and amenities throughout the parks and trails system. Approximately 25 participants attended the first public open house. A second open house was held on February 1, 2022 to review the draft recommendations.



Public Open House held on June 10, 2021

PUBLIC OPEN HOUSE RESULTS

As discussed previously, the initial open house provided attendees the opportunity to provide input on the park, recreation, and trail facilities in Denison through a series of interactive visioning boards. The focus of these boards was to understand current perceptions and desires for parks and trails systems as well as determine existing barriers to overcome and opportunities that should be leveraged. The boards prompted attendees to identify facility and amenity preferences, unmet needs, and potential locations for future parks and trails within the city. Key findings from the public open house interactive boards are summarized below.

Figure 2.3 | Key Findings for Parks & Trails

Top preferred park amenities



Picnic Areas



Shade Trees



Amphitheater

Top preferred open space amenities



Hike & Bike Trails



Paddle Sports



Preserving Scenic Views



Nature Viewing Areas

Top preferred trail amenities



Parking



Wayfinding Signage



Lighting

Key Findings:

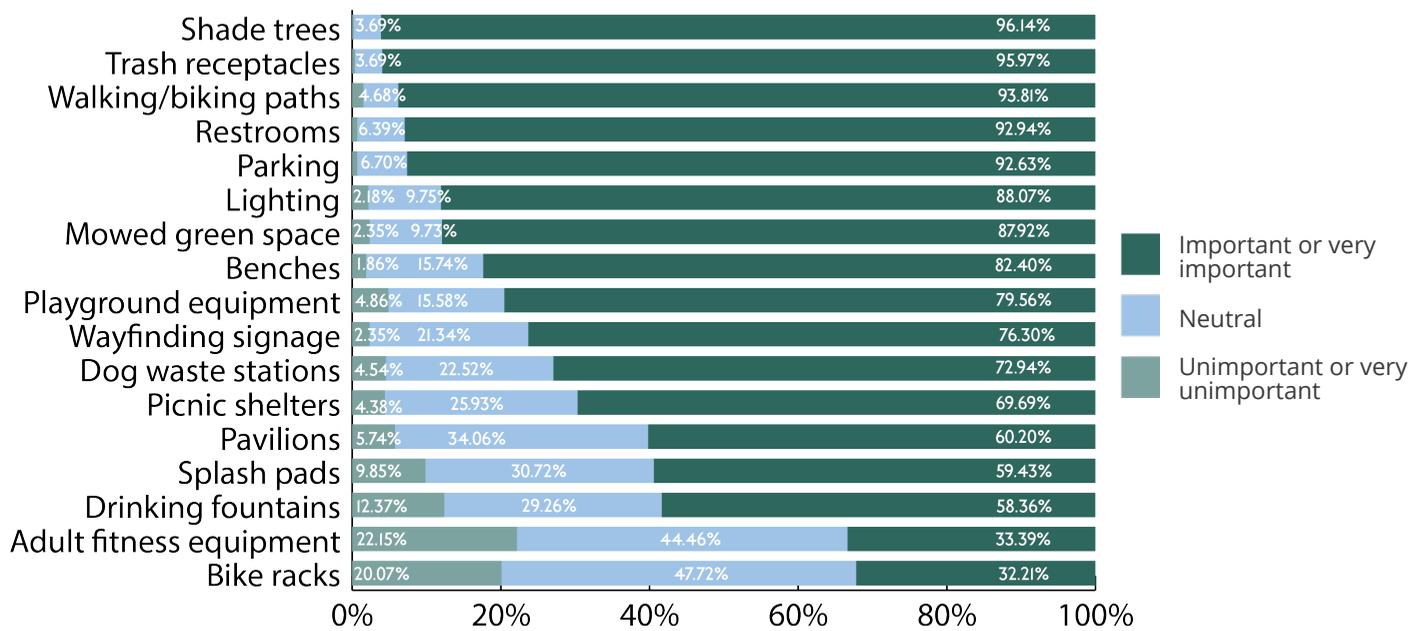
- Many attendees stressed the need for a more connected system of parks and trails to allow for recreation and alternative transportation options.
- Preferred amenities included shade trees, paddle sports, and hike & bike trails.
- Overall amenities that promote safety and accessibility, such as wayfinding signage and lighting play a crucial role in encouraging people to use parks and trails.

SURVEY RESULTS

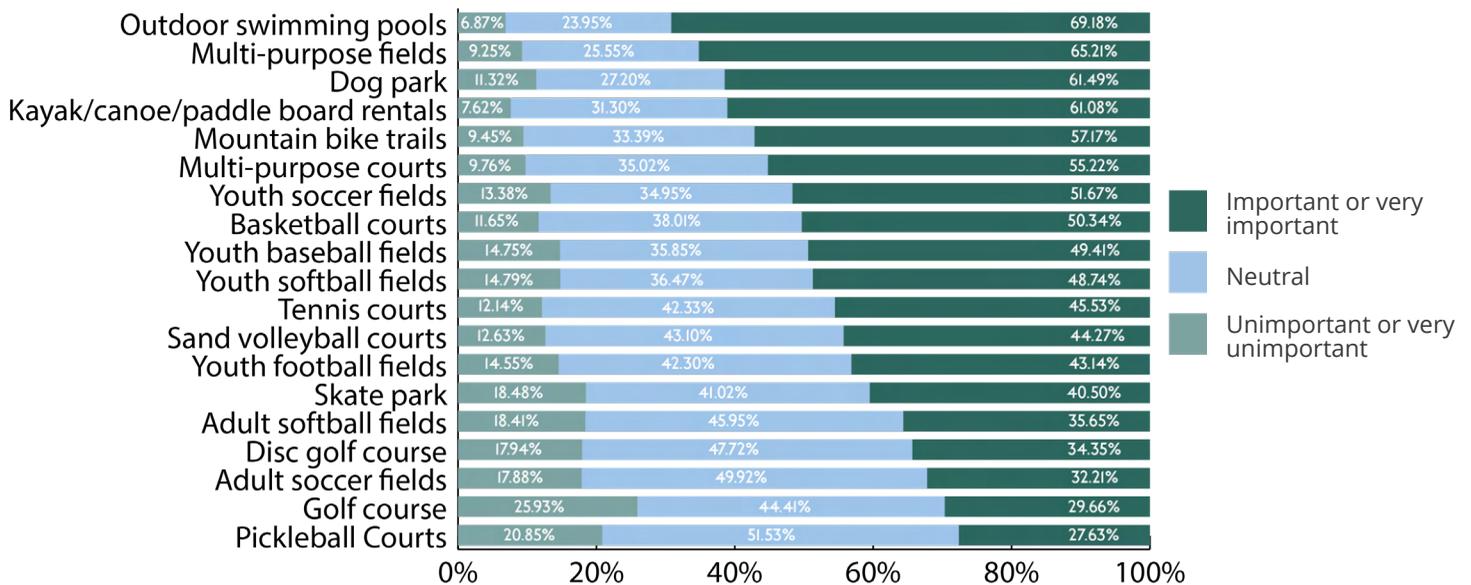
Public input is a critical part to the planning process and to reach a broad cross section of the population an online survey was made available from early June to early July 2021. During this timeframe the survey received a total of 601 responses. The survey contained a variety of questions pertaining to conditions and preferences for parks, trails, and recreation in Denison. This section summarizes the key findings from this survey.

Figure 2.4 | Key Online Survey Results

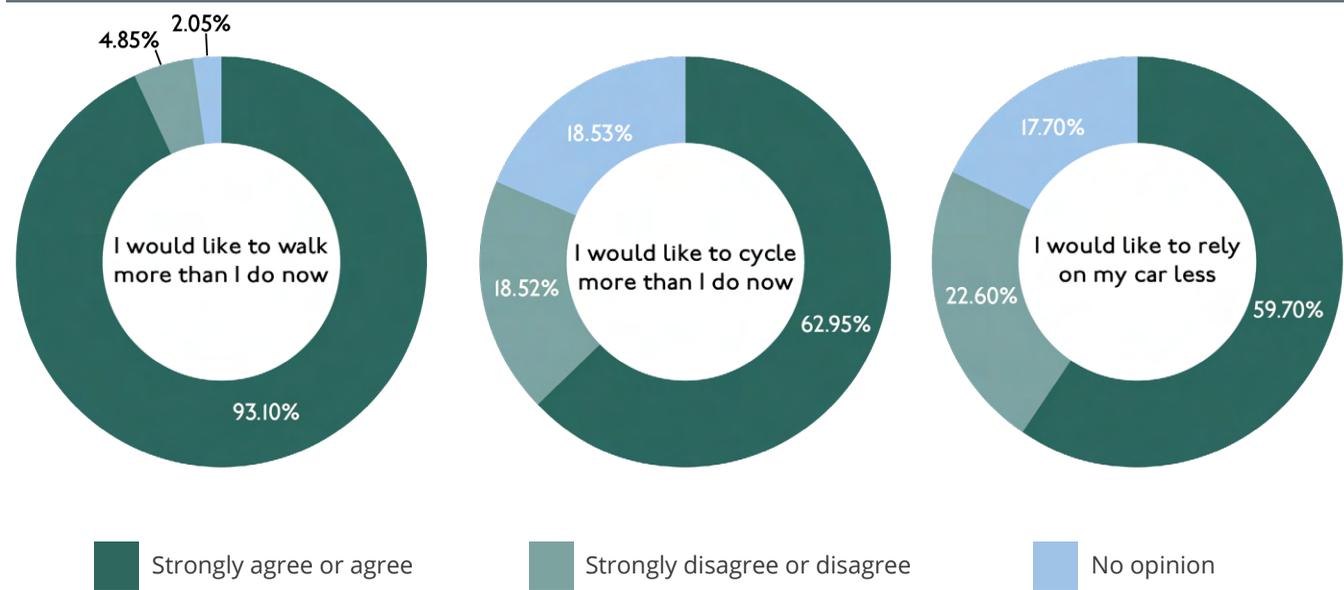
Importance of Park Amenities



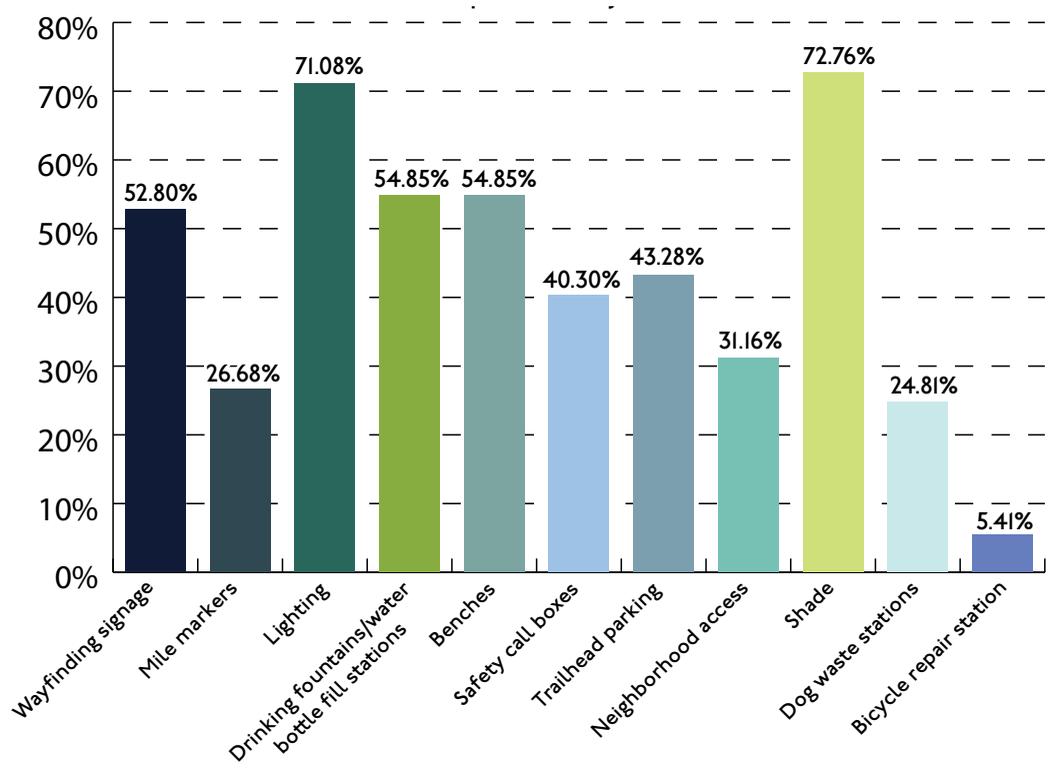
Importance of Outdoor Recreation Amenities



Use of pedestrian and bicycle facilities



Recreational trail amenity preferences



Key Findings:

- Survey respondents emphasized the importance of a balance between natural area and programmed park space by indicating a desire for a variety of park and outdoor recreation amenities.
- Improving trail safety and accessibility would encourage residents to use these facilities for recreational and alternative transportation options.



03 | PARKS & OPEN SPACE

- ◆ SYSTEM INVENTORY
- ◆ NEEDS ASSESSMENT

SYSTEM INVENTORY

PARK CLASSIFICATIONS

Denison has four types of parks within the city that serve a variety of passive and active recreation purposes: Regional, community, neighborhood, and pocket/mini parks. The park system is also supported by a network of trails and recreation facilities that serve the recreation needs of the community. **Map 3.1**, on the facing page, illustrates the existing park and recreation system. An overview of the park classifications and other recreational amenities provided by the city is summarized below.

REGIONAL PARKS

Regional parks are the largest park type, and are generally larger than 50 acres. Expansive acreage allows these parks to offer an extensive range of recreation and athletic opportunities serving residents within and beyond the city limits. Aiming to serve multiple communities and create regional draw, some of these parks are specially programmed to serve a specific purpose such as a large sports complex that can accommodate large tournaments and host regional events.

COMMUNITY PARKS

Community parks are typically larger than 10 acres and serve residents within a 1-mile radius. These parks offer passive and active recreation opportunities. Some of these opportunities include swimming pools, ball fields, playgrounds, and trails. Two of Denison's community parks currently house a significant number of practice fields.

NEIGHBORHOOD PARKS

Neighborhood parks are small, approximately 2-10 acres in size, and are designed to serve surrounding neighborhoods within a one-half mile. Some of the amenities offered include playgrounds, open areas for free play, pavilions and sports courts.

POCKET/MINI PARKS

Pocket parks are the smallest parks, typically smaller than 2 acres in size. This park type serves as accessible green space within a developed area that lacks outdoor gathering space for recreation and provides a limited number of amenities such as picnic tables and playgrounds. Pocket/mini parks serve the immediately surrounding area and many of the existing sites in Denison are found in or near downtown.

RECREATION FACILITIES

Recreation facilities are buildings that provide space for programmed recreational and athletic activities for the city. In Denison these facilities include Waterloo Pool and the Senior Citizen Center. Waterloo Pool is the only publicly accessible aquatic facility in the city and provides a variety of programs for residents of all ages. The Senior Citizen Center provides indoor programs for Denison seniors.

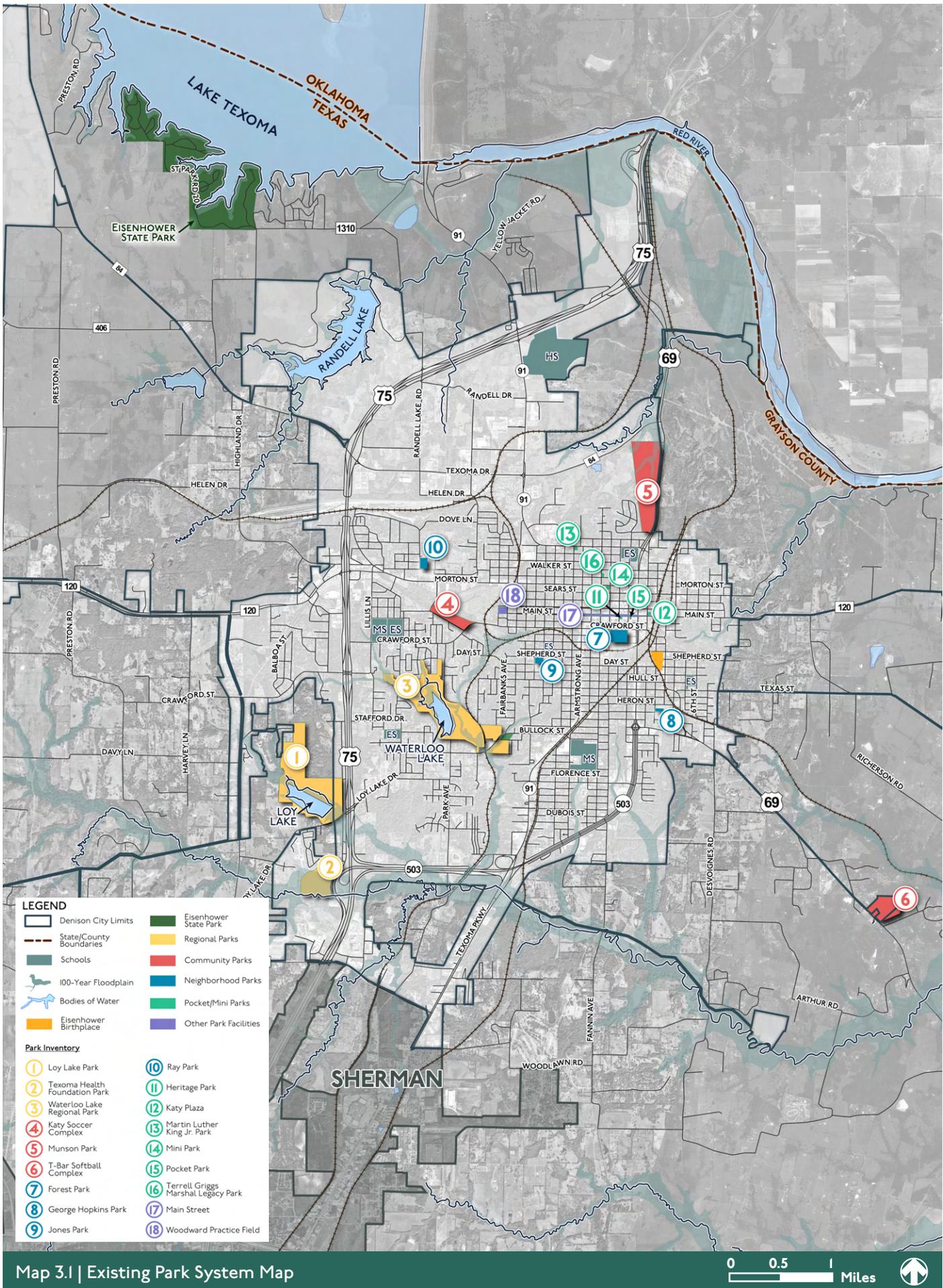
OTHER PARK FACILITIES

MAIN STREET

Main Street is a street that runs east and west in the central part of Denison. It covers about 6.01 acres of land and acts as a connecting corridor for two pocket parks along the roadway. A handful of revitalization projects are occurring in downtown Denison, one of which is focused on the redesign of Main Street's streetscape. Another key initiative along Main Street is creating connections to destinations such as surrounding parks and trails.

WOODARD PRACTICE FIELD

Woodard Practice Field is located in the central part of Denison in a residential neighborhood and covers 3.18 acres of land. It offers access to a multi-purpose practice field with backstops and bleachers. This space is primarily used for youth baseball and softball practices.



LEGEND	
	Denison City Limits
	State/County Boundaries
	Schools
	100-Year Floodplain
	Bodies of Water
	Eisenhower Birthplace
	Eisenhower State Park
	Regional Parks
	Community Parks
	Neighborhood Parks
	Pocket/Mini Parks
	Other Park Facilities

Park Inventory	
	Loy Lake Park
	Texoma Health Foundation Park
	Waterloo Lake Regional Park
	Katy Soccer Complex
	Munson Park
	T-Bar Softball Complex
	Forest Park
	George Hopkins Park
	Jones Park
	Ray Park
	Heritage Park
	Katy Plaza
	Martin Luther King Jr. Park
	Mini Park
	Pocket Park
	Terrell Griggs Marshal Legacy Park
	Main Street
	Woodward Practice Field

Map 3.1 | Existing Park System Map

0 0.5 1 Miles



REGIONAL PARKS

As of 2021 there are three parks in Denison classified as regional parks as illustrated in **Map 3.2** and summarized in **Table 3.1**. These parks contribute the most acreage to the parks system, totaling 476 acres of available park space. Regional parks serve residents citywide as well as surrounding communities and are typically expansive in terms of overall park acreage. Due to their size, these parks are characterized as being heavily programmed for recreation and athletic opportunities, accommodate a variety of amenities, and address a diverse range of active and passive outdoor recreational interests.

TYPICAL AMENITIES

Some of the programs and amenities that are found in Denison’s regional parks include:

- Sports and athletic fields
- Sand volleyball courts
- Multi-purpose fields
- Open space
- Fitness equipment
- Water access and recreation
- Pool
- Multi-use trails
- Playgrounds
- Picnic areas
- Pavilions
- Restrooms
- Concession facilities

Table 3.1 | Inventory of Regional Parks

	Park	Acres	Address
1	Loy Lake Park	198.00	457 RC Vaughan Rd. Denison, TX 75020
2	Texas Health Foundation (THF) Park	65.79	3801 South US Hwy 75 Denison, TX 75020
3	Waterloo Lake Regional Park	211.83	1001 Waterloo Lake Dr. Denison, TX 75020
Total Acreage		475.62	



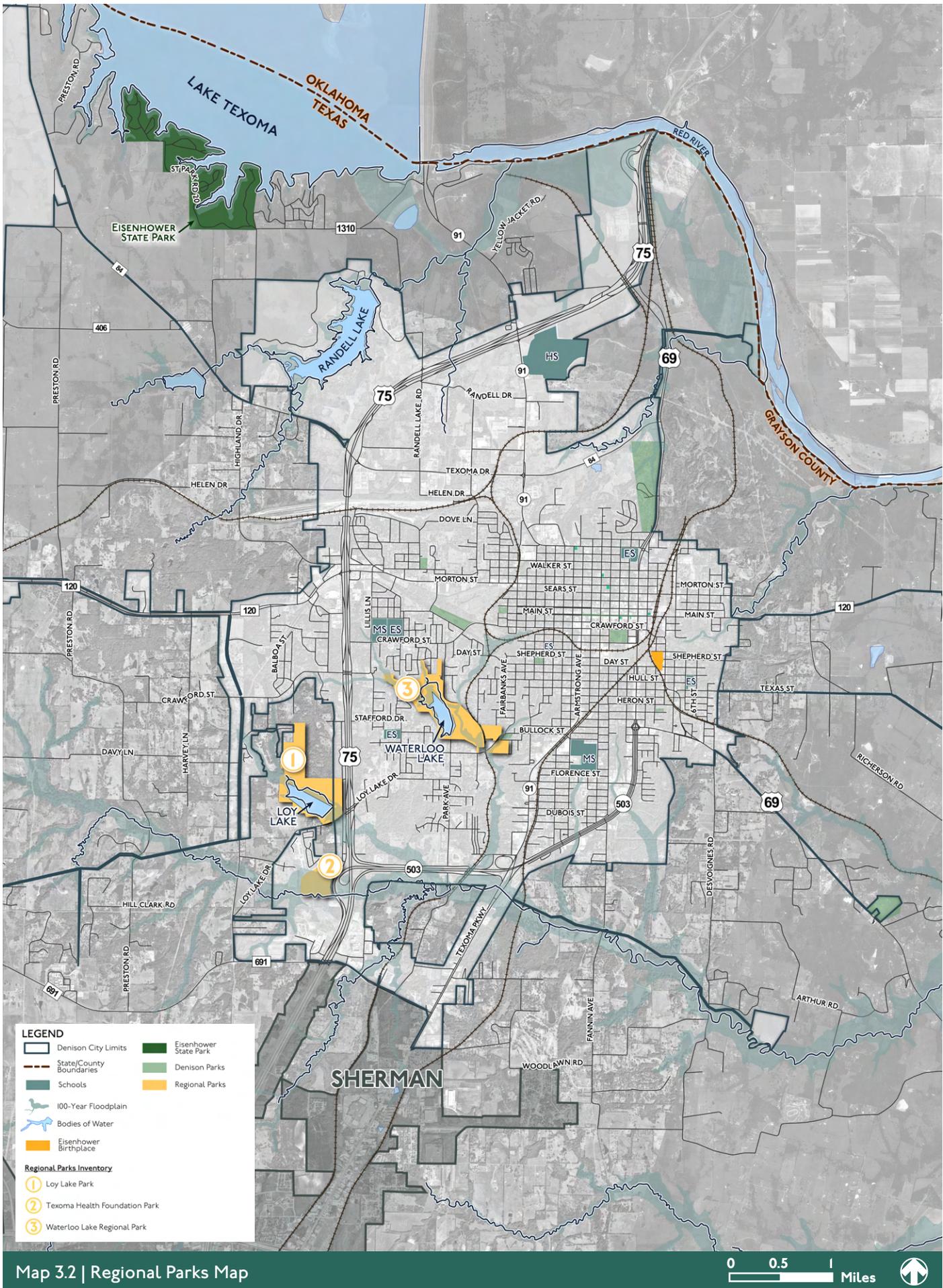
THF Park playground



THF Park sand volleyball courts



Waterloo Lake Park water recreation



COMMUNITY PARKS

As of 2021 there are three parks in Denison classified as community parks as illustrated in **Map 3.3** and summarized in **Table 3.2**. Community parks are the second largest classification by acreage in the overall park system and include a variety of passive and active recreation opportunities as well as athletic facilities. The majority of community parks are programmed for athletic fields, and are used primarily by youth sports leagues. Munson Park, the largest community park, houses an 18-hole disc golf course that is open to the public and regularly hosts professional and amateur tournaments.

TYPICAL AMENITIES

Some of the programs and amenities that are found in Denison’s community parks include:

- Sports and athletic fields
- Disc golf course
- Drinking fountains
- Open space
- Pavilions
- Playgrounds
- Restrooms
- Concession facilities
- Horseshoe pits
- Sand volleyball courts
- Multi-purpose fields
- Nature trails

Table 3.2 | Inventory of Community Parks

	Park	Acres	Address
1	Katy Park	20.55	2001 W. Crawford St. Denison, TX 75020
2	Munson Park	108.00	1501 N. Austin Ave. Denison, TX 75020
3	T-Bar Softball Complex	31.12	3064 E US Hwy 69 Denison, TX 75020
Total Acreage		159.67	



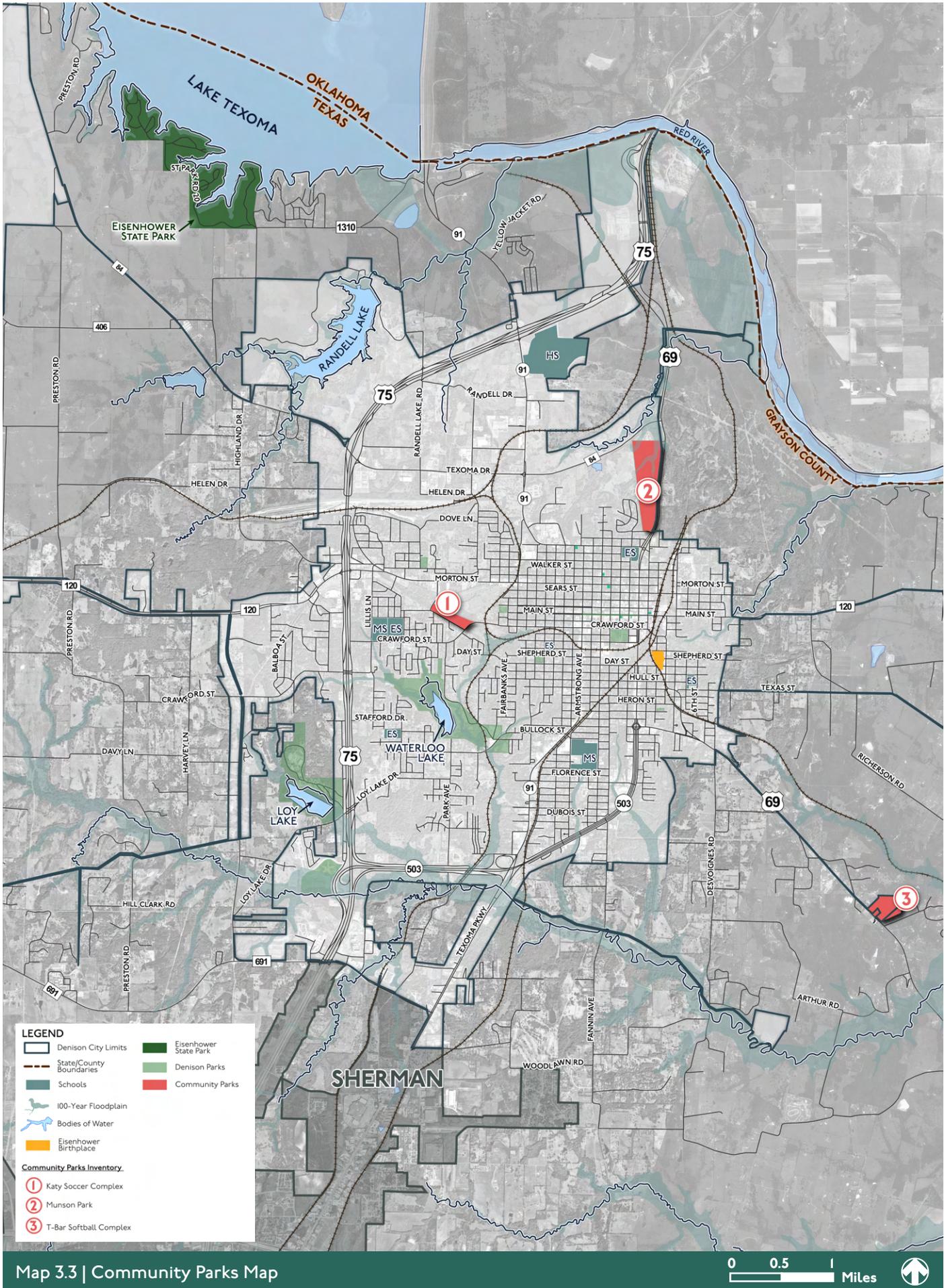
T-Bar Softball Complex



Munson Park disc golf course



Munson Park playground



NEIGHBORHOOD PARKS

Shown on **Map 3.4** and **Table 3.3**, as of 2021 there are four neighborhood parks in Denison. Neighborhood parks are generally located in the center of the city within mature residential neighborhoods. This park type contributes 21.06 acres to the overall parks system and provides park access and amenities primarily to residents surrounding the park space. The amenities that are typically found within the neighborhood park type are both passive and active and create a space for families, children and adults to gather and recreate outside.

TYPICAL AMENITIES

Some of the programs and amenities that are found in Denison’s neighborhood parks include:

- Open space
- Pavilions
- Picnic tables
- Playgrounds
- Restrooms
- Splash pads
- Multi-purpose fields
- Basketball courts

Table 3.3 | Inventory of Neighborhood Parks

	Park	Acres	Address
1	Forest Park	12.45	300 W Crawford St. Denison, TX 75020
2	George Hopkins Park	1.38	200 E Murray Denison, TX 75020
3	Jones Park	2.93	1200 W Shepherd St. Denison, TX 75020
4	Ray Park	4.30	700 N Ray Dr. Denison, TX 75020
Total Acreage		21.06	



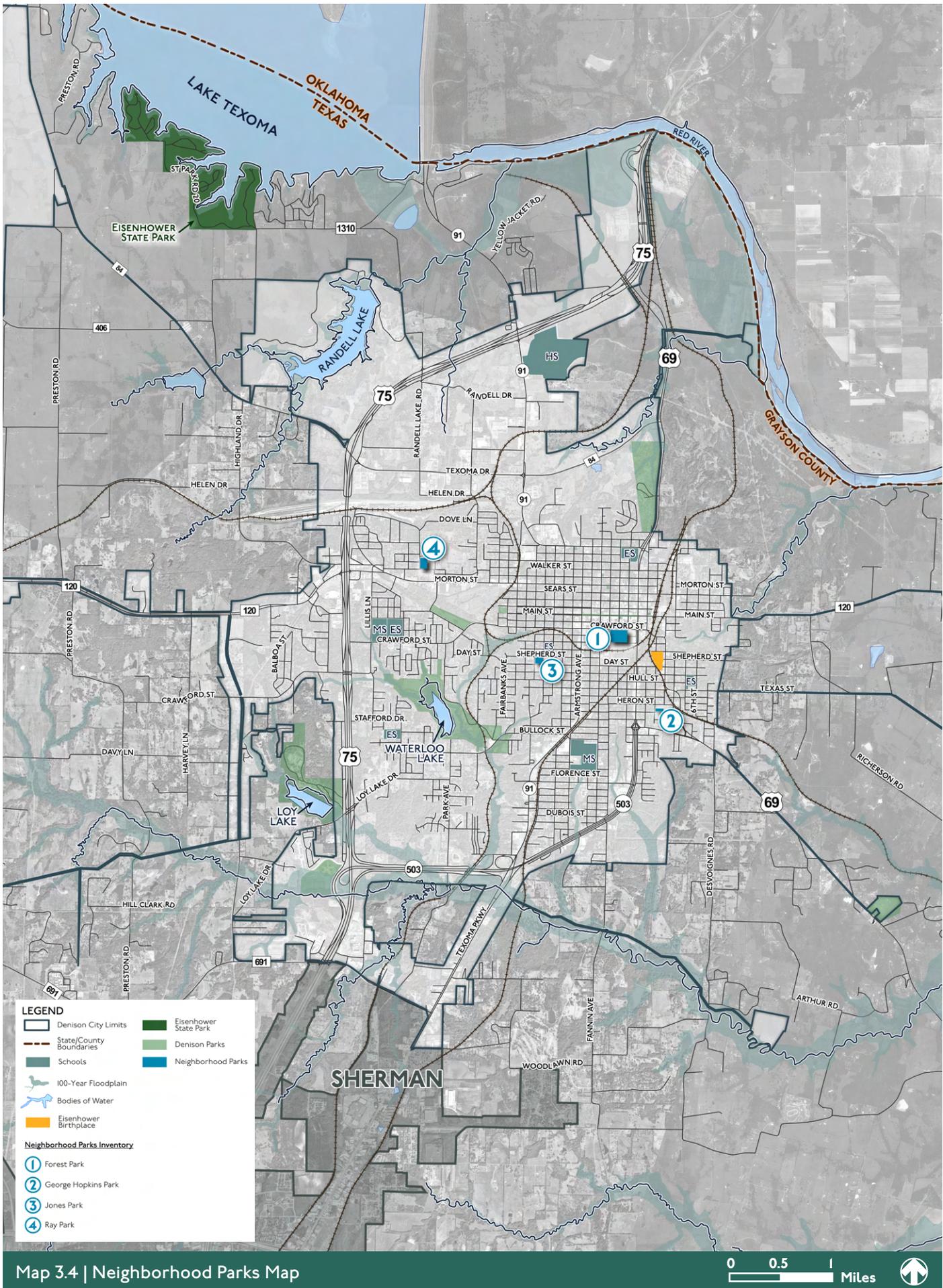
Basketball court at George Hopkins Park



Playground at Jones Park



Restroom facilities at Forest Park



Map 3.4 | Neighborhood Parks Map

0 0.5 1 Miles



POCKET/MINI PARKS

Pocket or mini parks are small park spaces, generally less than two acres in size and aim to fill the gap in the overall system coverage serving as green space for the immediately surrounding area. As illustrated in **Map 3.5** and summarized in **Table 3.4**, Denison has six pocket parks with total of 2.03 acres. Pocket/mini parks provide mostly passive recreation amenities with a few parks supporting limited active recreational uses.

TYPICAL AMENITIES

Some of the amenities that are found in Denison’s pocket/mini parks include:

- Water features
- Picnic tables
- Playgrounds
- Multi-purpose fields
- Basketball Courts
- Pavilions

Table 3.4 | Inventory of Pocket/Mini Parks

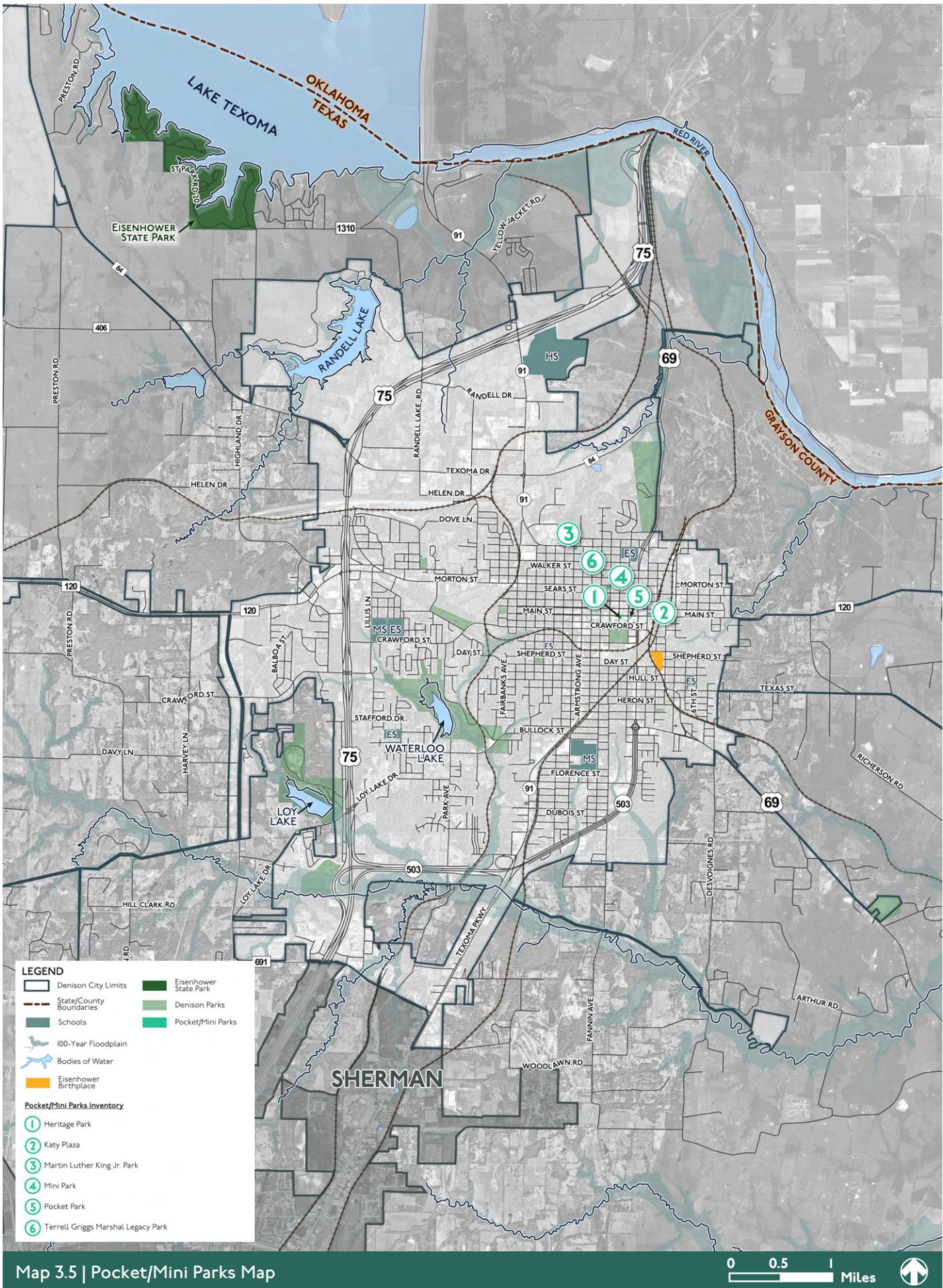
	Park	Acres	Address
1	Heritage Park	0.26	324 W Main St. Denison, TX 75020
2	Katy Plaza	0.38	101 E Main St. Denison, TX 75020
3	Martin Luther King Jr. Park	0.46	830 Martin Luther King St. Denison, TX 75020
4	Mini Park	0.52	500 W Morton St. Denison, TX 75020
5	Pocket Park	0.07	226 W Main St. Denison, TX 75020
6	Terrell Griggs Marshal Legacy Park	0.34	600 N. Mirick Ave. Denison , TX 75020
Total Acreage		2.03	



Mini Park



Pavilion at Terrell Griggs Marshal Legacy Park



Map 3.5 | Pocket/Mini Parks Map

0 0.5 1 Miles



RECREATION FACILITIES

Today, there are two recreation facilities that are open to the public, the Senior Citizen Center and Waterloo Pool. Indoor recreation opportunities are limited in Denison; however, Waterloo Pool is an amenity that is greatly used by residents because of the variety of programs offered. The Senior Citizen Center serves a smaller population of the community.

SENIOR CITIZEN CENTER

The Senior Citizen Center is located in the East-Central region of the city and offers amenities such as computers, meeting rooms, restrooms and more. The facility provides a wide range of recreation opportunities for the senior population of Denison, including dominoes, monthly senior dances, and meals. By connecting residents to these resources, the Senior Citizen Center helps provide overall physical and mental health throughout Denison. With the second largest age cohort being seniors 55 and older, this facility plays a critical role in providing recreational opportunities to over 30 percent of Denison’s current population.

WATERLOO POOL

Waterloo Pool is an indoor public pool on the east side of Waterloo Lake Regional Park offering year-round pool access. A range of water recreation opportunities for residents of all ages and abilities are offered at the pool through programs such as swim lessons, fitness classes and open recreational swimming. The facility has lap lanes that allow for it to be used for competitions, either for local meets or by the Metroplex Aquatics USA Swim Team that competes with other cities in the DFW metroplex. The facility also has picnic tables and concession facilities allowing the space to be rented for events. As the only publicly accessible pool in Denison, Waterloo Pool plays a critical role in providing indoor water recreation opportunities for the community.

OTHER PARK FACILITIES

In addition to the traditional park spaces found in Denison, there are a couple of unique park facilities, Main Street and Woodard Practice Fields. These spaces provide an additional 9.19 acres of recreational and athletic opportunities within the city.

MAIN STREET

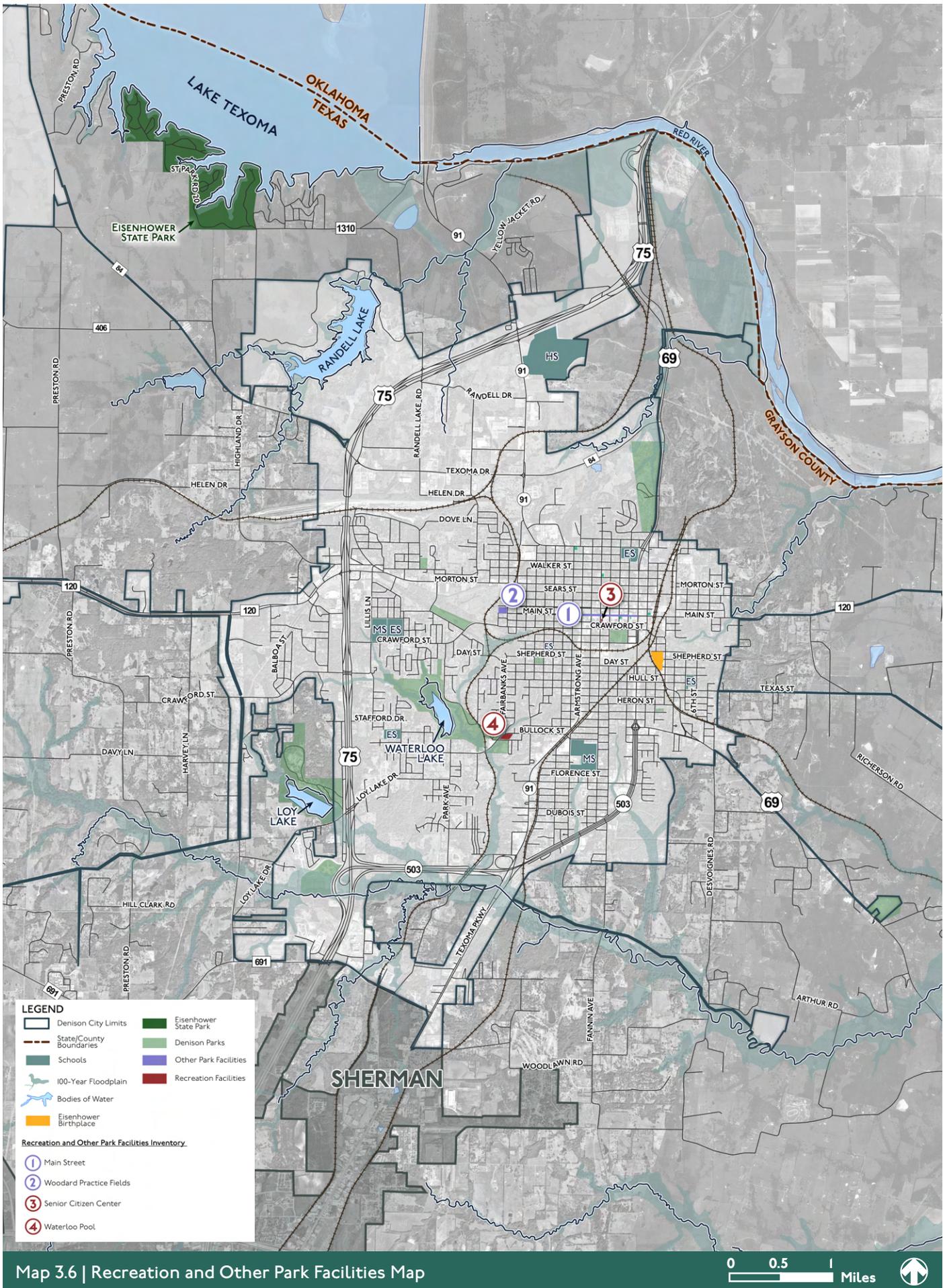
Main Street in downtown Denison is part of the Texas Main Street Program (TMSP), which is a state program established for the revitalization of historic downtowns in communities across Texas. As part of this revitalization effort the City has plans for enhancing the green space and streetscape along Main Street. Another planning effort occurring downtown is Design Downtown Denison, which is looking at redesigning the streetscape on Main Street to be more welcoming and accessible and creating connections to parks and recreational amenities throughout the city.

WOODARD PRACTICE FIELDS

Woodard Practice Field, previously named Lions Club Park, is on the west side of the city and is primarily used for baseball and softball practice by the youth leagues in the city. This field is within a residential neighborhood and provides a great opportunity for residents to utilize the space as members of a league or for fun. The majority of this park space is underutilized and there is opportunity to implement additional amenities to better serve the surrounding residents as a neighborhood park.

Table 3.5 | Inventory of Other Park Facilities

	Park	Acres
1	Main Street	6.01
2	Woodard Practice Fields	3.18
Total Acreage		9.19



NEEDS ASSESSMENT

The following pages will review the needs assessment conducted for the Denison park system. The assessment utilizes a three-part approach to determine the current and future park system needs. The three methods used are access-based assessment, demand-based assessment, and resource-based assessment. Each method is further summarized below.

Figure 3.1 | Needs Assessment Approach

Access-Based Assessment	Demand-Based Assessment	Resource-Based Assessment
<p>This method of assessment evaluates the amount of park space and outdoor recreation facilities offered by a City considering their current and projected population counts. This assessment includes park acreage level of service (LOS) and the park service area.</p> <ul style="list-style-type: none"> • Park Acreage LOS - Based on current and future projected population numbers, this method assesses total park acreage and whether the community is being served today and in the future. • Park Service Area - By looking at the location and distribution of parks within a community this method determines overall park accessibility throughout the City. 	<p>This method of assessment evaluates the overall demand for outdoor recreation to determine where park investments would be best applied. A big part of this method is using public feedback, which assists in determining what park needs are important and/or lacking. Another big indicator in determining how well current park amenities and programs are serving the community is usage and sports participation data, which showcases the numbers of active participants throughout the year. The following list are the resources used for this assessment:</p> <ul style="list-style-type: none"> • Usage Data • Sports and athletic league participation • Community surveys • Public meetings • Stakeholder listening sessions 	<p>This method of assessment identifies key features within a City that can be leveraged to support parks and outdoor recreation needs through partnerships, park expansions and land acquisitions. Some examples of these resources include:</p> <ul style="list-style-type: none"> • City owned land • School district property • Floodplains • Drainage easements • Utility easements • Natural/protected land • Entities providing recreation services



Loy Lake Park

ACCESS-BASED ASSESSMENT

PARK ACREAGE LEVEL OF SERVICE

Park Acreage Level of Service (LOS) allows a community to measure its current level of service compared to benchmark LOS and peer communities. Acreage LOS is shown as a per-capita figure such as “X acres per 1,000 population.” The National Recreation and Park Association (NRPA) has developed standards for park acreage LOS ranges based on park type, creating a target LOS for communities. **Table 3.6** shows the NRPA standards for neighborhood parks, community parks and the overall park system.

It is important to note that all communities are unique and comparison of total park acreage per capita to peer communities can be misleading as this standard does not take into consideration the quality of parks or the types of amenities found in the park system. Furthermore, the definition of parkland may vary between communities which can impact the systemwide LOS. With this in mind, park acreage LOS is just one part of the overall needs assessment evaluated in this master plan.

Table 3.6 | Park Acreage Standard LOS

Park Type	Target LOS Range
Neighborhood Parks	1-2 acres per 1,000 residents
Community Parks	5-8 acres per 1,000 residents
Park System*	9.7 acres per 1,000 residents

* National median for all agencies with populations between 20,000-49,999 residents.

Source: NRPA Agency Performance Review, 2021



Heritage Park

PARK SERVICE AREA

Additionally, the NRPA has also established a general service area for different park types. The typical service area for the different park types is shown in **Table 3.7**. However, many communities have moved towards assessing park service in terms of walkability. The Trust for Public Land (TPL) has established a nationwide campaign known as the 10-Minute Walk to a Park Initiative, which enables communities to identify gaps in park access that exist today and locations where future park development would significantly increase park accessibility. Looking at the service area of all parks, 54% of Denison residents live within a 10-minute walk of a park, with a large service gap in the northwestern and southern parts of the city. Although there is a high percentage of the population that is in walking distance of a park this benchmark does not consider the quality of park spaces and availability of amenities.

Table 3.7 | Park Service Area by Type

Park Type	Standard Radius
Pocket/Mini Parks	1/4 mile radius
Neighborhoods Parks	1/2 mile radius
Community Parks	1 mile radius
Regional Parks	Variable

Source: NRPA Agency Performance Review, 2021



Forest Park pavilion

NEIGHBORHOOD PARKS

ACREAGE LEVEL OF SERVICE

Denison comes very close to meeting the NRPA minimum target LOS benchmark of 1 acre per 1,000 residents and would require only an additional 4.5 acres to meet that standard, as shown in **Table 3.8**. As Denison’s population continues to grow even a small deficiency in park acreage may be magnified as the acreage required to reach the target LOS will also increase. In 2040, if there is no change in the amount of neighborhood park acreage, the deficit will increase to 9.67 acres in order to meet the minimum target level of service (TLOS) benchmark.

SERVICE AREA

Neighborhood parks make up 21.06 acres of the park system and provide service area coverage primarily in the central part of the city. **Map 3.7** on the facing page illustrates the existing neighborhood parks in Denison and their associated 10-minute walksheds. The 10-minute walkshed areas were created using available pedestrian networks such as sidewalks and trails and consider physical barriers including highways, railroads, bodies of water, or gaps in the pedestrian network that limit access. There is minimal overlap in service coverage between the four neighborhood parks.

Table 3.8 | LOS Assessment for Neighborhood Parks

	Current Developed Parkland (2021)	Future Developed Parkland (2040)
Population	25,529*	30,731**
Acreage	21.06 acres	21.06 acres
Current LOS	0.82 acres per 1,000 residents	0.69 acres per 1,000 residents
Acreage to acquire to meet 1-acre target LOS	4.47-acre deficit	9.67-acres deficit
Acreage to acquire to meet 2-acre target LOS	30.00-acre deficit	40.40-acre deficit

* 2019 population estimates from U.S. Census

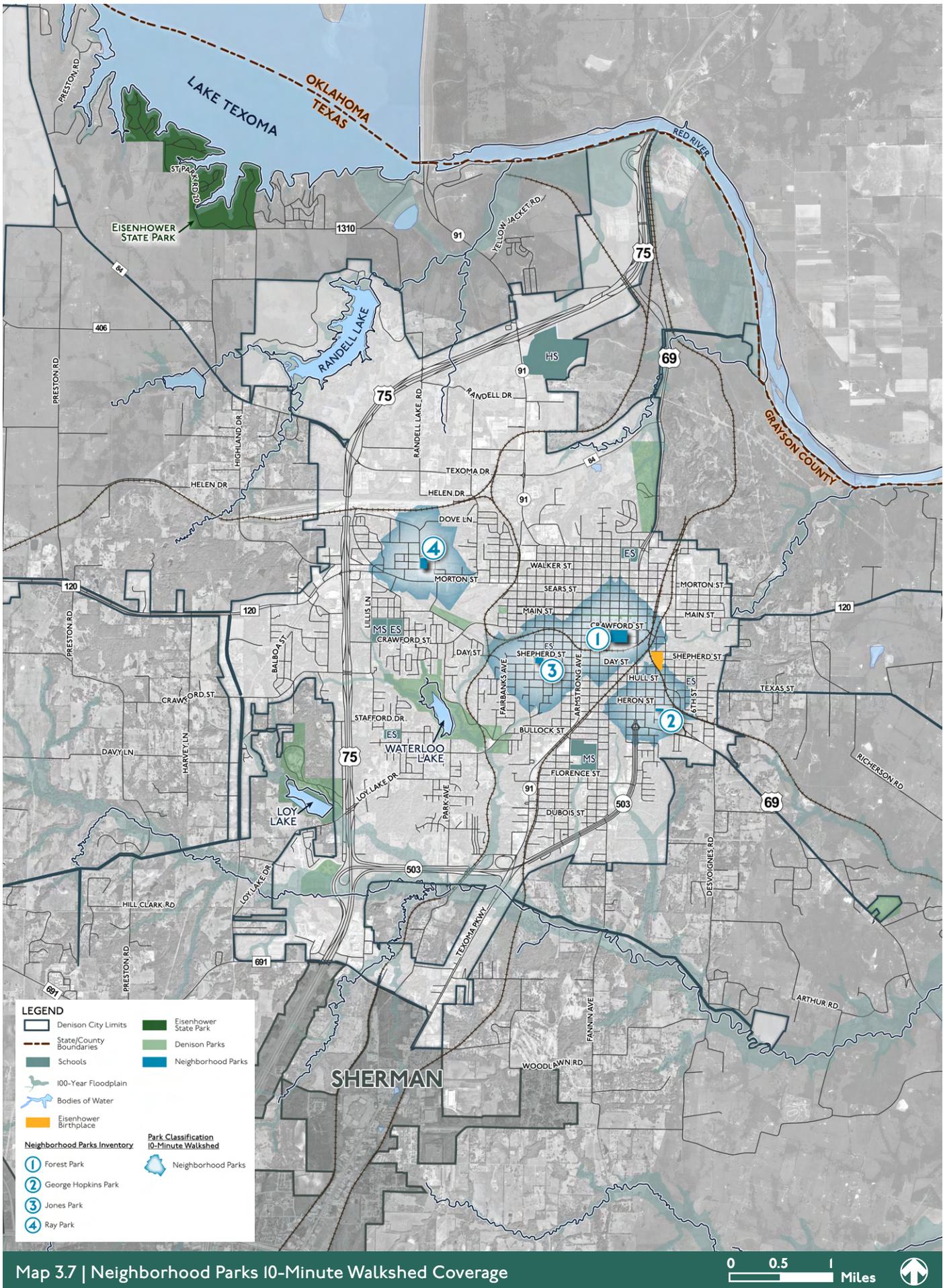
**2040 population projection from the Texas Water Development Board (TWDB)



Forest Park



George Hopkins Park



Map 3.7 | Neighborhood Parks 10-Minute Walkshed Coverage

0 0.5 1 Miles



COMMUNITY PARKS

ACREAGE LEVEL OF SERVICE

Today, community park acreage compared to Denison’s population exceeds the NRPA target LOS benchmark for the five acres and eight acres targets, as shown in **Table 3.9**. Looking toward 2040, despite anticipated population growth, this surplus remains for the minimum five acres per 1,000 residents when looking at current and future developed community parkland; however, there is a deficit today and in the future for the eight acre target LOS. It is important to note that two of Denison’s community parks are largely programmed for sports and athletics and may not serve other types of park goers.

SERVICE AREA

The three Community Parks in Denison contribute 159.67 acres to the park system and are distributed throughout the city. **Map 3.8** illustrates the existing community parks and their 10-minute walksheds. The 10-minute walkshed areas were created using available pedestrian networks such as sidewalks and trails and consider physical barriers including highways, bodies of water, or gaps in the pedestrian network that limit access. As there are only three community parks in Denison today a limited level of service is provided by this park type. Additionally, Munson Park and T-Bar Softball Complex are located in areas of the city that are not densely populated.

Table 3.9 | LOS Assessment for Community Parks

	Current Developed Parkland (2021)	Future Developed Parkland (2040)
Population	25,529*	30,731**
Acreage	159.67 acres	159.67 acres
Current LOS	6.25 acres per 1,000 residents	5.20 acres per 1,000 residents
Acreage to acquire to meet 5-acre target LOS	32.0-acre surplus	6.0-acre surplus
Acreage to acquire to meet 8-acre target LOS	44.6-acre deficit	86.2-acre deficit

* 2019 population estimates from U.S. Census

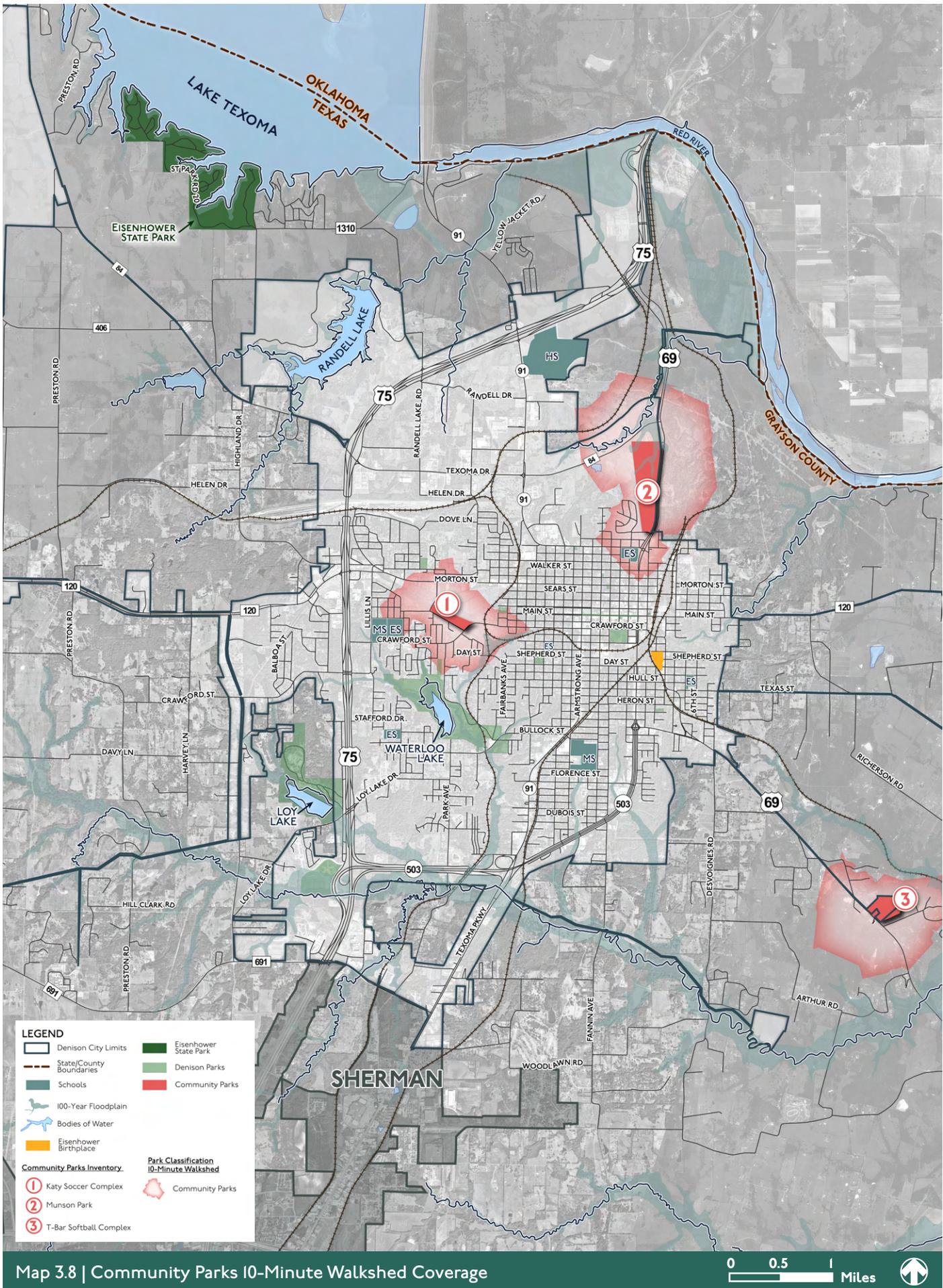
**2040 population projection from the Texas Water Development Board (TWDB)



Munson Park



T-Bar Softball Complex



OVERALL PARK SYSTEM

ACREAGE LEVEL OF SERVICE

As of 2021, there is a surplus of park acreage for the overall system in meeting the NRPA's 10-acre and 12-acre LOS targets, as shown in **Table 3.10**. The recent acquisition of Loy Lake Park, which added nearly 200 acres to the park system, has greatly expanded park level of service. The park system as a whole is 667.57 acres, which sufficiently serves Denison today. Looking to 2040, despite projected population growth, the current park acreage will meet NRPA TLOS benchmarks for the overall system as it is anticipated that the recently acquired Loy Lake Park will be developed, adding 196 acres to the overall system. Although there is a projected surplus in park acreage 20 years in the future this does not paint the whole picture, as it considers only the availability of parkland, and not the quality or variety in amenities offered by Denison parks.

SERVICE AREA

In Denison today there are a total of 18 parks totaling 667.57 acres, which comprise about 4.5% of Denison's total land. **Map 3.9** illustrates the existing park system and the associated 10-minute walksheds. The 10-minute walkshed areas were created using available pedestrian networks such as sidewalks and trails and considers physical barriers including highways, bodies of water, or gaps in the pedestrian network that limit access. With future growth occurring in the northeastern part of the city it will be crucial to proactively work with developers to provide parks in that region of the city where there is a gap in park service coverage.

Table 3.10 | LOS Assessment for Park System

	Current Developed Parkland (2021)	Future Developed Parkland (2040)
Population	25,529*	30,731**
Acreage	667.57 acres	667.57 acres
Current LOS	26.15 acres per 1,000 residents	21.72 acres per 1,000 residents
Acreage to acquire to meet 10-acre target LOS	412.28-acre surplus	360.26-acre surplus
Acreage to acquire to meet 12-acre target LOS	361.22-acre surplus	298.80-acre surplus

* 2019 population estimates from U.S. Census

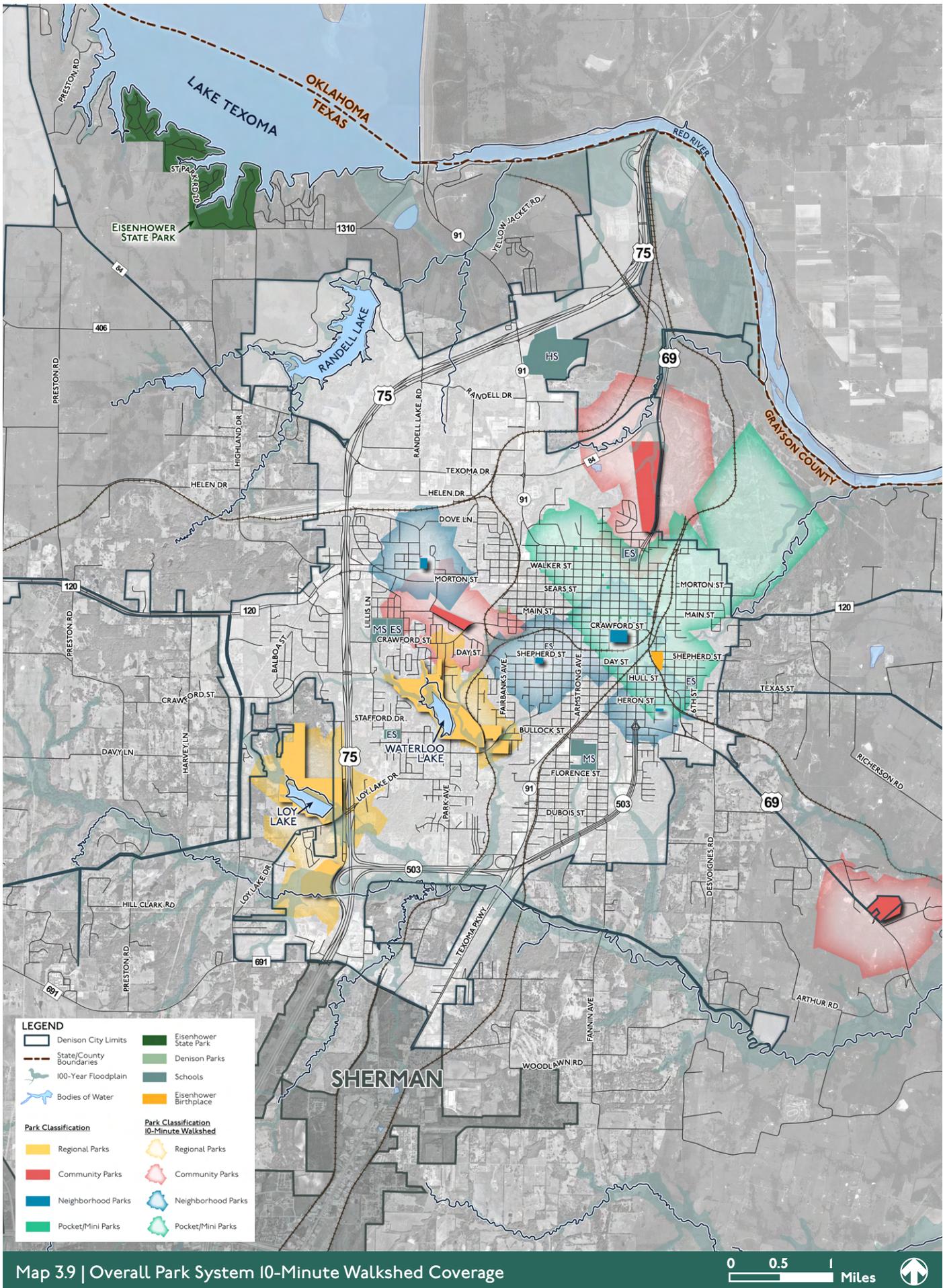
**2040 population projection from the Texas Water Development Board (TWDB)



Train themed playground at Forest Park



Horseshoe pits at Waterloo Lake Park



KEY FINDINGS - ACCESS BASED ASSESSMENT

- The majority of the park service area is concentrated in the central and eastern part of the city.
- There is a need for additional park acreage for neighborhood parks today and in the future.
- Community Parks such as Katy Park and T-Bar Softball Complex are located in parts of the city that are not easily accessible by most residents, and primarily serve sports and athletic needs.
- Looking towards 2040 there will be an anticipated deficit of at least 120 acres for both neighborhood and community parks to meet the NRPA standards for each park type



George Hopkins Park



Picnic area and splash pad at Forest Park



Basketball court at Munson Park

DEMAND-BASED ASSESSMENT

COMMUNITY INPUT

As discussed in Chapter 2, an online community survey was conducted to gain insight on parks and recreation facilities. The following summarize the key responses from the survey. The following graphics shown in Figure

3.2 summarize results from survey and open house questions focused on amenities and facilities that support Denison’s park and recreation system.

Figure 3.2 | Key Community Input Results

Top prioritized outdoor recreation amenities



Outdoor Pools



Multi-Purpose Fields



Dog Parks



Kayak/Canoe/Paddle Board Rentals

Top prioritized park amenities



Shade Trees



Trash Receptacles



Walking & Biking Paths



Restrooms

Top preferred sports & athletic amenities



Pickleball Courts



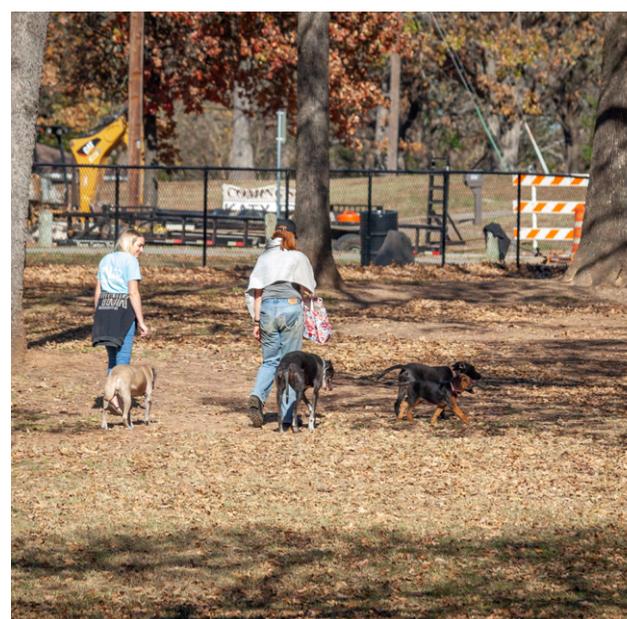
Disc Golf Course



Sand Volleyball Courts



Multi-Purpose Courts



Waterloo Lake Dog Park

SPORTS LEAGUE PARTICIPATION

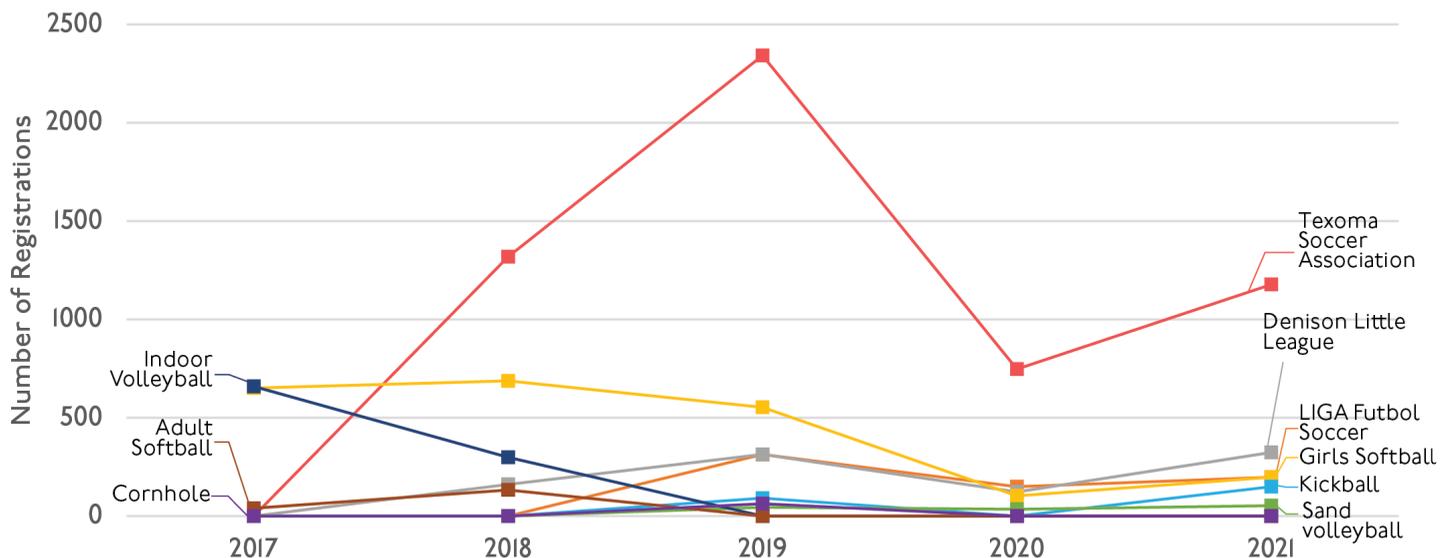
The demand-based approach also looks at sports league participation to better understand whether facilities are meeting current recreation needs. **Table 3.11** and **Figure 3.3** summarize the participation in adult and youth sports leagues available in Denison since 2017. Over this five-year span there was a consistent increase in league participation until 2020 where overall registration numbers significantly declined due to the COVID-19 pandemic.

Despite COVID-19 playing a huge role in the lower registration counts, 2021 league registration numbers nearly doubled from 2020. The significant increase in league participation in 2021 indicates demand for adult and youth sports will likely continue to follow the trend from previous years, requiring additional facilities to support new demand in sports and athletics. Some leagues such as adult and girls softball did not experience the same resurgence and may require additional efforts and refocused investment.

Table 3.II | Denison League Registration (2017-2021)

Year	Texoma Soccer Association	LIGA Futbol Soccer	Denison Little League	Girls Softball	Kickball	Sand Volleyball	Adult Softball	Indoor Volleyball	Cornhole
2017	0	0	0	651	0	0	660	40	0
2018	1319	0	161	688	0	0	300	134	0
2019	2342	315	315	553	92	46	0	0	64
2020	748	150	123	104	0	36	0	0	0
2021	1178	198	324	198	150	54	0	0	0

Figure 3.3 | Denison League Registration (2017-2021)



Source: Denison Parks & Recreation Department

AMENITIES LEVEL OF SERVICE

Assessing the level of service provided by the current available park amenities helps establish the level of demand for additional amenities throughout the city. Park amenity LOS, which is the benchmark that determines current and future needs, is calculated using current and future population estimates and existing amenity inventory compared to the target LOS benchmarks established by NRPA. The target LOS standards set by NRPA are established for communities in certain population ranges. Denison falls within the range of 20,000-49,999 residents today and in 2040.

Table 3.12 compiles the major park amenities found in Denison’s parks. For many of the park amenities reviewed, additional needs today and in the future are low. However, as the community grows over time it is important that the city regularly evaluate needs to ensure that recreational demand continues to be met. Amenities related to youth sports exceed current and future recreation demand. Hike and bike trails and tennis courts are the amenities in the greatest need for expansion to better serve users.

Table 3.12 | Park Amenities LOS

Amenity	Number	Current LOS	Future LOS	Target LOS*	Current Need	Future Need
Baseball Fields	8	1 per 3,191	1 per 3,841	1 per 5,099	0	0
Softball Fields	2	1 per 12,765	1 per 15,366	1 per 9,891	1	2
Basketball Goals	6	1 per 4,255	1 per 5,122	1 per 7,000	0	0
Soccer Fields	15	1 per 1,702	1 per 2,049	1 per 5,833	0	0
Football Fields	0	N/A	N/A	1 per 16,584	2	2
Sand Volleyball Courts	5	1 per 5,106	1 per 6,146	1 per 18,850	0	0
Hike & Bike Trails	6 miles	1 per 4,225	1 per 5,122	1 per 2,000	7 miles	10 miles
Playgrounds	11	1 per 2,321	1 per 2,794	1 per 2,961	0	0
Disc Golf Course (holes)	18	1 per 1,418	1 per 1,707	1 per 50,000	0	0
Skate Parks	0	N/A	N/A	1 per 31,248	1	1
Swimming Pools	1	1 per 25,259	1 per 30,731	1 per 25,402	1	1
Dog Parks	1	1 per 25,529	1 per 30,731	1 per 27,528	0	2
Tennis Courts	0	N/A	N/A	1 per 4,819	6	7
Multi-purpose Practice Fields	4	1 per 6,382	1 per 7,683	1 per 7,400	0	1

*Source: 2021 NRPA Agency Performance Review

KEY FINDINGS - DEMAND-BASED ASSESSMENT

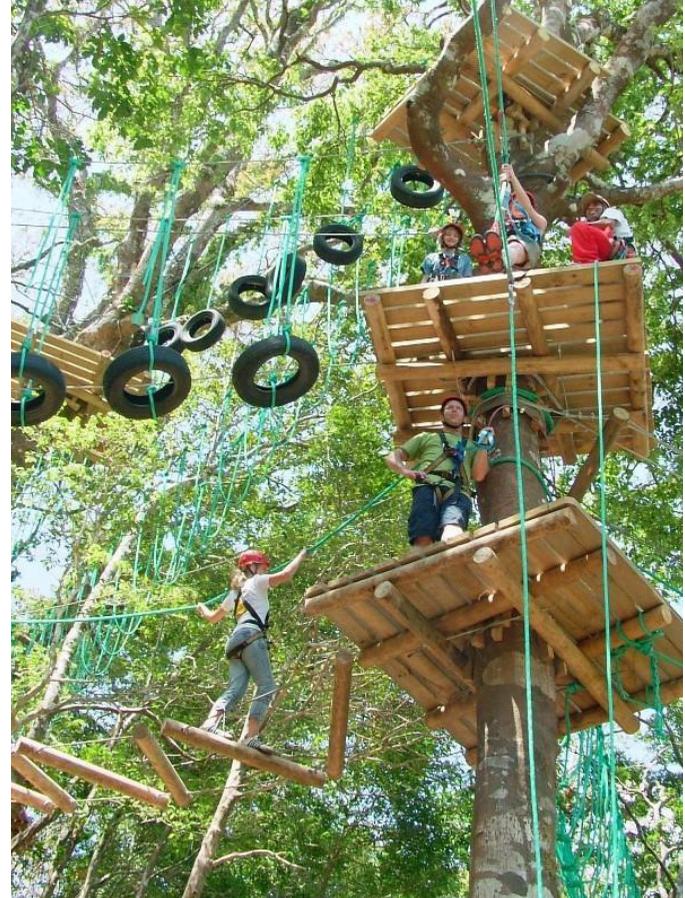
- Football fields, skate parks, and tennis courts are the major park amenities that are absent from the park system today. There is a significant current and future need for hike and bike trails; in addition to creating connections to parks and trails.
- The implementation of trailheads at parks will increase accessibility and visibility of park space. There is an increase in demand for passive park amenities that enhance the comfort for park users.
- Park users today desire a more diverse range of park and open space amenities that create unique recreational opportunities.



Outdoor pickleball court



All-inclusive playground



Outdoor adventure course

RESOURCE-BASED ASSESSMENT

The resource-based assessment identifies existing resources that can be utilized as sites for future parks, recreation, and open space amenities. Utilizing these sites could help the City fill the current gaps in service and increase overall accessibility of parks. The existing resources with the greatest potential for becoming new park spaces include:

- Identified gaps in park service
- Undeveloped land
- School
- City-owned land
- Land within floodplains

The identified resources in Denison that can be leveraged for expanding the current park system are illustrated in **Map 3.10** on page 54.

GAPS IN PARK SERVICE

Gaps in park service are identified as areas in the city that are not served by the 10-minute walksheds of existing parks. Areas lacking park service coverage, especially in developed areas, are in the greatest need of park spaces to create a more comprehensive and accessible system. Gaps in service coverage primarily exist in the northwestern and southeastern parts of the city. Considering existing gaps, as development occurs in these areas in the future it is important to identify land to be reserved for park spaces.

UNDEVELOPED LAND

Undeveloped land is a great opportunity for the City of Denison to acquire and develop new park space. With the majority of undeveloped land located in areas that are unserved by the current park coverage, it would be beneficial to establish a parkland dedication strategy for new development in these areas.

Loy Lake Park was recently acquired by the City and is now the second largest regional park in Denison with 198 acres of parkland. While 42 acres of the park is water, the remaining 156 acres is largely unprogrammed open space. Loy Lake is a prominent natural asset within the park and its shoreline presents the opportunity to provide additional recreation options and water access points.

SCHOOL PROPERTY

Schools typically have outdoor recreation and athletic facilities such as playgrounds, sports fields, and running tracks (depending on the age of students at the school). Many communities utilize shared-use agreements, which are partnerships between the city and the school district that allow public use of outdoor recreation amenities outside of the school's hours of operations. Many of Denison's schools are located away from existing parks; therefore, developing shared-use agreements would provide additional park service coverage. This is a resource that has yet to be utilized by the city as an opportunity to increase park access for residents and to provide a variety of recreation opportunities that may not be available within city parks today.

CITY-OWNED LAND

The City of Denison owns a number of small parcels of land throughout the city, some of which are located in parts of the city that are lacking park service coverage and would be ideal for future park development. For example, city-owned land adjacent to existing park land would be ideal locations for expansion as it would build upon current park acreage and provide opportunities for new amenities and facility services. Further studies of these areas may show the possibility of incorporating these sites to extend park service further into current unserved areas of the city.

FLOODPLAIN

Land within the floodplain can be a great location for new parks as this land is generally unable to support other development types. Floodplains in the city can be found predominately in both the far northern and southern portions of the city, which overlap with the unserved areas by the current park system. As the city seeks to expand the park system, a feasibility study should be conducted to determine floodplain areas that would be good candidates for future park spaces. Additionally, floodplains are excellent locations to implement trails if deemed feasible through future studies.

KEY FINDINGS - RESOURCE BASED ASSESSMENT

- Develop amenities that follow current trends.
- Create space for festivals and events.
- Dedicate parkland in undeveloped land to expand park coverage and reduce gaps in park service.
- Leverage scenic views and natural resources to develop a balance between natural and programmed spaces throughout the park system.



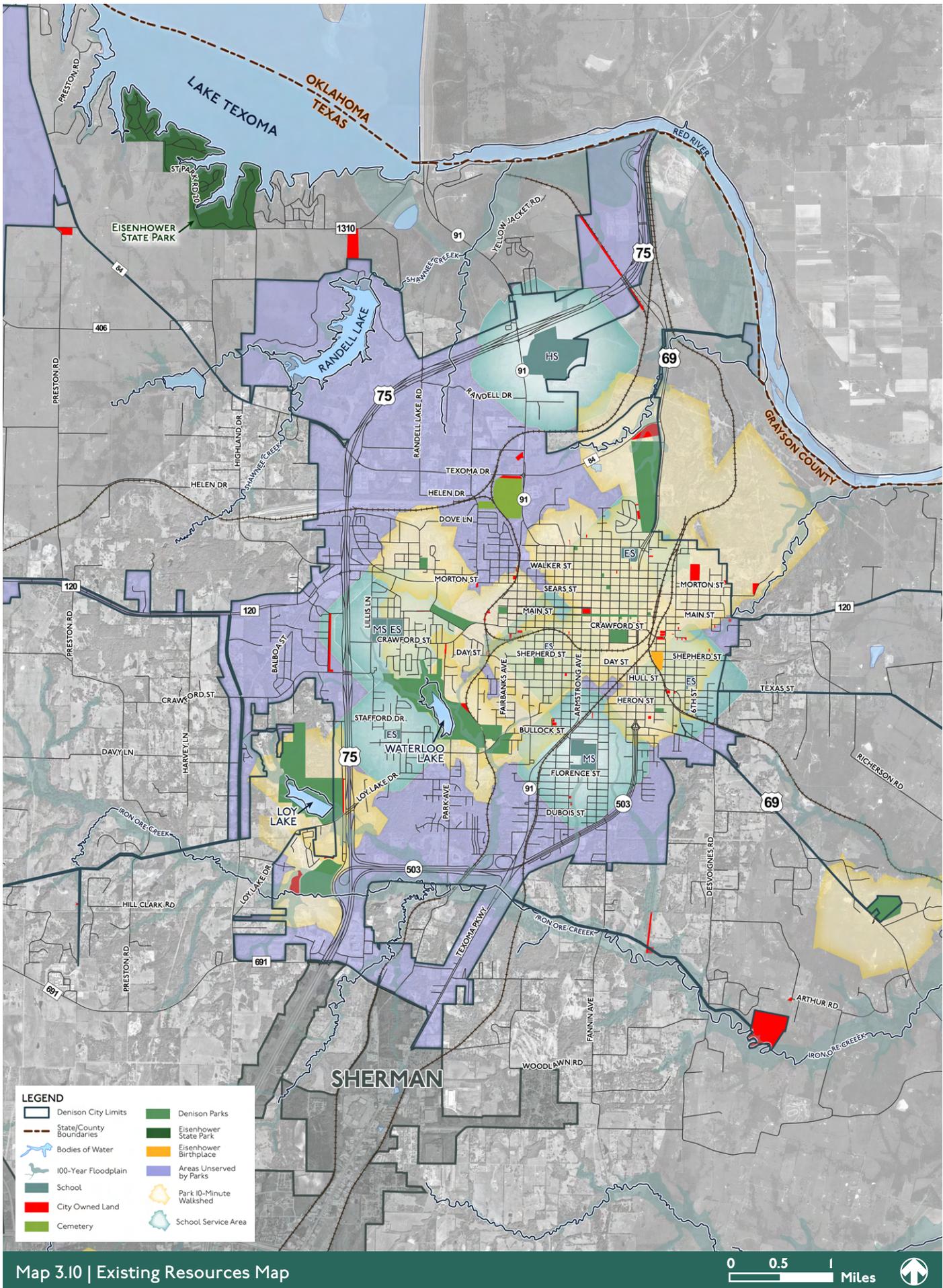
Community concert held in Heritage Park



Example of preserved open space



Example of overnight camping in parks where feasible

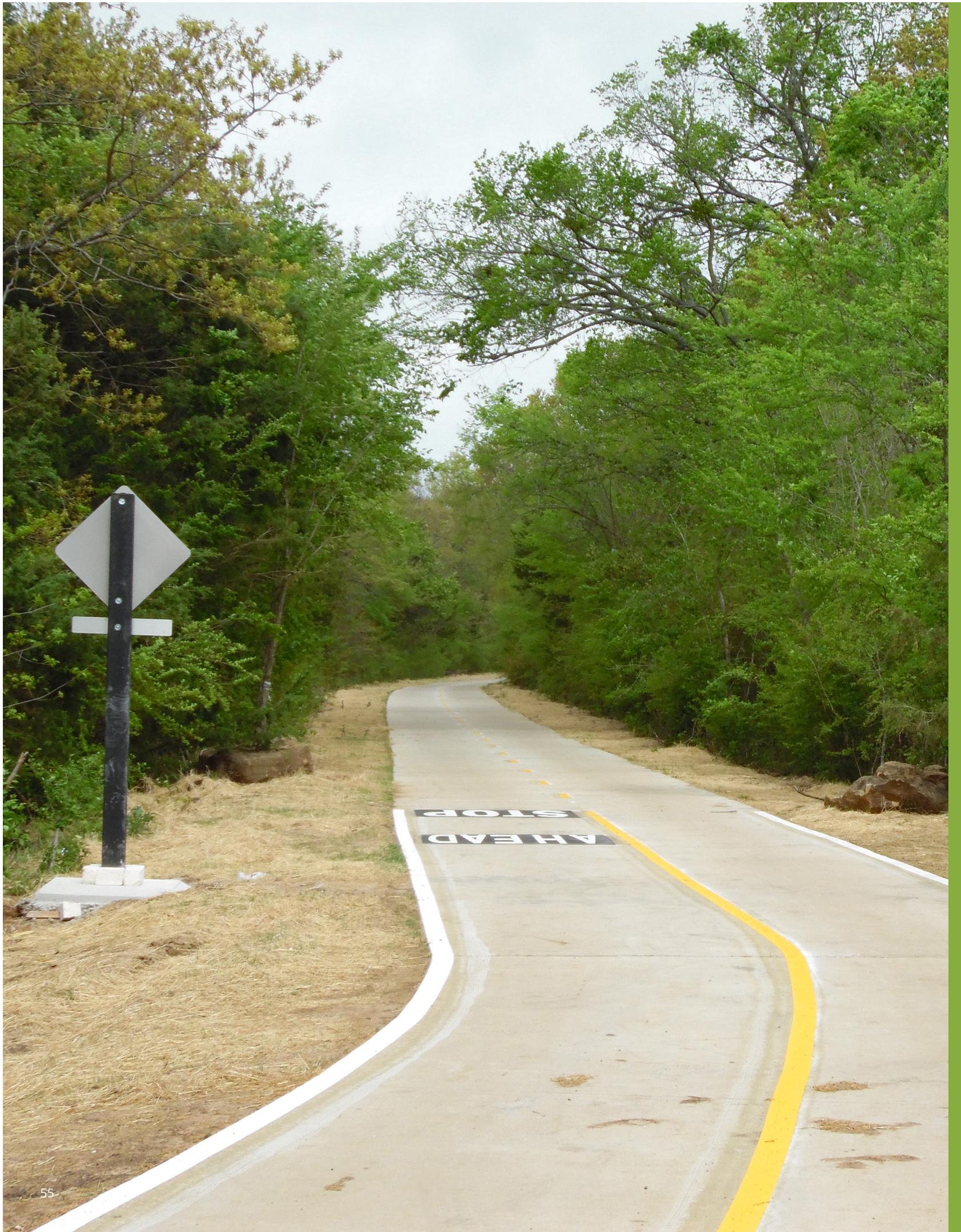


LEGEND

Denison City Limits	Denison Parks
State/County Boundaries	Eisenhower State Park
Bodies of Water	Eisenhower Birthplace
100-Year Floodplain	Areas Unserved by Parks
School	Park 10-Minute Walkshed
City Owned Land	School Service Area
Cemetery	

Map 3.10 | Existing Resources Map





04 | TRAILS

- ◆ INVENTORY OF TRAILS
- ◆ NEEDS ASSESSMENT

INVENTORY OF TRAILS

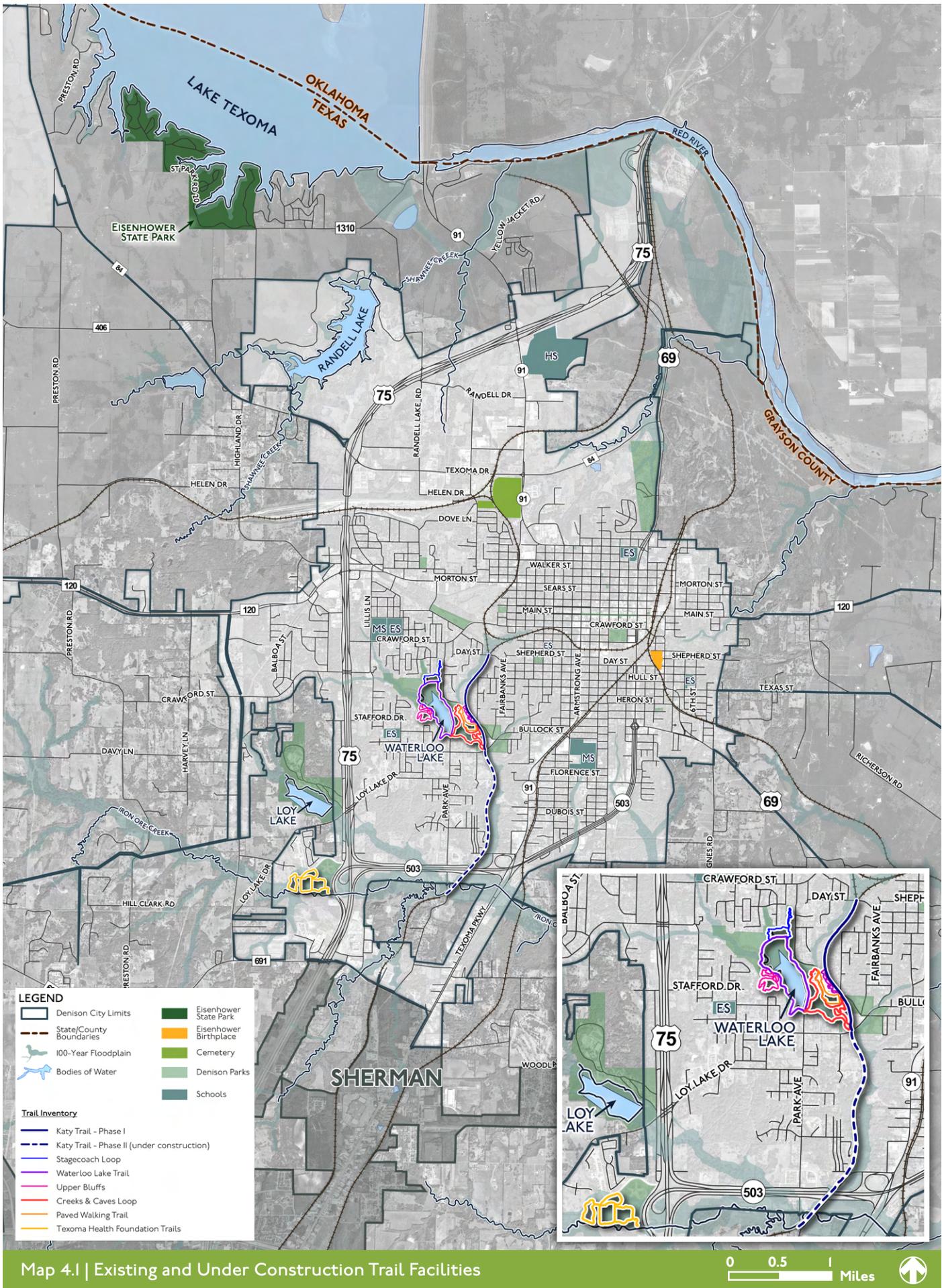
EXISTING & PROPOSED NETWORK

Map 4.1 illustrates the trail facilities in Denison that are existing and under construction. There are both paved and soft-surface trails in Denison as shown in **Table 4.1**. Paved trails provide more suitable surfaces for all weather conditions and all user types, which increases the overall usability and reduces the impact of heavy rains and flooding. Soft-surface trails are located primarily within existing parks and are mostly used as walking trails. Existing trails are primarily found in Waterloo Lake Regional Park and Texoma Health Foundation Park in the southwestern portion of the City. While these existing trails provide active recreational opportunities, they exclusively serve the parks they are within and lack connectivity to surrounding neighborhoods.

Recently, the city has invested in the construction of a 12 foot wide paved multi-use trail known as the Katy Trail because it is within the right-of-way (ROW) of the abandoned Katy Railroad (MKT) rail line. Upon completion of the trail there will be a 2.57 mile connection from Day Street to south of Spur 503. The first phase of the Katy Trail has been completed and the second phase is under construction. After the completion of the Katy Trail Phase II there will be a total of 12.77 miles of trails in Denison; half of the system will be paved and the other half will be soft-surface. Not only will the Katy Trail increase the overall coverage of the trail system, but it will also act as a spine trail through the center of the city creating connections to parks and between Denison and Sherman.

Table 4.1 | Existing and Under Construction Trail Facilities Inventory

Type of Trail	Trail Name	Trail Location	Trail Length (Miles)	Status
Soft-Surface	Creeks and Caves Loop	Waterloo Lake Regional Parks	1.73	Existing
Soft-Surface	Stagecoach Loop	Waterloo Lake Regional Parks	0.68	Existing
Soft-Surface	Upper Bluff	Waterloo Lake Regional Parks	1.39	Existing
Soft-Surface	Waterloo Lake Trail (Main Trail)	Waterloo Lake Regional Parks	2.3	Existing
Soft-Surface	Woodland Loop	Waterloo Lake Regional Parks	0.59	Existing
Paved	Katy Trail Phase I	Former MKT Railroad ROW	1.00	Existing
Paved	Katy Trail Phase II	Former MKT Railroad ROW	1.33	Under Construction
Paved	Paved Walking Track	Waterloo Lake Regional Parks	0.69	Existing
Paved	Trail 1 at THF	Texoma Health Foundation Park	0.51	Existing
Paved	Trail 2 at THF	Texoma Health Foundation Park	0.56	Existing
Paved	Trail 3 at THF	Texoma Health Foundation Park	0.48	Existing
Paved	Trail 4 at THF	Texoma Health Foundation Park	1.51	Existing



NEEDS ASSESSMENT

STANDARDS & SAFETY ASSESSMENT

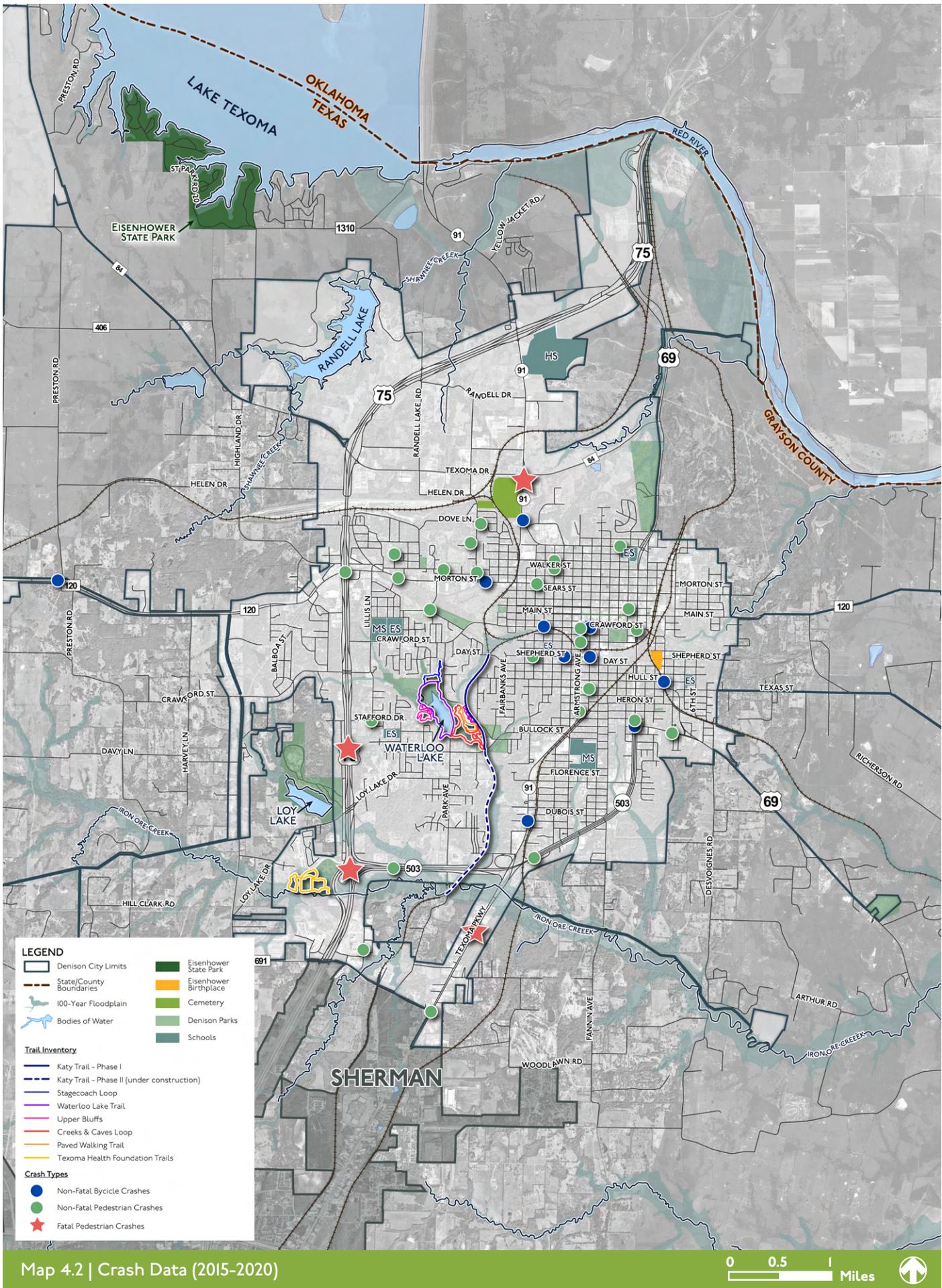
As of 2021 there are a total of 11 named trails within Denison’s existing trail system. Five of these trails are soft-surface trails that total 6.69 miles; and the remaining seven are paved trails comprising a total of 6.09 miles. Similar to parks within a community, NRPA has established trail mileage level of service for communities based on a set of population ranges. For cities with populations between 20,000 and 49,999 the median is nine miles of trails and provide one mile of trail per 1,000 residents. With over 12 miles of trail existing and currently under development Denison is not currently meeting the service benchmark of one mile per 1,000 residents. As shown in **Table 4.2**, Denison’s current overall trail LOS is one mile for every 2,232 residents and a projected LOS of one mile per 2,406 residents by 2040. Although there is an increase in population the number of residents served by Denison trails does not significantly change because it is assumed by 2040 the Katy Trail will be completed, providing an additional 1.33 miles of trails to service residents that does not exist in 2021.

The conditions of the existing active transportation system was assessed from a safety standpoint by

looking at bicycle and pedestrian crash data, which can help to identify safety issues that need to be addressed. The data used in this section was gathered from the Texas Department of Transportation (TxDOT) Crash Record Information System (CRIS). **Map 4.2** displays locations of bicycle and pedestrian crashes separated into fatal and non-fatal incidents that occurred from 2015-2020. As this data is using reported crashes only, this map does not represent crashes that were unreported. Within the five-year timeframe a total of 58 bicycle and pedestrian crashes occurred, 74% of them were non-fatal pedestrian incidents. Non-fatal bicycle crashes were the second most common incidents making up 19% of all crashes. A commonality among many of these incidents is they occurred along major roadways where traffic speeds and volumes are typically high and where intersection crossings may be unsafe. Roadways that have historically been hot spots for crashes include SH 91, W Crawford St, US 69, FM 120 and US 75. This data informs where future bicycle and pedestrian facilities might be needed to create a more comprehensive system for active transportation that allows users to safely and comfortably access for mobility and recreation purposes.

Table 4.2 | LOS Assessment of Trails

Year	Population
2021	25,529
2040	30,731
Trail LOS	Residents Served per Mile
All Trail LOS - 2021	1 mile per 2,232 residents
All Trail LOS - 2040	1 mile per 2,406 residents
Trail LOS (Paved) - 2021	1 mile per 5,375 residents
Trail LOS (Paved) - 2040	1 mile per 5,054 residents
Trail LOS (Soft-Surface) - 2021	1 mile per 3,816 residents
Trail LOS (Soft-Surface) - 2040	1 mile per 4,594 residents

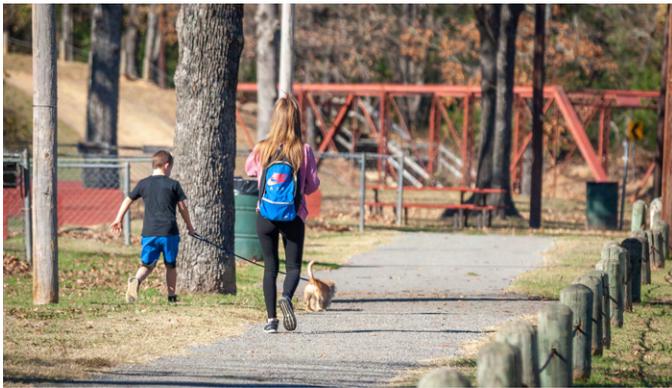


BENCHMARK ANALYSIS

LOS is a calculated ratio used to compare the total miles of trail in a community with its total population. When evaluating the need for trails in Denison it is beneficial to compare the LOS of the city’s existing system to those of peer communities. **Figure 4.1** showcases Denison’s existing trail system compared to three peer communities, Sherman, Granbury and Fate. These three benchmark cities were chosen either because of their proximity to Denison or because they are comparable in size and overall development patterns. The comparison only considers Denison’s existing paved trails and does not include Phase II of the Katy Trail, which is under construction.

Figure 4.1 summarizes the trail mileage LOS in Denison compared to the benchmark cities through a population-per-mile benchmark. A lower population-per-mile benchmark figure indicates there are more miles of trail per capita in that particular city, resulting in a higher LOS. It is more desirable to have a lower population-per-mile figure as this indicates a higher level of trail service city-wide. Today, there is one mile of trail for every 5,375 Denison residents. In this comparison, it is evident that Denison has a higher population-per-mile number than the other three cities thus indicating a need for expanding the trail system coverage throughout the city. It is important to note that this comparison only considers existing paved trails as these best serve a variety of users. Although they may be accessible to a more limited number of users, if soft-surface trails were included in this benchmark there would be one mile of trail for every 4,039 residents.

It should be noted that this assessment is strictly based on quantity of trails in a community and does not reflect the overall quality or available trail amenities in the benchmark communities.



Waterloo Cave Trail

Figure 4.1 | Regional Benchmark Comparison



DENISON
1 MILE PER 5,375 RESIDENTS
POPULATION: 25,529
EXISTING TRAIL MILES: 4.75
CITY AREA: 14,720 ACRES



GRANBURY
1 MILE PER 1,913 RESIDENTS
POPULATION: 10,524
EXISTING TRAIL MILES: 5.5
CITY AREA: 10,797 ACRES



SHERMAN
1 MILE PER 3,075 RESIDENTS
POPULATION: 42,432
EXISTING TRAIL MILES: 13.8
CITY AREA: 28,096 ACRES



FATE
1 MILE PER 3,790 RESIDENTS
POPULATION: 18,191
EXISTING TRAIL MILES: 4.8
CITY AREA: 7,680 ACRES

DEMAND ANALYSIS

Public engagement is a crucial part of the planning process and in order to create an overall inclusive plan, trail demand was analyzed through public input via stakeholder meetings, public open houses, and an online survey. **Figures 4.2** and **4.3** show that although over 93% of Denison residents would like to walk more than they do now, almost a quarter of the respondents do not currently use the trail and bike system. Additionally, the majority of respondents indicated that they would like to cycle more than they currently do, which supports the demand for an increase in bicycle facilities throughout the city. A large part of trail usage is dependent on the environment. If users feel comfortable and can easily navigate the network, then usage will likely increase. **Figure 4.4** shows the trail amenities prioritized by the community through public input opportunities that would help to increase overall system usage.

By incorporating these amenities, trail safety and accessibility will increase which will effectively encourage residents to use the trail system for recreational and alternative transportation options.

Figure 4.2 | Trail and Bike Usage Frequency

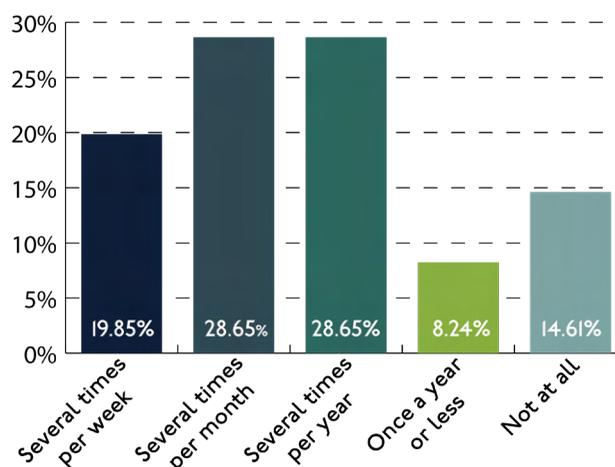


Figure 4.3 | Use Preference of Pedestrian and Bicycle Facilities

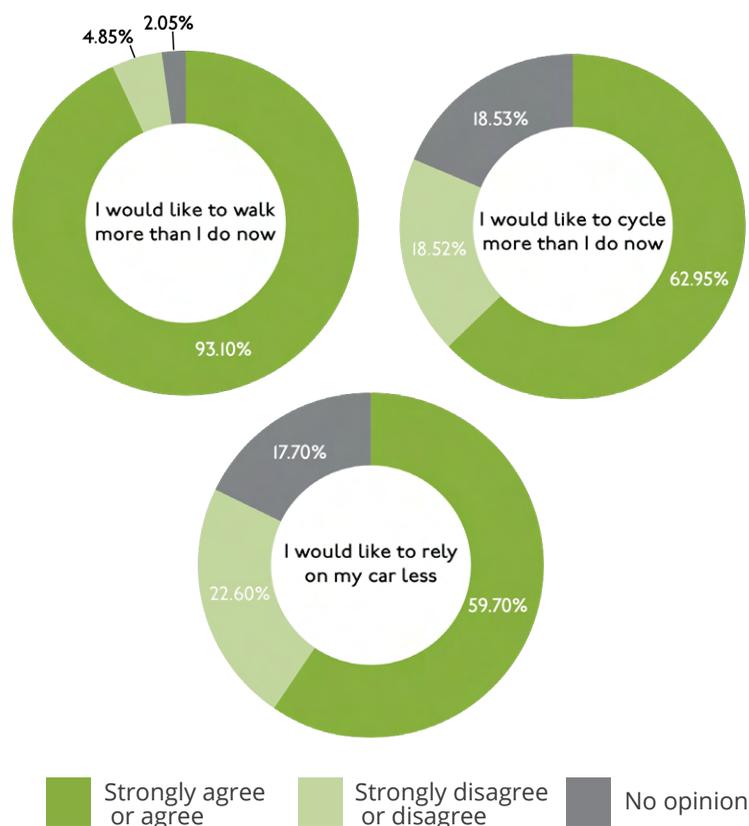
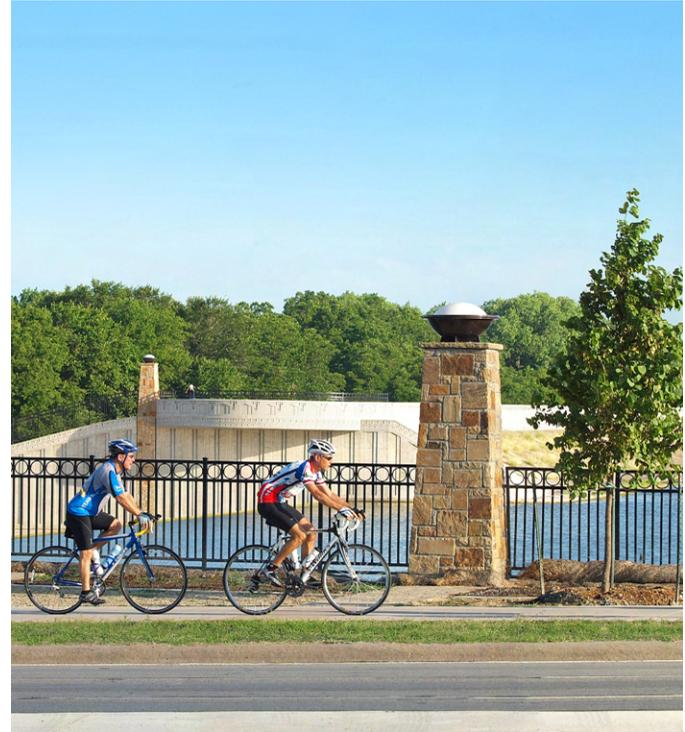


Figure 4.4 | Prioritized Trail Amenities



SUMMARY OF KEY NEEDS & OPPORTUNITIES

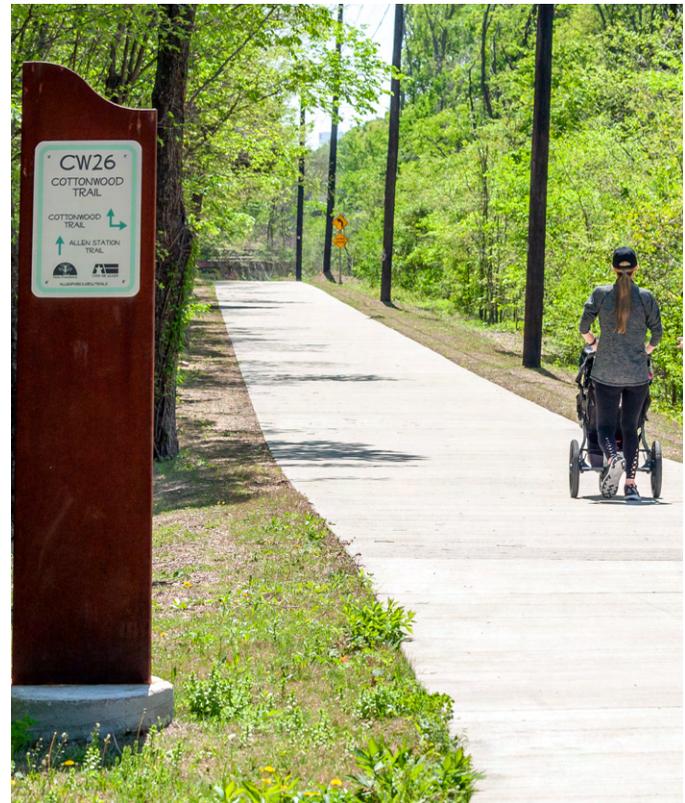
- Denison’s trail and bikeway system should be expanded in the future to better serve residents and create a level of service similar to its peer communities.
- A more comprehensive park and recreation system can be achieved by connecting parks to trails, allowing for recreation and alternative transportation options to reach key destinations.
- Updated development standards are needed to have stronger requirements for bicycle and pedestrian facilities and amenities that make the experience more comfortable and encourage more users.
- There is a demand for additional pedestrian and bicycle facilities that provide safe and accessible non-motorized transportation options to be used for mobility and recreation purposes.



Example of multi-use paths



Example of trailhead monumentation



Example of wayfinding signage on trails

OPPORTUNITIES

Through evaluation of the results from the trails needs assessment, a series of opportunities were identified for the expansion of the existing trail and bikeway system. **Map 4.3** depicts the opportunities for future trail and bikeways in Denison. The major trail and bikeway opportunities identified include major destinations, interjurisdictional connections, abandoned railroad lines, and gaps in connectivity. Additionally, previous planning initiatives conducted locally and regionally have identified potential pedestrian and bicycle routes that this plan can build upon. These initiatives include Denison's 2018 Comprehensive Plan, TxDOT's bicycle tourism routes, and the proposed Ike Hike in downtown Denison, which were all discussed in detail in Chapter 2. **Map 4.3** overlays all of the previously listed opportunities and will serve as a framework for the recommendations presented later in the document.

MAJOR DESTINATIONS

Major destinations are key locations within or surrounding Denison that would greatly benefit by having increased active transportation access. A crucial aspect of a robust active transportation network is providing access to key destinations to allow residents and visitors of all ages and abilities to easily and safely reach these destinations by foot or bicycle. These destinations include the existing park system, Downtown, Eisenhower Birthplace, Eisenhower State Park, and Waterloo Lake Regional Park. Many of the identified key destinations cannot be accessed by trail or bikeways and some are in locations that require major barriers to be crossed. When looking at potential trail and bikeway corridors it is important to consider creating connections to major destinations.



Example of a multi-use trail along a rail corridor

INTERJURISDICTIONAL CONNECTIONS

Interjurisdictional connections present several opportunities to link Denison's trail and bikeway system to surrounding cities such as Sherman to the south and to regional points of interests such as Carpenters Bluff Bridge east of the city on the Red River. These connections would increase regional connectivity and additionally enhance accessibility for people inside and outside of Denison. The creation of interjurisdictional connections allows residents and visitors to reach major destinations in Denison as well as attractions in the surrounding areas. Implementing non-motorized transportation connections between jurisdictions increases accessibility for visitors and will encourage exploration of the many attractions that Denison has to offer from Main Street in Downtown to the historic Eisenhower Birthplace and the expansive park system.

ABANDONED RAILROAD LINES

Denison's 2018 Comprehensive Plan also includes a map showcasing the multiple abandoned railroad lines throughout the city. Similar to the Katy Trail, these abandoned railroad corridors present the opportunity to be repurposed and incorporated into a vibrant trail and bikeway system. These abandoned rail lines would create key connections within Denison and to surrounding municipalities. Rails to Trails projects can be found all across the country and are a great opportunity for Denison to expand and enhance its current trail system. Additionally, if the city pursues implementing trails in these former rail corridors there are grant opportunities that can be utilized to help fund future projects.



Example of natural trails

GAPS IN CONNECTIVITY

Gaps in connectivity include parts of the city that currently lack substantial trail and bikeway connections; which therefore, present a great opportunity to develop additional routes. The majority of the City is not currently served by the existing trail network. Many of the gaps that exist today occur in the southwestern part of the city, where there are many barriers to overcome at the US 75 and Spur 503 interchange as well as in the central part of the city where there are major destinations that currently can't be reached by a trail or bikeway facility. Further developing these connections is significant to the expansion and the increase in accessibility of the future trail system.

2018 COMPREHENSIVE PLAN

Denison's 2018 Comprehensive Plan includes a pedestrian and bicycle plan that focused its efforts on creating an expansive intermodal plan allowing for a more interconnected city. The plan illustrates three different types of trail and bikeway facilities, including shared trails, bike paths, and bike lanes. Bike lanes were prioritized in the central part of the city while bike paths and shared trails were aligned around the edges of the city. Recommendations from this plan are informed by this previous planning effort.

TXDOT BICYCLE TOURISM ROUTES

The Texas Bicycle Tourism Study was created by TxDOT in collaboration with its Bicycle Advisory Committee (BAC) in 2005 as an effort to develop a statewide bicycle network to support local tourism. The development of this network requires long-range planning efforts that involve public, private, and non-profit partnerships. To identify locations for the bicycle tourism trail network a high-level network analysis was performed to develop initial route options. This network of bicycle tourism trails highlights natural and historic landscapes across the state of Texas and provides the potential to increase local economies by attracting people from multiple regions. Today, there are several routes identified to go through Denison which could be implemented through the support of TxDOT's Bicycle and Pedestrian Program.

IKE HIKE

The Ike Hike trail is a city effort that incorporates Denison's history into the trail system. The trail begins along Main Street in downtown and terminates at one of the city's major destinations, the Eisenhower Birthplace. The trail creates a linear timeline that memorializes Eisenhower's visits to Denison by connecting downtown to the historic Eisenhower birthplace site through interpretive displays of historical events. Not only does this celebrate the rich city history but it also creates a regional destination for tourists. As the trail and park system is further enhanced, Denison's history should be incorporated through elements such as public art and educational signage similar to this effort.

A linear timeline trail that will memorialize Dwight D. Eisenhower's visits to Denison with a series of interpretive displays of the historical events while connecting Downtown to the Eisenhower Birthplace Historic Site.

IKE HIKE
DENISON, TEXAS

Stay Connected
ikehike.com
@ikehike #ikehike

POINTS OF INTEREST

- 1 Beginning of the Parade Route
- 2 Photo Ops/Main Street Walk
Audio/Visual Kiosk & Sidewalk Trail Markers
- 3 The Rialto Theatre
Audio/Visual Kiosk
- 4 Mural
Art Installation
- 5 Red River Railroad Museum
- 6 Speech at Forest Park
Audio/Visual Kiosk
- 7 Crawford Underpass
Improved Pedestrian Connection
- 8 Eisenhower Birthplace State Historic Site
- 9 Mayor's Story

MAYOR'S STORY

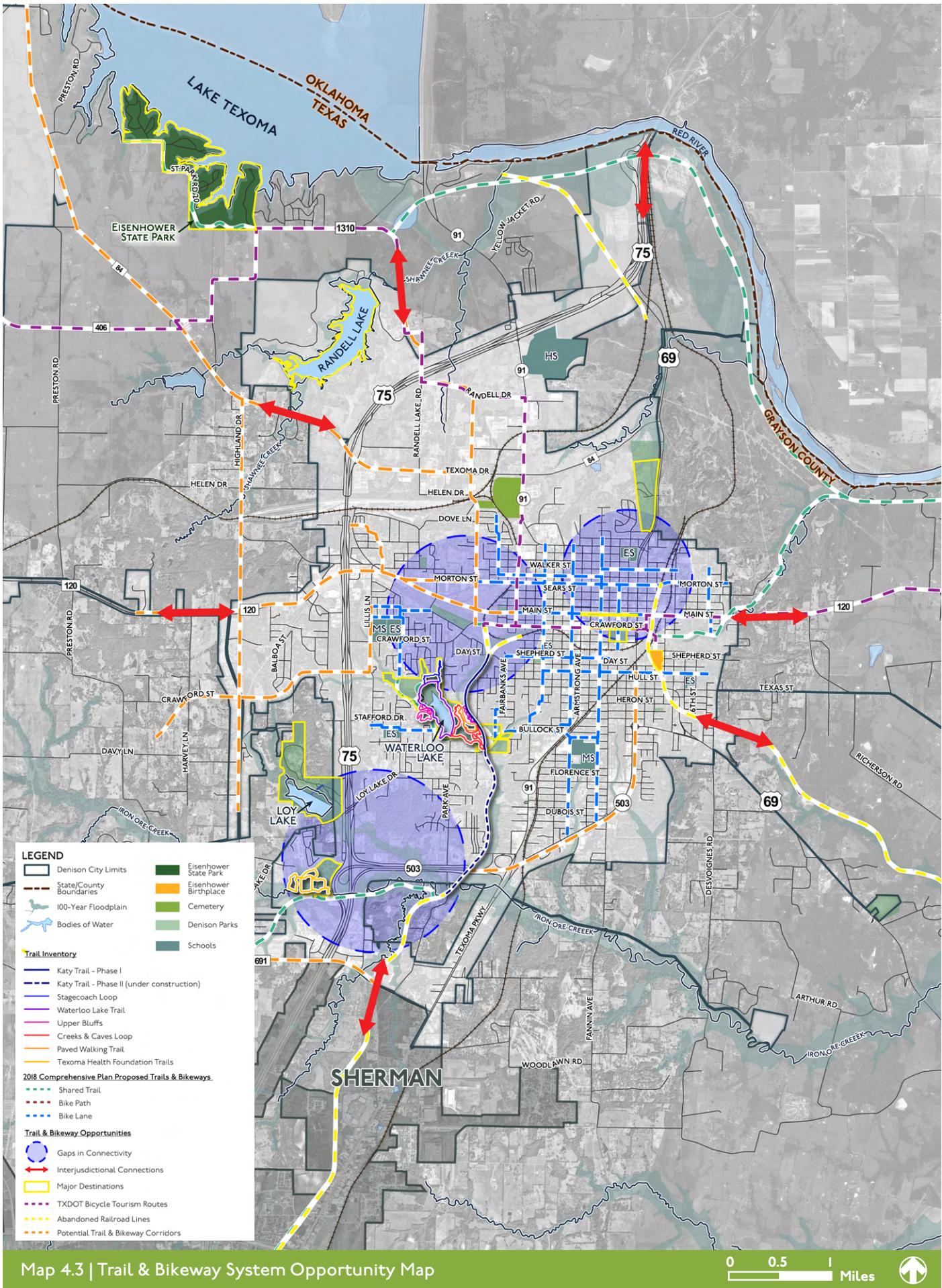
A young girl's day at the parade

Not just a childhood memory, but a moment that inspired a lifetime of service and leadership. At this location in Forest Park, Denison Mayor Janet Gott witnessed President Eisenhower speak to the crowd and the parade head east to the birthplace. A kiosk memorializing her story of that day and how it drove her to become the mayor of her hometown is proposed for this location.

— Ike Hike — Parade Route

Ike Hike Trail map showing route from Main St to Eisenhower Birthplace State Historic Site.

Ike Hike Trail



Map 4.3 | Trail & Bikeway System Opportunity Map

0 0.5 1 Miles



KEY FINDINGS

- Increasing safety for bicyclists & pedestrians is vital to increase the utilization of alternative transportation options.
- Incorporating trailheads & access points is critical in expanding trail access and connectivity.
- Amenities such as wayfinding signage, lighting and shade trees increase comfort levels for trail users.



Multi-use trail lighting

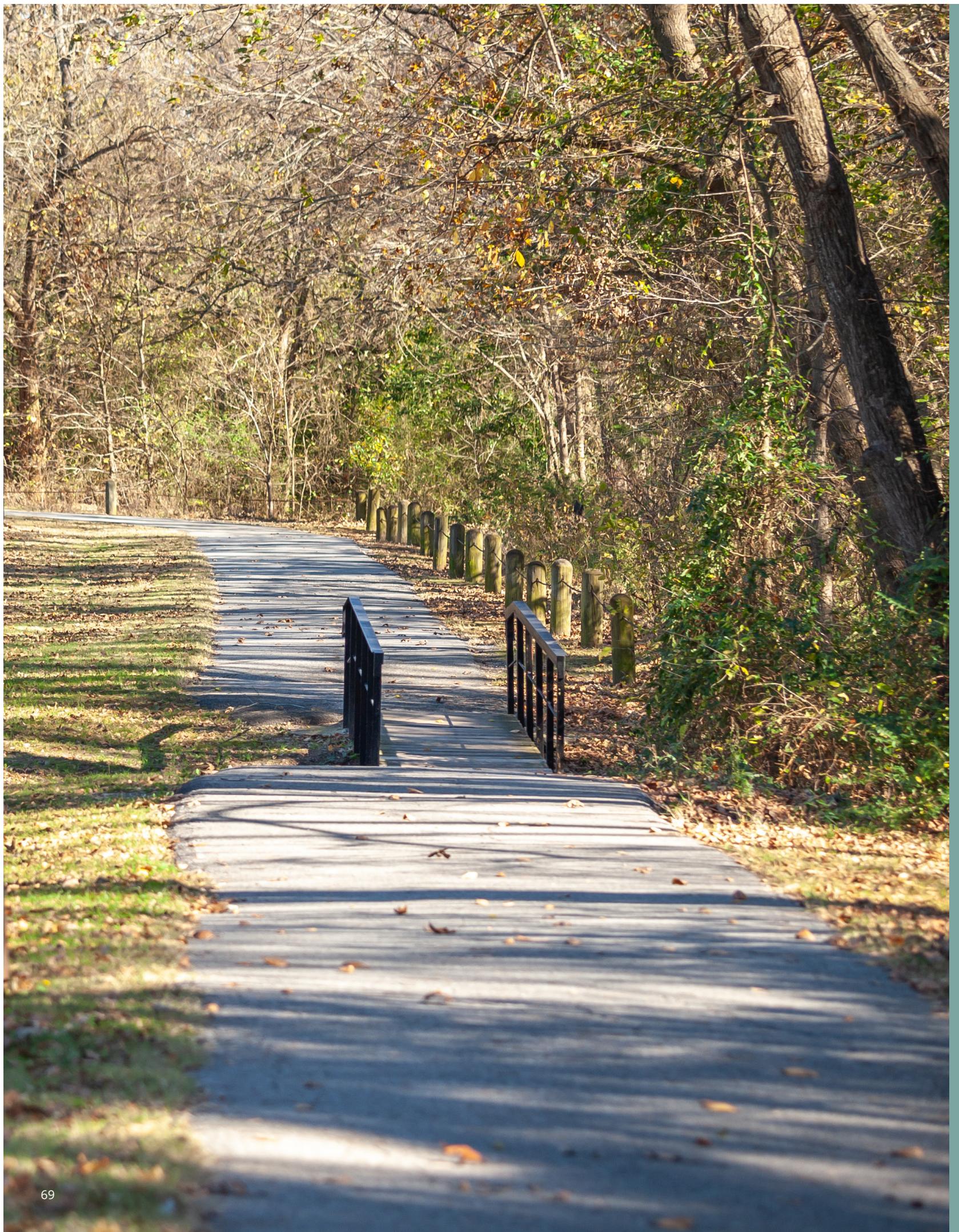


Trailhead monumentation



Directional signage

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05 | RECOMMENDATIONS

- ◆ SYSTEMWIDE PARK RECOMMENDATIONS
- ◆ SYSTEMWIDE TRAIL & BIKEWAY RECOMMENDATIONS
- ◆ FACILITIES TOOLBOX
- ◆ RECOMMENDED STRATEGIES

SYSTEMWIDE PARK RECOMMENDATIONS

RECOMMENDED SYSTEM

Map 5.1 represents the park opportunities for Denison for the next 10+ years based on the needs and opportunities identified through this plan process.

AREAS UNSERVED BY PARKS

These areas identified on **Map 5.1** represent parts of the city that fall outside of a 10-minute walking radius of an existing park in Denison today. These areas signify where there is the greatest need for additional park spaces and amenities in the city. The underserved areas largely exist in the northwestern and southeastern parts of the city.

CITY OWNED VACANT LAND

These parcels of land are those that the City currently owns that have not been developed; and therefore, if determined feasible, could be utilized as future parkland. These parcels are located throughout the city and would require further studies and coordination efforts to determine if they could be repurposed as park space in the future or utilized to expand upon existing park space.

SCHOOL SERVICE AREA

Schools typically possess outdoor recreation and athletic amenities which, through a shared-use agreement between the City and the school district, could be utilized by the public during designated times. This additional access to outdoor recreation amenities increases accessibility for residents in the surrounding neighborhood.

DEVELOPMENT PROJECTS

The City currently has several ongoing development projects that are either under construction or have had zoning, platting, or site plans approved, which are illustrated in **Map 5.1**. These future projects represent the potential to support access to existing or future park, trails, and recreation facilities. Coordination with developers in the future will be pertinent to successfully implementing new park spaces or access points to trails and bicycle facilities.

GAPS IN PARK SERVICE

Gaps in park service represent key areas in the City where future park development should be prioritized because park access is limited in these areas. The

highlighted areas are divided into those where future development and growth is anticipated to happen; and areas that are already developed where residents need additional accessibility to park space and amenities.

UNPROGRAMMED PARKLAND

Unprogrammed parkland is space that is currently designated as parkland, or areas within existing parks that are not programmed and are able to support new amenities and programs that are needed and desired by the community. Munson Park has land in the northern portion of the park that is currently unprogrammed, where amenities that don't exist in Denison's park system today could be implemented. Loy Lake Park, which is newly acquired City parkland, is largely unprogrammed, and presents the opportunity to address the unmet needs and desires of the community. Concurrent this master plan effort a site design concept is being developed for Loy Lake Park.

POTENTIAL PARK EXPANSION

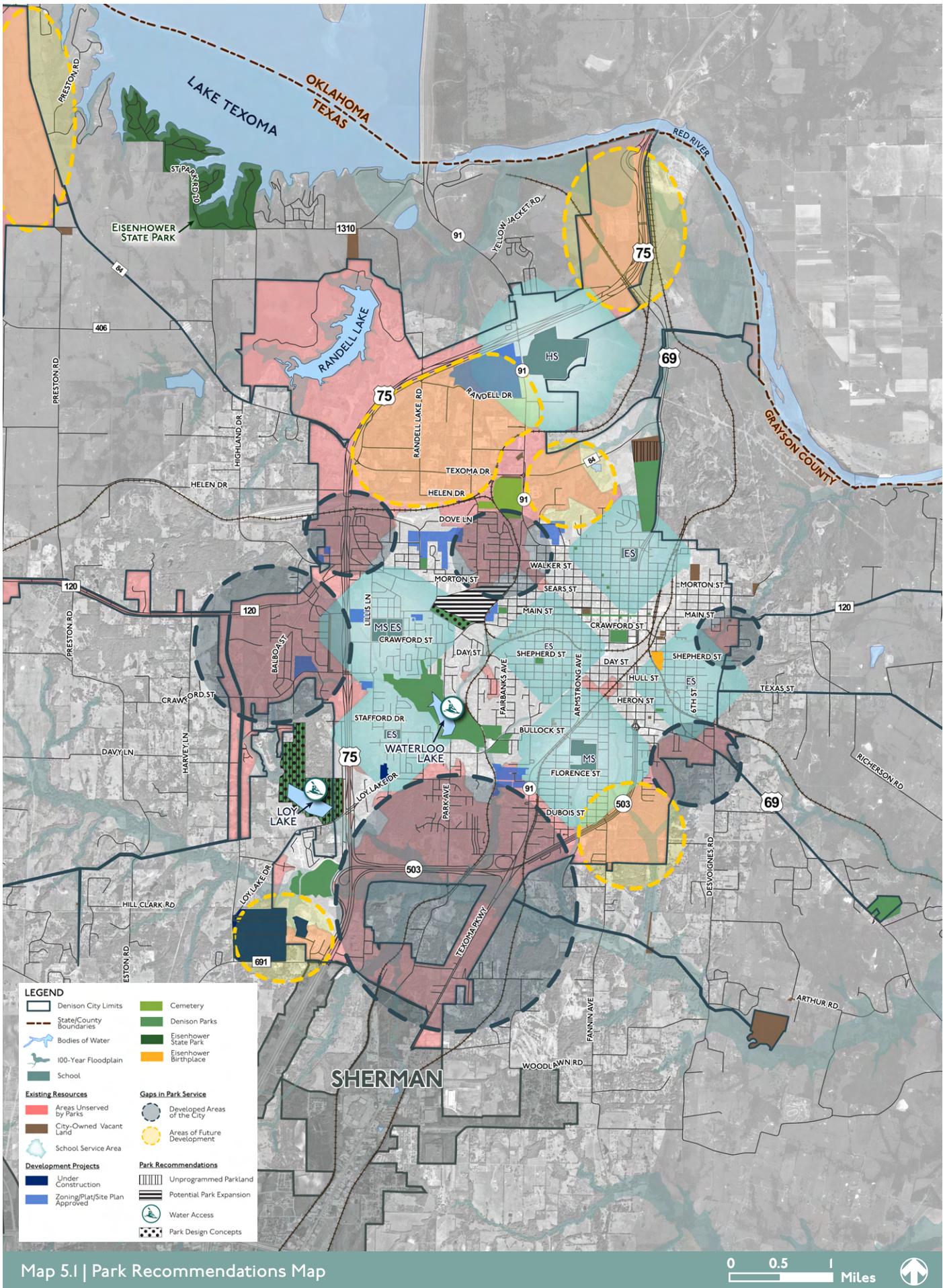
Undeveloped land adjacent to existing park space that, through coordination with property owners, could be transitioned into additional park space. The land for expansion identified in **Map 5.1** is that to the north of Katy Park, which could be used to implement additional park amenities to better serve Denison residents. In order to expand the footprint of Katy Park, for example, future coordination between the City and current property owners would be required.

WATER ACCESS

Locations within parks that contain water bodies where increased access for water recreation, water amenities, and equipment rental facilities and programs should be enhanced or implemented. Water access is currently available at Waterloo Lake, and the City should consider expanding upon existing programs and facilities to introduce new water recreation opportunities that can also be potentially implemented at Loy Lake Park as future programming decisions are made.

PARK DESIGN CONCEPT

These are park spaces that are being redesigned through this master plan effort to better provide for the park and recreation needs and preferences of the community. There are two park design concepts being developed – Loy Lake Park and Katy Park. Loy Lake Park presents the opportunity for the City to introduce new amenities and programs into the park system as it is largely unprogrammed today. The design concept for Katy Park is aiming to better serve community needs and to improve the existing practice fields to support local teams. Detailed design concepts for both parks can be found in the Appendix.



RANDELL LAKE FEASIBILITY STUDY

Randell Lake is in the northwest corner of Denison, west of US 75, and is an important natural feature as it supplies the majority of the city's water. As the city water source, it is vital that the water meets standards set by the Texas Commission on Environmental Quality (TCEQ) to ensure it is safe for residents to use. To continue to maintain a usable water source the City should actively protect Randell Lake and restrict public access to the lake and prohibit water recreation activities including human-powered and motorized watercraft.

During the engagement process for this master plan, many residents and stakeholders expressed the desire for trail and bikeway facilities around Randell Lake; however, to ensure that any future facilities would be not contaminate the water, a feasibility study should be conducted.

It is important to conduct a feasibility study in order to determine if future trail facilities would be appropriate in the vicinity of Randell Lake. If determined that trail facilities, at an appropriate distance, are feasible the study should also identify where future facilities would be most suitable to protect the lake.

Design standards for trail facilities should also be established through this study and focus on preventing users from accessing the water and creating safe and accessible routes. The feasibility study should include consultation with TCEQ to ensure that future trail development does not pollute the city water source and follows existing regulations.





SYSTEMWIDE TRAIL & BIKEWAYS RECOMMENDATIONS

FACILITY HIERARCHY

The pedestrian and bicycle network proposed for Denison is composed of various trail and bikeway accommodations that collectively create a comprehensive, multi-modal network to serve a range of users. The hierarchy of facilities is divided between **Trail Facilities** and **On-Street Bikeway Facilities**, each of which contains sub-categories

of specific accommodations determined by factors such as proximity to roadways, facility width, level of connectivity, and designated user group. These proposed facilities create a connected system encouraging the use of non-motorized transportation for recreation and mobility needs. This section will define the characteristics of each facility in more detail.

TRAIL FACILITIES



OFF-STREET TRAILS

These trail facilities are found in off-street corridors and create an enhanced level of comfort for users as they are separated from vehicular traffic and are wide enough to allow multiple user groups to occupy them at the same time. These trail routes provide long, continuous connections that allow users to easily and safely access major destinations throughout the city.

WIDTH: 10'-12'

USER GROUPS: Bicyclists and pedestrians

LOCATION: Typically implemented in off-street corridors such as greenbelts, utility easements, and railroad corridors.



Off-street trail within a railroad corridor



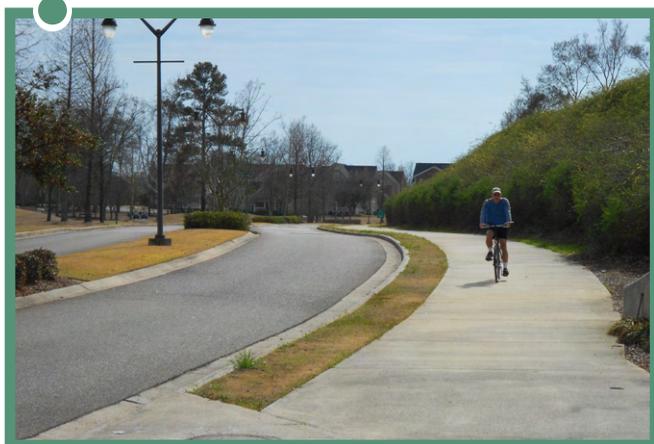
SIDEPATHS

These multi-use trails are found along roadways and create connections to key destinations. Their width enables both pedestrians and bicyclists to use the trails simultaneously without conflict. Sidepaths are preferred along both sides of the roadway where feasible, but where there are constraints a path should be implemented on the side with the greatest available ROW and if feasible, a minimum 5' sidewalk should be implemented on the opposite side. As these paths typically cross intersections and driveways, additional safety considerations must be addressed.

WIDTH: 8'-10'

USER GROUPS: Bicyclists and pedestrians

LOCATION: Adjacent to roadways providing a minimum 2.5' buffer, 5' preferred in areas without constraints, between users and motor vehicle traffic.



Sidepath along roadway



Soft-surface trail composed of decomposed granite



SOFT-SURFACE TRAILS

Soft-surface trails are often found within park spaces and are not paved but rather generally composed of natural materials such as compacted earth or decomposed granite. These trails support a limited group of users and can become unusable during unfavorable weather conditions. Users typically found on soft-surface trails include walkers, joggers, and mountain bikers, where as devices such as strollers, wheelchairs, and even road bikes may have a more difficult time navigating the inconsistent trail surface. This is a cost-effective facility that can be implemented more easily and is less disruptive to the natural environment.

WIDTH: 8'-10'

USER GROUPS: Pedestrians

LOCATION: Typically found within parks, open spaces, and greenbelts where paved surfaces are not feasible or there is interest in minimizing environmental impact.

ON-STREET BIKEWAY FACILITIES



SHARED-USE LANES

Shared-use lanes are located within a street where a travel lane is designated to serve both bicyclists and motor vehicles through the use of pavement markings and/or signage. When located along residential streets, on-street bike route signage is sufficient. For facilities along collectors and minor thoroughfares, the use of shared-use pavement markings and accompanying signage is recommended, to clearly identify the presence of bicyclists within the travel lane. Typically, this type of bicycle facility occurs along roadways with speeds of 35 mph or slower and with relatively low traffic volumes.

USER GROUPS: Bicyclists

LOCATION: Along roadways with appropriate speeds, generally 35 mph or less, and low volumes.



Shared-use lane pavement markings



BIKE LANES

Bike lanes are designated as a portion of the roadway that exclusively serve bicyclists and are separated from motor vehicle traffic. Bike lanes can be implemented as either standard or separated depending on the amount of roadway ROW available. Standard bike lanes have a 6" painted stripe separating the bike lane from the travel lanes and separated bike lanes have 3' minimum buffer from vehicular lanes as recommended by National Association of City Transportation Officials (NACTO). Both types of facilities utilize signage, pavement markings, and striping to demarcate the facility. Road lane diets may need to be considered along some roadways to accommodate bike lanes, particularly to enable bike lanes in both directions.

WIDTH: 4' minimum - 5' preferred from edge of curb

USER GROUPS: Bicyclists

LOCATION: Within roadways with appropriate speeds, generally 45 mph or slower, and with lower volume traffic.



Bike lanes with pavement markings and signage



Wide shoulder accommodating a bicycle route



WIDE SHOULDERS

Wide shoulders are facilities that exclusively serve bicyclists and are typically found on rural roadways that have higher speed traffic and volumes. These create long continuous routes that connect to destinations at the edges or beyond the city limits and are often used by more experienced bicyclists on long rides. This facility type has been recommended by TxDOT as appropriate to support long-range bicycle uses if paved and between 8'-10' wide. Additionally, directional and safety signage should be implemented to inform motorists of the presence of bicyclists.

WIDTH: 8' minimum - 10' preferred

USER GROUPS: Bicyclists

LOCATION: Typically, along rural roadways that have higher speed traffic and volumes.

RECOMMENDED NETWORK

The proposed system of trails and bikeways was informed by the needs assessment, public and stakeholder feedback, established prioritization criteria, and alignment to the overall plan goals. **Map 5.2** illustrates the overall recommended system of facilities.

The recommended network proposes a total of 101 miles of new trail and on-street bicycle facilities to maintain a high service level for the community as the city grows and future developments arise. This plan expands and diversifies the existing facility inventory to better address the pedestrian and bicycle needs of residents and provides new opportunities for recreation and mobility utilizing trails and on-street bikeways. The recommended network focuses on creating continuous connections that can be utilized

by pedestrians and bicyclists to support daily trips to destinations throughout the city.

Table 5.2 summarizes the build-out level of service of paved trails. This plan recommends 28.77 miles of paved off-street trails and there are currently 6.08 miles of paved off-street trails in Denison today. At build-out anticipated by this plan, there is projected to be a total of 34.85 miles of trails, which will increase the level of service in 2040 to 1 mile per 881.81 residents. Refer to page 61, for more details on level of service calculations.

The following pages outline the recommendations for each facility category and provides details on specific pedestrian and bicycle accommodations and connectivity throughout Denison.

Table 5.1 | Master Plan Recommended Systemwide Facility Mileage

Facility Type	Recommended Facility Mileage	Build-Out Mileage
Trails	43.03	55.04
On-Street Bikeways	50.91	50.91
Sidewalk Improvements	8.30	8.30
Total	102.24	114.25

Table 5.2 | Build-Out Level of Service (LOS)

Facility Type	LOS
2021 Population	25,529
2040 Population	30,731
Current Trail LOS - 2021*	1 mile per 5,375 residents
Current Trail LOS - 2040*	1 mile per 5,054 residents
All Recommended Trails LOS - 2040**	1 mile per 881.81 residents

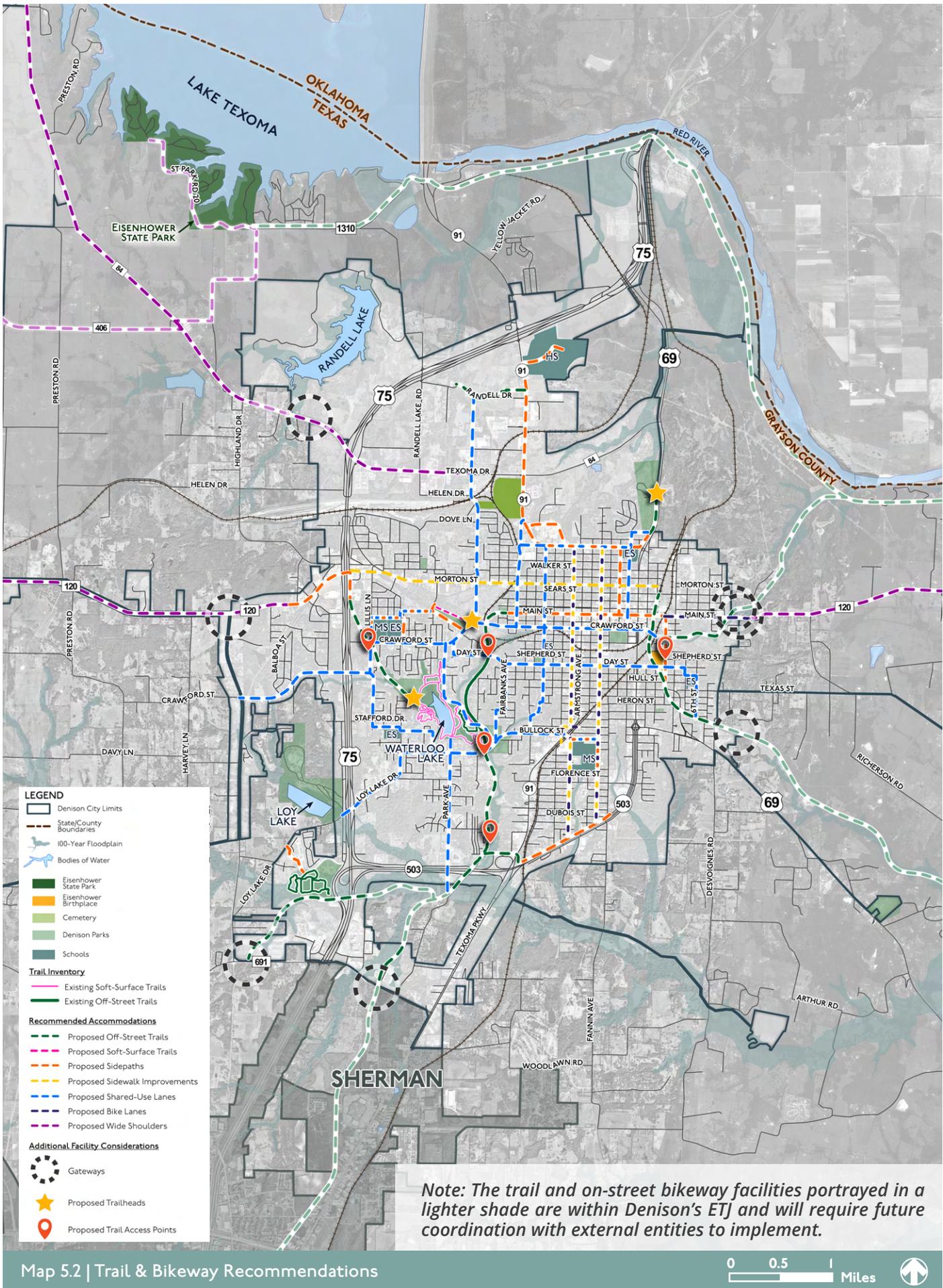
*These calculations use 2021 paved trail inventory mileage including the second phase of the Katy Trail.

**These calculations combine 2021 paved trail inventory mileage and recommended off-street trail facility mileage.

REGIONAL CONNECTIONS

Denison is in a unique geographic position: it abuts the Texas/Oklahoma border; is just south of Lake Texoma; and is well connected to the Dallas-Fort Worth Metroplex via US 75. To become a park, trail, and recreation destination of North Texas it is as critical to create regional connections as it is to grow the existing parks and recreation system. Regional connections will allow visitors from surrounding communities and beyond to access the park and recreation destinations in Denison and its extraterritorial jurisdiction (ETJ) through safe and comfortable pedestrian and bicycle routes.

Non-motorized transportation connections present the opportunity to strengthen and build partnerships with regional entities to promote recreational and park tourism throughout North Texas. One potential connection to explore is a trail or bikeway corridor that links Denison to Bonham State Park, which is approximately 30 miles southeast of the city. As this master plan recommends facilities to connect to Eisenhower State Park as well, this regional corridor would allow future users to travel to two of North Texas' state parks via non-motorized transportation routes. Creating this type of regional connection would be a long-term goal as implementation would require extensive planning, funding considerations, and partnerships with various public and private entities.



Map 5.2 | Trail & Bikeway Recommendations

TRAIL FACILITIES

Map 5.3 illustrates the trail facilities proposed for Denison. These facilities include off-street trails and sidepaths, which support both pedestrian and bicyclists, and create a network that connects users to key destinations throughout the City through off-street corridors and along key roadways. Trail facilities require additional planning, design, and funding efforts which means they cannot all be implemented at once, the following chapter details prioritization of projects for implementation over time.

OFF-STREET TRAILS

The recommended off-street trails aim to create new or continued connections through greenbelts, along creek beds, and within abandoned railroad corridors. Utilizing these natural and man-made corridors is ideal for creating routes that span long distances to connect key destinations throughout the City. Providing off-street trails, serving both pedestrians and bicyclists, supports new recreational and mobility opportunities for Denison residents and visitors. Some of the recommended off-street trails are proposed within the ETJ, primarily north of the city and close to the state/county line. These trail routes were previously recommended in the 2018 Comprehensive Plan and create connections to key destinations such as Eisenhower State Park and provide pedestrian and bicycle friendly routes that extend towards the jurisdictions and natural features beyond Denison. The second phase of the Katy Trail is shown as a proposed trail as there are plans to begin construction in the short-term. A short connection north of the existing portion of the Katy Trail is recommended to create a linkage to Main Street.

SIDEPATHS

The recommended sidepaths support safe and accessible connections along major roadways throughout Denison. Generally, sidepaths are located along roadways that have adequate ROW to construct wider paths and provide connections for pedestrians and bicyclists. The roadways that would benefit the most from the addition of sidepaths are those that are unsafe for on-street bicycle facilities and would support higher volumes of non-motorized traffic when connections to key destinations are made. Sidepaths recommended in this plan build off of current facilities and planning efforts such as Downtown's Ike Hike, and address corridors that create connections to community amenities and services such as schools and parks. Roadways that cannot accommodate sidepaths but would provide key system connectivity should be considered for sidewalks, preferably from 5'-6' in width.

SOFT-SURFACE TRAILS

The majority of Denison's existing trails are soft-surface and are located within Waterloo Lake Regional Park. The only new proposed soft-surface trail is on the north side of Katy Park and is part of the design prepared as a parallel effort to this master plan.

IMPROVED SIDEWALKS

Sidewalk improvements are recommended along roadways where there is an existing gap in connectivity that could be improved to provide much needed future connections. These recommendations have been proposed along roadways that cannot accommodate on-street bikeways or have ROW constraints that prohibit the implementation of wider trail facilities. Improving sidewalks will strengthen connectivity for pedestrians by connecting to other existing and proposed pedestrian and bicycle facilities.

TRAILHEADS

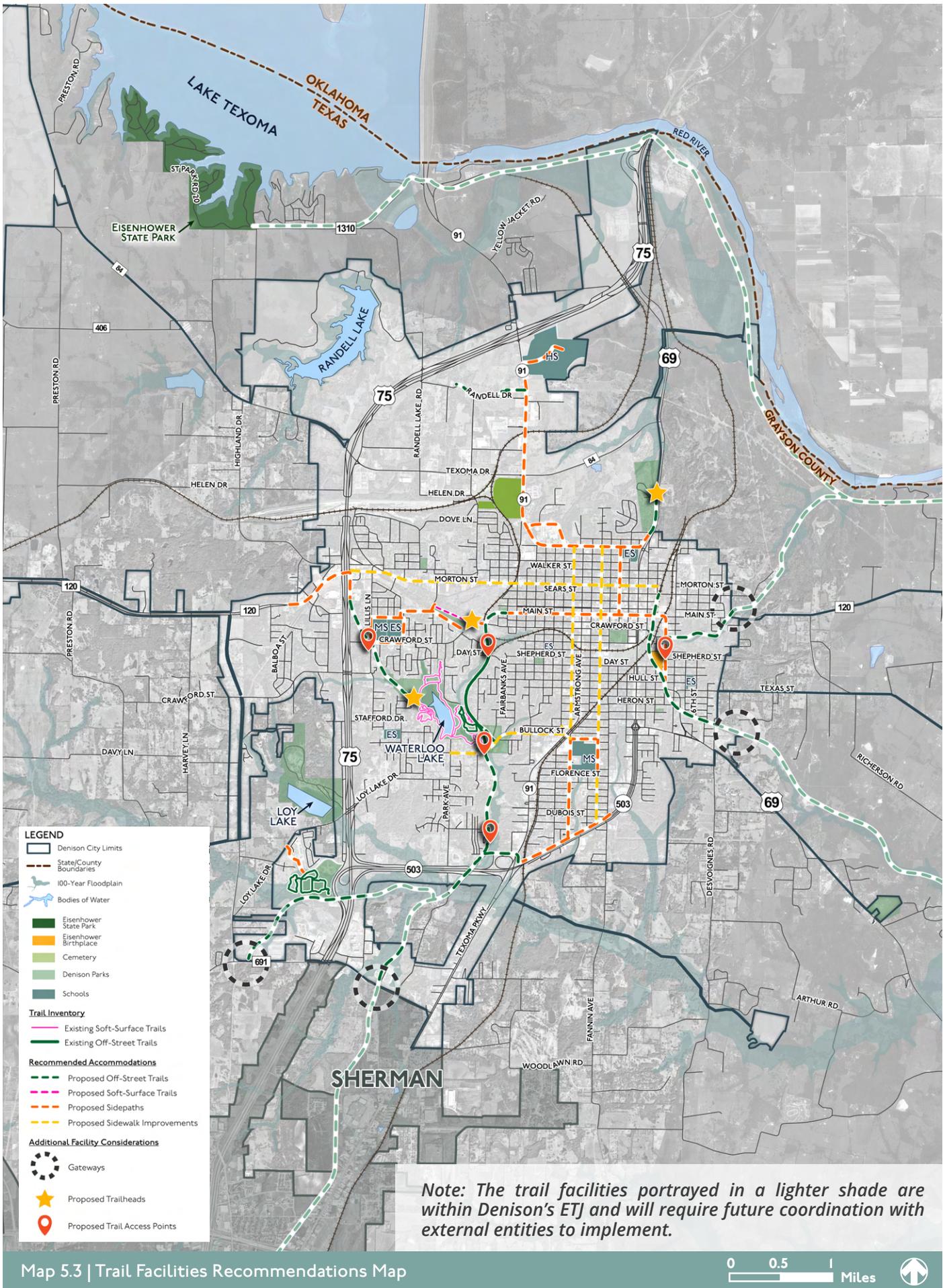
Trailheads are recommended to be implemented in locations such as community parks and key destinations where there is available space to incorporate amenities such as parking, information signage, drinking fountains, and restrooms. There are three locations that have been identified for trailheads: Waterloo Lake Regional Park, Munson Park, and Katy Park, all of which are regional or community parks. These trailheads serve as entrances into the trail system, provide wayfinding information, and are designed to be easily identified by potential users.

TRAIL ACCESS POINTS

Trails access points serve as supplemental entrances into the trail system and are usually located within residential neighborhoods, at key destinations, or at trail intersections. Many of the access points recommended for Denison occur at key intersections where proposed trails cross major roadways or other trails; or at key destinations such as the Eisenhower Birthplace. As development occurs in Denison, it is important that future trail access points are considered for developments adjacent to trails, to increase accessibility, particularly for residential areas.

Table 5.3 | Master Plan Recommended Pedestrian Facility Mileage to meet Target LOS

Facility Type	Recommended Mileage
Off-Street Trails	28.77
Sidepaths	13.87
Soft Surface Trails	0.39
Sidewalk Improvements	8.30
Total	51.56



Map 5.3 | Trail Facilities Recommendations Map

0 0.5 1 Miles



ON-STREET BIKEWAY FACILITIES

Map 5.4 illustrates the on-street bicycle facilities proposed for Denison; these facilities include shared-use lanes, bike lanes, and wide shoulders, which can be designated to support bicyclists. Collectively, these facilities create a network that connects bicycle users to local and regional destinations. Roadway types, speeds, and volumes were key factors in determining the appropriate location and facility designation.

SHARED-USE LANES

Recommended shared-use lanes contribute a significant amount of mileage to the overall proposed bikeway facilities and are mainly concentrated in the center of the city. This type of bicycle facility is easily implemented and would minimally impact existing roadways. The roadways that were determined as appropriate for shared-use lanes are those with lower speeds and traffic volumes and that provide continuous routes to connect to key destinations. These connections are intended to create safe and comfortable user experiences to serve bicyclists of all ages and abilities. Additionally, these bikeways reflect well-known routes that bicyclists in Denison travel today and would be improved through official designation of bicycle routes.

BIKE LANES

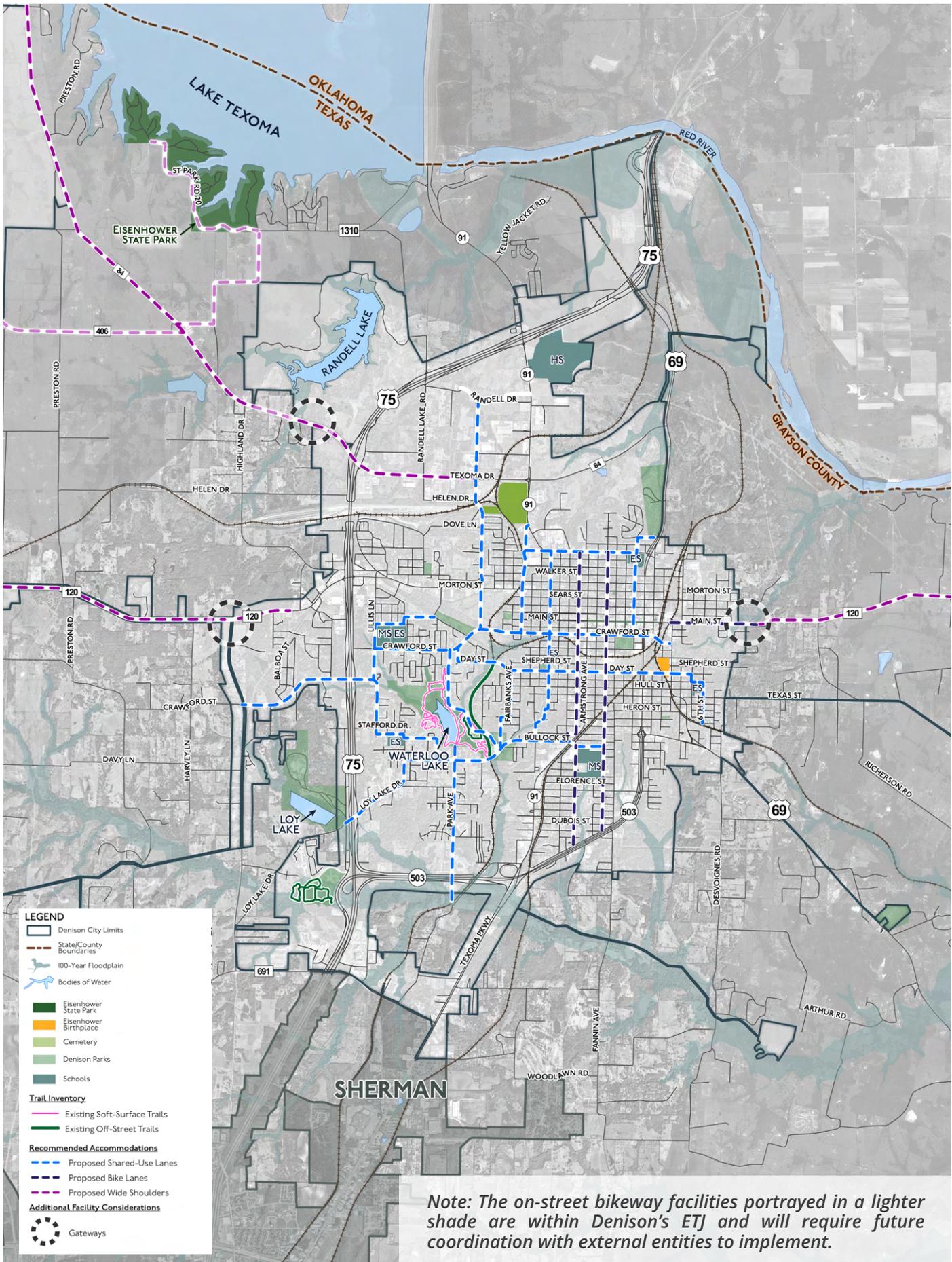
Bike lanes have been recommended for two north-south roadways that run through the center of the city. This type of bicycle facility is most suitable for roadways that have slightly higher speeds and traffic volumes and have available pavement width to support separated bicycle facilities. These facilities provide an additional level of comfort and safety for bicyclists and create continuous connections to key destinations such as downtown, schools, and residential neighborhoods as well as connect to other proposed pedestrian and bicycle facilities.

WIDE SHOULDERS

Wide shoulders contribute a significant amount of mileage to the overall proposed bikeway facilities. These are generally recommended on rural roadways that extend to the edges of the city limits and into the ETJ. Several of the roadways designated to support wide shoulders align with recommendations from TxDOT’s Bicycle Tourism Study and these can be implemented in the future through partnerships with TxDOT. These routes address the desire of experienced, long-distance bicyclists for designated routes that connect to surrounding municipalities and regional destinations.

Table 5.4 | Recommended On-Street Bikeway Facility Mileage to meet Target LOS

Facility Type	Total Recommended Mileage
Shared-Use Lanes	21.77
Bike Lane	6.28
Wide Shoulders	22.86
Total	50.91



Map 5.4 | On-Street Bikeway Facilities Recommendations Map



PRIORITIZATION CRITERIA

A series of prioritization criteria was established to determine priority corridors for the proposed trails and bikeways. Elements that were considered as part of this evaluation include connectivity, safety, accessibility, and feasibility of implementation. The prioritization

criteria should guide future implementation of proposed facilities. Criteria was developed separately for trail and bicycle facilities, although there are some overlapping items. The following pages outline the criteria.

TRAILS PRIORITIZATION CRITERIA



Connects to key destinations

Key destinations include existing parks, schools, major employment and shopping centers, areas of historic, cultural, or natural significance, and other community facilities.



Connects to the existing trail and bikeway network

Creating connections to the existing trail and bikeway system establishes a comprehensive and connected network.



Fills a gap in the existing system

Expanding the network will create a more comprehensive network for recreation and mobility purposes and create continuous connections.



Improves an existing trail connection

Prioritizing improvements to existing trails to accommodate a variety of users with consideration for users of all ages and abilities and expand connections throughout the city.

**Creates an interjurisdictional connection**

Establish connections into surrounding jurisdictions to increase regional connectivity.

**Solves a safety issue or overcomes a barrier**

It is an essential role of alternative transportation routes to eliminate safety concerns and overcome barriers to accessibility.

**On the TxDOT Bicycle Tourism Network as a facility that serves pedestrians & bicyclists**

Developing trails that align with those designated by the TxDOT Bicycle Tourism Study as facilities for pedestrians and bicyclists increases opportunities for funding and enhances the regional network.

**Ease of implementation**

The ability to easily implement trail segments relates to feasibility and ultimately prioritizes the development of segments in the near-term. Factors considered for this criterion include property ownership, topography, floodplain, and barriers.

**Amount of environmentally sensitive area disturbed**

Minimizing disruption to the natural areas along trails is important as a measure to preserve the natural landscape and to provide scenic views along trails.

**Connectivity to schools**

Prioritizing connections to schools that provide students with safe, comfortable, and accessible routes.

ON-STREET BIKEWAY PRIORITIZATION CRITERIA



Connects to key destinations

Key destinations include existing parks, schools, major employment and shopping centers, areas of historic, cultural, or natural significance, and other community facilities.



Connects to the existing trail and bikeway network

Creating connections to the existing trail and bikeway system establishes a comprehensive and connected network.



Fills a gap in the existing system

Expanding the network will create a more comprehensive network for recreation and mobility purposes and create continuous connections.



Improves an existing facility

Prioritizing improvements to existing facilities to accommodate a variety of users with consideration for users of all ages and abilities and expand connections throughout the city.



Creates an interjurisdictional connection

Establish connections into surrounding jurisdictions to increase regional connectivity.



6 Solves a safety issue or overcomes a barrier

It is an essential role of alternative transportation routes to eliminate safety concerns and overcome barriers to accessibility.



7 Level of comfort

Comfort is a critical factor for the development of bikeways; the more comfortable a facility is perceived to be, the greater chance it will be utilized by users of all ages and abilities. The level of comfort of a roadway takes into consideration traffic volumes, speeds, and pavement widths.



8 On the TxDOT Bicycle Tourism Network as a facility that serves bicyclists

Developing bikeways that align with those designated by the TxDOT Bicycle Tourism Study as facilities for bicyclists increases opportunities for funding and enhances the regional network.



9 Ease of implementation

The ability to easily implement trail segments relates to feasibility and ultimately prioritizes the development of segments in the near-term. Factors considered for this criterion include property ownership, topography, floodplain, and barriers.



10 Connectivity to schools

Prioritizing connections to schools that provide students with safe, comfortable, and accessible routes.

FACILITIES TOOLBOX

TRAIL DESIGN STANDARDS

The previously presented proposed trail and bikeway network includes a variety of facilities that serve different functions; therefore, each adheres to specific design standards that address the safety and comfort of users as well as local and regional active transportation objectives. It is important that all trail and bikeway facilities, at a minimum, meet the standards outlined by the American Association of State and Transportation Officials (AASHTO) and TxDOT and surpass these requirements where feasible. This section outlines the design considerations for the proposed active transportation facilities in this plan. The recommendations in this plan also comply with the following standards and recommendations:

- **AASHTO** – American Association of State Highway and Transportation Officials
- **ADAAG** – Americans with Disabilities Act Accessibility Guidelines
- **ITE** – Institute of Transportation Engineers
- **NACTO** – National Association of City Transportation Officials
- **PROWAG** – Public Rights-of-Way Accessibility Guidelines
- **TAS** – Texas Accessibility Standards
- **TMUTCD** – Texas Manual of Uniform Traffic Control Devices
- **TTI** – Texas Transportation Institute
- **TxDOT** – Texas Department of Transportation

Following adoption, it is intended that the City of Denison will integrate these recommended standards into applicable development regulations. Commonly used trail and bikeway signage is included in the Appendix.

TRAIL WIDTH

Off-street trails should be between 10' and 12' wide in order to accommodate multiple user groups such as pedestrians, bicyclists, maintenance vehicles, and other non-motorized traffic. As off-street trails are intended to support a range of uses and typically span longer distances it is important that they are substantial in width.

Facilities designated as sidepaths should be a minimum of 10' to support multiple users as well as bi-directional traffic. In locations where there are significant ROW constraints, 8' wide facilities are acceptable if lower volumes of bicycle and pedestrian traffic are anticipated and additional accommodations for passing and resting are provided.

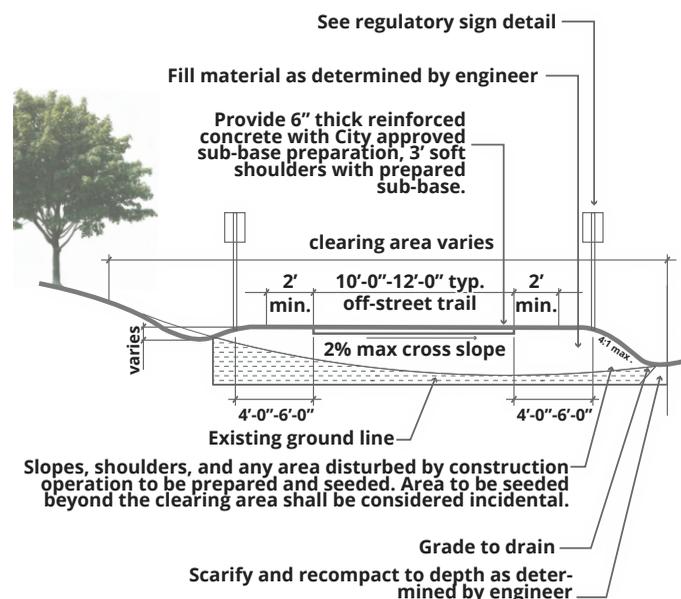
PAVEMENT STRUCTURE

The pavement of trails should be constructed of 6" thick reinforced concrete. Expansion joints should be placed in the trails at an interval of 40' for 10' wide trails and 50' to 60' for 12' wide trails. Expansion joints should be topped and sealed with a self-leveling elastomeric joint compound and should be flush with the top surface of pavement on both sides of the joint. Control joints should be placed at intervals equal to the trail width and the depth should be one-fourth of the pavement thickness. The joints should be saw-cut and ¼" wide. For optimum user comfort, the finished surface of trails should not vary more than ¼" from the lower edge of an 8' long straight edge when laid on the surface in any direction.

VERTICAL CLEARANCE

It is recommended that there be a minimum 10' vertical clearance over trails, including vegetation obstructions. This height is necessary to accommodate the access of security, maintenance, and emergency vehicles. All underpasses and tunnels must have a minimum 8' vertical clearance and low-height warning signs where 10' is not feasible.

Figure 5.1 | Typical Trail Cross Section



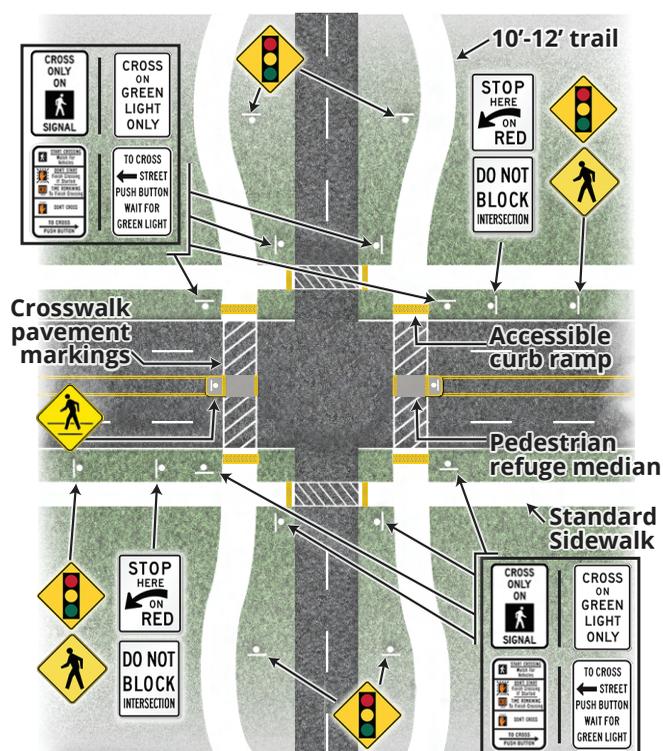
EASEMENT REQUIREMENTS

For off-street trails that are separated from roadways usually in natural areas, utility easements, or adjacent to railroads, a minimum 50' easement is typically required. This easement is crucial for safety and environmental reasons. For example, trail corridors that run along creeks need to be a certain distance away to reduce the potential impact that erosion could have on the ability to use the trail. Trails within railroad corridors require a 20' easement beyond the railway foul zone to ensure that the path and users are safely outside of the area necessary for railroad maintenance.

INTERSECTION CROSSINGS

Intersection crossings, either between trail facilities or where trail connections cross roadways, present a point of conflict. To reduce conflict, it is recommended that there be a 15' corner radius at 90-degree intersections. In locations where trails cross roadways there should be the following information and safety countermeasures: signage, crosswalk striping, and pedestrian activated signals. **Figure 5.1** depicts a typical crossing where two trail facilities intersect. Intersection crossing between trails and roadways is illustrated in **Figure 5.2**, and shows the location for all the necessary signage and pavement markings.

Figure 5.2 | Signalized Trail Roadway Intersection Crossing



TRAIL ACCESS POINTS

Trail access points are found along off-street trails and are designated areas for trail users to access the trail system. These are generally found at locations such as neighborhood parks, near key destinations, and at trail intersections. Trail access points consist of a paved spur that connect the off-street trail to existing sidewalks in a neighborhood or commercial areas. It is recommended that trail markers are implemented at the access point to clearly identify the trail and support wayfinding efforts to alert users. Additional trail amenities are not required at these locations.

TRAILHEADS

Trailheads serve as the primary entrance into a trail or trail system and are usually found at community parks, within greenbelts, and key destinations that can support trail amenities and accessibility for trail users. The majority of trail amenities are found at trailheads, such as drinking fountains, trash receptacles, parking, benches and informational signage. Trailheads help users and visitors to the area easily identify and navigate the trail system and support overall trail accessibility and comfort.

Figure 5.3 | Typical Trail Intersection

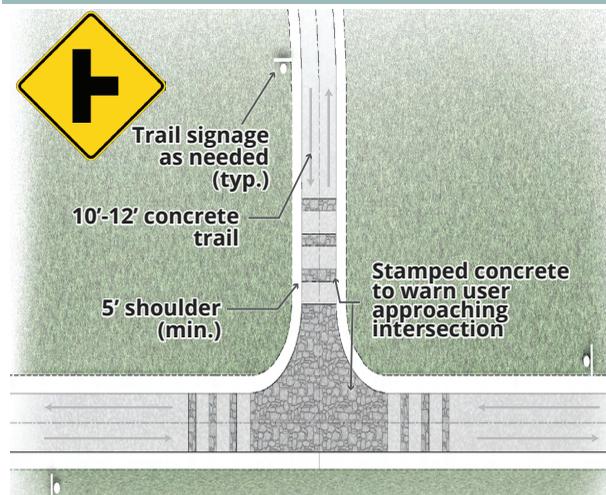


Figure 5.4 | Typical Trailhead



BIKEWAY DESIGN STANDARDS

There are three types of facilities identified to exclusively serve bicyclists within this master plan: shared-use lanes, bike lanes, and wide shoulders. This section defines the key characteristics of each facility. When determining appropriate facility type and location the following design principles should be considered:

- Future on-street bicycle facilities should be determined by evaluating a roadway in terms of traffic speeds, traffic volumes, available pavement width, and roadway functional classification.
- Bikeways should follow continuous and well-known routes through high demand corridors to create strategic connections.
- Appropriate signage, pavement markings, or a combination of both should be implemented along bikeways to communicate safety procedures to all roadway users and contribute to wayfinding needs.

SHARED-USE LANES

Shared-use lanes are a bicycle facility within roadways where the travel lanes are shared by motorists and bicyclists. Typically, these facilities are designated through pavement markings and/or roadway signage, which informs bicyclists of the existing route and alerts drivers of their presence. On roadways that are classified as local or residential streets the “share the roadway” signage is sufficient to identify shared-use lanes; however, roadways classified as collectors and minor thoroughfares require the addition of pavement markings.

Width

This type of bikeway facility is most appropriate on roadways that have lower traffic speeds (35 mph or less) and low volumes. The outside travel lane of roadways supporting shared-use lanes should be a minimum of 14', (not including curb and gutter). If the outside lane is narrower than 14', bicyclists may ride in the middle of the lane. If the outside lane is 14' or wider, state law dictates that bicyclists are to ride closer to the curb.

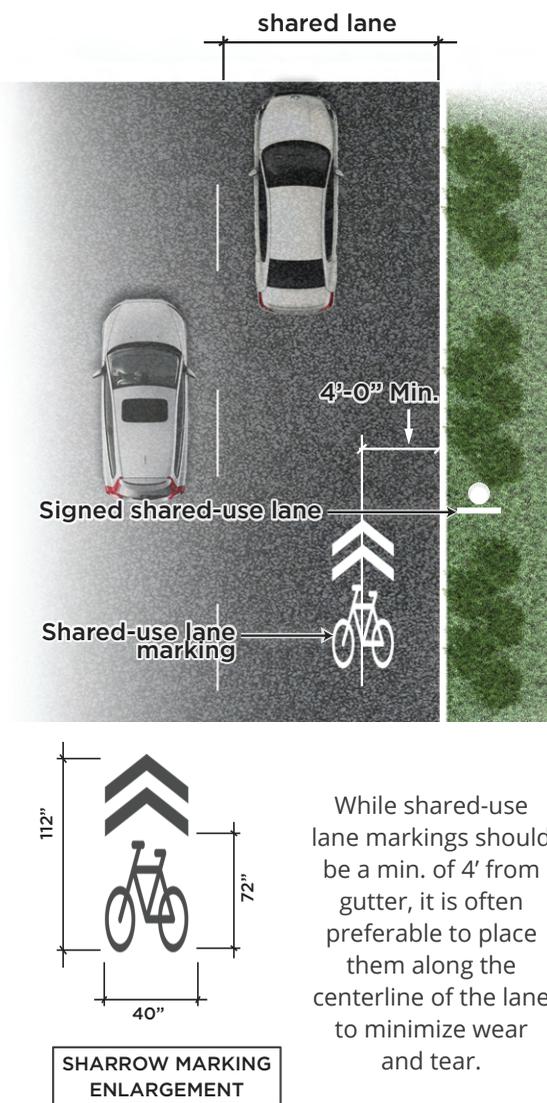
Markings

Shared-use lane markings should be a minimum of 4' from the curb on roadways that do not support on-street parking and a minimum of 5' from the outside of the parking lane or roadways with on-street parking. Markings should be placed immediately after an intersection and at intervals not greater than 250'.

Signage

Associated shared-use lane signage should be located on both signed routes and along roadways with shared-use pavement markings. Required signage includes “Share the Road,” and “Bicycle May Use Full Lane” signs which alert motorists that they may come across bicyclists and encourage respectful shared use of the roadway.

Figure 5.5 | Shared-Use Lane Typical Features



BIKE LANES

Bike lanes designate a portion of the roadway that is physically separated from motor vehicle traffic for the exclusive use of bicyclists. Bike lanes utilize pavement striping, signage, and in some cases physical barriers to create this bicycle facility. Bike lanes can be implemented as either standard or separated, which are differentiated by an enhanced level of separation typically on roadways that have more available pavement width.

Width

This bikeway facility is typically implemented on roadways with relatively higher volumes and speeds (35-45 mph). For a standard one-directional bike lane the minimum width is 4' and the preferred width is 5' for a more comfortable user experience. The design features for standard and separated bike lanes are similar except that separated bike lanes require a minimum 3' painted or physical buffer between the bike lane and vehicular travel lane. The physical buffer can be flexible pylons or a raised median.

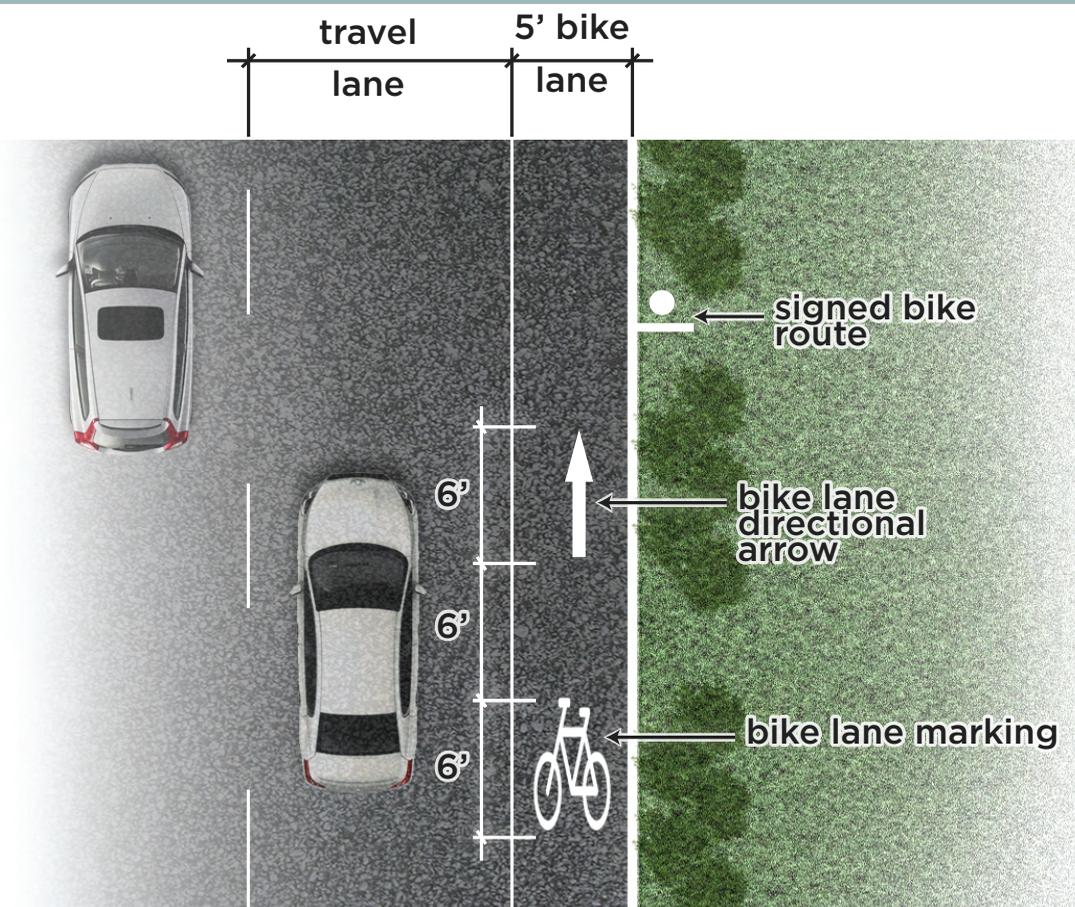
Markings

Bike lanes are intended for one-way bicycle traffic and should be indicated as such through pavement markings per TMUTCD. The pavement markings for bike lanes are characterized by a bicycle outline and directional arrow and are delineated as separate from the travel lane with a solid white stripe or 3' buffer.

Signage

Associated signage is required and indicates that the bike lane is reserved exclusively for bicyclists. The "Bike Lane" sign should be found adjacent to bike lane markings but not at all markings to avoid overuse and cluttering the roadside.

Figure 5.6 | Bike Lane Typical Features



WIDE SHOULDERS

Wide shoulders are one-directional bicycle facilities found on rural roadways. They support bicyclists that seek long distance routes to destinations typically beyond the city limits. This facility utilizes the existing roadway width and designated paved shoulder to provide additional bikeways within a community.

Width

This bikeway accommodation is typically implemented on roadways with relatively high volumes and speeds. As recommended by TxDOT, these long-range bicycle facilities are best suited on paved shoulders that are 8'-10' wide, this facility width allows bicyclists an increased level of comfort and separation from motor vehicle traffic. This width does not include the rumble strip; where rumble strips are present the shoulder should adequately provide for the required bicycle facility width beyond the rumble strip. Additionally, for the safety of bicyclists, periodic gaps in the rumble strip should be implemented to allow users to enter

and exit the bike route. A 15' gap occurring every 40'-60' is required in areas where bicycle traffic is 20 mph or slower. Where bicycle traffic is faster than 20 mph, the gap should increase to 20' or more, or the rumble strip should be located on the right side of the shoulder to eliminate conflict in bicyclists need to enter the travel lane.

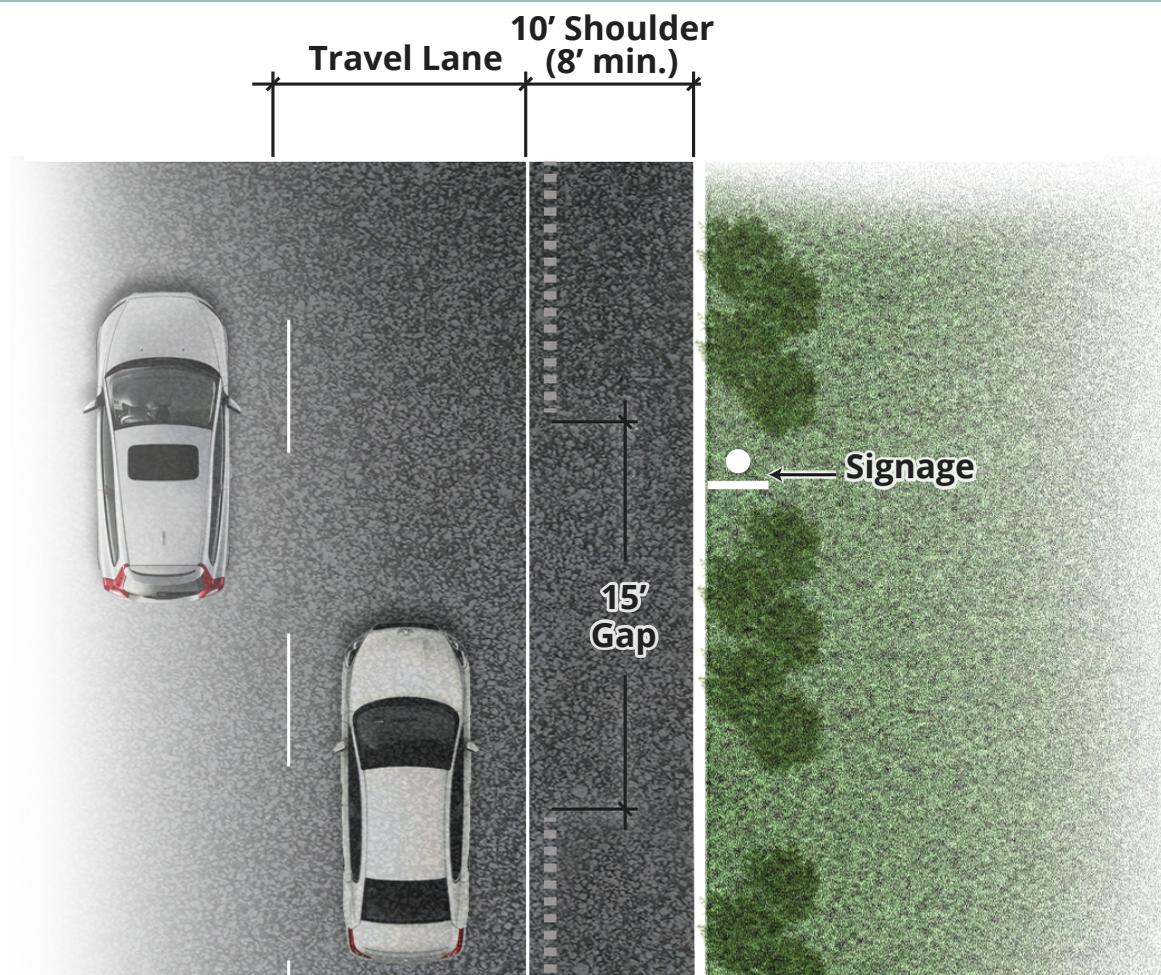
Markings

Wide shoulders that have been designated as bicycle routes are intended for one-way bicycle traffic and require a 6" solid white strip. Bicycle accessible shoulders do not typically have additional pavement markings.

Signage

Associated signage is recommended along the shoulder to indicate to motorists that bicyclists may be present and to support wayfinding for riders.

Figure 5.7 | Wide Shoulders Typical Features



INTERSECTION TREATMENTS

The previously described bikeway facilities are all located within roadways and users will eventually encounter an intersection. There are a number of safety countermeasures that can be implemented to provide safe crossings at intersections. The following are best practices for intersection safety. At a minimum, intersections should clearly imply how motorists and bicyclists navigate through an intersection through the provision of lighting, eliminating free flowing turning, and bicycle routes through intersections.

Intersection Crossings

Bicycle pavement markings that carry through intersections indicate the path for cyclists and inform all roadway users of the designated path for bicycles. Implementing an unmistakable boundary separating motor vehicle travel lanes and bicycle accommodations supports awareness of potential conflicts between roadway users and

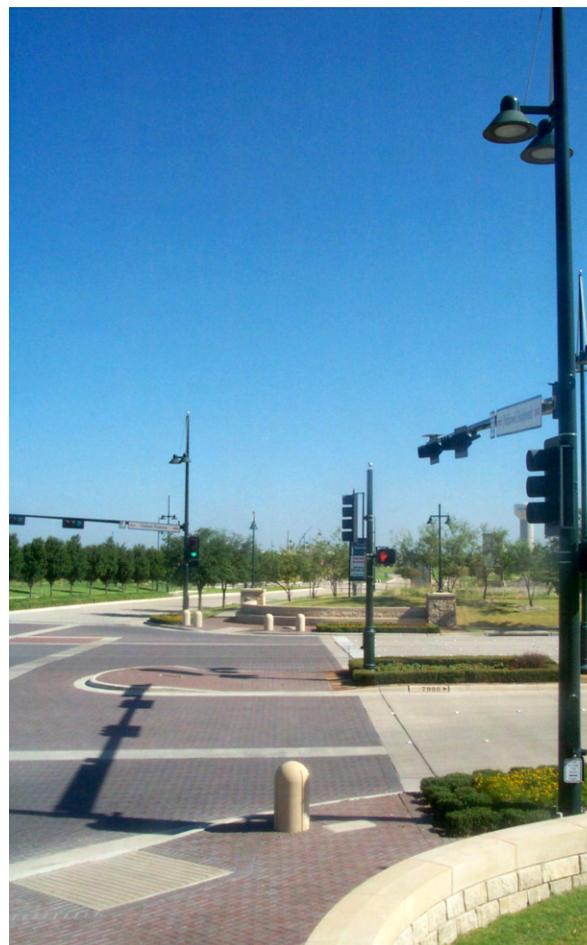
promotes a safe and comfortable crossing experience. Typical application includes signalized intersections, complex intersections where lane designations become unclear, roadways with designated bike lanes, and when driveways are crossed.

Median Refuge Island

Located between bi-directional vehicular traffic lanes, this is protected space used to facilitate safe bicycle and pedestrian crossings at intersections. The median refuge island creates an additional space or refuge at the median of a roadway. This intersection treatment is appropriate on roadways with high volumes, faster speeds, and wider pavement widths. These create a more comfortable user experience by reducing crossing length, calming traffic through physical design, and establishing priority for bicyclists and pedestrians when crossing roadways.



Example of a bike box, prioritizing bicyclists at intersection crossings



Example of enhanced crosswalk

RECOMMENDED STRATEGIES

GOAL I | PARK ACCESS

Create an accessible and connected system of parks.

A healthy park system should target providing equitable park access to all residents. Parks provide health, economic, and safety benefits that extend into a community. Studies have been conducted by organizations such as the Trust for Public Land (TPL) and the National Recreation and Park Association (NRPA) that have concluded that parks, particularly when connected by pedestrian and bicycle facilities, positively impact a community's quality of life.

Today, 54%* of Denison residents live within a 10-minute walk of a park according to metrics analyzed by the TPL ParkServe and this planning effort. The overall park system service map on page 46 illustrates the 10-minute walksheds for existing parks and indicates where there are gaps in service and where overlaps in service coverage occur. While this method of analysis can inform accessibility to park space it does not account for park conditions, size, or amenities available to residents within the walkshed.

Besides physical access to parks, park accessibility can be measured by the type of programming and amenities available. Parks can support passive and active recreational programming; both types address a range of needs and preferences of a community. Implementing a variety of passive and active amenities throughout the Denison park system will increase overall accessibility and diversity of park spaces. Awareness of the park system and available amenities is an important aspect of park access. Developing a park system brand and effectively promoting the system identity can raise awareness for residents and visitors.

In the following section, recommended objectives and actions are described that relate directly to enhancing park access in Denison.

**This number does not match that shown on the TPL ParkServe website as not all existing parks are included in the calculations.*

Objective I.1 | Improve existing park space and develop undeveloped park acreage.

Denison currently maintains a total of 18 park facilities varying in size and the type of amenities, programs, and recreation opportunities available. Existing parkland is both developed and undeveloped, which presents the opportunity for new or additional programs to be implemented, especially those that don't exist today, which can expand park level of service. Looking at existing parks, the City should consider making strategic improvements to update park amenities and address maintenance issues to better meet the needs and preferences of residents. Developing a plan to guide park improvements throughout the city will increase safety and accessibility of parks and provide needed and desired amenities that reflect latest recreational trends.

Action 1.1.1 - Develop a concept plan for the undeveloped land within Munson Park.

Munson Park is a 108-acre community park in the northeast part of Denison and the northern portion of the park is unprogrammed. The park is home to a premier 18-hole disc golf course incorporated throughout the park space, baseball/softball practice fields, and a pavilion with playground equipment, but the majority of the park remains as open space. As the park today retains the natural landscape, introducing additional passive amenities and programs would best match the existing character. A future concept plan can identify the types of park programs that would be most appropriate for the available space and how to develop the park to best serve community interests in the future.

Action 1.1.2 – Address maintenance needs and updates to amenities through an asset replacement plan.

A number of Denison parks contain amenities that are outdated and no longer meet the recreational needs of residents or present safety issues. Parks and park amenities that are safe and modernized are key to providing a community with quality park access and regular updates are necessary to maintain a high level of service. To keep track of necessary updates and present maintenance issues at individual parks, the City should explore preparing an asset replacement plan. An asset replacement plan establishes the lifecycle maintenance needs of amenities and serves as a tool to track upcoming replacements and to guide budgetary planning. This should be a subsequent effort to the adoption of this master plan.

Action 1.1.3 – Implement the master plan design concept for Loy Lake Park.

As a concurrent effort to the Parks and Trails Master Plan, a design concept has been developed for Loy Lake Park. The park was acquired by the City in 2020, adding nearly 200 acres to the city's overall parkland acreage. The majority of the park is undeveloped and presents the opportunity to implement new park amenities and programs. The City should prioritize implementation of the design concept to expand park access, introduce new park amenities, and create water recreation opportunities that will improve park service for residents and support efforts to make Denison a regional parks and recreation destination.

Action 1.1.4 – Implement the master plan design concept for Katy Park.

A design concept for Katy Park was also developed as a parallel effort to this master plan. Katy Park is a community park that serves as the location for youth soccer practices for local teams. The plan proposed for this park recommends lighted soccer fields, three parking lots, a perimeter trail and trailhead, and an active core with pickleball courts, basketball courts, splash pads, playground, and picnic area. These new amenities will better serve the surrounding community and the improved fields will create a better facility for the local leagues that currently utilize the space for practices. Creating park specific parking will help to reduce congestion on the surrounding roadways and create greater accessibility to the park space. As the City's trail network expands, the proposed trailhead will serve as a great access point into the system.



Katy Park proposed lighted field and activity core in the center of the park

Action 1.1.5 – Prioritize parkland acquisition that increases the percentage of residents that are within a 10-minute walk to a park.

About 54% of Denison residents live within a 10-minute walk of a park, which is just below the national average of 55%. Although this is a relatively high percentage, the City should continually strive to maintain or increase residents’ access to park space. To achieve greater accessibility the City should prioritize acquiring land that would be suitable to support park spaces and associated amenities. Referring to **Map 3.9** on page 46, prioritizing parkland acquisition in areas that are outside of an existing park 10-minute walkshed is recommended, as these are locations that would most significantly contribute to the increase in the percentage of residents within 10 minutes of a park. Additionally, Denison has an extensive ETJ that could be incorporated into the city through voluntary annexations; therefore, any long-range planning efforts should consider the future parkland development in the ETJ.

Action 1.1.6 – Acquire approximately 120 acres of parkland by 2040 to meet the target level of service for neighborhood and community parks.

Target Level of Service (TLOS) is a measure established by the NRPA that compares park acreage needed to support the recreation needs of a community for neighborhood parks, community parks, and the overall park system to understand park acreage needs. While Denison has a significant amount of overall park acreage, existing neighborhood and community parks don’t meet TLOS for today’s population or for the population projected for 2040. An additional 120 acres are required to meet target level of service and increase access to park spaces for residents.

Action 1.1.7 – Continue to coordinate with developers on providing new parkland and park improvements within new developments.

There are several ongoing and anticipated development projects in Denison today. These future developments present an opportunity to connect to and expand the City’s parks, trail, and recreation system. Continued coordination between the City and developers should occur to ensure that future developments provide new park spaces or support park improvements as outlined in Sections 22-100 – 22-102 of the Denison Code of Ordinances. This coordination will establish long-term planning for park spaces to support projected growth that is associated with new developments.



Forest Park

Objective 1.2 | Establish park system branding to help users locate park and recreation amenities and programs.

Creating a unique and memorable brand for a park system is an excellent way to develop an identity for the system that can be easily recognized by future and current users. A well-established brand creates familiarity and increases awareness for residents and visitors; and can be utilized in future advertising efforts for park events, programs, and activities. A successful brand should integrate elements such as history, arts, and culture that reflect the character of the city. It is important that a brand is consistently implemented throughout the system to support legibility and assist with navigation within and between park facilities. As improvements are made to Denison parks branded signage, wayfinding elements and other stylistic features should be incorporated to begin building a stronger park system identity.

Action 1.2.1 - Develop a brand that leverages the character and history of Denison.

Denison has a unique history that is proudly highlighted in areas of the City and through initiatives such as the Ike Hike along Main Street. Additionally, the city is geographically positioned in a part of the state where there are key natural destinations. The history of Denison can be woven into the park system through implementation elements such as educational or interpretative signage. There is an opportunity to partner with public and/or private entities such as the Eisenhower Birthplace State Historic Site to provide insight for integrating historical elements into parks. Linking the park system brand to the character and history of Denison will create a sense of familiarity that residents identify with and encourages visitors to learn more about the city.

Action 1.2.2 - Develop a wayfinding program to direct users as they navigate the park system.

Wayfinding is a system of navigational tools that help guide users through a park system and locate key destinations or amenities. Through branded elements such as signage and maps users will be able to recognize that they are within a Denison park and easily reach desired locations or explore new amenities. A wayfinding program should be consistent, legible, and easily identifiable to efficiently serve users, especially those that are unfamiliar with the park system. Wayfinding can serve as an educational tool that informs users of new or previously unadvertised park amenities and programs.

Action 1.2.3 - Use the system brand to increase awareness of the offerings in the park, recreation, and trails system.

A park system brand can be used in future marketing and public outreach efforts conducted by the City. Associating future advertisements with the brand will be easily recognized by residents and build continuity. The brand can be utilized to spread awareness of ongoing activities, upcoming events, or new programs. As future programs and events arise related to parks, recreation, and trails the City should coordinate with appropriate departments and groups to ensure that branding is utilized and consistent.



Park branding in Prosper, Texas

Objective 1.3 | Create a balance between active and passive park programming.

The park system should be developed and maintained in a manner that supports a balance between natural open space intended for passive recreation and heavily programmed spaces for active recreation. A diverse range of park types that vary in the programs and amenities available is necessary to sufficiently serve the outdoor recreation needs of a community. To best support park and recreation demands, parks should accommodate a multitude of uses that serve the greater community rather than prioritizing a single use. Denison has the opportunity to incorporate passive uses that are unavailable to other communities due to its geographic location, proximity to water bodies, and available land. Preserving the natural landscape and creating access to natural areas should be considered as future developments occur. As a major city in Grayson County that supports numerous local and regional sports teams and events, the City should consider modernizing practice facilities to accommodate future growth and anticipated demand.

Action 1.3.2 – Update practice facilities to better serve local sports and athletic associations.

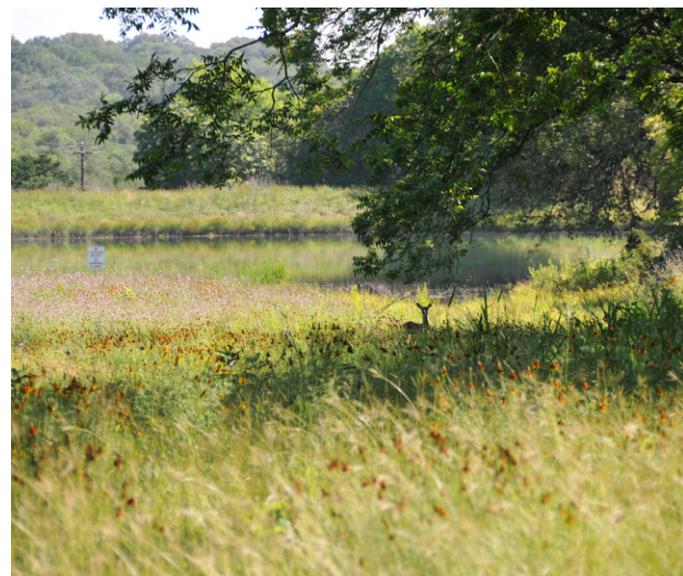
As a local and regional hub for sports and athletic teams (primarily youth), it is important that practice facilities adequately support demand. Many of Denison’s existing practice facilities are beginning to show signs of age and cannot support the increase in demand that has occurred in recent years. Needed improvements include improving surface conditions, replacement of nets or fencing, reconditioning turf, and providing supplemental amenities such as seating and lighting.



Texoma Health Foundation Park

Action 1.3.1 – Preserve open space to support passive recreation uses.

Denison has a significant amount of undeveloped land within its city limits and has an extensive ETJ. Open space that maintains the natural landscape is an important part of a parks system as it supports passive recreation activities, is low-maintenance, and preserves the integrity of the natural environment. For many cities, land designated as unprogrammed open space is scarce; therefore, it is advantageous for Denison to preserve its natural landscape and designate it as open space to ensure it will be maintained in the future and continue to support passive recreation needs.



Preserved Open Space

Action 1.3.3 – Identify locations within existing parks that would be suitable for implementation amenities and programs that don’t exist today.

Future investments should be made to implement new park amenities and programs that are lacking or nonexistent in Denison today. The City should determine the appropriate location within existing parks where these amenities could be implemented. Part of this selection process should consider aspects such as necessary parkland acreage, existing support amenities, community accessibility, and the surrounding neighborhood. Parking at regional and community parks is an increasingly important amenity, allowing residents and visitors to more easily access parks spaces. Waterloo Lake Regional Park in an example of an existing park that would benefit by having additional parking. Incorporating new amenities and programs will allow Denison to keep up with regional and national park and recreation trends that better meet the demands of residents.

Action 1.3.4 – Increase water access to allow visitors to Waterloo Lake Regional Park and Loy Lake Park the ability to participate in active and passive water recreation opportunities.

Denison has two parks that have lakes, which presents the unique opportunity to support water recreation programs. The City should consider expanding its current water recreation offerings and points of access. These opportunities can include active recreation such as human-powered watercraft, like kayaks and canoes, as well as passive recreation such as educational programs. As Loy Lake is largely undeveloped, new forms of water recreation and water accessibility that don’t exist today can be incorporated and would be unique assets to leverage in the future when promoting the city as a parks and recreation destination in North Texas. Additionally, the City should explore obtaining a lease at Lake Texoma, which is just north of the City, to expand waterfront offerings and create new lake access opportunities.



Waterloo Lake Regional Park fishing pier

GOAL 2 | AMENITIES

Provide park, trail, and recreation amenities that serve users of all ages and abilities.

An important element of a comprehensive park system is providing amenities that are safe, routinely maintained, and that address the needs and preferences of the community they serve. Park amenities largely contribute to the overall health of the community as they support healthy activities that are accessible to the community at large. Similar to many communities, Denison parks have amenities that need updates or improvements as they do not meet safety standards or support current outdoor recreation trends. The City should strategically identify parks with amenities in the greatest need of improvements. Additionally, park amenities should enhance the overall character of a park and the park system by incorporating elements that promote the history, culture, and community identity.

This plan establishes four classifications of parks – regional parks, community parks, neighborhood parks, and pocket/mini parks – to inform design, safety, and amenity standards that are appropriate for parks based on size and amenity offerings. Determining the amenities and programs most suitable for each park classification should be based on the following principles:

- Parks should include passive elements contributing to a clean and comfortable environment;
- Active amenities and programming should support recreation to the intensity permitted by the size of a park; and,
- All amenities should be maintained equitably, based on park size, to ensure safety of users.

In the following section, recommended objectives and actions are described that relate directly to enhancing park, recreation, and trail amenities in Denison.

Objective 2.1 | Ensure that parks provide amenities that meet the demand and interests of the community.

Communities are best served by parks when amenities address the needs and interests of residents of all ages and abilities. As Denison continues to grow and change over time, it is vital that available park amenities align with current outdoor recreation trends, meet target level of service standards, and reflect community preferences. As parks are a public amenity, generally with a broader user group, their primary goal is to provide diverse amenities and programs that create environments where users feel comfortable and safe. As future amenities and programs are needed, or as existing amenities require replacement, it is important that the City pursue regular funding opportunities and partnerships to assist with implementation.

Action 2.1.1 – Provide a diverse range of amenities that align with community interests and follow latest recreation trends.

Amenities within parks should reflect the demographic, cultural, and neighborhood diversity of Denison to best meet the needs and preferences of the entire community. It is anticipated that Denison will continue to grow and the city will become increasingly diverse, creating change in recreational interests; therefore, the city should continually work to ensure that park amenity and program offerings address current interests. For example, the needs assessment and the public engagement process indicated a need and desire for an additional dog park within the overall park system. Over time, it can be expected that innovations are made in park and recreation amenities and that trends change. Regularly reviewing park programs and looking to peer communities will allow the City to consistently meet the needs and level of service targeted for its residents. User satisfaction surveys can also help identify needed changes to programs or amenities.

Action 2.1.2 - Incorporate inclusive play amenities where feasible to address the needs of users of all ages and abilities.

Providing outdoor recreation opportunities that meet the needs and interests of users of all abilities is an essential responsibility of a city's park and recreation department. Incorporating inclusive play equipment and programming into parks allows children, parents, and caregivers to enjoy a park space regardless of physical, mental, or sensory abilities. Nationwide, communities have increasingly explored incorporating inclusive play into new or existing parks to better serve outdoor recreation needs of the community. The City should determine where it would be feasible to implement inclusive play equipment in existing parks and work with community partners to advance future efforts to enhance accessibility of inclusive play amenities.



Inclusive play equipment in PlayGrand Park in Grand Prairie, Texas

Action 2.1.3 - Pursue funding opportunities to support regular maintenance and modernized amenities.

Regular maintenance is a necessary part of the park system to ensure that park amenities remain safe and usable. As amenities reach the end of their lifecycle or as technology progresses, park amenities will need to be replaced to maintain the target level of service for the community. To support ongoing maintenance needs and periodic implementation of new amenities, the City will need to pursue sustainable funding to ensure these efforts can be achieved. Funding support should be pursued on a local and regional level through grant programs or public/private partnerships.

Action 2.1.4 - Address deficiencies in park amenities based on existing level of service targets to better serve recreation needs.

Availability and condition of park amenities are good measures of how well parks are serving the community. Deficiencies in park amenities indicate that the demand for an amenity is far greater than the supply, which means the community is not being appropriately served. Reviewing the existing deficiencies in park amenities indicates what facilities need to expand in the future, especially as new park spaces are developed or existing park spaces receive new programming. The needs assessment conducted in Chapter 3 of this plan indicate that there are several park amenities that should be expanded upon to better serve the community.

Action 2.1.5 - Implement the recommendations from the aquatics feasibility study to either improve the existing pool or build a new aquatic facility.

Denison has one municipal pool within Waterloo Lake Regional Park where residents can participate in classes, recreational swimming, or host events. The facility is also utilized by local swim teams for practices and meets. The City is currently conducting an aquatics feasibility study to determine how to best serve residents in the future, either through improvements to the existing pool or developing a new aquatic facility. The recommendations proposed by this study should be implemented by the City to ensure that the aquatic needs of residents today and in the future are met.

Objective 2.2 | Integrate Denison's history throughout the park and trail network.

As the birthplace of President Eisenhower, Denison has a rich history that largely contributes to the city's identity. The overall user experience of parks and trails can be enhanced by implementing elements that incorporate the City's history. This can be achieved through elements such as public art, interpretive signage, and interactive educational opportunities. Partnering with historic and cultural organizations in the City can help establish new initiatives and assist with future implementation of park and trail programming.

Action 2.2.1 - Include elements such as public art, outdoor education opportunities, and interpretive signage to reflect Denison's history throughout the parks and trails system.

Parks and trails are ideal placemaking opportunities where the identity and history of a city can be exhibited. Community groups that are focused on the art, culture, and history of Denison can be an excellent resource for employing local talent into the park and trails system. Distributing unique elements such as educational activities or programs and interpretive signage throughout parks and trails that identify historic locations, people, and events present the opportunity to highlight Denison's history.

Action 2.2.2 - Coordinate with community entities to build upon the momentum of existing historic and cultural initiatives.

As a city that is proud of its history, there are many community organizations that have invested in highlighting historical people, events, and locations as well as integrating history throughout the city. Future coordination with these groups will allow the city to build on initiatives and potentially expand them into parks and trails. Working with public or private entities focused on Denison's history will be a great resource for generating new ideas and providing accurate information that can be used for educational programs or interpretive signage.

Action 2.2.3 - Support events and programs in parks and along trails that highlight the City's history.

Promoting parks and trails as locations to host community events not only increases awareness of these spaces but can be used to highlight the city's history. Instituting events that reflect Denison's history and occur throughout the year will bolster city identity as well as the identity of the parks and trails system, especially if events are diverse and attract a variety of interests. The city should partner with community organizations to plan and promote future events in parks and along trails.



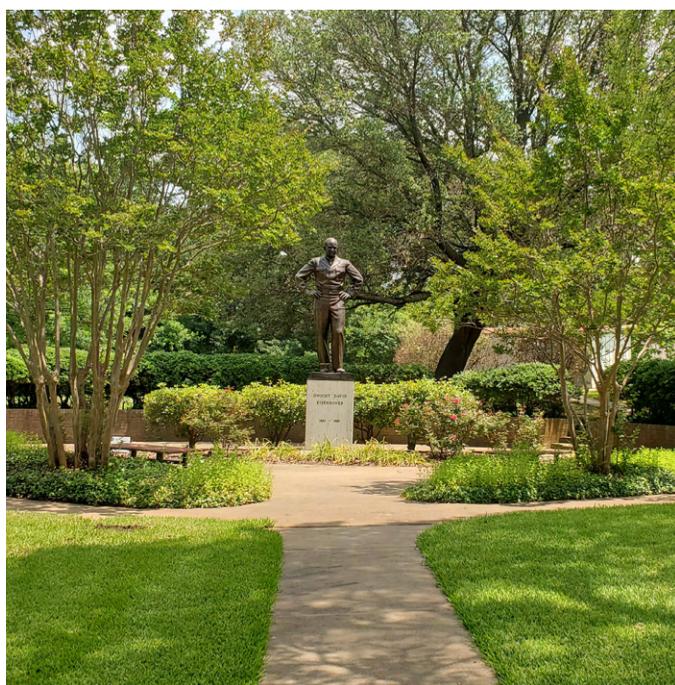
Interpretive signage along a park trail



President Eisenhower monument at Loy Lake Park



Frontier Village within Loy Lake Park



Bronze statue of President Eisenhower



Eisenhower Birthplace Historic Site

Objective 2.3 | Establish consistent and equitable amenities appropriate for each park type.

As defined in Chapter 3, there are four types of parks in Denison characterized by size, recreation offerings, and level of service. Just as these parks differ in size, they also have varying capacities for the types of amenities that they can support. For example, neighborhood parks are intended to serve the immediate surrounding area and tend to be one of the smaller types of parks, whereas regional parks are expansive and can host a variety of amenities that serve the entire city and surrounding communities. The differences illustrated in this example conclude that park types cannot be measured against one another as this would not accurately indicate how well a park serves the community. The City should consider developing design and amenities standards specific to each park classification to ensure amenities are distributed in a manner that is equitable and consistent across the city.

Action 2.3.1 - Develop a set of design and amenity standards appropriate for each park classification.

A defined set of design and amenity standards should be implemented for each park typology to create consistency in park service and enhance park spaces through equitable provision of amenities that also address safety concerns. The four park typologies outlined in this plan are classified to serve different recreational purposes based on the amenities that are suitable for the individual park space. Design standards that the city develops should consider the type of active and passive recreation amenities suitable for each typology informed by park size and target level of service. As Denison implements park design and amenity standards, existing parks should be improved to comply with established standards and meet safety requirements.

Action 2.3.2 - Consistently review recreation trends to ensure parks are meeting service needs and community interests.

Over time it can be expected that recreation trends will change, and the interests of the community will evolve as demographics shift. The City should regularly review local and national park and recreation trends to determine future enhancements and improvements that need to be conducted to better serve the needs and interests of the community. Resources such as the NRPA can identify recent and upcoming trends for park and recreation amenities and programs. Keeping up with current recreational trends will positively contribute to Denison becoming an outdoor recreation destination in North Texas.

Action 2.3.3 - Provide equitable distribution of amenities throughout the city.

Park systems best serve a community when the amenities offered are equitably distributed throughout the city. As previously established, the type of amenities that are offered at parks depend on park typology. One of the primary goals of the park system should be to provide consistent amenities at all parks within the same classification through the standards developed as an outcome of Action 2.3.1. For example, users should be able to expect that the amenities available at one neighborhood park location are likely to be found in another neighborhood park. Equitable distribution of amenities contributes to park level of service and increases accessibility to amenities for all residents.

GOAL 3 | TRAILS & BIKEWAYS

Expand the trail and bikeway network to connect to key destinations throughout the City.

Throughout the public and stakeholder engagement process for this master plan, the desire for additional trail and bikeway facilities was discussed often. The recent opening of Phase I of the Katy Trail proves what a great amenity a connected trails system can be. The soft-surface trails within Waterloo Lake Park are also well-used. However, currently there is limited connectivity to other parts of the community such as neighborhoods, parks, schools, and employment centers. The trail and bikeway network recommendations presented earlier in this chapter (see pages 79-84) seek to provide a more connected system, but the City needs changes to policies and operations in order to implement these recommendations.

In the following section, recommended objectives and actions are described that relate directly to increasing trail and bikeway connectivity in Denison.



Existing development is a barrier to future trail development within utility easement

Objective 3.1 | Ensure that trail and bikeway facilities are safe and appropriate for all ages and user groups.

User comfort on trails and bikeways is directly related to one's ability and experience level. For example, more advanced cyclists typically feel comfortable riding on roadways without a designated bikeway accommodation, but beginner cyclists typically prefer a separated path such as an off-street trail that is located away from motor vehicle traffic. In order to accommodate the greatest number of user groups, a diverse range of trail and bikeway facilities is recommended, as described earlier in this chapter.

Action 3.1.1 - Identify areas where there are existing safety concerns or barriers along trail and bicycle routes.

As discussed in Chapter 4, several potential safety concerns were analyzed during the needs assessment process of this master plan. Locations of recent bicycle and pedestrian crashes were reviewed and barriers such as unsafe intersections, major infrastructure, and waterways were assessed. As implementation of the recommended trails and bikeway network moves forward, identification of barriers should occur again to determine if any new barriers are present that need to be addressed in the design of the facility.

Action 3.1.2 - Develop design and construction standards for trails to provide a safer and more comfortable experience for users.

The Facility Toolbox section earlier in this chapter (see pages 89-94) identifies proposed considerations for the design of all of the recommended facility types as presented in this master plan. Design considerations include trail width, pavement structure, clearance, easements, intersection crossings, access points, markings, and signage. The intent is that these design standards be codified in the city's development regulations after adoption of the master plan. That will give clear and predictable guidance on expectations for the construction of trails and bikeways moving forward.

Action 3.1.3 - Establish a hierarchy of trail and bikeway facilities to serve different users and functions.

It is important to have a defined hierarchy of facilities to provide clear expectations of what the user can expect in terms of comfort and amenities. The hierarchy of trails and bikeways as presented earlier in this chapter includes the following:

Trail Facilities

- Off-Street Trails
- Sidepaths
- Soft-Surface Trails

On-Street Bikeways

- Shared-Use Lanes
- Bike Lanes
- Wide Shoulders

The different facility types serve a variety of users and functions and should be codified with the update of the city's development regulations once this master plan is adopted.

Action 3.1.4 - Initiate a bicycle safety awareness program to educate bicyclists and motorists on sharing the roadway.

Oftentimes there are conflicts between cyclists and motor vehicles because one or both users are not aware of proper etiquette in using the shared facilities. The initiation of a safety awareness program can help better inform the various users about sharing the road in a safer manner. Many communities nationwide have implemented some type of program and there are lots of resources for bicycle advocacy groups that can be referenced such as the League of American Cyclists. Typical topics addressed in a safety awareness program include etiquette for roadway crossings, trail crossings, and interpretive signage and markings. Some programs are developed in partnership with school districts so children can be involved as well.

Action 3.1.5 - Develop standards for safe intersection crossings where trails intersect with roadways.

One of the most potentially dangerous points for trail and bikeway users are where trails intersect with roadways. Without proper intersection treatments, signalization, and signage, there is greater potential for accidents. The facility toolbox section earlier in this chapter identified recommendations for safety countermeasures at intersections such as signage, crosswalk striping, and pedestrian signals. These recommendations should be codified with the rest of the design standards in an update to the City's development regulations.



Best practice image of trail/roadway crossing

Objective 3.2 | Implement wayfinding signage to increase awareness of the trail and bikeway system for residents and visitors.

There are many unique experiences that residents and visitors can have in Denison, so a well-defined wayfinding system for drivers as well as trail and bikeway users is important. Wayfinding to the actual trail system can also help spread awareness of trails and subsequently increase usage. There was significant discussion during the master plan process regarding making Denison a recreational tourism destination, with which wayfinding signage can help.

Action 3.2.1 - Develop a wayfinding program unique to Denison that allows users to easily navigate the trail and bikeway system.

Wayfinding programs can help make a trail system more legible and create a more comfortable user experience. Components included in a wayfinding program can include directional signage, trail and bikeway location maps, and informational kiosks that describe amenities and destinations found along trails. A consistent design style is important for a wayfinding program so users can easily identify a trail. Other considerations for wayfinding signage include scale, legibility for different types of users, and materials.

Action 3.2.2 - Identify locations for trailheads and trail access points at key places along trails.

Map 5.2 earlier in this chapter identified three proposed trailheads and five proposed trail access points to implement as the trail system grows. Trailheads serve as primary entrances to the trail system and include amenities such as parking, seating, informational signage, and drinking fountains. They serve as ideal places for people to meet up before using a trail and are typically found near existing parks. Trail access points are designated areas where users can access a trail from a neighborhood or commercial area. Since many of the recommended trails in Denison are off-street, it is important to designate where users can safely access the trail. There are typically fewer amenities found at trail access points than at trailheads.



Trailhead at Heritage Park in Flower Mound, Texas



Example of park system branding in Oklahoma City, Oklahoma

Action 3.2.3 - Develop clear and highly visible roadway signage and markings for all bikeway facilities.

The implementation of on-street bikeway facilities is only possible with safe educational and cautionary signage for both drivers and cyclists. This includes share the road signage, bike lane signage, and yield signage, among others. All signage should be consistent with MUTCD standards. Commonly used trail and bikeway signage can be found in the appendix.



Legible trail and bikeway signage in Flower Mound, Texas

Action 3.2.4 - Explore developing online mapping tools to increase legibility of the trail and bikeway system

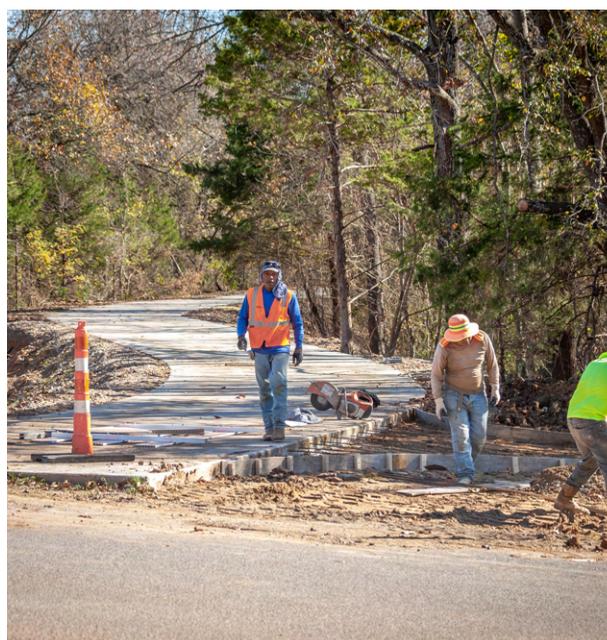
Paper and printed maps can quickly become out of date, especially as the trail system grows. An alternative would be to invest in an online map that can be more quickly updated as the trail system changes. ArcGIS Online is a popular platform used by many municipalities to host interactive maps. The City should explore developing an online mapping software to display trail routes and associated length, difficulty, and amenity information for increased transparency for trail users.

Objective 3.3 | Increase mobility in the City through alternative transportation options.

While Denison and other Texas communities are primarily car-oriented, this master plan process has shown that there is interest and demand for additional transportation options. Alternative transportation refers to other modes of transportation such as walking, cycling, or transit. The recommended trails and bikeways in this master plan will help increase alternative transportation mobility throughout Denison and surrounding areas.

Action 3.3.1 - Expand Denison’s existing trail and bikeway system to create more connections to key destinations throughout the city.

Denison currently has just under 5 miles of paved trails and just under 6 miles of soft-surface trails. Based on a comparison to similar benchmark communities, Denison has fewer miles of trails than similar communities. Phase II of the Katy Trail will add additional mileage to the system in the near term, but the 101 miles of future trail and bikeway facilities recommended in this plan will create a more complete system. Priority segments should include those that connect to key destinations such as schools and parks.



Construction of the Katy Trail

Action 3.3.2 - Explore implementing enhanced safety countermeasures at key trail and bikeway road crossings.

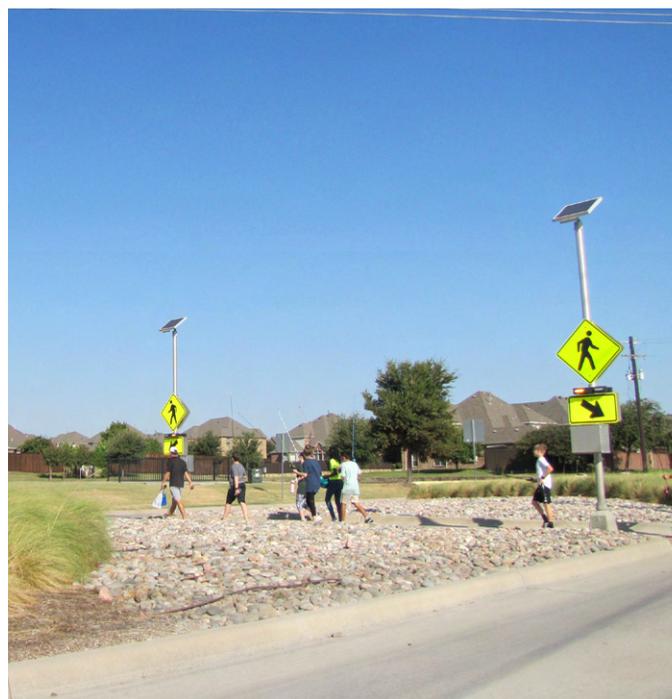
The greatest potential for conflict between trail and bikeway users and motor vehicles is where these facilities intersect with roadways. The safest place for this to occur is at existing roadway intersections so pedestrian signals and crosswalks can be added. However, in some cases this is not feasible and a mid-block crossing away from an intersection is needed. Best practices for safety countermeasures at mid-block crossings include pedestrian activated signals, crosswalk striping, cautionary signage, and rumble strips leading up to the crossing.

Action 3.3.3 - Explore partnering with TxDOT to implement bikeways along the Texas Bicycle Tourism Study routes.

The Texas Bicycle Tourism Study is a statewide initiative spearheaded by TxDOT to highlight potential bikeway corridors that highlight the natural and historic landscapes throughout the state. There are a series of routes on the proposed network that traverse through Denison, including FM 406, FM 1310, SH 91, through downtown, and continuing east on FM 120. This route includes some of the key historic and cultural features within Denison. Since TxDOT is the agency that initiated the study, there may be funding opportunities in the future to help implement these routes.

Action 3.3.4 - Prioritize connections to key destinations within the City, including downtown, parks, schools, the Eisenhower Birthplace, and other points of interest.

As part of the trails needs assessment and analysis, an inventory of key destinations was compiled to identify prime locations in order to prioritize active transportation connections. As shown in **Map 5.2** earlier in this chapter, if the proposed trail and bikeway recommendations were implemented, destinations such as parks, schools, downtown, the Eisenhower Birthplace, and neighborhoods would be better connected.



Signalized pedestrian crossing in Prosper, Texas



Downtown is a key destination that should be prioritized for pedestrian and bicycle connections

Action 3.3.5 - Continue to coordinate with other departments and developers to ensure that trails and bikeways are incorporated into new developments.

Whenever the City's development regulations are updated to include the proposed trail and bikeway design standards presented in this master plan, it should be clearly stated what the expectations from developers are in terms of providing trails and sidewalks. Development standards in many communities are outdated in terms of the width of facilities that are required. Current AASHTO standards for a multi-use trail is now a minimum of 10' to be able to safely and comfortably accommodate multiple user groups. Continued coordination with the City's planning department as well as developers is needed to ensure that the recommendations in the master plan are realized as development occurs.

Action 3.3.6 - Work with surrounding communities to implement regional trail connections.

The only immediately adjacent community to Denison is Sherman, and the two communities have been working together on planning for the regional Katy Trail. There are other communities further away from the Denison city limits that could also be connected, including Pottsboro, Bonham, and Whitesboro. The wide shoulders bikeway recommendations included in the recommendations map would provide more regional connections. Partnerships with these nearby communities will be important to implement the recommendations over time.



Regional destination - Eisenhower State Park

Action 3.3.7 - Pursue implementation of trail corridors that meet recreation, culture, nature, and regional goals.

Opportunities to expand the trail system can help achieve recreation, culture, nature, and regional goals as described below:

- **Recreation:** Trails that provide connections to existing parks so park visitors can walk or bike to their destination instead of driving in a car.
- **Culture:** Trails that connect to cultural destinations such as downtown and the Eisenhower Birthplace monument.
- **Nature:** Trails that highlight unique natural settings in Denison near the lakes and along creek greenbelts.
- **Regional:** Trails that tie to other communities such as Sherman or that lead to communities further away.



Trail entrance at Eisenhower State Park

GOAL 4 | RECREATIONAL TOURISM

Leverage the park, trail, and recreation system to encourage tourism.

There are many unique aspects to Denison that can help make it a recreation destination, including the various lakes, changes in topography and scenic views, and a rich community history that can be incorporated into the parks, recreation, and trail system. Many residents and visitors utilize the water bodies within Denison for boating, fishing, and paddle sports. For lakes maintained by the City, this presents opportunities to capitalize on potential revenue related to lake access. In terms of sports, THF Park is already a premier destination for youth sports in the region, drawing both local and regional users. With some slight modifications, the sports complex could draw in even more revenue for the City. Finally, there are other opportunities that exist for the parks system to generate revenue, including camping and events within parks.

In the following section, recommended objectives and actions are described that relate directly to enhancing recreational tourism opportunities in Denison.

Objective 4.1 | Leverage lake access by supporting water recreation opportunities.

Within the City of Denison there are three lakes: Loy Lake, Waterloo Lake, and Randell Lake. Also in close proximity is Lake Texoma at the Texas-Oklahoma border. While the function of these lakes differ, the two lakes that represent the greatest opportunity for capitalizing on water recreation are Loy Lake and Waterloo Lake. Randell Lake serves as a water source for the City, so water recreation is not recommended for that site.



Rental equipment available at Waterloo Lake Regional Park

Action 4.1.1 - Provide a variety of water sport rentals (kayaks, canoes, paddle boards) at lake access points in Waterloo Lake Regional Park and Loy Lake Park.

Paddle sports such as kayaking, canoeing, and stand-up paddle boarding are increasing in popularity due to the health benefits and relative ease in which to learn. Currently at Waterloo Lake Regional Park there is a kayak rental station that is available from March to November each year. Based on the continued success of this rental station, the City should consider including canoes for rental as well in addition to adding a rental station at Loy Lake once that lake is dredged. Rental prices should be evaluated on an annual basis to ensure the City is achieving the best possible return on its investment.

Action 4.1.2 - Implement additional launch points along the lakes to improve water access.

Paddling launch points are designated areas where paddle sport users (kayakers, canoers, and stand-up paddle boarders) can safely access the water. Typical amenities associated with a launch point include floating docks, rental facilities, trash receptacles, and parking. Since these sites are often located within an existing park or adjacent to a boat ramp, many of these facilities may already exist. In that case, a low-cost improvement would be to add signage to formally designate the site as a launch point. A small boat ramp already exists at Waterloo Lake. A launch point has been designated on Loy Lake and should be implemented once it is determined feasible to encourage safe entry into the water for paddle sport users.



Launch points along Lake Ray Hubbard in Garland

Action 4.1.3 – Utilize the lakeshores to host events and special programs throughout the year.

The Denison Parks and Recreation Department hosts a variety of events within the parks system already, including the Easter Egg Hunt, Fishing Derbies, and various runs. The lakeshores at both Loy Lake and Waterloo Lake represent scenic opportunities to host additional events throughout the year that can bring in revenue for the City. Special programs may include fishing lessons, educational classes, and interpretive signage.

Action 4.1.4 – Enhance fishing opportunities at Waterloo Lake and Loy Lake.

Many people flock to Waterloo Lake for fishing, which is stocked by the Texas Parks and Wildlife Department (TPWD) each year. There is currently a small fishing pier located there that could be expanded. At Loy Lake, the lake needs to be dredged before it can be stocked with fish. The Loy Lake concept plan, developed in conjunction with this master plan, identifies the ideal location for a fishing pier in the future.

Action 4.1.5 – Explore opportunities to enter into a lease with the USACE for parkland along Lake Texoma.

Lake Texoma is one of the premier recreation destinations in the greater Denison area. Visitors travel from across Texas and Oklahoma to participate in a variety of water and lakeshore activities. The USACE owns the majority of the shoreline but has extended leases with entities for parts of their land. Some of the 100-year leases that the USACE manages are set to expire soon, which presents an opportunity for the City of Denison to explore the potential for a partnership with the USACE for a park along Lake Texoma. The City should consider enough parkland to serve as a regional park.

Objective 4.2 | Make Denison a park, trail, and recreation destination of North Texas.

There are opportunities to leverage the unique aspects of Denison to make it a recreation destination within the greater North Texas region. This includes enhancing existing amenities and exploring opportunities to add additional amenities that don't exist today. Opportunities include enhancing sports and athletic facilities and adding adventure amenities. Particularly since the onset of the COVID-19 pandemic, people are looking for more opportunities to recreate outdoors and value unique experiences.

Action 4.2.1 – Conduct a feasibility study to determine the ideal location for adventure amenities such as zip lines and obstacle courses.

Through the master plan engagement process, a desire for adventure amenities was noted by staff, Steering Committee members, and residents. Adventure amenities could include zip lines or obstacle courses. These types of amenities are typically offered by a private provider in partnership with a municipal Parks and Recreation Department. This puts the liability on the private company and not the city. For example, the City of Plano has contracted with Go Ape to provide a zip line and obstacle course at one of the large nature preserves within the City. Considerations for siting this type of amenity include an area with significant vegetation, parking, and space for a trailer for the amenity provider.



Visitors fishing at Waterloo Lake Regional Park

Action 4.2.2 – Expand upon THF Park sports complex facilities, including supporting infrastructure such as parking, to support regional events and tournaments.

THF Park is a very successful sports complex featuring soccer, baseball, and softball fields. The complex hosts a number of local and regional tournaments each year. With any successful park, there are going to be issues that arise as demand increases. One issue at THF that has intensified over time is the lack of parking within the complex. During times of high use such as tournaments, visitors often have to search for parking elsewhere. A return on investment (ROI) study conducted in 2021 found that additional parking at THF Park could lead to an increase in total revenue of approximately 43% from tournament registration and food and beverage spending. Therefore, the City should explore additional opportunities to provide parking at THF Park, including additional on and off-site parking and shuttle services for tournaments.



Existing parking at THF Park

Action 4.2.3 – Promote Munson Park as a premier course for disc golf tournaments.

Munson Park is a large community park in the northeastern portion of the community that boasts an 18-hole disc golf course featuring rolling hills and lots of trees for a challenging course. The course is heavily used by residents and visitors and disc sets can be rented from the City. While the course is currently used to host some tournaments, there are improvements that could be made to make it a more premier course to host additional tournaments. These include improvements to the park itself such as additional parking and wayfinding signage, improved restroom facilities, and infrastructure to allow food trucks during tournaments similar to the arrangements at THF Park. Additionally, coordination with the Denison Area Chamber of Commerce to promote the course can help spread the popularity of the site.



Munson Park Disc Golf Course

Objective 4.3 | Utilize park spaces in ways that generate revenue.

While the primary objective of municipal park and recreation agencies should be to provide quality and safe places for residents to recreate, a secondary objective should be to seek to generate revenue through the parks and recreation system. There are many studies that have shown the economic benefits of parks and the positive economic development they can bring to a community. The actions in this objective relate to introducing new amenities and enhancing existing amenities to generate more revenue for the parks system.

Action 4.3.1 – Designate areas within Loy Lake Park for both primitive and RV overnight camping.

The City has embarked on a master plan for Loy Lake Park as a complementary effort to this overall system master plan. Key stakeholders and users were engaged throughout the process to get feedback on the types of amenities they desired at the park. One such amenity was campsites, including both primitive camping (without electricity or water hook-ups) and RV camping (designated sites with electricity and water hook-ups). The proposed concept plan for Loy Lake designates where these camping sites could be located.



RV camping in Grapevine, Texas

Action 4.3.2 – Support annual and seasonal events, festivals, and celebrations within park spaces.

The City of Denison Parks and Recreation Department hosts a variety of events each year within parks. While many community events are free, there are communities that have successfully charged nominal fees for events to help off-set the costs or in some cases generate a profit. The City should continue to support annual and seasonal events within parks and work closely with groups such as the Chamber of Commerce to help advertise for the events.

Action 4.3.3 – Explore rental amenities and facilities within parks.

There are existing facility rentals within the parks system, including indoor facilities (Waterloo Lake Building, Waterloo Pool, and Senior Citizen Center), outdoor facilities (park pavilions, Katy Plaza, Waterloo Lake Bluff), athletic facilities (practice fields), and kayak rentals. Additional rental amenities to possibly explore include meeting rooms, areas for wedding venues, and bicycles. Park spaces represent a relatively inexpensive venue for weddings and can be a good source of stable income for the City. Additionally, as the Katy Trail is extended and use along the facility picks up, a municipal bike share program could be explored as a revenue generating opportunity. Both Dallas and Fort Worth have municipal bike share systems.

Action 4.3.4 – Encourage sports tourism through modernized sports complexes and unique recreation opportunities.

THF Park is a prime example of a high-quality, modern sports complex. Other sports facilities within the City, including those at Waterloo Park, T-Bar Softball Complex, and Munson Park, need various improvements. If the baseball and softball fields and associated amenities at these other sites are improved, that would take some of the pressure off of THF Park and provide more quality options for practice fields within the City.

GOAL 5 | MAINTENANCE & ADMINISTRATION

Update policies to improve efficiency of park, trail, and recreation services.

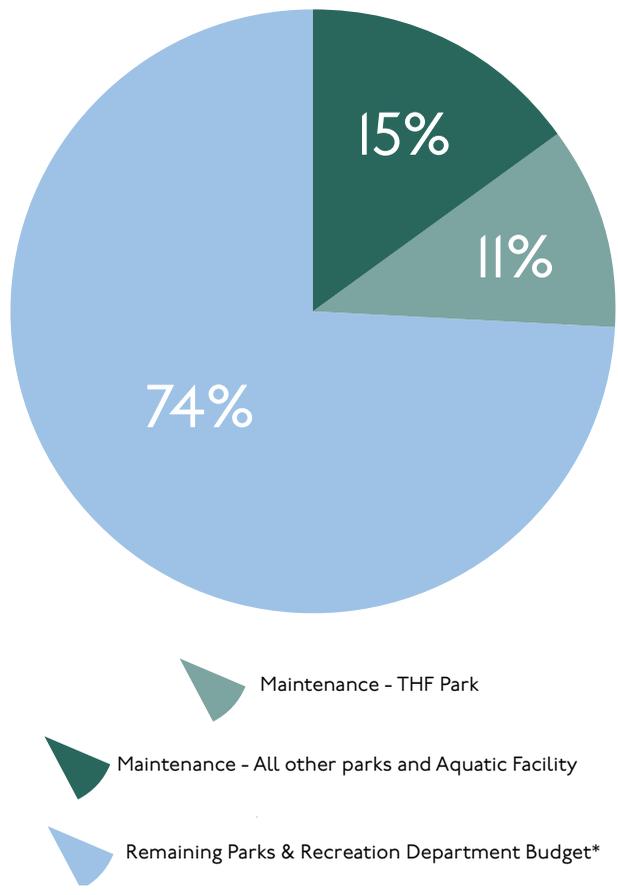
Effective and efficient maintenance and administration of the parks and recreation system is critical for providing safe and inviting places to recreate within any community. Overall, the maintenance of existing park facilities within Denison is good, particularly at facilities such as THF Park. However, as the park system continues to grow and the types of amenities offered continues to be more diverse, additional park maintenance and administrative staff will be needed. There are also improvements that could be made to improve the overall convenience and efficiency of how the system is operated.

In the following section, recommended objectives and actions are described that relate directly to improving the maintenance and administrative efficiencies of parks and recreation in Denison.

Objective 5.1 | Review maintenance standards to ensure parks, trails, and recreation facilities are equitably maintained based on the type of facility.

The maintenance of a parks and recreation agency is closely tied to the number of acres that have to be maintained, the number of maintenance staff, and the budget allocated for parks maintenance. In the Fiscal Year 2021-2022 city budget, approximately 26% of the parks department's budget is allocated to maintenance - 11% to THF Park and 15% to the remaining parks and the aquatic facility, as shown in **Figure 5.8**. This breakdown in costs shows an imbalance in maintenance spending as one park is receiving a percentage of the budget that is almost as much as what is allotted for all other park and recreation facilities. There are maintenance best practices that can be implemented to help ensure that the City is able to make the most of the resources that they have.

Figure 5.8 | Denison Parks & Recreation Budget FY 22



*Remaining department budget items include personnel, supplies, contractual costs, and debt service.

Action 5.1.1 - Establish operation and maintenance guidelines that cover the department responsibilities, approach to maintenance, and labor required for each park typology.

As discussed in Chapter 3, there are four primary park classifications (regional, community, neighborhood, and pocket/mini parks) in addition to recreation facilities. Each of these park types are of various sizes and have different amenities, therefore requiring different levels and frequency of maintenance. A parks operations and maintenance manual can help to specify frequency of maintenance components such as turf care, irrigation, litter control, landscaping, repairs, and inspections. The manual should also provide manpower estimates that help project how many staff are needed to complete the associated maintenance tasks.



Park mowing

Action 5.1.2 – Explore best management practices to increase the operations and maintenance efficiency of the park and trail system.

The NRPA and other similar agencies routinely have developed best management practices (BMPs) to help improve the operational efficiency of park systems. Some of the BMPs that Denison could consider implementing include:

- **Grow Zones:** These are designated areas within parks that are only mowed a few times a year and instead are left more natural to establish areas for native grasses and wildflowers. This helps to reduce the overall cost for mowing.
- **Work Order Tracking:** Instead of tracking work orders manually, there are a variety of software programs that exist that can help streamline preventative maintenance, work schedules, and lifecycle tracking for equipment, among other features.
- **Energy Conservation:** Using more energy-efficient materials such as switching out older lighting with LEDs can help save on energy costs.

Action 5.1.3 – Initiate routine maintenance schedules to update pavement markings along bikeways and to address issues along trails.

This plan recommends 50 miles of new on-street bikeways and 43 miles of additional trail. As the trail and bikeway system continues to grow, it is critical to establish routine maintenance schedules for maintaining these facilities. For example, on-street bikeway pavement markings can fade over time, resulting in potential safety issues if the markings are hard to see. Potential maintenance issues along trails include debris removal, surface repairs, vegetation trimming, erosion stabilization, and bridge repairs. A routine maintenance schedule should include a timeframe for when each of these issues should be assessed to quickly implement a solution.

Action 5.1.4 – Integrate automation of park systems and centralized controls for greater efficiency.

As technology advances in parks and recreation continues to evolve, solutions will become cheaper and more widely available. There are many systems within a parks and recreation system that could be managed in one central location and therefore save both staff time and money. Examples of systems that could be automated through a centralized control system include irrigation, access (such as time locks for restrooms), and sports lighting. The City is already utilizing automated paint striping at the fields at THF to automate that process.



Example of a mow strip and grow zone

Objective 5.2 | Review staffing needs to ensure park and recreation facilities are adequately maintained.

According to the NRPA, the national average for parks and recreation staff in a municipal agency is 8.2 full-time equivalent employees (FTEs) per 10,000 residents. In Denison, there are 27 full-time, 57 part-time, and 55 seasonal part-time positions in the Parks and Recreation Department. This translates to 11.03 FTEs per 10,000 residents which is higher than the NRPA national average. However, since the total amount of parkland acreage that the City maintains is high, this results in a large number of acres maintained by each employee. The following actions relate to ensuring that staffing positions are aligned with the acreage of parks as the City continues to grow.

Action 5.2.1 - Adopt a target staffing ratio requiring park maintenance staff to be concurrent with the number of parkland acres maintained.

Although there are 27 FTEs across the parks and recreation department, only 15 focus solely on maintenance. This translates to 6.13 maintenance FTEs per 10,000 residents and 44.5 acres maintained per employee. That amount of acreage to be maintained per employee is high, particularly considering that a number of maintenance employees just focus on maintenance of THF Park and no other facilities. In order to ensure continued efficient and equitable maintenance of parks moving forward, the City should adopt a staffing ratio that mirrors the NRPA's benchmark to maintain over time.

Action 5.2.2 - Routinely review the necessary maintenance of individual parks to maintain appropriate staffing levels and funding.

Consistent with the operations and maintenance plan (see Action 5.1.1), regular inspection of parks and park amenities should occur to address any issues and make any repairs in a timely manner. The operations and maintenance plan can help identify funding needs for implementing maintenance at individual parks as well. Playground equipment is often the first type of park amenity that begins to show its age in terms of needed repairs. A playground lifecycle replacement program could be established to guide future expenditures and keep track of when to budget for playground repair or replacement.

Action 5.2.3 - Encourage the formation of volunteer organizations to help with beautification efforts at parks.

Friends of the park groups can help provide park beautification or clean up efforts for communities. These volunteer-driven groups can help create more pride particularly for neighborhood parks. These groups can also help support existing maintenance efforts conducted by the City. It is prudent for the City to keep track of these groups and to help identify projects that are not too complex for the volunteer groups to complete.



Culpepper Practice Fields

Objective 5.3 | Increase convenience and transparency of the Parks & Recreation Department initiatives, amenities, and programs for system users.

Participation in parks and recreation programs is directly related to how easy it is for people to find and sign up for these events. Convenience and transparency are important elements of any parks and recreation system. The department website features a well-designed online reservation system in which users can sign up for programs, reserve facilities, and view a calendar of events. In addition to the online reservation system, there are other actions the City can take to further enhance convenience and transparency for users.

Action 5.3.1 – Prepare an annual review of park, recreation, and trail improvements to keep the public informed about tax dollar spending.

This master plan includes 61 total actions which are intended to be implemented over time. In order to track progress towards achieving these actions, an annual progress report should be prepared that is presented to the Parks and Recreation Commission and City Council. The progress report should include elements such as action items started, in progress, and completed, costs associated with implementing the actions, any upcoming staff or budget needs, and major accomplishments. This annual progress report should also be posted on the City’s website for even greater transparency.

Action 5.3.2 – Continually provide opportunities for residents to provide feedback on overall park, recreation, and trail system satisfaction and unmet service needs and interests.

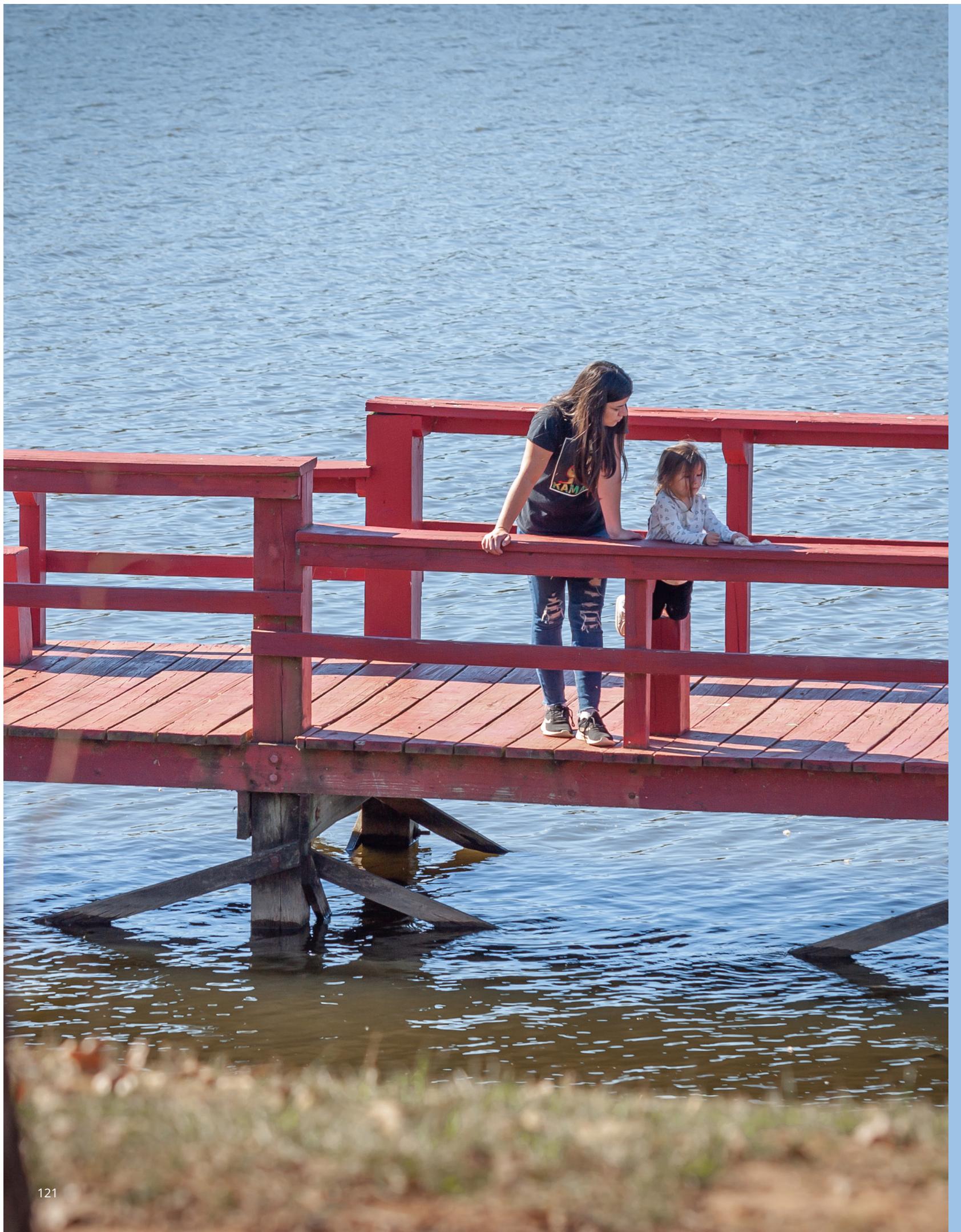
This master plan process resulted in a greater understanding of community needs and desires as they relate to parks and recreation through the input gathered via public meetings and the survey. However, as made evident with the recent public health pandemic, trends and desires can quickly change, especially as demographics shift. Periodic resident satisfaction surveys can help provide an updated snapshot of current needs and desires. The department can also reach a better understanding of overall satisfaction ratings over time and adjust programs or services where warranted.



Play equipment at THF Park



Waterloo Lake Regional Park



06 | IMPLEMENTATION

- ◆ PRIORITY CORRIDORS
- ◆ IMPLEMENTATION ACTION PLAN
- ◆ FUNDING STRATEGIES
- ◆ PLAN ADMINISTRATION

PRIORITY CORRIDORS

The recommended trail and on-street bikeway facilities in this plan are intended to be implemented over time to create a comprehensive active transportation network. Not all of the recommendations can be implemented at once; therefore, a prioritization list of projects was developed organizing the recommended facility corridors into high, medium, and low priority. The following pages summarize how the prioritization list was developed.

RECOMMENDATIONS BY SEGMENT

Table 6.1 on pages 125-126, and **Table 6.2** on pages 128-129, present the recommendations broken down by identified segments. The recommended type of facility, project limits, segment length, and recommended priority are identified for each segment. Prioritizing implementation was determined by scoring each corridor utilizing the prioritization criteria described on pages 85-88 and summarized below. These represent metrics such as safety, connectivity, and barriers to evaluate various projects.

The resulting priority recommendations are categorized into three timeframes.

High Priority

Recommended to be implemented in years 1-3 of the plan. These represent projects that scored high on the prioritization criteria, are feasible within a short timeframe, or meet critical connectivity need.

Medium Priority

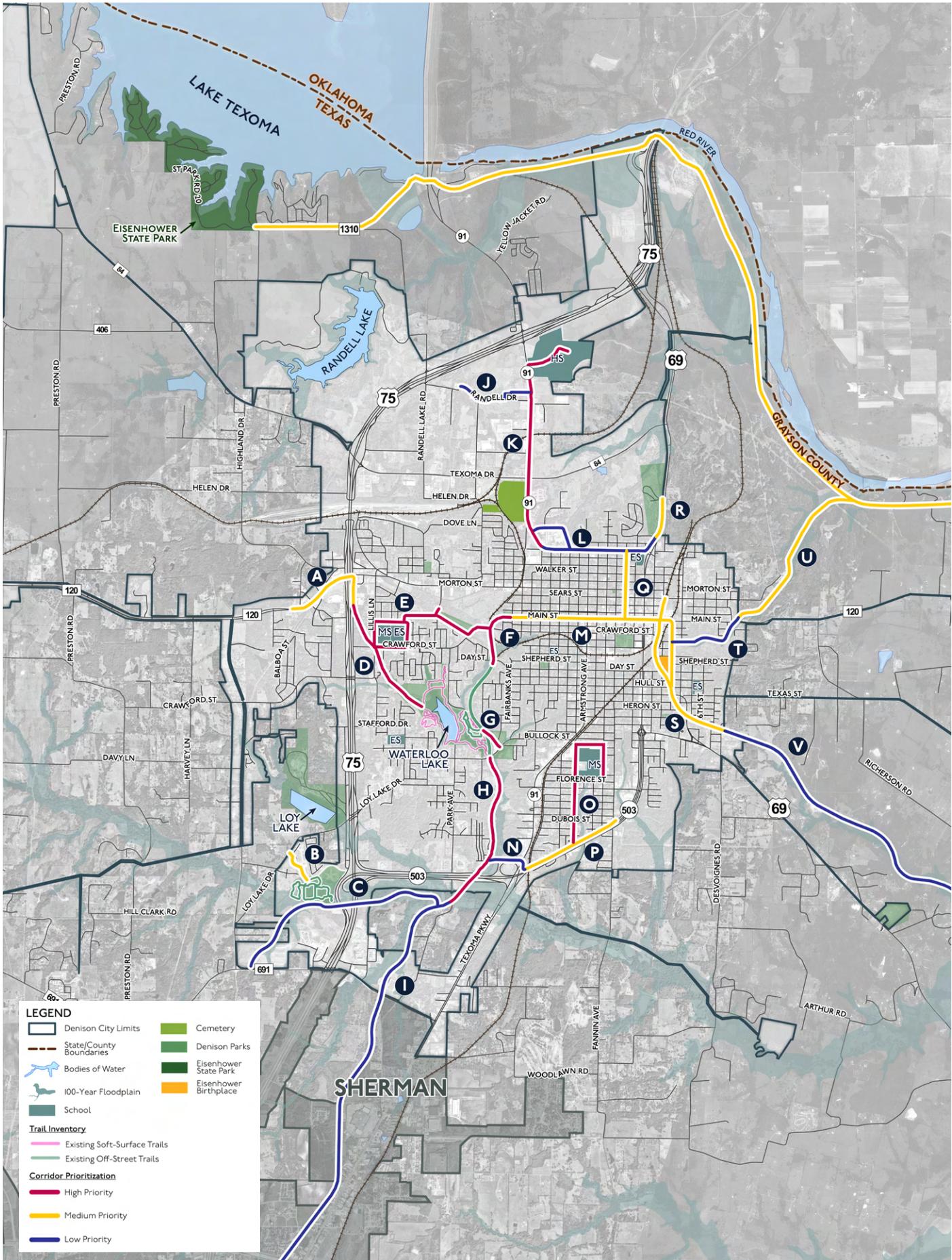
Recommended to be implemented in years 3-5 of the plan. These represent projects that scored in the medium range on the prioritization criteria. These are typically projects that are more complicated to implement.

Low Priority

Recommended to be implemented beyond year five of the plan. These represent projects that either score relatively low in the prioritization criteria, will require significant funding or additional planning, or are not feasible until other connections are made first.

Pages 124-126 depict the trail corridor prioritization and pages 127-129 depict the on-street bikeway corridor prioritization.

Trails Prioritization Criteria	Bikeways Prioritization Criteria
Connects to key destinations	Connects to key destinations
Connects to the existing trail and bikeway network	Connects to the existing trails and bikeway network
Fills a gap in the existing system	Fills a gap in the existing system
Improves an existing trail connection	Improves an existing facility
Creates an interjurisdictional connection	Creates an interjurisdictional connection
Solves a safety issue or overcomes a barrier	Solves a safety issue or overcomes a barrier
On the TxDOT Bicycle Tourism Network as a facility that serves pedestrians and bicyclists	Level of comfort
Ease of implementation	On the TxDOT Bicycle Tourism Network as a facility that serves bicyclists
Amount of environmentally sensitive area disturbed	Ease of implementation
Connectivity to schools	Connectivity to schools



Map 6.1 | Trails Prioritization Corridor Map

0 0.5 1 Miles



Table 6.1 | Trail Corridor Prioritization

Corridor ID	Facility Type	Corridor	Limits From	Limits To	Length (Miles)	Priority
A	Sidepath	FM 120	Parkdale Lane	US 75 Frontage Road	0.96	Medium
B	Sidepath	Greenway Parks	Loy Lake Drive	Gateway Boulevard	0.33	Medium
C	Off-Street Trail	Loy Creek Greenbelt	FM 691	Theresa Drive	2.15	Low
D	Off-Street Trail	Waterloo Lake Greenbelt	US 75	Waterloo Lake Park	1.20	High
E	Sidepath	Crawford Street-Lillis Lane -Elk Street-Flora Lane	Mayes Elementary School & McDaniel Intermediate School	Katy Park	2.07	High
F	Off-Street Trail	North Katy Trail Extension	Main Street	Kary Trail Phase I	0.58	High
G	Off-Street Trail	Katy Trail Spur	Katy Trail Phase I	Bullock Street	0.22	High
H	Off-Street Trail	Katy Trail Phase II	Katy Trail Phase I	Theresa Drive	1.55	High
I	Off-Street Trail	Katy Trail South Extension	Katy Trail Phase II	Sherman	4.78	Low
J	Off-Street Trail	Hills of Texoma Development	Pecan Gap Street	SH 91	0.77	Low
K	Sidepath	SH 91	Denison High School	Martin Luther King Street	2.19	High
L	Sidepath	Martin Luther King Street	SH 91	Munson Park	1.67	Low
M	Sidepath	Main Street-Crockett Avenue	Woodard Practice Field	Hull Street	2.12	Medium
N	Off-Street Trail	Spur 503	Katy Trail Phase II	Eisenhower Parkway	0.40	Low
O	Sidepath	Scullin Avenue-Brock Street-Mirick Avenue	Eisenhower Parkway	Florence Street	1.48	High
P	Sidepath	Eisenhower Parkway	Railroad Corridor	Fannin Avenue	0.98	Low

Table 6.1 | Trail Corridor Prioritization (continued)

Corridor ID	Facility Type	Corridor	Limits From	Limits To	Length (Miles)	Priority
Q	Sidepath	Burnett Avenue	Martin Luther King Street	Main Street	0.63	Medium
R	Off-Street Trail	Munson Park	Martin Luther King Street	Munson Park Entrance	0.37	Medium
S	Off-Street Trail	Railroad Corridor	Morton Street	East City Limits	1.60	Medium
T	Off-Street Trail	East City Greenbelt	Crockett Avenue	East City Limits	0.76	Low
U	Off-Street Trail	FM 1310-ETJ	Eisenhower State Park	East ETJ	11.19	Medium
V	Off-Street Trail	Abandoned Railroad Corridor	East City Limits	East ETJ	3.18	Low

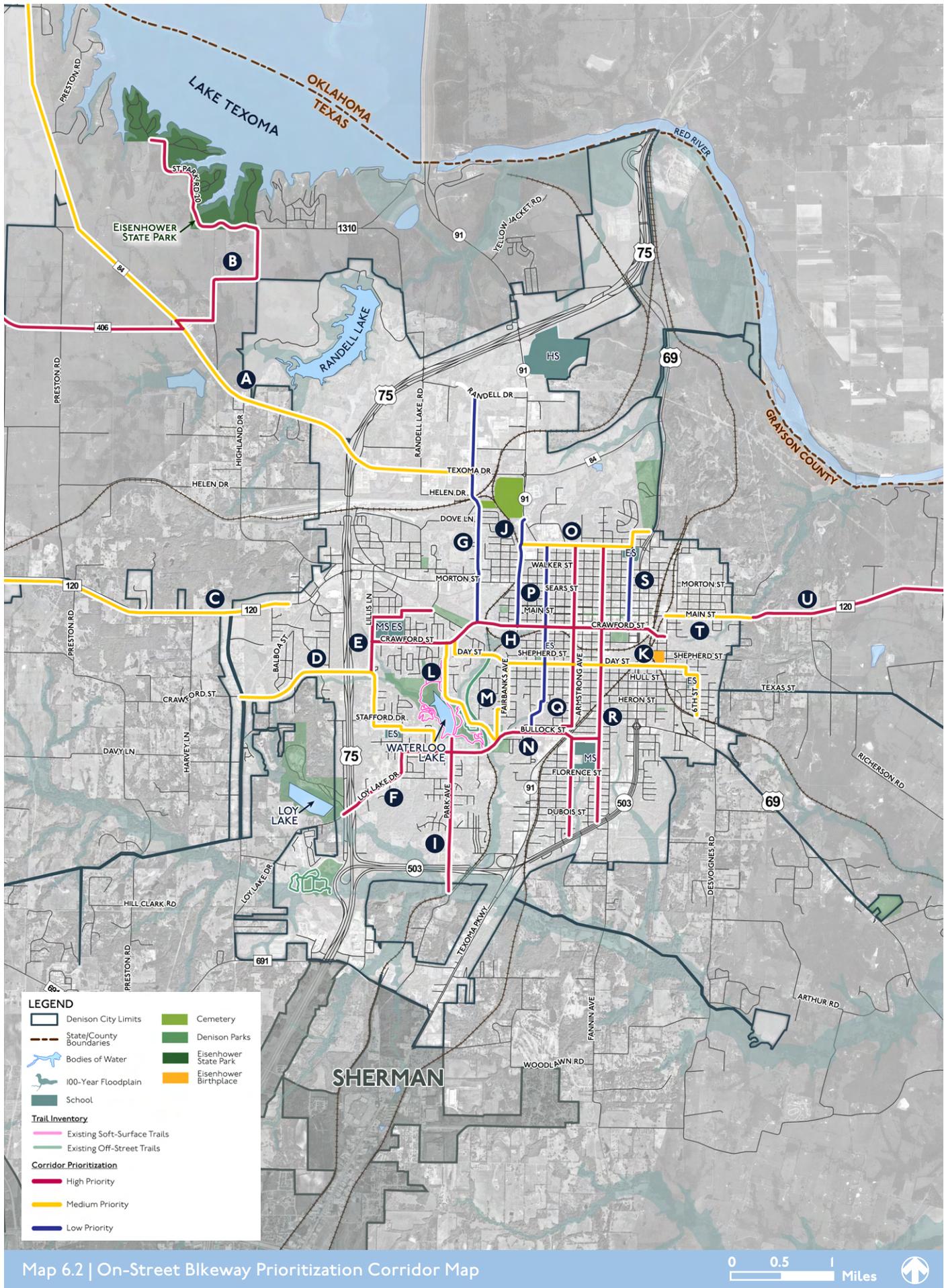


Table 6.2 | On-Street Bikeway Corridor Prioritization

Corridor ID	Facility Type	Corridor	Limits From	Limits To	Length (Miles)	Priority
A	Wide Shoulder	FM 84/Texoma Drive	West ETJ	Juanita Drive	7.02	Medium*
B	Wide Shoulder	FM 406-Eisenhower Drive-State Park Road 20	West ETJ	Eisenhower State Park	5.68	High*
C	Wide Shoulder	FM 120	West ETJ	Parkdale Lane	2.80	Medium*
D	Shared-Use Lane	Crawford Street-Lillis Lane-Sunset Street-Hyde Park Avenue-Waterloo Drive	FM 131	Loy Lake Drive	2.67	Medium
E	Shared-Use Lane	Lillis Lane-Elk Street-Imperial Drive-Flora Lane	Crawford Street	Katy Park	1.15	High
F	Shared-Use Lane	Loy Lake Drive	RC Vaughan Road	Katy Trail Phase I	1.69	High
G	Shared-Use Lane	Juanita Drive	Randell Drive	Crawford Street	2.17	Low
H	Shared-Use Lane	Crawford Street	Lillis Lane	Owing Street	2.91	High
I	Shared-Use Lane	Park Avenue	Waterloo Lake Regional Park	Theresa Drive	1.46	High
J	Shared-Use Lane	Maurice Avenue	SH 91	Crawford Street	1.04	Low
K	Shared-Use Lane	Day Street-5th Avenue-Munson Street-6th Street	Crawford Street	Abandoned Railroad Corridor	2.95	Medium
L	Shared-Use Lane	Waterloo Lake Drive	Crawford Street	Loy Lake Drive	1.24	Medium
M	Shared-Use Lane	Fairbanks Avenue-Murray Street-French Avenue-Brock Street	Day Street	Bullock Street	0.81	Medium
N	Shared-Use Lane	Bullock Street	Katy Trail Phase I	Mirick Avenue	1.17	High
O	Shared-Use Lane	Martin Luther King Street-Austin Avenue	Maurice Avenue	US 69	1.35	Medium

*These corridors are in the ETJ and will require coordination with external entities.

Table 6.2 | On-Street Bikeway Corridor Prioritization (continued)

Corridor ID	Facility Type	Corridor	Limits From	Limits To	Length (Miles)	Priority
P	Shared-Use Lane	Perry Avenue-Cole Drive-Brookside Drive-Woodlawn Boulevard	Martin Luther King Street	Bullock Street	1.86	Low
Q	Bike Lane	Scullin Avenue	Martin Luther King Street	Eisenhower Parkway	2.92	High
R	Bike Lane	Mirick Avenue	Martin Luther King Street	Eisenhower Parkway	2.64	High
S	Shared-Use Lane	Rusk Avenue	Martin Luther King Street	Crawford Street	0.79	Low
T	Bike Lane	Main Street	Crockett Avenue	East City Limits	0.81	Medium
U	Wide Shoulder	FM 120	East City Limits	East ETJ	2.32	High*

*These corridors are in the ETJ and will require coordination with external entities.



Construction of the Katy Trail

TYPICAL PROJECT COSTS

The typical project costs outlined on **Table 6.3** were informed by **recent project bids, current market trends, and engineering standards and design methods**. These estimates should be used to guide near and long-term budgeting to plan for project implementation. These estimates are at a pre-design level, and therefore will vary as additional planning, design, and engineering occurs.

The **Cost Considerations** column in **Table 6.3** details the items that inform the potential cost ranges. The higher end of the range considers projects that might encounter obstacles such as utility lines and roadway conditions or those providing enhanced safety countermeasures, particularly at intersection crossings.

Table 6.3 | Typical Project Cost by Facility Type

Facility Type	Parameters	Potential Cost Range*	Cost Considerations
Off-Street Trails	10'-12' wide paved concrete	\$1.35M - \$1.9M per mile	Concrete Paving Demolition* Utilities* Grading & Earthwork* Signage Crosswalks & ADA ramps
Sidepaths	8'-10' wide concrete path adjacent to a roadway	\$1.35M - \$1.9M per mile	Concrete Paving Demolition* Utilities* Grading & Earthwork* Signage Crosswalks & ADA ramps
Shared-Use Lanes	Shared-use lane markings, existing pavement section, regulatory and directional signage adjacent to roadway	\$50,000 - \$75,000 per mile	Pavement Markings Signage Enhanced Signalization* Preparing ROW
Bike Lanes	Lane striping, pavement markings, existing pavement sections (both sides of street)	\$50,000 - \$95,000 per mile	Lane Striping Pavement Markings Signage Enhanced Signalization* Preparing ROW
Wide Shoulders	Existing pavement sections (8'-10'), regulatory and directional signage adjacent to roadways	\$50,000 (no additional pavement needed) - \$1.9M per mile	Lane Striping Signage Preparing ROW

Note: Costs for a specific trail or bikeway facility will vary based on site conditions and as additional planning, design, and engineering occurs. An inflation of 3% per year should be factored into any project cost. Chapter 5 includes typical cross sections and additional design considerations for these facility types.

*Cost consideration items are dependent on site conditions.

IMPLEMENTATION ACTION PLAN

The implementation action plan presented over the next several pages should serve as a checklist for the City to track progress of plan implementation over time. Successful implementation of this master plan will require coordination from multiple departments and outside entities. The following section describes the major components of the implementation action plan in more detail. Each of the actions are described in more detail in Chapter 5.

ACTION TYPE

The type of action guides the City in the how and who will be responsible for initiating implementation and whether or not an action will have fiscal implications.

Investment - New or adjusted capital or operational expenditures.

Operations - Requires a new or modified program or staffing arrangement.

Partnership - Formal agreement or informal pursuit of shared goals with external entity.

Policy - Requires a new or modified process or policy.

Regulation - Requires Council approved modification to City ordinance.

Study - Requires further analysis or investigation to determine most appropriate solution.

PARTNERS

The implementation action tables identify the partners that would need to be involved in order to successfully implement an action. For some actions there are multiple partners required. The partners identified include a variety of City departments and public and private entities outside of the City.

TIMEFRAME

The timeframes assigned to each action item refer to the time period in which they should be initiated.

Short-Term: This timeframe represents actions that should begin within 1-3 years after plan adoption. These items are identified as either high priority or determined to be feasible for implementation in the near term.

Mid-Term: This timeframe represents actions to be initiated within 3-5 years of plan adoption. These actions are not immediately feasible and require more complex planning and budgeting decisions.

Long-Term: This timeframe represents actions that should be initiated after the first five years after plan adoption. These items support the long-term vision of the plan and will need additional studies, feasibility assessments, and significant funding to achieve.

Ongoing: Actions within this category are those that do not have a specific timeframe and should be implemented over time or should be regularly implemented on an established schedule.

HIGH PRIORITY

Actions that are identified as high priority in the following action tables indicate those to be considered for immediate implementation. The City should prioritize these actions when reviewing upcoming budgets and feasibility of near term implementation.

COSTS

For some of the identified action items there are associated cost considerations listed. This cost is an estimate of what is needed to implement the action. As these are probable costs, it should be noted that costs are subject to change as additional planning and design occurs for individual actions.

Table 6.4 | Implementation Action Plan - Park Access

Goal I Park Access						
Goal Statement: Create an accessible and connected system of parks.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective I.1: Improve existing park space and develop undeveloped park acreage.						
I.1.1	Develop a concept plan for the undeveloped land within Munson Park.	Study	Short-Term		THF, User Groups, Neighborhoods	\$25K
I.1.2	Address maintenance needs and updates to amenities through an asset replacement plan.	Study, Operations	Short-Term	Yes	Park Maintenance	Varies
I.1.3	Implement the master plan design concept for Loy Lake Park.	Investment	Mid-Term	Yes	TELS, Frontier Village	TBD
I.1.4	Implement the master plan design concept for Katy Park.	Investment	Short-Term	Yes	Council, ITSA, LIGA	\$10M-\$15M
I.1.5	Prioritize parkland acquisition that increases the percentage of residents that are within a 10-minute walk to a park.	Policy	Ongoing		Plan Developments	Varies based on land cost
I.1.6	Acquire approximately 120 acres of parkland by 2040 to meet the targeted level of service for neighborhood and community parks.	Investment	Long-Term		City Council, Legal, Plan Developments	Varies based on land cost
I.1.7	Continue to coordinate with developers on providing new parkland and park improvements within new developments.	Partnership, Policy	Ongoing	Yes	City Council, Legal, Plan Developments	N/A
Objective I.2: Establish park system branding to help users locate parks and recreation amenities and programs.						
I.2.1	Develop a brand that leverages the character and history of Denison.	Investment	Short-Term		Leisure Services, Main Street, DISD, Red River Railroad Museum, Eisenhower Birthplace, Frontier Village, TELS	\$25K
I.2.2	Develop a wayfinding program to direct users as they navigate the park system.	Investment	Short-Term		Fire, PD, Mountain Bike Assoc., Park Advisory Board	\$40K
I.2.3	Use the system brand to increase awareness of the offerings in the park, recreation, and trails system.	Operations	Ongoing		Leisure Services	N/A

Refer to page I31 for descriptions of each of the action plan components.

Table 6.4 | Implementation Action Plan - Park Access (continued)

Goal I Park Access						
Goal Statement: Create an accessible and connected system of parks.						
Action		Action Type	Timeframe	High Priority	Partners	Costs
Objective 1.3: Create a balance between active and passive park programming.						
1.3.1	Preserve open space to support passive recreation uses.	Operations	Ongoing	Yes	City Council, Legal, Environmental groups	N/A
1.3.2	Update practice facilities to better serve local sports and athletics associations.	Investment, Partnership	Mid-Term		Sports Associations, DISD, TSA, LIGA, Boys and Girls Club, Little League	Varies
1.3.3	Identify locations within existing parks that would be suitable for implementing amenities and programs that don't exist today.	Investment	Short-Term		Citizen Committee	N/A
1.3.4	Increase water access to allow visitors to Waterloo Lake Regional Park and Loy Lake Park the ability to participate in active and passive water recreation opportunities.	Operations	Long-Term		TPWD	N/A

Refer to page I31 for descriptions of each of the action plan components.

Table 6.5 | Implementation Action Plan – Amenities

Goal 2 Amenities						
Goal Statement: Provide park, trail, and recreation amenities that serve users of all ages and abilities.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 2.1: Ensure that parks provide amenities that meet the demands and interests of the community.						
2.1.1	Provide a diverse range of amenities that align with community interests and follow latest recreation trends.	Policy	Ongoing		Citizen Committee	Varies
2.1.2	Incorporate inclusive play amenities where feasible to address the needs of users of all ages and abilities.	Policy, Investment	Short-Term	Yes	Planning	\$750K for inclusive playground
2.1.3	Pursue funding opportunities to support regular maintenance and modernized amenities.	Partnership, Operations	Ongoing	Yes	Grant Administrators	N/A
2.1.4	Address deficiencies in park amenities based on existing level of service targets to better serve recreation needs.	Investment	Ongoing		Park Maintenance, City Council	Varies
2.1.5	Implement the recommendations from the aquatics feasibility study to either improve the existing pool or build a new aquatic facility.	Investment	Long-Term	Yes	Planning, Hospital, THF, private partners	TBD by feasibility study
Objective 2.2: Integrate Denison’s history throughout the park and trail network.						
2.2.1	Include elements such as public art, outdoor education opportunities, and interpretive signage to reflect Denison’s history throughout the parks and trails system.	Regulation	Short-Term		Parks Maintenance, design consultants	N/A
2.2.2	Coordinate with community entities to build upon the momentum of existing historic and cultural initiatives.	Policy, Operations	Ongoing	Yes	NRPA, TPWD, TPL, TRAPS, Parks Maintenance	N/A
2.2.3	Support events and programs in parks and along trails that highlight the City’s history.	Policy	Ongoing		City Council	N/A

Refer to page 131 for descriptions of each of the action plan components.

Table 6.5 | Implementation Action Plan - Amenities (continued)

Goal 2 Amenities						
Goal Statement: Provide park, trail, and recreation amenities that serve users of all ages and abilities.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 2.3: Establish consistent and equitable amenities appropriate for each park type.						
2.3.1	Develop a set of design and amenity standards appropriate for each park classification.	Regulation	Short-Term		Parks Maintenance, Design consultants	N/A
2.3.2	Consistently review recreation trends to ensure parks are meeting service needs and community interests.	Policy, Operations	Ongoing	Yes	NRPA, TPWD, TPL, TRAPS, Parks Maintenance	N/A
2.3.3	Provide equitable distribution of amenities throughout the City.	Policy	Ongoing		City Council	N/A

Refer to page I31 for descriptions of each of the action plan components.

Table 6.6 | Implementation Action Plan - Trails & Bikeways

Goal 3 Trails & Bikeways						
Goal Statement: Expand the trail and bikeway network to connect to key destinations throughout the City.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 3.1: Ensure that trail and bikeway facilities are safe and appropriate for all ages and user groups.						
3.1.1	Identify areas where there are existing safety concerns or barriers along trail and bicycle routes.	Study	Short-Term	Yes	Fire, PD, TxDOT, Public Works	Varies
3.1.2	Develop design and construction standards for trails to provide a safer and more comfortable experience for users.	Regulation	Short-Term		Fire, PD, TxDOT, Public Works	N/A
3.1.3	Establish a hierarchy of trail and bikeway facilities to serve different users and functions.	Regulation	Short-Term		Fire, PD, TxDOT, Public Works	N/A
3.1.4	Initiate a bicycle safety awareness program to educate bicyclists and motorists on sharing the roadway.	Operations	Mid-Term		Fire, PD, TxDOT, Public Works, Planning	\$25K
3.1.5	Develop standards for safe intersection crossings where trails intersect with roadways.	Regulation	Short-Term		Fire, PD, TxDOT, Public Works, Planning	N/A
Objective 3.2: Implement wayfinding signage to increase awareness of the trail and bikeway system for residents and visitors.						
3.2.1	Develop a wayfinding program unique to Denison that allows users to easily navigate the trail and bikeway system.	Investment	Mid-Term		Fire, PD, TxDOT, Public Works	\$40K
3.2.2	Identify locations for trailheads and trail access points at key places along trails.	Study	Short-Term		Fire, PD, TxDOT, Public Works	Varies
3.2.3	Develop clear and highly visible roadway signage and markings for all bikeway facilities.	Investment	Short-Term		Fire, PD, TxDOT, Public Works	Varies
3.2.4	Explore developing online mapping tools to increase legibility of the trail and bikeway system.	Investment	Mid-Term		Fire, PD, TxDOT, Public Works	\$15K

Refer to page 131 for descriptions of each of the action plan components.

Table 6.6 | Implementation Action Plan - Trails & Bikeways (continued)

Goal 3 Trails & Bikeways						
Goal Statement: Expand the trail and bikeway network to connect to key destinations throughout the City.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 3.3: Increase mobility in the City through alternative transportation options.						
3.3.1	Expand Denison’s existing trail and bikeway system to create more connections to key destinations throughout the city.	Investment	Mid-Term		Fire, PD, TxDOT, Public Works	Varies
3.3.2	Explore implementing enhanced safety countermeasures at key trail and bikeway road crossings.	Study	Mid-Term		Fire, PD, TxDOT, Public Works	Varies
3.3.3	Explore partnering with TxDOT to implement bikeways along the Texas Bicycle Tourism Study routes.	Partnership	Short-Term		Fire, PD, TxDOT, Public Works	N/A
3.3.4	Prioritize connections to key destinations within the City including downtown, parks, schools, the Eisenhower Birthplace, and other points of interest.	Policy	Short-Term		Fire, PD, TxDOT, Public Works, Planning	N/A
3.3.5	Continue to coordinate with other departments and developers to ensure that trails and bikeways are incorporated into new developments.	Operations	Ongoing	Yes	Community Development, Public Works, Denison Development Alliance	N/A
3.3.6	Work with surrounding communities to implement regional trail connections.	Partnership, Investment	Mid-Term		Community Development, Public Works, Denison Development Alliance	N/A
3.3.7	Pursue implementation of trail corridors that meet recreation, culture, nature, and regional goals.	Policy	Ongoing		Community Development, Public Works, Denison Development Alliance	N/A

Refer to page I31 for descriptions of each of the action plan components.

Table 6.7 | Implementation Action Plan - Recreational Tourism

Goal 4 Recreational Tourism						
Goal Statement: Leverage the park, trail, and recreation system to encourage tourism.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 4.1: Leverage lake access by supporting water recreation opportunities.						
4.1.1	Provide a variety of water sport rentals (kayaks, canoes, paddle boards) at lake access points in Waterloo Lake Regional Park and Loy Lake Park.	Investment	Mid-Term		Grant Administrator, Planning, Private Vendors, TPWD	N/A
4.1.2	Implement additional launch points along the lakes to improve water access.	Investment	Mid-Term		Grant Administrator, TPWD, Planning	15K per launch site
4.1.3	Utilize the lakeshores to host events and special programs throughout the year.	Operations	Ongoing		Grant Administrator, TPWD, Planning	N/A
4.1.4	Enhance fishing opportunities at Waterloo Lake and Loy Lake.	Investment	Mid-Term		Grant Administrator, TPWD, Planning	Varies
4.1.5	Explore opportunities to enter into a lease with the USACE for parkland along Lake Texoma.	Partnership	Short-Term		USACE	N/A
Objective 4.2: Make Denison a park, trail, and recreation destination of North Texas.						
4.2.1	Conduct a feasibility study to determine the ideal location for adventure amenities such as zip lines and obstacle courses.	Study	Long-Term		Steering Committee	\$20K
4.2.2	Expand upon THF Park sports complex facilities, including supporting infrastructure such as parking, to support regional events and tournaments.	Investment	Short-Term	Yes	TSA, LIGA, Little League, BGC, leagues	TBD by design
4.2.3	Promote Munson Park as a premier course for disc golf tournaments.	Operations	Short-Term		Disc Golf Association and leagues	N/A

Refer to page I31 for descriptions of each of the action plan components.

Table 6.7 | Implementation Action Plan - Recreational Tourism (continued)

Goal 4 Recreational Tourism						
Goal Statement: Leverage the park, trail, and recreation system to encourage tourism.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 4.3: Utilize park spaces in ways that generate revenue.						
4.3.1	Designate areas within Loy Lake Park for both primitive and RV overnight camping.	Operations	Mid-Term		TELS, Frontier Village, athletic leagues, Fire, PD, Leisure Services, Chamber of Commerce	N/A
4.3.2	Support annual and seasonal events, festivals, and celebrations within park spaces.	Policy	Ongoing		Leisure Services, Chamber of Commerce	N/A
4.3.3	Explore rental amenities and facilities within parks.	Operations	Short-Term		Fire, PD, Leisure Services, Chamber of Commerce	N/A
4.3.4	Encourage sports tourism through modernized sports complexes and unique recreation opportunities.	Policy, Investments	Short-Term		Leagues, Leisure Services, Visitors Bureau, Chamber of Commerce, DDA, Community Development	N/A

Refer to page I31 for descriptions of each of the action plan components.

Table 6.8 | Implementation Action Plan - Maintenance & Administration

Goal 5 Maintenance & Administration						
Goal Statement: Update policies to improve efficiency of park, trail, and recreation services.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 5.1: Review maintenance standards to ensure parks, trails, and recreation facilities are equitably maintained based on the type of facility.						
5.1.1	Establish operation and maintenance guidelines that cover the department responsibilities, approach to maintenance, and labor required for each park typology.	Operations	Short-Term	Yes	Public Works, Parks Maintenance	\$50K
5.1.2	Explore best management practices to increase the operations and maintenance efficiency of the park and trail system.	Operations, Investment	Short-Term	Yes	Public Works, Parks Maintenance	N/A
5.1.3	Initiate routine maintenance schedules to update pavement markings along bikeways and to address issues along trails.	Operations	Ongoing		Public Works	N/A
5.1.4	Integrate automation of park systems and centralized controls for greater efficiency.	Investment	Long-Term		Parks Maintenance	Varies
Objective 5.2: Review staffing needs to ensure park and recreation facilities are adequately maintained.						
5.2.1	Adopt a target staffing ratio requiring park maintenance staff to be concurrent with the number of parkland acres maintained.	Policy	Ongoing	Yes	City Council	N/A
5.2.2	Routinely review the necessary maintenance of individual parks to maintain appropriate staffing levels and funding.	Operations	Ongoing		Parks Maintenance	N/A
5.2.3	Encourage the formation of volunteer organizations to help with beautification efforts at parks.	Partnership	Short-Term		Master Gardeners	N/A

Refer to page I31 for descriptions of each of the action plan components.

Table 6.8 | Implementation Action Plan - Maintenance & Administration (continued)

Goal 5 Maintenance & Administration						
Goal Statement: Update policies to improve efficiency of park, trail, and recreation services.						
Action	Action Type	Timeframe	High Priority	Partners	Costs	
Objective 5.3: Increase convenience and transparency of the Parks & Recreation Department initiatives, amenities, and programs for system users.						
5.3.1	Prepare an annual review of park, recreation, and trail improvements to keep the public informed about tax dollar spending.	Operations	Ongoing		Finance, DDA, Community Development	N/A
5.3.2	Continually provide opportunities for residents to provide feedback on overall park, recreation, and trail system satisfaction and unmet service needs and interests.	Operations	Ongoing		Leisure Services	N/A

Refer to page 131 for descriptions of each of the action plan components.

FUNDING STRATEGIES

There are a variety of federal, state, and local funding sources that communities such as Denison can access to implement improvements to parks, recreation, and trails systems. This section lists potential funding sources and provides a brief description of each.

FEDERAL FUNDING SOURCES

DEPARTMENT OF AGRICULTURE - NATURAL RESOURCES CONSERVATION SERVICE

Conservation Technical Assistance Program:

Assists entities in planning and implementing conservation systems to reduce erosion, improve soil and water quality, improve and conserve wetlands, enhance fish and wildlife habitat, improve air quality, improve pasture and range condition, reduce flooding, and improve woodlands.

Source: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/>

Emergency Watershed Protection Program:

Designed to help conserve natural resources by relieving imminent flood, fire, and windstorm hazards to life and property.

Source: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/>

U.S. NATIONAL PARK SERVICE

National Park Service (NPS) Programs: Include the Land and Water Conservation Fund (LWCF) and Urban Park and Recreation Recovery Act (UPARR), which provides funds for parks and recreation. Congress appropriates both funds. Typically, the funding sources have supported traditional parks rather than linear systems. From 1965 to 2014, LWCF has provided more than \$4.1 billion as grants to state and local governments.

DEPARTMENT OF AGRICULTURE - U.S. FOREST SERVICE

Urban and Community Forestry Program: Assists local governments to improve natural resource management of trees and forests in urban areas.

Source: <https://www.fs.usda.gov/managing-land/urban-forests/ucf?msclkid=382abc5ea6ec11ec8db5419eb4c78fb0>

DEPARTMENT OF THE INTERIOR - FISH & WILDLIFE SERVICE

Boating Access Program: Provides funding to states and area fish and wildlife agencies for projects that develop new access to waterways or renovation/improvement of existing facilities.

Source: <https://www.fws.gov/program/boating-access>

Sport Fish Restoration Program: Provides funding for fish management, conservation, and restoration; funds are distributed through state fish and wildlife departments.

Source: <https://www.fws.gov/program/sport-fish-restoration>

DEPARTMENT OF THE INTERIOR - NATIONAL PARK SERVICE

Land and Water Conservation Fund: Provides funding for planning, acquisition, and development of park and recreation areas and resource-based facilities.

Source: <https://www.nps.gov/subjects/lwcf/index.htm>

Outdoor Recreation Legacy Partnership Program: Provides funding to help create and improve state and local parks and other recreation areas, particularly in underserved communities.

Source: <https://www.nps.gov/orgs/1207/orlp2021.htm>

DEPARTMENT OF TRANSPORTATION - FEDERAL HIGHWAY ADMINISTRATION

Recreational Trails Program: Provides funds to entities to develop and maintain trails for both motorized and non-motorized users. Funds are administered through the states.

Source: <https://recreationaltrailsinfo.org/>

Transportation Alternative Set-Aside Program:

Provides funding for on and off-road pedestrian and bicycle facilities, recreational trail projects, safe routes to school projects, and planning, designing, or constructing boulevards. Funds are administered through the states.

Source: https://www.fhwa.dot.gov/environment/transportation_alternatives/

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grant:

Provides funding for significant road, rail, transit, and port projects that achieve national objectives.

Source: <https://www.transportation.gov/RAISEgrants>

Congestion Mitigation and Air Quality Improvement Program (CMAQ):

Provides funding for projects that improve air quality and reduces congestion, such as bicycle lanes, separated bicycle lanes, sidewalks, shared use paths, and signage.

Source: <https://www.transportation.gov/sustainability/climate/federal-programs-directory-congestion-mitigation-and-air-quality-cmaq>

Highway Safety Improvement Program: Provides funding for improving safety along public roadways to reduce conflicts between pedestrians/bicycles and automobiles.

Source: <https://safety.fhwa.dot.gov/hsip/>

Federal Lands Access Program: Provides funding to improve transportation facilities to or within federal lands with preference given to high-use recreation sites and economic generators.

Source: <https://highways.dot.gov/federal-lands/programs-access>

STATE FUNDING SOURCES

TEXAS PARKS AND WILDLIFE DEPARTMENT

Local Parks Grant: The Local Park Grant Program consists of 5 individual programs that assist local units of government with the acquisition and/or development of public recreation areas and facilities throughout the State of Texas. The Program provides 50% matching grants on a reimbursement basis to eligible applicants. All grant assisted sites must be dedicated as parkland in perpetuity, properly maintained and open to the public.

Source: <http://tpwd.texas.gov/business/grants/recreation-grants/about-local-parks-grants>

Outdoor Recreation Grant: Outdoor Recreation Grants provide 50% matching grant funds to cities, counties, Municipal Utility Districts (MUDs), and other special districts with a population less than 500,000 to acquire and develop parkland or to renovate existing public recreation areas. There are two funding cycles per year with a maximum award of \$500,000. Projects must be completed within three years of approval. Application deadlines are October 1st of each year (the master plans submission deadline is 60 days prior to application deadline). Award notifications occur six months after deadlines.

Recreational Trails Grant: TPWD administers the National Recreational Trails Fund in Texas under the approval of the Federal Highway Administration (FHWA). This federally funded program receives its funding from a portion of federal gas taxes paid on fuel used in non-highway recreational vehicles. The grants can be up to 80% of project cost with a maximum of \$200,000 for non-motorized trail grants and currently there is not a maximum amount for motorized trail grants (call 512-538-4427 for motorized trail grant funding availability). Funds can be spent on both motorized and non-motorized recreational trail projects such as the construction of new recreational trails, to improve existing trails, to develop trailheads or trailside facilities, and to acquire trail corridors.

Source: <https://tpwd.texas.gov/business/grants/recreation-grants/recreational-trails-grants?msclkid=32784ea2a6ef11eca1a1e92e30bb02b2>

Community Outdoor Outreach Program Grants:

Provide funding to local governments and non-profit organizations for programming that introduces under-served populations to environmental and conservation programs as well as TPWD mission-oriented outdoor activities. This is not a land acquisition or construction grant; this is only for programs. Grants are awarded to non-profit organizations, schools, municipalities, counties, cities, and other tax-exempt groups. Minimum grant requests are \$5,000 and maximum grant requests are \$50,000. The application deadline is February 1st each year.

OTHER FUNDING OPPORTUNITIES

Aside from federal, state, and local funding, other organizations can provide funding or volunteer services to help support the improvement of the parks system. These groups include friends of the park groups, service groups, youth service providers, and private corporations for sponsorships.

TEXAS DEPARTMENT OF TRANSPORTATION

Safe Routes to School Program: The purpose of the Federal Safe Routes to School (SRTS) Program is to address these issues head on. At its heart, the SRTS Program empowers communities to make walking and bicycling to school a safe and routine activity once again. The Program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.

LOCAL FUNDING SOURCES

General Fund Expenditures for improvements or repairs to existing parks and facilities.

Bond Fund are voter-approved debt financing that is paid back over time for large capital expenditures.

Park Fee Ordinance is a city ordinance that imposes a fee on developers when new development is built to pay for developing or improving parks. Depending on the structure of the ordinance, the city can require land to be dedicated for parks, cash in lieu of land for park development, or park development fees.

Tree Mitigation Funds is a city ordinance that can be enacted to ensure that developers replace trees removed during development or pay a fee for trees to be planted elsewhere.

PLAN ADMINISTRATION

The City of Denison and the partners identified in the implementation tables are collectively responsible for administering the plan and the associated action items. It is the obligation of the City to oversee the implementation of the plan, monitor completion of action items, and incorporate plan items into annual planning and budgeting decisions.

ANNUAL PROGRESS REPORT

The implementation action tables serve as a checklist for the City to utilize when prioritizing project implementation and tracking progress over time for both City Council and the Parks and Recreation Commission. Preparing an annual progress report will allow elected and appointed officials to discuss plan achievements and amendments to the action plan necessitated by recent developments or major changes. As items in the action plan are completed, the City should review remaining items to ensure future budgets and work programs incorporate action items within the various timeframes in subsequent years after plan adoption.

FIVE-YEAR UPDATE

Five years after plan adoption, staff should conduct a more comprehensive review of the plan to update the park, recreation, and trail inventory, incorporate growth and demographic trend changes, and ensure that action items are relevant and continue to reflect community goals.

TEN-YEAR UPDATE

Ten years after plan adoption, the City should expect significant changes and updates to the park, recreation, and trail system as well as general development throughout the city. It is good practice to conduct a full update to a city's park master plan every 10 years to stay up to date with community needs and national trends. If a revised master plan is not feasible the City should at least compile a summary of accomplishments since implementation of the plan, update system inventory and demographics, create public input opportunities, review action item prioritization, and update plan goals and maps.

CONCLUSION

This master plan process is critical for a community to undergo every 5-10 years to ensure that parks, recreation facilities, and trails meet the needs and interests of residents. This master plan will serve as a guide for future budgetary, programming, and capital expenditures for the entire system. The recommendations for parks, recreation facilities, and trails identified in this plan reflect the input received during the public and stakeholder input process, observations made during needs assessments, and reflect the vision of the community. In partnership with various city departments and public and private entities the City can successfully implement action items in subsequent years following adoption.

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APPENDIX

- ◆ **GLOSSARY OF TERMS**
- ◆ **SURVEY RESULTS**
- ◆ **COMMONLY USED TRAIL & BIKEWAY SIGNAGE**
- ◆ **PARK CONCEPT PLANS**

GLOSSARY OF TERMS

PEDESTRIAN-ORIENTED TERMS

Buffer: The portion of a highway, road or street between the curb-face or edge of the pavement and the sidewalk that provides a spatial buffer between vehicular traffic and pedestrians on sidewalks. Buffers often include landscape plantings such as grass, trees or shrubs, or utility poles, and may also be referred to as the “planting strip,” “landscape buffer,” “tree buffer,” or “tree box.” Buffers can also include barriers such as highway guide rails (guardrails) or bollards. In rural or suburban areas the buffer may be a grassy swale or drainage ditch. In urban areas and downtowns, the buffer may also include street furniture, street signs, fire hydrants, vending boxes, lighting poles, etc.

Crosswalk: The horizontal portion of roadways, usually at intersections, reserved for pedestrian crossing; it may be marked or unmarked. Three marking patterns using white striping are most common: 1) Double parallel lines, 2) “zebra stripes:” white cross hatches perpendicular to the pedestrian direction of travel, or 3) “Ladder:” perpendicular white cross hatches combined with double parallel lines on the outside edges.

Intersection Treatment: The design of intersections to reduce conflict between pedestrians, cyclists, and motorists that occurs at roadway and trail intersections. The purpose of these treatments is to increase awareness for all users, achieved through the implementation of visual or physical indicators such as specialized signals, changes in pavement material, pavement markings, and the addition of refuge medians on wide roadways.

Mid-Block Crossing: Pedestrian or bicyclist crossings located in between signalized intersections. Mid-block crossings have marked crosswalks on the pavement and may also include a pedestrian signal. These crossings can offer a more convenient option for crossing roadways, especially ones with long distances in between intersections.

Pedestrian: A person walking or traveling by means of a wheelchair, electric scooter, crutches, or other walking devices or mobility aids. Use of the term pedestrian is meant to include all disabled individuals regardless of which equipment they may use to assist their self-directed locomotion (unless they are using a bicycle). It also includes runners, joggers, those pulling or pushing strollers, carriages, carts and wagons, and those walking bicycles.

Pedestrian Activated Signal: A traffic control device used to indicate the presence of a pedestrian to allow for a safe crossing away from a signalized intersection. Once the signal is activated, flashing lights appear to signal their presence and vehicles are required to stop.

Rest Area: Defined as level portions of a trail wide enough to provide wheelchair users and others a place to rest and gain relief from prevailing grade and cross-slope demands. Users can benefit from rest stops on steep or very exposed trails to pause from their exertions and enjoy the environment. Rest areas are most effective when placed at intermediate points, scenic lookouts, or near trail amenities. Rest areas located off the trail allow stopped trail users to move out of the way of continuing traffic. The most inviting rest areas have a bench, shade, a place to rest bicycles, and a trash receptacle.

Sidepath: This type of facility provides connections for pedestrians and bicyclists, and is typically located adjacent to roadways. Sidepaths are 10’ or wider to serve multiple users in a safe manner.

Sidewalk: That portion of a highway, road or street specifically constructed for the use of pedestrians on the outside edge of the vehicular travel way. Sidewalks are typically, but not always, curb-separated from the roadway and made of concrete, brick, asphalt or another hard surface material.

Off-Street Trail: These trail facilities serve a variety of users and are typically 10’-12’ or wider to accommodate high volumes of users. These trails are generally found within greenbelts and provide regional connectivity.

Texas Accessibility Standards (TAS): Standards for developing ADA accessible public facilities in Texas. The TAS are regulated by the Texas Department of Licensing and Regulations (TDLR).

BICYCLE-ORIENTED TERMS

Bicycle: Every vehicle propelled solely by human power upon which any person may ride, having two tandem wheels, except scooters and similar devices. The term “bicycle” in this planning process also includes three and four-wheeled human-powered vehicles, but not tricycles for children.

Bicycle Accommodations/Facilities: A general term denoting a variety of improvements and provisions that are made by public agencies to accommodate or encourage bicycling, including bike lanes, shared-use pathways, signed bike routes, and bicycle parking and storage facilities.

Bike Lane: A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.

Bikeway: A generic term for any road, street, path, trail, or way that, in some manner, is specifically designated for bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

Major Thoroughfares: Roadways designated for large traffic volumes, higher speeds, and intended for long-distance travel. Typically, this type of thoroughfare creates interjurisdictional connections and is part of a regional roadway network.

Minor Thoroughfares: Roadways with lower traffic volumes, slower speeds, and intended for local travel needs. Typically, these thoroughfares create key cross-town connections and connect to major thoroughfares.

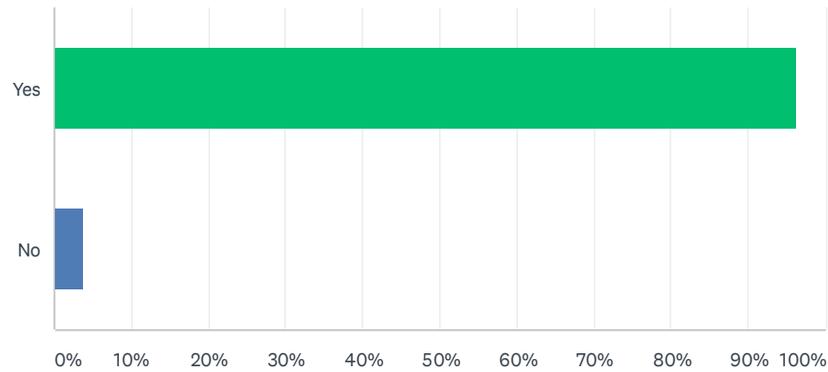
Shared-Use Lane: A roadway that is open to both bicycle and motor vehicle travel. Unless bicycle travel is explicitly prohibited, all highways, roads, and streets are “share lanes.” Some shared lanes may have wide curb lanes or paved shoulders, to increase comfort for bicyclists; however in most cases these roads do not have sufficient width to accommodate a designated bike lane.

Wide Shoulder: Any pavement of a roadway to the right-most travel lanes that is between 8’-10’ wide, that with appropriate signage and safety measures can serve as routes for bicyclists. This bicycle facility is best suited for rural roadways that have high traffic speeds and volumes and create long-distance or regional bicycle routes.

SURVEY RESULTS

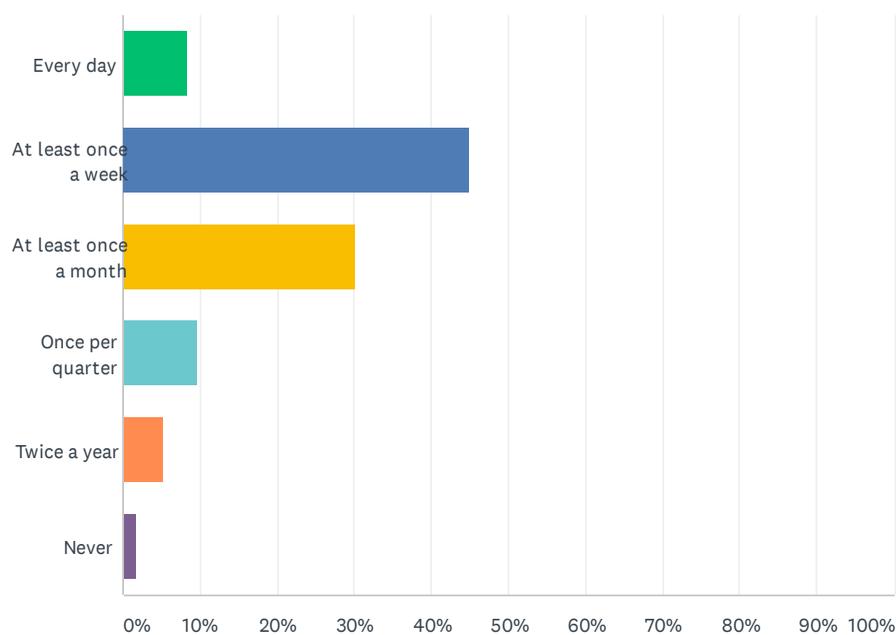
A community survey consisting of questions focused on various aspects of park and trail facilities as well as demographic characteristics of the community was conducted from June to July of 2021.

Question I: Have you visited any parks in the City of Denison in the past year?



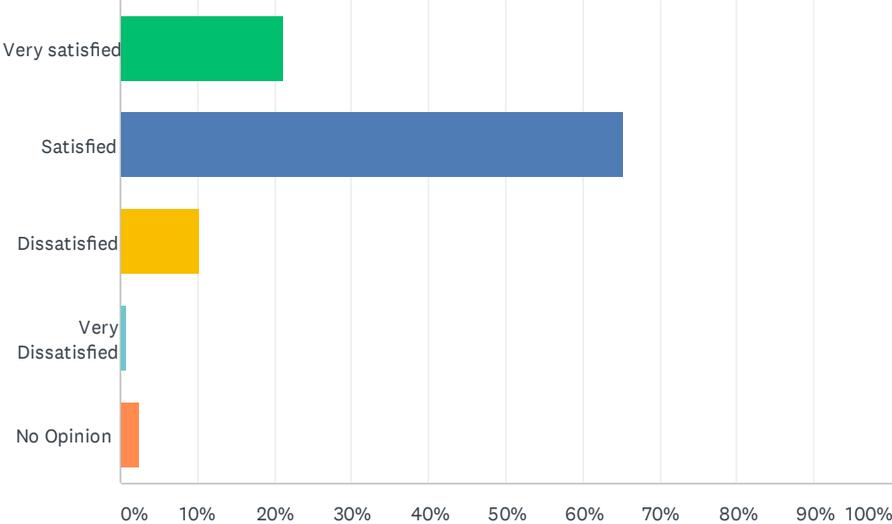
ANSWER CHOICES	RESPONSES	
Yes	96.15%	575
No	3.85%	23
TOTAL		598

Question 2: How frequently do you visit a park in Denison?



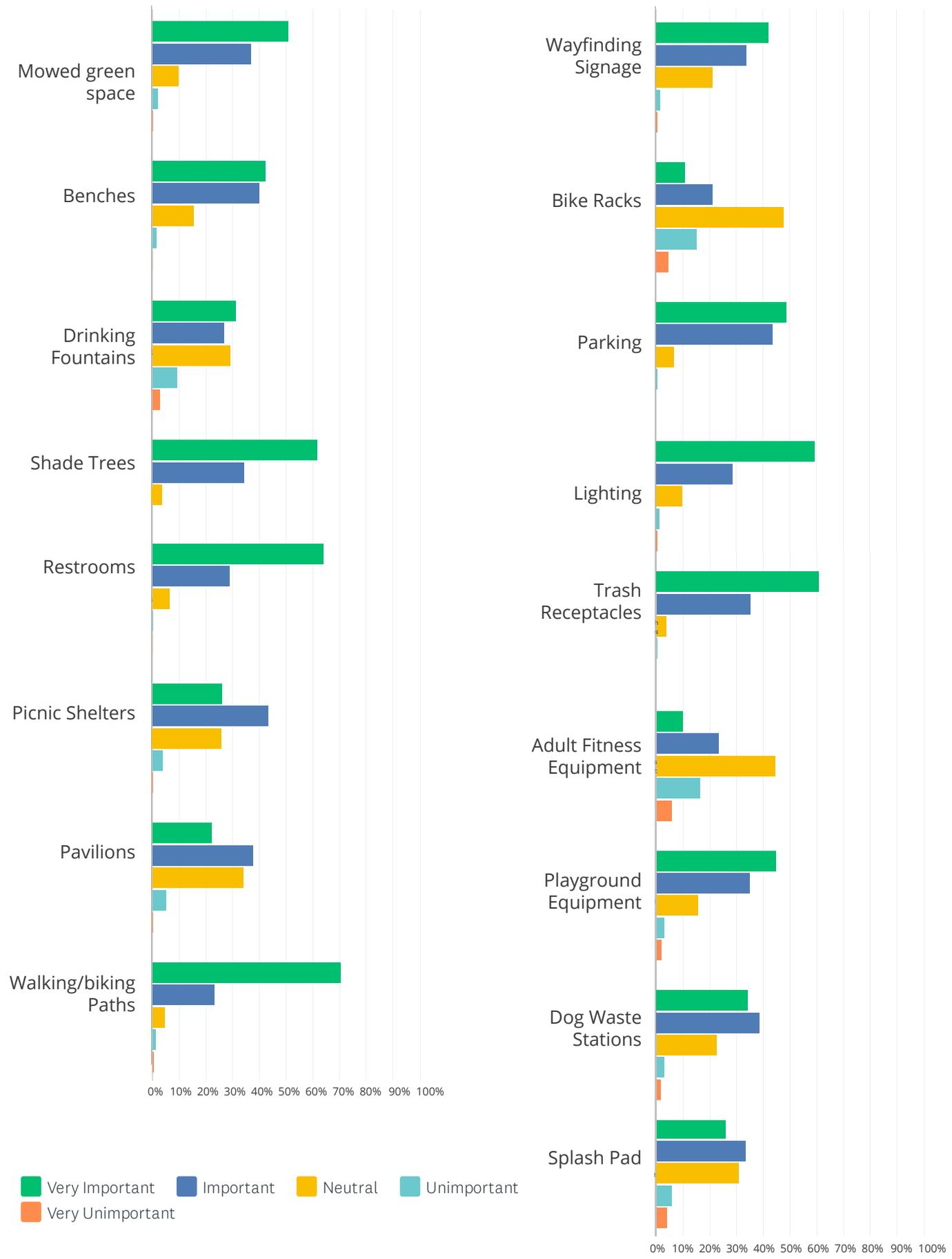
ANSWER CHOICES	RESPONSES	
Every day	8.35%	50
At least once a week	44.91%	269
At least once a month	30.22%	181
Once per quarter	9.68%	58
Twice a year	5.18%	31
Never	1.67%	10
TOTAL		599

Question 3: How satisfied or dissatisfied are you with the quality of parks in Denison?



ANSWER CHOICES	RESPONSES	
Very satisfied	21.14%	126
Satisfied	65.27%	389
Dissatisfied	10.23%	61
Very Dissatisfied	0.84%	5
No Opinion	2.52%	15
TOTAL		596

Question 4: Please rate how important each of the following park amenities are to you.



	VERY IMPORTANT	IMPORTANT	NEUTRAL	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Mowed green space	50.84% 303	37.08% 221	9.73% 58	2.01% 12	0.34% 2	596	1.25
Benches	42.47% 251	39.93% 236	15.74% 93	1.69% 10	0.17% 1	591	1.06
Drinking fountains	31.44% 188	26.92% 161	29.26% 175	9.36% 56	3.01% 18	598	0.42
Shade trees	61.74% 368	34.40% 205	3.69% 22	0.17% 1	0.00% 0	596	1.54
Restrooms	64.03% 381	28.91% 172	6.39% 38	0.50% 3	0.17% 1	595	1.50
Picnic shelters	26.09% 155	43.60% 259	25.93% 154	3.87% 23	0.51% 3	594	0.62
Pavilions	22.26% 132	37.94% 225	34.06% 202	5.23% 31	0.51% 3	593	0.38
Walking/biking paths	70.40% 421	23.41% 140	4.68% 28	1.17% 7	0.33% 2	598	1.57
Wayfinding signage	42.35% 252	33.95% 202	21.34% 127	1.68% 10	0.67% 4	595	0.94
Bike racks	10.79% 64	21.42% 127	47.72% 283	15.18% 90	4.89% 29	593	-0.35
Parking	48.91% 292	43.72% 261	6.70% 40	0.67% 4	0.00% 0	597	1.34
Lighting	59.50% 354	28.57% 170	9.75% 58	1.51% 9	0.67% 4	595	1.35
Trash receptacles	60.80% 363	35.18% 210	3.69% 22	0.34% 2	0.00% 0	597	1.52
Adult fitness equipment	9.90% 59	23.49% 140	44.46% 265	16.28% 97	5.87% 35	596	-0.34
Playground equipment	44.72% 267	34.84% 208	15.58% 93	3.02% 18	1.84% 11	597	1.03
Dog waste stations	34.29% 204	38.66% 230	22.52% 134	2.86% 17	1.68% 10	595	0.79
Splash pads	26.04% 156	33.39% 200	30.72% 184	5.84% 35	4.01% 24	599	0.43

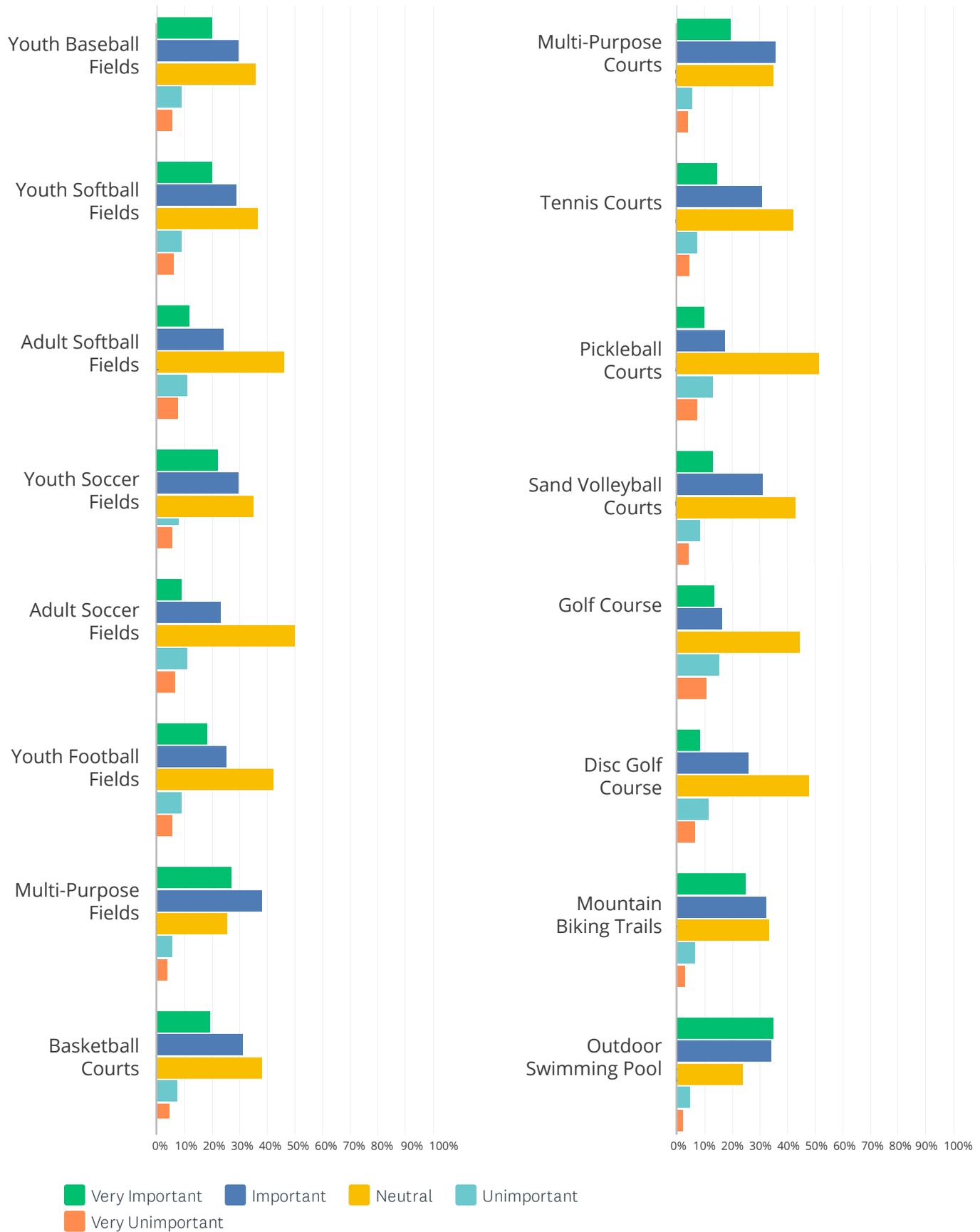
#	OTHER (PLEASE SPECIFY)	DATE
1	More places needed for long distance runners and cyclists	7/15/2021 8:02 PM
2	Toddler playground equipment - smaller slides, swings, ride-ons	7/14/2021 8:48 AM
3	Emergency notification station	7/14/2021 3:16 AM
4	do not pave over natural paths.	7/9/2021 1:01 AM
5	More activities for the dogs at the dog park would be nice.	7/8/2021 1:47 PM
6	Shaded areas are a must. The new park near the hospital had dangerously HOT playground equipment... and that was in May!	7/7/2021 7:35 PM
7	Other sports facilities (e.g. basketball, baseball, soccer, disk golf, etc.)	7/7/2021 6:41 PM
8	I am a senior and I like to roller skate. And I would love to see the trails be more skate friendly.	7/7/2021 4:05 PM
9	Walking trails with no pets allowed. Some do not use leashes and others let the leash out all the way. Not all are dog lovers and some are allergic	7/7/2021 1:56 PM
10	I would like to see more trails that have a natural surface instead of concrete.	7/7/2021 11:14 AM
11	The more trails to hike the better	7/7/2021 10:20 AM

12	Mile/ Distance Markers, health tracking signage (heart rate etc), reminders to clean up after pets, specific areas where pets are not allowed, no smoking/ no vaping, no alcohol signage, wheelchair access/ options	7/7/2021 10:17 AM
13	Soft (dirt or decomposed granite) walking/running path)	7/7/2021 10:17 AM
14	Please be sure to inspect and clean restrooms daily! Doesn't seem to be done at THF Park.	7/7/2021 9:57 AM
15	Toddler playground	7/7/2021 9:33 AM
16	Our dissatisfaction with Denison parks, particularly the playground/ splash pad by the stadium, is cleanliness. This area is most always full of trash, cigarette butts and nasty hazards to the toddlers and kids it was designed for.	7/7/2021 9:30 AM
17	Security	7/7/2021 9:27 AM
18	Would love to have a rinse off hose near the sand courts	7/6/2021 4:35 PM
19	Fixed playground equipment	7/5/2021 4:01 PM
20	If a park doesn't have a restroom available that discourages me from going because one of the children will always have to go	7/5/2021 9:07 AM
21	Rock Climbing area	7/4/2021 7:46 AM
22	Fishing for youth at least.	7/3/2021 11:49 PM
23	Be cool to have some historical markers (aka Katy trail) along or at some of the parks giving info about the history of the park or area.	7/3/2021 5:35 PM
24	Clean B/R are always important.	7/3/2021 1:41 PM
25	Please don't take the Nature out of Loy Lake too	7/3/2021 1:47 AM
26	Mountain Bike Trails!	7/2/2021 7:46 AM
27	Playground equipment needed east of denison for smaller neighborhood parks	7/2/2021 6:01 AM
28	Drinking stations for dogs as well. Not just for the humans.	7/1/2021 7:56 PM
29	Munson Park is huge, beautiful shade trees, and it's play ground equipment is OLD. A frisbee golf corse? How many people use that? Loy Lake? The Museum is locked, no one can see the old homes. You put a splash pad in at Crawford abd a new park on the Southwest of town. Very nice, expensive homes, but I sure wouldn't want those bright light shining in my windows.	7/1/2021 6:58 PM
30	Maintenance of the playground equipment. Lots of broken stairs, slides gor months. Burn marks holes in slides as well. These things need to be checked often for saftey 0	7/1/2021 5:45 PM
31	Would like to see a concession stand at both Waterloo and Loy lake	7/1/2021 5:42 PM
32	Swing set at thf would be nice	7/1/2021 5:06 PM
33	Keep the large trees!!! They will never regrow in our lifetime	7/1/2021 3:45 PM
34	Some parks could use updated playground equipment	7/1/2021 3:41 PM
35	Dog runs where they can play off leash	7/1/2021 3:22 PM
36	occasional police presence	7/1/2021 3:07 PM
37	Dirt paths are very important. Less concrete is very important.	7/1/2021 2:45 PM
38	keeping vegetation trimmed back from trails	7/1/2021 2:34 PM
39	Clean, peaceful trails with nature undisturbed as much as possible is so refreshing in our busy and hectic surroundings.	7/1/2021 10:39 AM
40	Drinking fountains for dogs	7/1/2021 10:29 AM
41	Clean bathrooms!!!!	7/1/2021 7:22 AM
42	Dog watering stations!	7/1/2021 7:18 AM
43	All so a MTB pump track, skill section like sherman would be awesome, maybe a little more attention on the MT Bike side as Waterloo gets a huge folowing. Water feature addition at waterloo like slide etc.	7/1/2021 3:12 AM
44	Concrete walk ways	7/1/2021 1:58 AM
45	Basketball courts at New parks. You build they will come	6/30/2021 9:40 PM

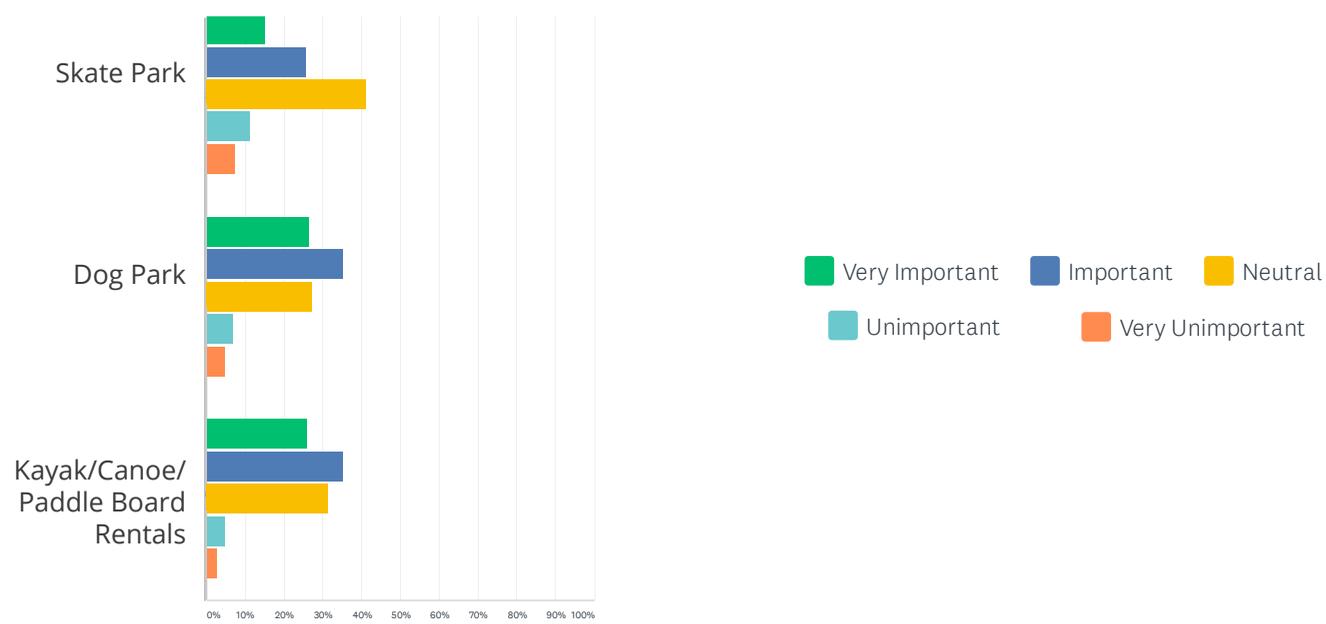
46	A sustainably focused plan/implement to any/all park features! green love <3	6/30/2021 9:39 PM
47	Water bottle filler stations are very important and appreciated	6/30/2021 9:35 PM
48	Sidewalk access to parks. Waterloo Lake needs sidewalks and speed bumps	6/30/2021 9:19 PM
49	I go 1 -2 times a week. Needs police patrol/present	6/30/2021 8:41 PM
50	Wash stations for feet (walking in sand or mud)	6/30/2021 8:21 PM
51	Stickers controll should be better.	6/30/2021 7:30 PM
52	Trails that interconnect	6/30/2021 6:42 PM
53	Denison needs to upgrade public swimming pool	6/30/2021 6:08 PM
54	Keeping ponds in good environmental shape to enhance fishing experience and protect fish population.	6/30/2021 5:56 PM
55	Wheel chair access to picnic areas	6/30/2021 5:52 PM
56	Waterloo Pool is very important to my wife and I. Lap swimming is a priority for us!	6/30/2021 5:08 PM
57	More trash cans in more places! Could really use a trash can or two along the trails at Waterloo, not just at the main park area. Maybe people wouldn't litter so much if there were trashcans available on the trails.	6/30/2021 4:59 PM
58	Play equipment for smaller children or with disabilities	6/30/2021 4:43 PM
59	Neutral means variation in parks needed.	6/30/2021 4:38 PM
60	Bikers need to follow the rules so runners stop getting hurt by them.	6/30/2021 4:37 PM
61	More hiking areas. Very important	6/30/2021 4:34 PM
62	It would be great if the playground at the Waterloo could be replaced, as it has broken equipment. The waterloo pool needs major updating.	6/30/2021 4:32 PM
63	Disc Golf	6/30/2021 4:32 PM
64	THF Park could use playground equipment for smaller children.	6/30/2021 4:26 PM
65	Horseback riding trails	6/30/2021 4:24 PM
66	wish everyone would pick up and use dog waste stations	6/30/2021 4:12 PM
67	As a woman, I want to feel safe at the parks.	6/30/2021 4:09 PM
68	Children exercise areas are important as well as playground	6/30/2021 4:09 PM
69	A place to dispose of snakes once killed	6/30/2021 4:07 PM
70	Forest management at Waterloo Lake	6/17/2021 3:09 AM
71	No black or dark colored playground equipment. We live in TX with 100 plus degrees in the summer and black/ dark equipment gets hot! Skin burning hot.	6/14/2021 7:59 PM
72	Well maintained paths & tracks. Waterloo track is full of dips & holes. I've nearly fallen several times	6/9/2021 8:08 PM
73	Non paved biking, hiking, and running trails	6/9/2021 7:18 PM
74	Playground equipment for young children at THF park. Baby swings, slides, climbing structure for those 3 and under.	6/9/2021 9:13 AM

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Question 5: Please rate how important each of the following outdoor recreation amenities are to you.



Question 5: Please rate how important each of the following outdoor recreation amenities are to you.



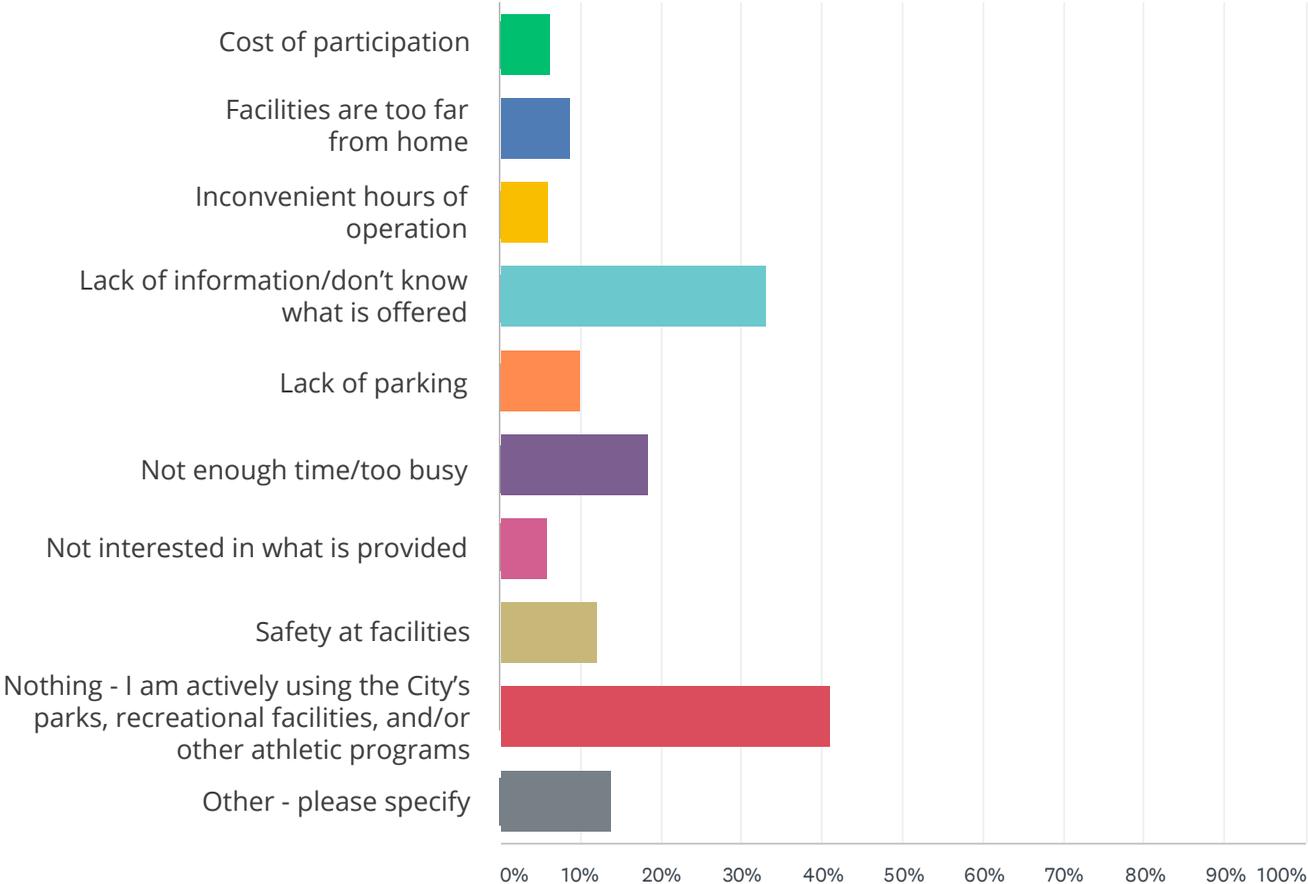
	VERY IMPORTANT	IMPORTANT	NEUTRAL	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Youth baseball fields	19.93% 119	29.48% 176	35.85% 214	9.05% 54	5.70% 34	597	0.15
Youth softball fields	19.83% 118	28.91% 172	36.47% 217	8.74% 52	6.05% 36	595	0.15
Adult softball fields	11.66% 69	23.99% 142	45.95% 272	10.98% 65	7.43% 44	592	-0.21
Youth soccer fields	22.24% 133	29.43% 176	34.95% 209	7.86% 47	5.52% 33	598	0.23
Adult soccer fields	8.94% 53	23.27% 138	49.92% 296	11.13% 66	6.75% 40	593	-0.31
Youth football fields	18.10% 107	25.04% 148	42.30% 250	8.97% 53	5.58% 33	591	0.01
Multi-purpose fields	27.06% 161	38.15% 227	25.55% 152	5.55% 33	3.70% 22	595	0.56
Basketball courts	19.26% 114	31.08% 184	38.01% 225	7.26% 43	4.39% 26	592	0.17
Multi-purpose courts	19.53% 116	35.69% 212	35.02% 208	5.72% 34	4.04% 24	594	0.28
Tennis courts	14.67% 87	30.86% 183	42.33% 251	7.59% 45	4.55% 27	593	0.03
Pickleball Courts	10.00% 59	17.63% 104	51.53% 304	13.22% 78	7.63% 45	590	-0.40
Sand volleyball courts	13.13% 78	31.14% 185	43.10% 256	8.42% 50	4.21% 25	594	-0.03
Golf course	13.39% 79	16.27% 96	44.41% 262	15.25% 90	10.68% 63	590	-0.32
Disc golf course	8.46% 50	25.89% 153	47.72% 282	11.51% 68	6.43% 38	591	-0.28

	VERY IMPORTANT	IMPORTANT	NEUTRAL	UNIMPORTANT	VERY UNIMPORTANT	TOTAL	WEIGHTED AVERAGE
Mountain bike trails	24.96% 148	32.21% 191	33.39% 198	6.58% 39	2.87% 17	593	0.36
Outdoor swimming pools	35.01% 209	34.17% 204	23.95% 143	4.86% 29	2.01% 12	597	0.71
Skate park	15.08% 89	25.42% 150	41.02% 242	11.19% 66	7.29% 43	590	-0.08
Dog park	26.35% 156	35.14% 208	27.20% 161	6.76% 40	4.56% 27	592	0.47
Kayak/canoe/paddle board rentals	25.89% 153	35.19% 208	31.30% 185	4.91% 29	2.71% 16	591	0.46

#	OTHER (PLEASE SPECIFY)	DATE
1	Adult fitness course	7/14/2021 8:48 AM
2	Another pool or a place for the dogs to be able to swim would be nice.	7/8/2021 1:47 PM
3	Indoor pool new or improved	7/7/2021 8:52 PM
4	Lacrosse or field hockey fields so we could join the Dallas leagues. Also, a natatorium for our competition swimmers instead of having to drive to Frisco.	7/7/2021 1:56 PM
5	More natural trails for running, hiking etc.	7/7/2021 11:14 AM
6	Tesla / Electric / Hybrid Car Charging Stations	7/7/2021 10:17 AM
7	It's great to have a nice park, but spending \$100,000 for ground maintenance is over doing it!! These fields are for children NOT professional athletes!	7/7/2021 9:57 AM
8	Outdoor unenclosed pools are needed.	7/7/2021 9:50 AM
9	jetski rentals would be nice	7/7/2021 9:16 AM
10	Pickleball is the fastest growing sport. We need courts to plan on.	7/5/2021 8:58 PM
11	Rock climbing	7/4/2021 7:46 AM
12	Courts, fields should be versatile enough to easily be outfitted for as many activities as practice.	7/3/2021 11:49 PM
13	At all of the paved trails and some of the dirt trails there needs to be speed limit and or pedestrian vs bike signage...I've almost been hit or run over by bikers several times on the Katy trail.	7/3/2021 5:35 PM
14	More facilities for special needs children in wheel chairs	7/3/2021 12:35 AM
15	Emergency stations (a button to press in case someone needs police, ambulance, fire truck etc	7/2/2021 8:23 PM
16	Most amenities listed, we have at the bigger parks. We need playground equipment at the smaller ones.	7/2/2021 6:01 AM
17	Outdoor roller hockey	7/1/2021 9:06 PM
18	Would like paddle boats for us older folks	7/1/2021 5:42 PM
19	Indoor heated pool	7/1/2021 2:54 PM
20	I'd rather not have mountain bikers on the hiking trails. They are rude and dangerous. I used to run everyday on the trails, now maybe once a week because if the dangerous conditions of the mountain bikers.	7/1/2021 2:45 PM
21	Prefer to enjoy nature without a lot if extra development with the land.	7/1/2021 10:39 AM
22	Paved bike trail at least 10 miles long.	7/1/2021 7:00 AM
23	Kayaking docks	7/1/2021 1:58 AM
24	Outdoor rec simply (i.e. butterfly garden, bird watch zone, & etc similar features)	6/30/2021 9:39 PM
25	I do not know what pickleball is.	6/30/2021 7:30 PM

26	Bike rentals	6/30/2021 6:16 PM
27	Make recreational for family, need fun and safe parks for kids and parents to enjoy	6/30/2021 6:08 PM
28	Fish tackle and bait	6/30/2021 5:52 PM
29	Waterloo pool!	6/30/2021 5:42 PM
30	While I responded mostly neutral I believe that many of the area are VERY IMPORTANT to families and the community so please, don't use my answers as a lack of interest. Therefore I am neutral as to my needs but support the services for others.	6/30/2021 5:08 PM
31	We reserved the Waterloo pavilion for a birthday party and we intended on renting kayaks, but couldn't rent the 2 person ones because they were damaged and in the process of being fixed. It would be great if there was a backup plan so that people don't miss out on those. It was our whole reason for booking a party there.	6/30/2021 4:32 PM
32	waterloo pool very important	6/30/2021 4:25 PM
33	I'd love to have paddle boats and kayaks to rent.	6/30/2021 4:09 PM
34	Ice hockey would be wonderful to see here	6/30/2021 4:09 PM
35	Indoor year round pool.	6/30/2021 4:06 PM
36	new indoor, year round swimming pool	6/23/2021 5:22 PM
37	Fishing	6/16/2021 3:01 PM
38	Bike connectors between neighborhood/schools and parks.	6/10/2021 8:30 PM
39	I'd like to see an area for young kids and Waterloo pool. The most shallow area is 3 feet deep.	6/9/2021 9:13 AM
40	Horseshoe pits at Waterloo - very unimportant	6/9/2021 8:54 AM

Question 6: Which of the following reasons prevent you from using parks, recreational amenities, and/or athletic programs offered by the Denison Parks and Recreation Department? If you currently use amenities and programs, what prevents you from using them more often?



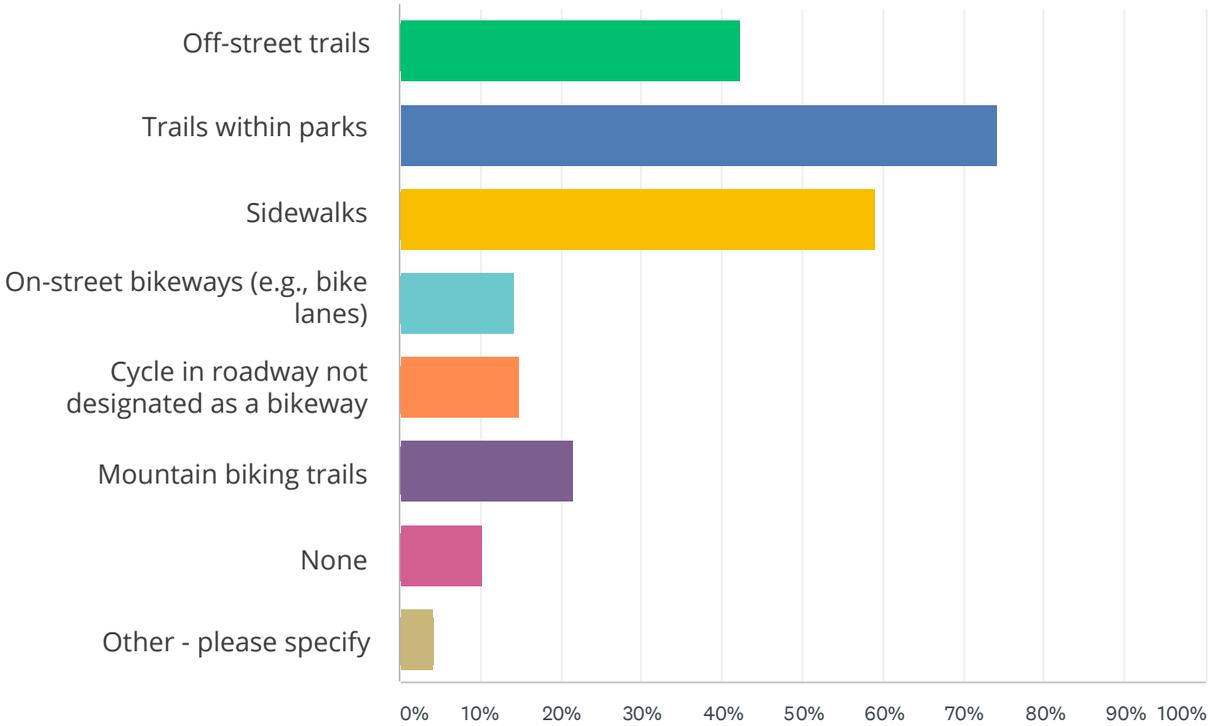
ANSWER CHOICES	RESPONSES	
Cost of participation	6.31%	37
Facilities are too far from home	8.87%	52
Inconvenient hours of operation	5.97%	35
lack of information/don't know what is offered	33.11%	194
Lack of parking	10.07%	59
Not enough time/too busy	18.43%	108
Not interested in what is provided	5.80%	34
Safety at facilities	12.12%	71
Nothing - I am actively using the City's parks, recreational facilities, and/or athletic programs	40.96%	240
Other (please specify)	13.82%	81
Total Respondents: 586		

#	OTHER (PLEASE SPECIFY)	DATE
1	No wheelchair athletic programs offered that I know of	7/12/2021 12:19 PM
2	There are no nice parks on the east side of town. All the nice parks on the one west part of Denison. Munson park has fallen into significant disrepair	7/9/2021 4:20 PM
3	Mosquitoes are a big problem on The Katy Trail	7/9/2021 12:05 AM
4	Munson Park is the closest to us and the amenities there are very null. We would really like to have a walking/bike trail here :)	7/8/2021 1:00 PM
5	Lack of basketball courts	7/7/2021 8:25 PM
6	I have three children and eight grandchildren living in Denison so all the parks and recreational areas are very important to our family and used by all regularly, not me in particular but I frequent them with family.	7/7/2021 8:06 PM
7	Not enough shade	7/7/2021 7:35 PM
8	Health issues	7/7/2021 5:47 PM
9	Bathrooms or drinking stations not working or not available, cleanliness along with the bathrooms	7/7/2021 4:18 PM
10	Pets and more pets not leashed or loose leashes	7/7/2021 1:56 PM
11	Lack of interconnected trails	7/7/2021 1:47 PM
12	I just moved here less than 2 months ago so haven't had much opportunity to frequent the parks in Denison. I see there's improvement going on though.	7/7/2021 12:03 PM
13	Weather - so much rain has made trails muddy	7/7/2021 11:42 AM
14	The sidewalks to walk from my home to the parks is bad condition. It makes pushing a stroller difficult.	7/7/2021 11:18 AM
15	Need more tables/benches/places to sit and more shade	7/7/2021 10:59 AM
16	handicap parking and easy access	7/7/2021 10:32 AM
17	There are beautiful game field for sports. But when it comes to practice fields, most are not much better than close mowed pastures, if they are mowed. No place for a kid practice batting or pitching in the same environment that he would be competing in. Practice fields both for soccer and baseball, are not level. Fields 1 and 2 at THF slope to the north east. Badly. No parking on Day st to access Katy trail.	7/7/2021 10:32 AM
18	Having knowledgeable staff member on site at all parks would be awesome! Wayfinding friendliness from a human, as well as signage would really set our Parks & Rec apart from the rest! Also, tennis and pickleball have been HUGE requests for many years.	7/7/2021 10:17 AM
19	Lighting	7/7/2021 10:14 AM
20	I have been meaning to and I would like to	7/7/2021 9:57 AM
21	Vandalism	7/7/2021 9:38 AM
22	See comment above regards cleanliness and safety for our toddlers and kids.	7/7/2021 9:30 AM
23	Restrooms not being available	7/5/2021 9:07 AM
24	please remove the curfew, its too hot to walk during the day	7/5/2021 5:28 AM
25	Denison has a large population of seniors. We need to design facilities for the safety and comfort of seniors and to accommodate activities enjoyed by seniors such as board games, dominos, cards, etc. Comfortable seating.	7/3/2021 11:49 PM
26	need a dog park	7/3/2021 9:36 PM
27	Bikers go supper fast on the Katy trail...hardly know they are coming till they are on top of me sometimes...at least 3 times I've felt very uncomfortable with the speed they have passed me and at very close distance. Most the time they are looking down and don't see who's ahead of them	7/3/2021 5:35 PM
28	U	7/3/2021 3:57 PM
29	Spray for Mosquitoes regularly	7/3/2021 1:41 PM
30	Don't concrete all of nature and take the homes of animals which drives them to our homes	7/3/2021 1:47 AM
31	Call stations along walking trails and better lighting	7/3/2021 12:35 AM

32	Covid	7/2/2021 7:55 PM
33	Facilities need to be more handicap accessible.	7/2/2021 7:49 PM
34	The cost for the kayak rental is high	7/2/2021 8:45 AM
35	The condition of the walking path around the dog park area at Waterloo. There are several places where the path has collapsed and causes a walking hazard.	7/2/2021 8:23 AM
36	Maintenance of the playground equipment. Lots of broken stairs, slides gor months. Burn marks holes in slides as well. These things need to be checked often for safety	7/1/2021 5:45 PM
37	I have issues with the little dog park at Waterloo. I do not presently have any problem but lots of other older adults do. The parking is too far away from the little dog gate. The Sherman dog park parking is right in front of the gate. We need more parking plus spraying for mosquitoes.	7/1/2021 2:55 PM
38	Age limit for rentals	7/1/2021 2:27 PM
39	Pool time for older adults	7/1/2021 1:03 PM
40	Recent attack at Waterloo caused us not to go there for a while now. Did they catch the attacker?	7/1/2021 10:39 AM
41	At THF need more parking when 2 sports are running simultaneously	7/1/2021 9:20 AM
42	Paved trail not long enough (road bike on a one mile trail is like an 8 minute ride)	7/1/2021 7:00 AM
43	weather	7/1/2021 5:48 AM
44	Handicap access	7/1/2021 5:43 AM
45	Getting run over by bikers while trying to walk with my dogs.	6/30/2021 10:36 PM
46	Bad signage on trails	6/30/2021 10:02 PM
47	When the water bottle filler stations are inoperable I don't stay as long. The lighting after dark is an issue.	6/30/2021 9:35 PM
48	The new Katy Trail lacks parking facilities	6/30/2021 9:19 PM
49	open weekends	6/30/2021 8:50 PM
50	Pit Bulls on playground and lake area of Waterloo	6/30/2021 8:46 PM
51	I love the indoor pool.	6/30/2021 7:30 PM
52	Upkeep, or lack there of	6/30/2021 6:51 PM
53	Kayak rental is not easily accessible. The trailer is so tall that it is nearly impossible for someone with arthritis to lift the kayak high enough to put it up. (Let alone getting it back up the hill after a two hour rental)	6/30/2021 6:51 PM
54	I would use Munson park more often if the roads and parking area weren't so beat up.	6/30/2021 6:49 PM
55	I would bike more if there were trails connecting Waterloo to other parks. More rail to trail.	6/30/2021 6:42 PM
56	Not clean or well taken care of/maintained, people smoking, restrooms dirty, etc etc.	6/30/2021 5:52 PM
57	I'm handicapped to walker and wheel chair	6/30/2021 5:52 PM
58	No walking trail at Munson Park	6/30/2021 5:48 PM
59	Parking at the new park is AWFUL especially when youth sports are involved	6/30/2021 5:25 PM
60	Restrooms being locked is a problem. Splash pads not working properly is frustrating. THF gets too crowded when multiple sports are playing at once.	6/30/2021 5:13 PM
61	There appears to be a growing number of adults using the lap swim time, especially in the early morning before work time. Scheduling has helped but it is an inconvenience for some who can't get a time.	6/30/2021 5:08 PM
62	Lack of cleanliness/maintenance at some parks.	6/30/2021 4:59 PM
63	P & R not active participants in youth sports. Offer facilities but that is all. Website is not maintained and out of date!	6/30/2021 4:40 PM
64	Need playground equipment for smaller children	6/30/2021 4:26 PM
65	Not offered, horseback riding trails, amenities	6/30/2021 4:24 PM
66	The Texas heat! Not much to do about that other than maybe having misting stations. The Ft Worth zoo has those and they really help when it's hot.	6/30/2021 4:09 PM

67	Waterloo Pool a GREAT asset	6/30/2021 4:01 PM
68	Don't have the connections to get on an adult team	6/30/2021 3:58 PM
69	Unsafe, old, rusted equipment; rude staff	6/24/2021 8:44 PM
70	Bathrooms are locked; with little children it's difficult.	6/14/2021 7:59 PM
71	Taxes are too high for this type of entertainment	6/11/2021 4:23 PM
72	Would love to see more activities offered for active senior adults and advertised. Fitness center, variety of exercise classes, line dancing, other classes such as pottery or computer skills	6/11/2021 3:08 PM
73	Side walks connecting neighborhoods and schools to parks	6/10/2021 8:30 PM
74	Splash pads for the kids NEVER work! Makes me not want to ever go back.	6/10/2021 7:18 PM
75	Not enough basketball courts nor skate parks	6/10/2021 12:29 PM
76	Baseball and soccer fields restricted use prevents casual use and practice	6/10/2021 10:04 AM
77	I still use them it was just hard to find info on some of them	6/9/2021 11:48 PM
78	The weather	6/9/2021 8:25 PM
79	Trails can be a little too congested on to ride my MTB... Maybe with more trail mileage or separate MTB trails could ease congestion	6/9/2021 7:15 PM
80	Lack of activities for kids under 4. At our home park (THF) my 3 year old can play but everything is to big for my 1 year old. There isn't even a swing she can ride in or a slide she can use.	6/9/2021 9:13 AM
81	Would play kickball, but sign-ups are at the team level - not the individual level	6/8/2021 5:56 PM

Question 7: What type of pedestrian or bicycle facilities do you generally use?

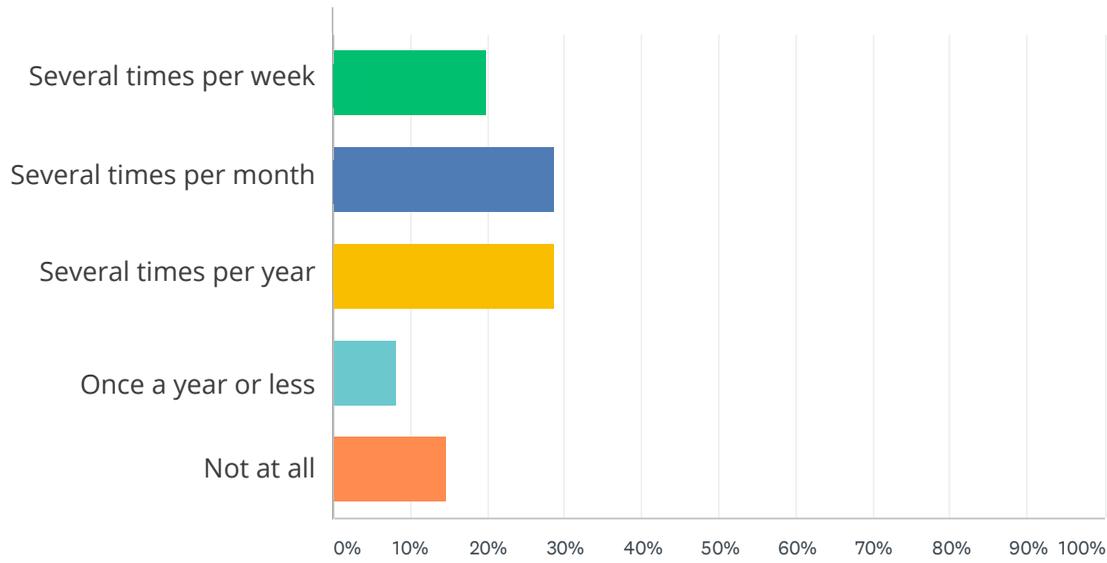


ANSWER CHOICES	RESPONSES
Off-street trails	42.24% 226
Trails within parks	74.21% 397
Sidewalks	59.07% 316
On-street bikeways (e.g. bike lanes)	14.21% 76
Cycle in roadway not designated as a bikeways	14.77% 79
Mountain biking trails	21.50% 115
None	10.28% 55
Other (please specify)	4.11% 22
Total Respondents: 535	

#	OTHER (PLEASE SPECIFY)	DATE
1	I use all the bike trails that are wide enough for my wheelchair	7/12/2021 12:38 PM
2	My grandchildren and their friends use the bike areas which is needed to keep them safe and out of traffic since our streets are narrow and there are very few sidewalks	7/7/2021 8:09 PM
3	In #8 below, I moved here less than 2 months ago, but I would use the trails often, so marking it as what I *would* do.	7/7/2021 12:10 PM
4	Walking on the street.	7/7/2021 10:02 AM
5	Streets/ no sidewalks	7/3/2021 10:32 AM
6	We do not have enough sidewalks to safely be able to ride bikes in town	7/1/2021 2:58 PM
7	Trails at work	7/1/2021 8:43 AM
8	There is a huge lack of sidewalks!	7/1/2021 7:26 AM

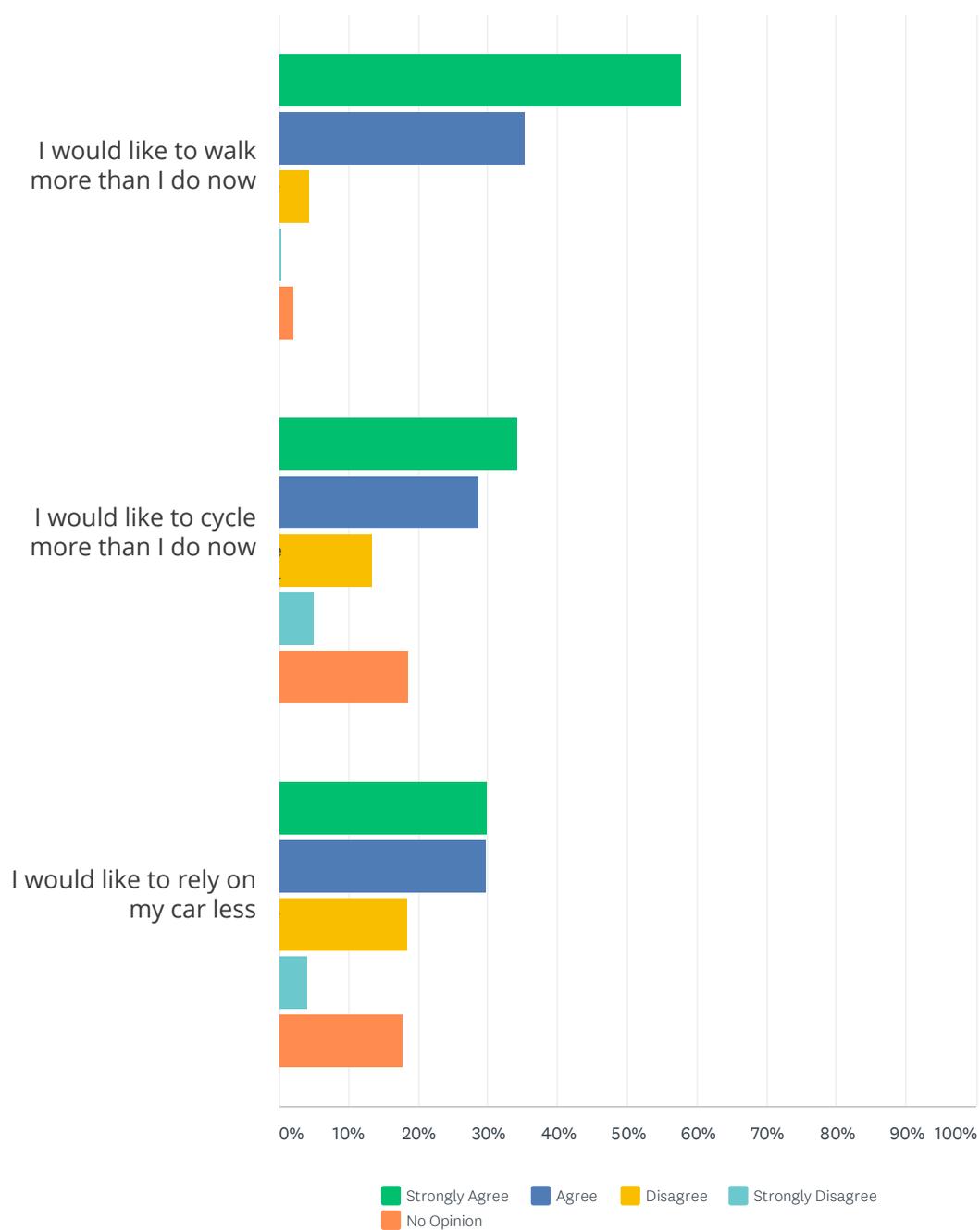
9	There are no sidewalks to access Waterloo Lake Park	6/30/2021 9:22 PM
10	pool	6/30/2021 8:53 PM
11	We need more sidewalks on side streets and main streets	6/30/2021 8:01 PM
12	My neighborhood does not have sidewalks. Bummer.	6/30/2021 7:41 PM
13	There is no bike lanes	6/30/2021 7:13 PM
14	Zas	6/30/2021 6:56 PM
15	Undesignated trails	6/30/2021 6:28 PM
16	City street	6/30/2021 6:04 PM
17	I wish we had more sidewalks in the community, especially in middle/upper class neighborhoods.	6/30/2021 5:19 PM
18	Playground equipment	6/14/2021 8:01 PM
19	Paved one side for pedestrians and the other for cycling	6/11/2021 12:27 AM
20	I would love other trails but there are very few options	6/10/2021 8:33 PM
21	Denison doesn't have any sidewalks nor biking trail to use.	6/10/2021 12:34 PM
22	THF park sidewalk trails	6/9/2021 9:17 AM

Question 8: How often do you use trail or bikeway facilities in Denison?



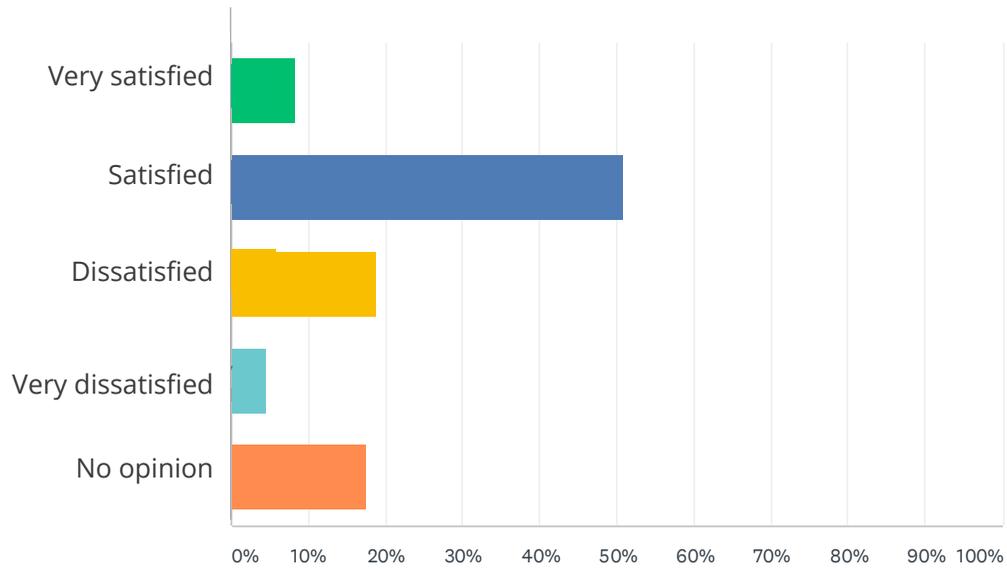
ANSWER CHOICES	RESPONSES	
Several times per week	19.85%	106
Several times per month	28.65%	153
Several times per year	28.65%	153
Once a year or less	8.24%	44
Not at all	14.61%	78
TOTAL		534

Question 9: Please indicate to what extent you agree with the following statements.



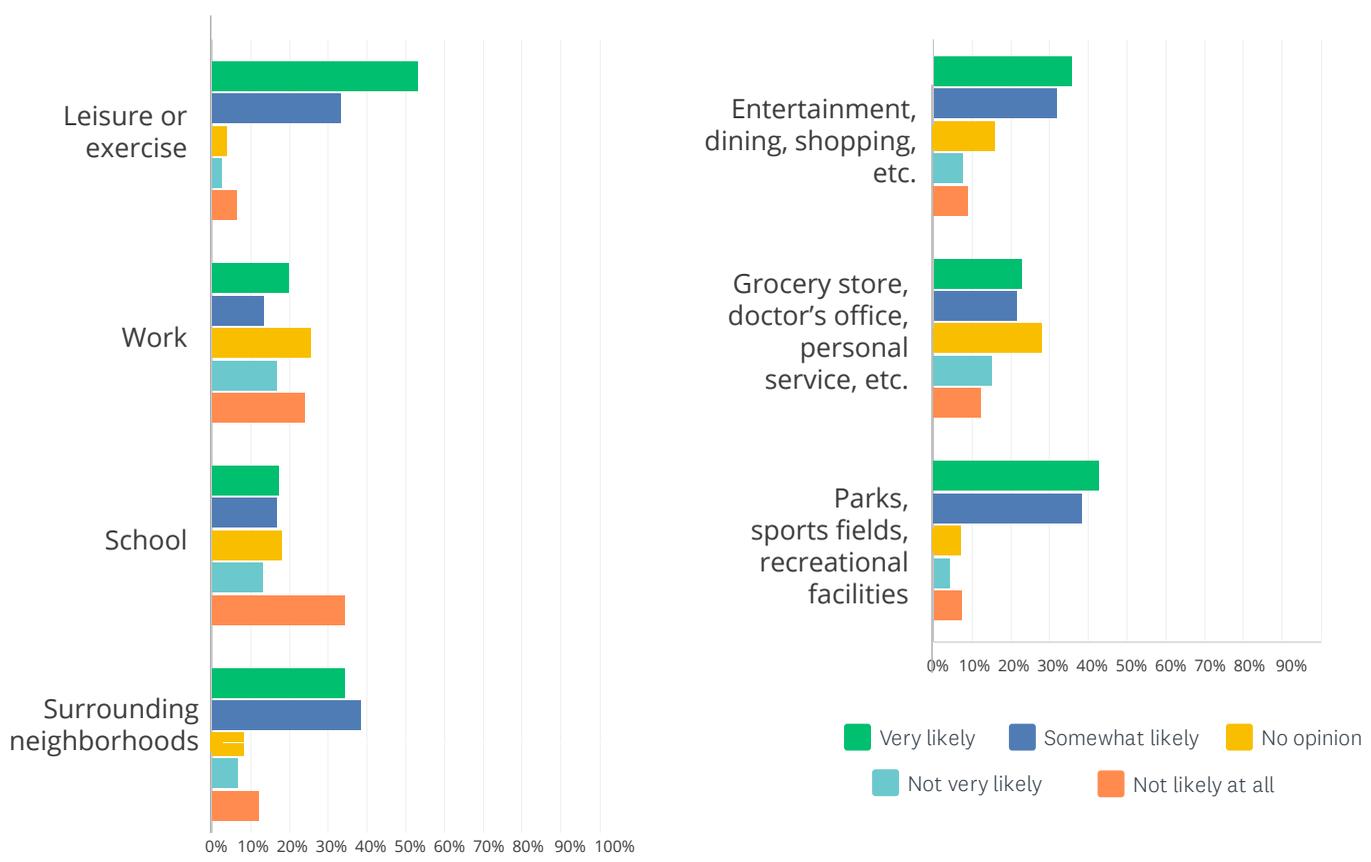
	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
I would like to walk more than I do now	57.84% 310	35.26% 189	4.48% 24	0.37% 2	2.05% 11	536	1.46
I would like to cycle more than I do now	34.22% 181	28.73% 152	13.42% 71	5.10% 27	18.53% 98	529	0.74
I would like to rely on my car less	29.94% 159	29.76% 158	18.46% 98	4.14% 22	17.70% 94	531	0.63

Question 10: How satisfied are you with the quality of trail and bikeway facilities in Denison?



ANSWER CHOICES	RESPONSES	
Very satisfied	8.46%	45
Satisfied	50.75%	270
Dissatisfied	18.80%	100
Very dissatisfied	4.51%	24
No Opinion	17.48%	93
TOTAL		532

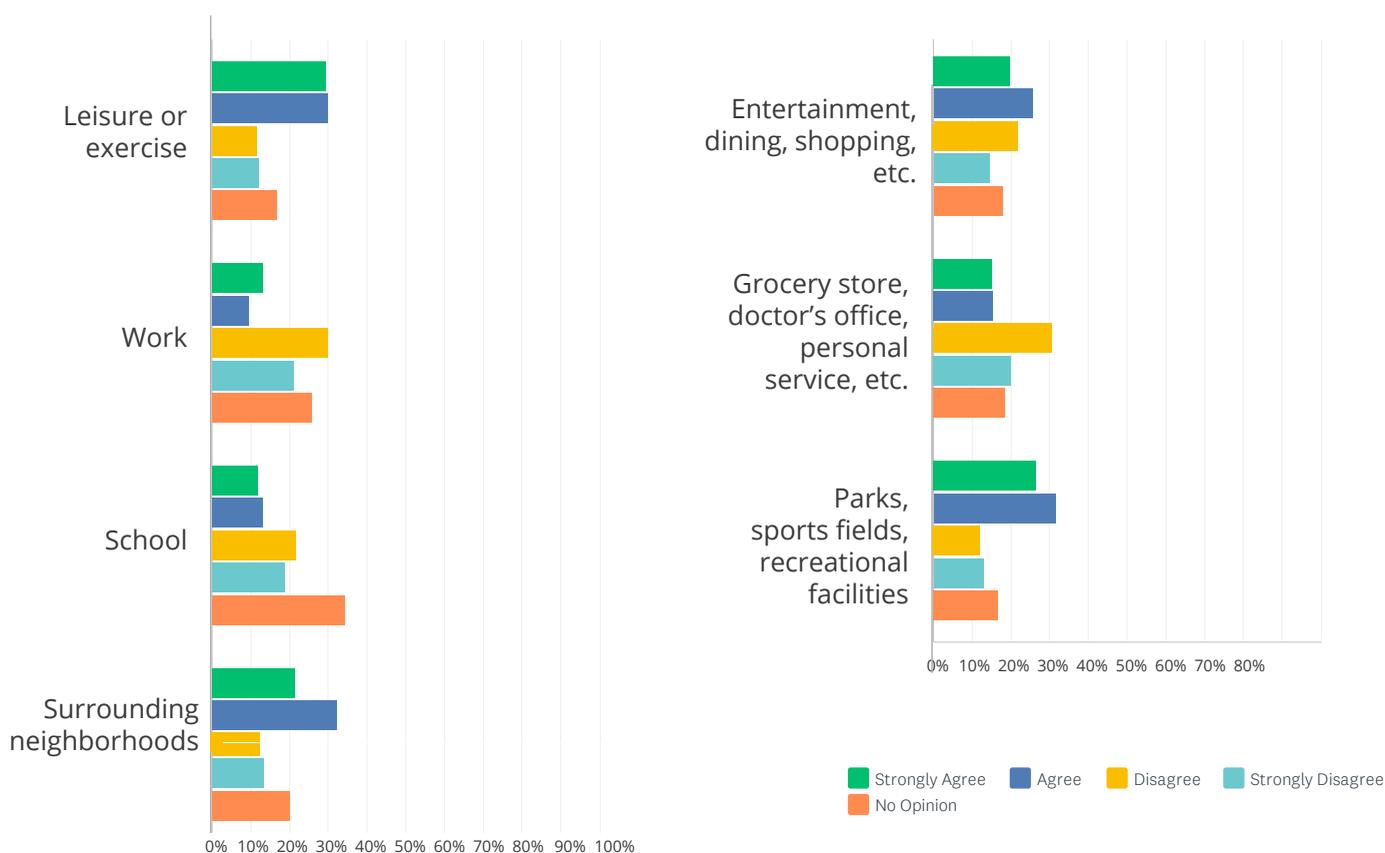
Question II: If off-street trails connected your residence to the following destinations, what is the likelihood that you would walk or cycle for at least some of your trips?



	VERY LIKELY	LIKELY	UNLIKELY	VERY UNLIKELY	NO OPINION	TOTAL	WEIGHTED AVERAGE
Leisure or exercise	53.20% 283	33.46% 178	3.95% 21	2.82% 15	6.58% 35	532	1.30
Work	19.81% 104	13.52% 71	25.71% 135	16.95% 89	24.00% 126	525	-0.06
School	17.34% 90	16.96% 88	18.30% 95	13.10% 68	34.30% 178	519	0.07
Surrounding neighborhoods	34.40% 182	38.56% 204	8.32% 44	6.62% 35	12.10% 64	529	0.86
Entertainment, dining, shopping, etc.	35.76% 187	31.74% 166	15.87% 83	7.65% 40	8.99% 47	523	0.72
Grocery store, doctor's office, personal service, etc.	22.71% 119	21.56% 113	28.05% 147	15.27% 80	12.40% 65	524	0.08
Parks, sports fields, recreational facilities	42.94% 228	38.42% 204	7.16% 38	4.14% 22	7.34% 39	531	1.09

#	OTHER (PLEASE SPECIFY)	DATE
1	The off-street trails are Great for wheelchair use in getting around town. It would be nice if there were more.	7/12/2021 12:38 PM
2	I would like to use the alleyways for walking and pushing the stroller but they are too damaged. When it rains our alleyway floods.	7/7/2021 11:26 AM
3	Nor safe to walk alone	7/5/2021 9:10 AM
4	Need more bike lanes and trails in Denison! There's not many good streets with room for bikes or trails for bikers or walkers (aka sidewalks for walkers)	7/3/2021 5:39 PM
5	Downtown entertainment	7/3/2021 10:32 AM
6	Live on FM 120 - too far.	7/2/2021 7:58 PM
7	I don't live in the city limits, but we would probably use interconnecting trails more often if we lived closer.	7/1/2021 2:50 PM
8	I have a hard time answering some of these questions because I walk and run daily. I fact that my beloved waterloo training area has turned into a misery danger trail has me disgusted.	7/1/2021 2:49 PM
9	Please make a running/ walking trail all the way down Crawford Street	6/30/2021 8:49 PM
10	Retired.	6/30/2021 7:41 PM
11	Love, love, love this goal of safe interconnected ness	6/30/2021 6:51 PM
12	It's unlikely I would use off-street trails to places where I need to "look good" (doctors offices, work, shopping/dining) especially in the heat of the summer.	6/30/2021 5:19 PM
13	We live outside city limits.	6/30/2021 4:11 PM

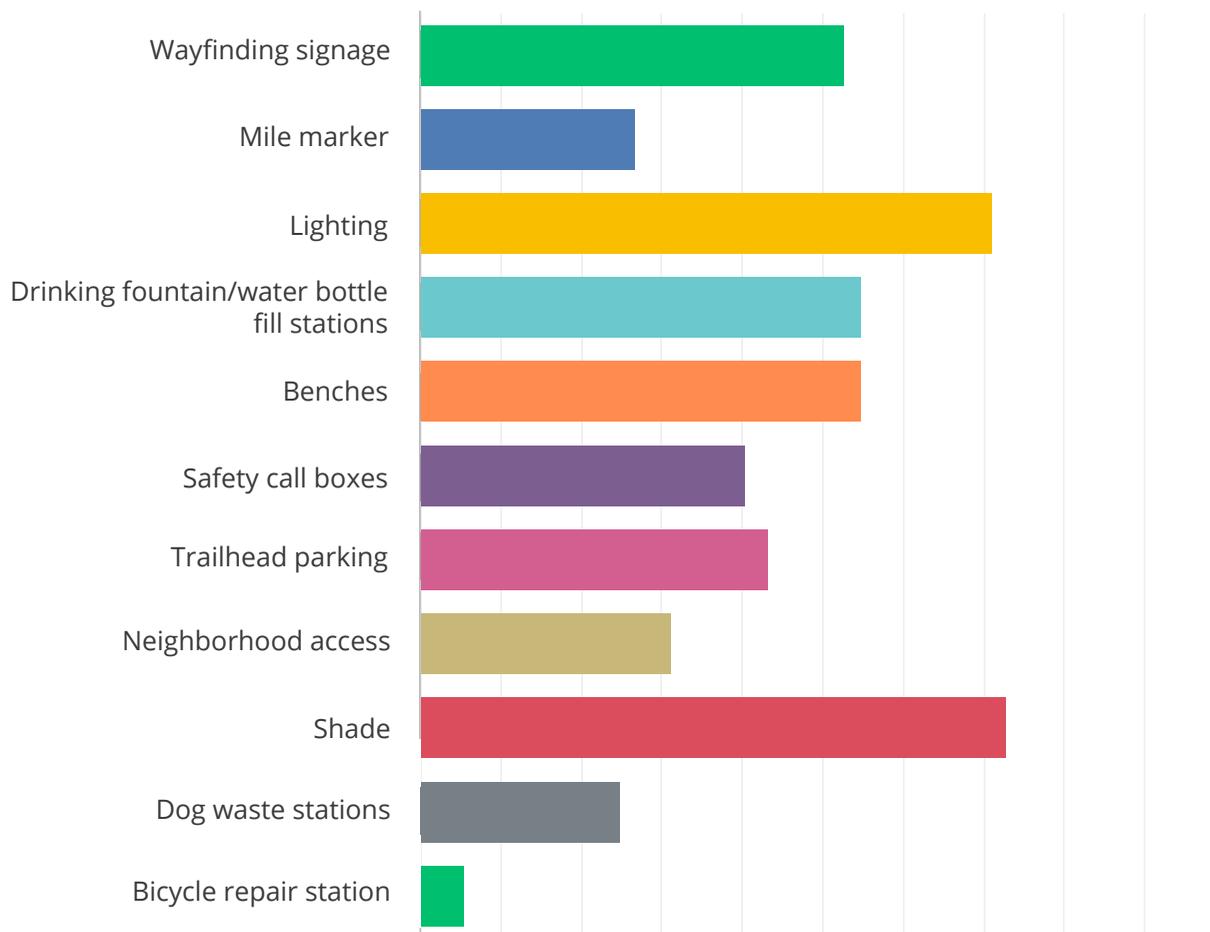
Question 12: If on-street bicycle facilities connected your residence to the following destinations, what is the likelihood that you would cycle for at least some of your trips?



	VERY LIKELY	LIKELY	UNLIKELY	VERY UNLIKELY	NO OPINION	TOTAL	WEIGHTED AVERAGE
Leisure or exercise	29.52% 155	29.90% 157	11.62% 61	12.19% 64	16.76% 88	525	0.53
Work	13.10% 68	9.63% 50	29.87% 155	21.39% 111	26.01% 135	519	-0.37
School	12.02% 62	13.18% 68	21.71% 112	18.80% 97	34.30% 177	516	-0.22
Surrounding neighborhoods	21.46% 112	32.38% 169	12.26% 64	13.60% 71	20.31% 106	522	0.36
Entertainment, dining, shopping, etc.	19.96% 104	25.72% 134	21.69% 113	14.59% 76	18.04% 94	521	0.15
Grocery store, doctor's office, personal service, etc.	15.19% 79	15.58% 81	30.58% 159	20.00% 104	18.65% 97	520	-0.25
Parks, sports fields, recreational facilities	26.58% 139	31.55% 165	12.24% 64	13.00% 68	16.63% 87	523	0.46

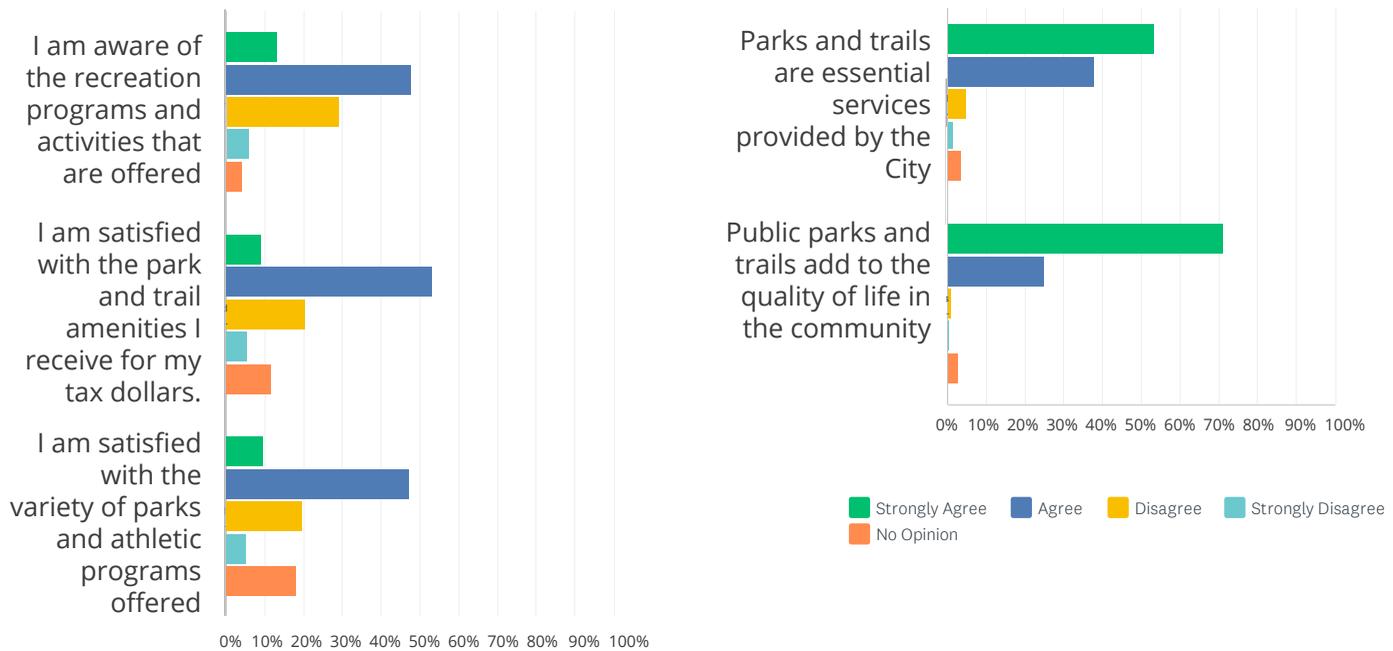
#	OTHER (PLEASE SPECIFY)	DATE
1	if I can Safely use my wheelchair to get there I will, Otherwise I drive.	7/12/2021 12:38 PM
2	This would need a real hands on awareness for bike riders safety.	7/7/2021 10:35 AM
3	Very unlikely to use on-street due to safety concerns. Drivers are not likely to be alert or aware of pedestrians.	7/7/2021 10:23 AM
4	Not safe	7/5/2021 9:10 AM
5	See above	7/2/2021 7:58 PM
6	special events	6/30/2021 9:41 PM
7	Please make a bicycle lane all the way down Crawford	6/30/2021 8:49 PM
8	Retired	6/30/2021 7:41 PM
9	I'm not a big bicycler.	6/30/2021 5:19 PM
10	Do not want to have to share the road with cars. Too many inattentive drivers.	6/30/2021 5:02 PM
11	I don't think Denison is bike friendly for on-street use	6/10/2021 6:00 PM

Question 13: Select your top five recreational trail amenities that are most important to you.



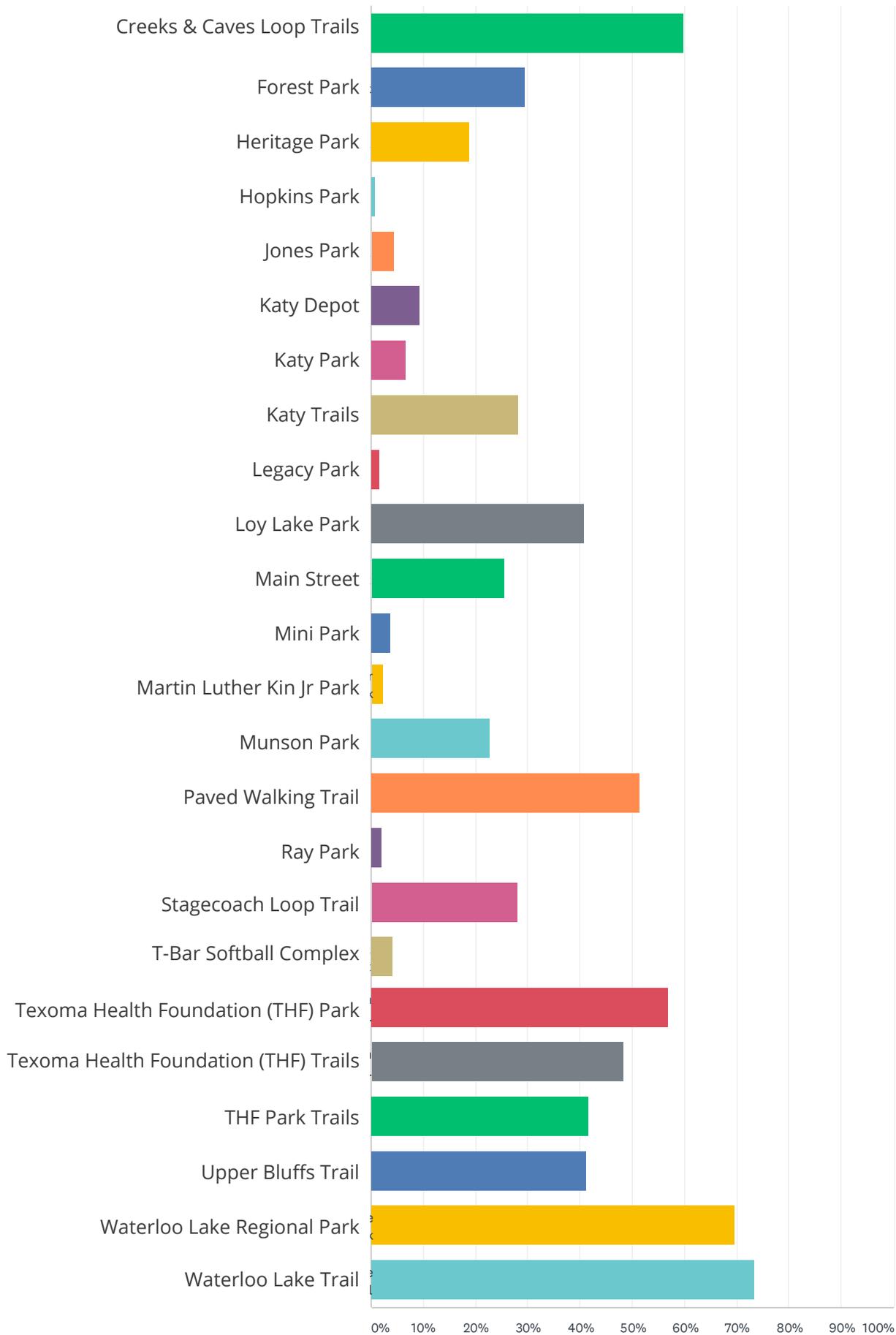
ANSWER CHOICES	RESPONSES	
Wayfinding signage	52.80%	283
Mile markers	26.68%	143
Lighting	71.08%	381
Drinking fountains/water bottle fill stations	54.85%	294
Benches	54.85%	294
Safety call boxes	40.30%	216
Trailhead parking	43.28%	232
Neighborhood access	31.16%	167
Shade	72.76%	390
Dog waste stations	24.81%	133
Bicycle repair station	5.41%	29
Total Respondents: 536		

Question 14: Please indicate your level of agreement with each of the following statements regarding the Parks and Recreation Department.



	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
I am aware of the recreation programs and activities that are offered	13.24% 67	47.63% 241	29.05% 147	5.93% 30	4.15% 21	506	0.68
I am satisfied with the park and trail amenities I receive for my tax dollars	9.09% 46	53.16% 269	20.55% 104	5.53% 28	11.66% 59	506	0.84
I am satisfied with the variety of parks and athletic programs offered by the City	9.68% 49	47.23% 239	19.76% 100	5.14% 26	18.18% 92	506	0.74
Parks and trails are essential services provided by the City	53.07% 268	37.62% 190	4.55% 23	1.19% 6	3.56% 18	505	1.21
Public parks and trails add to the quality of life in the community	71.15% 360	24.90% 126	0.79% 4	0.40% 2	2.77% 14	506	1.19

Question 15: What park and trail facilities do you and members of your household use in Denison today?



ANSWER CHOICES	RESPONSES	
Creeks & Caves Loop Trail (in Waterloo Lake Regional Park)	59.84%	298
Forest Park	29.52%	147
Heritage Park	18.88%	94
Hopkins Park	0.80%	4
Jones Park	4.42%	22
Katy Depot	9.44%	47
Katy Soccer Complex	6.63%	33
Katy Trail	28.31%	141
Legacy Park	1.61%	8
Loy Lake Park	40.76%	203
Main Street	25.50%	127
Mini Park	3.82%	19
Martin Luther King Jr. Park	2.21%	11
Munson Park	22.89%	114
Paved Walking Track (in Waterloo Lake Regional Park)	51.41%	256
Ray Park	2.01%	10
Stagecoach Loop Trail (in Waterloo Lake Regional Park)	28.11%	140
T-Bar Softball Complex	4.22%	21
Texoma Health Foundation (THF) Park	56.83%	283
Texoma Health Foundation Trails (in THF Park)	48.39%	241
THF Park Trails	41.57%	207
Upper Bluffs Trail (in Waterloo Lake Regional Park)	41.16%	205
Waterloo Lake Regional Park	69.68%	347
Waterloo Lake Trail	73.49%	366
Total Respondents: 498		

Question 16: Do you have additional comments about parks and trail conditions and needs in Denison today?

#	RESPONSES	DATE
1	No, thank you for this opportunity and I especially want to thank the Waterloo park staff for their trail maintenance and care	7/14/2021 2:28 PM
2	The bike/walking trails that are wheelchair usable are a Great asset to our community. The more the better	7/12/2021 12:56 PM
3	The facilities on the east part of town are poorly maintained or inadequate	7/9/2021 4:31 PM
4	We are so happy with the parks and trail progress, however, have noticed a huge quality change in our city street quality. Would love if more attention could be put on street repair, especially spots that are patched with gravel that could pose a safety threat.	7/9/2021 12:42 PM
5	do not pave everything over. it's ugly and ruins natural spaces. trails are wonderful, sidewalks are not. not everything has to be shared with a bike. don't turn Denison into a gross copy of big cities.	7/9/2021 1:07 AM
6	I would like to see them all connected. They way it is now happening in Dallas	7/8/2021 10:58 PM
7	The only thing missing from THF is a good basketball court. I understand that there are several goals throughout the city but no full courts and there is something wrong with each of them. Also disc golf is becoming really popular. If you added another course in town would be beneficial for those golfers.	7/8/2021 10:14 PM
8	It would really be nice to have a place to let the dogs cool off in the summer. A splash pad for them and a pool to teach them to swim would be wonderful!	7/8/2021 2:00 PM
9	we just moved here about 3 years ago and really dont know about all the amenities available in Denison. We do live near Munson Park (1 block away) and have visited it. We really wish there were more to do there besides frisbee golf. The children's area is run down and there are no walking or bike trails. The children in this area need something more at this park please	7/8/2021 1:06 PM
10	Really? Back-in parking spots on main? Come on man	7/8/2021 8:08 AM
11	Build more trails or at least make them longer!	7/7/2021 10:09 PM
12	Waterloo Pool is in bad shape. THF park would be a great location to build something new.	7/7/2021 8:56 PM
13	There should be a trail connecting Village Green Townhomes to Waterloo Lake. More upscale basketball courts are needed especially need some at THF Park.	7/7/2021 8:33 PM
14	Keep up the good work, the progress is amazing and I can't wait to see what the future has in store for Denison!	7/7/2021 8:11 PM
15	Need basketball courts desperately.	7/7/2021 7:07 PM
16	I would love to have live music around those areas	7/7/2021 5:50 PM
17	Need several miles of connected off street paved trails.	7/7/2021 1:55 PM
18	No.	7/7/2021 12:12 PM
19	Not at this time, thank you.	7/7/2021 12:12 PM
20	Please add more natural walking/running/hiking trails.	7/7/2021 11:52 AM
21	We need runner friendly trails that aren't concrete (ie. crushed granite, wood chips, chat, etc.)	7/7/2021 11:15 AM
22	Would love to see pickleball more available	7/7/2021 11:13 AM
23	Portions of THF concrete path and recent concrete path by Waterloo lake suffer from poor drainage. After hard rain there are puddles, mud, and debris on the path. Would be nice to fix these issues, but more importantly all future path should be designed to properly handle drainage. This would reduce time spent by city to clean the path and would increase citizen use.	7/7/2021 10:35 AM

25	I would like to help you with a butterfly garden. One that needs little help and one shaped like a butterfly. It would be a fun photo feature at Waterloo,	7/7/2021 10:00 AM
26	Poison ivy is a BIG problem along trails. Also, I'm there (at waterloo trails) daily and rarely see any patrols. Security and safety are the most important things in order to enjoy the trails and parks! Thanks.	7/7/2021 9:56 AM
27	The playground in Waterloo lake park needs repair ASAP. It has been almost a year That's some of it has been fenced off.	7/7/2021 9:40 AM
28	We live on Woodland Park Dr. Somewhat concerned about traffic when the Katy trail opens up in the next phase. We are seeing some abuses currently with motorized vehicles using the trail. Simple signage might help. We use the Denison park system frequently.	7/7/2021 9:38 AM
29	More signage would be useful. There's hardly any signs except at the trailheads. More water fountains and bathrooms. Also love that kayak, canoe, paddle board rentals were added. More of that!	7/7/2021 9:30 AM
30	Would like to see more covered tables at THF splash pad for parents to sit comfortable while watching kids play. More covered tables at Waterloo for Birthday parties.	7/7/2021 8:15 AM
31	The main issue is I have is the upkeep of the park equipment near the boat docks at Waterloo. There have been a few things in disrepair for a while with caution tape that you can clearly see is not being followed by the children using it meaning they are using unsafe equipment.	7/6/2021 3:43 PM
32	Only one water fountain at THF is not enough. We need something near the volleyball courts too	7/5/2021 8:49 PM
33	More restrooms and safety	7/5/2021 9:12 AM
34	The addition of the new walking/biking trails is fantastic and needs to be expanded to include more areas in the city. Increasing outdoor activity increases a communities health.	7/5/2021 8:45 AM
35	Waste entirely too much money on maintenance of athletic fields. The youth that play sports don't need professionally manicured soccer fields.	7/5/2021 6:24 AM
36	Spend less on equipment the police dont need and you can afford better parks	7/5/2021 5:32 AM
37	I would like to see a way to access Waterloo park by bike from the Juanita drive neighborhood. We have to cross Morton, then go up Maurice, then down Crawford to reach the park so I usually end up driving it.	7/5/2021 2:19 AM
38	Denison needs a Parks system like the City of McKinney. Towne Lake, Bonnie Wenk, Gabe Nesbitt. These are 3 of McKinney very best parks. While Denison is much smaller in square miles, Denison should try to buy/set aside land for the Denison Parks & Rec Master Plan. We have enough residential/commercial zones and need more dedicated parks land.	7/4/2021 1:12 PM
39	Keep doing what you are doing:)	7/4/2021 7:48 AM
40	I would like to see a connection of the trails to get to Lake Randall, Eisenhower State Park, Waterloo, Loy Lake Park and Downtown. We could then bike to a lunch destination from either our home or a hotel. Bring in more revenue to the community.	7/4/2021 7:46 AM
41	The Katy trail is nice. However concrete is not necessary and nice groomed gravel trail is often preferred. I prefer walking on gravel.	7/3/2021 6:40 PM
42	It would be really cool if at some of the Historical Parks (aka Katy trail, forest park, Katy depo, Loy lake etc) if there was signs telling about the historic impact of that area to the city and region. Maybe as a "did you know" or just a sign with pics and/or some historical info of the park or area...like the Katy trail...could have signs along the Katy trail telling the History of the railroad in Denison...or forest park the history of the park in Denison...it would another layer of pride and charm to Denison.	7/3/2021 5:46 PM
43	Emergency call box's would be nice.	7/3/2021 4:43 PM
44	Would be nice to highlight native plants on the trails or historical facts	7/3/2021 3:22 PM
45	Golf	7/3/2021 3:11 PM
46	Safety patrols by citizens would be a nice addition.	7/3/2021 2:30 PM
47	Safety, would like to have some police officers on bikes and involved with community. Waterloo pool needs updating love the water wish we had outdoor pool. Munson park is a gem in the rough, needs work.	7/3/2021 7:31 AM
48	Glad to be out of that town!	7/3/2021 7:14 AM
49	Would like to have paved trail completely around Waterloo Lake. More facilities for special needs and handicap. Especially for children.	7/3/2021 12:44 AM
50	Pump track for bicycles at Waterloo!! Super fun and kid friendly.	7/2/2021 8:26 PM

52	N/A	7/2/2021 8:23 AM
53	Mountain Bike trail at Waterloo is one of the things that attracted us to Denison. Having more trails around could help draw people to visit and spend money at our businesses. Instead of driving from DFW to Bentonville, people could come to Denison.	7/2/2021 7:52 AM
54	It is important to focus on having fun things for the kids that live on the east side of town. We are lower income and our kids need something healthy, safe and fun.	7/2/2021 6:26 AM
55	Need more Splash pads, and pools.	7/2/2021 12:54 AM
56	Not really parks, but I wish we had more sidewalks to make the rest of the city more walkable.	7/1/2021 8:47 PM
57	Keep up the good work	7/1/2021 7:58 PM
58	Do something about the poison ivy and mosquitoes on the cave and creeks trail at Waterloo	7/1/2021 7:24 PM
59	Fix up Muson Park and Loy Lake park. Some of the benches at Loy Lake Park don't even have benches anymore....	7/1/2021 7:03 PM
60	Ebike rentals	7/1/2021 5:52 PM
61	Maintenance of the playground equipment. Lots of broken stairs, slides gor months. Burn marks holes in slides as well. These things need to be checked often for safety	7/1/2021 5:48 PM
62	When restoring Loy Lake Park please try to preserve and include original rock picnic tables and benches that still exist.	7/1/2021 5:40 PM
63	I would encourage more soft surface trails	7/1/2021 5:33 PM
64	Greenspan's and access to nature drive our decision to live here. All cities have patches of grass or ball fields that they call parks- few have what we have in Denison with rugged more natural landscape and minimal concrete . I hope Denison continues to value nature's beauty over stylized ground clearings called parks	7/1/2021 3:55 PM
65	I appreciate being able to have a voice	7/1/2021 3:28 PM
66	Thank you!	7/1/2021 3:25 PM
67	They need more walking and bike trails or sidewalks in town. It is not safe waking or riding in the road because of no sidewalks. They should be on every street. I would gladly give up some of my yard for a sidewalk	7/1/2021 3:03 PM
68	All facilities need a bit more parking. The new THHF park sometimes is overflowing during soccer season. My great grandkids love the splash pad but it would be nice to have a few more picnic tables in other areas.	7/1/2021 3:01 PM
69	If there is anyway to slow the bike riders down at waterloo, I'd be thrilled to death. I'd also like to see a couple of benches near the parking area to the right of the bathrooms.	7/1/2021 2:54 PM
70	There is a lack of safety in many of the parks. Ranges from little to no lighting, no parking, to lack of call boxes or any sort of first aid access. This would drastically improve many of our parks.	7/1/2021 2:53 PM
71	vegetation hanging over trails need to be cut back during summer, need benches along side of paved walking trail at Waterloo park	7/1/2021 2:43 PM
72	Would like to see some younger play equipment for kids at THF that two big three story tower are too big for young ones. Also would like to see more water pads with slides.	7/1/2021 1:53 PM
73	No	7/1/2021 12:28 PM
74	Loy Lake has a great potential with Frontier Village tying in history and outdoor recreation. But my family (or at least myself) really enjoy MINIMAL development and keeping the land open for outdoor recreation.	7/1/2021 10:53 AM
75	Consider roller skate rental, kayak rental, bike rental, concession stands	7/1/2021 10:37 AM
76	We walk the trails in the woods behind the Waterloo park and it is VERY CONFUSING trying to find our way around.	7/1/2021 10:14 AM
77	Bring back adult softball, please	7/1/2021 9:43 AM
78	The sand volleyball courts at THF Park need barrier shrubbery planted about 20 yards off each side of the courts to keep from having to chase the volleyball all the time. There should also be a couple outside shower or hose-off stations to clean sand off your body when your done playing.	7/1/2021 9:43 AM
79	Need more fish stocked in the small lakes	7/1/2021 9:25 AM
80	Keep up the great work!!	7/1/2021 9:20 AM
81	More benches by the splash pad in THF park	7/1/2021 8:41 AM

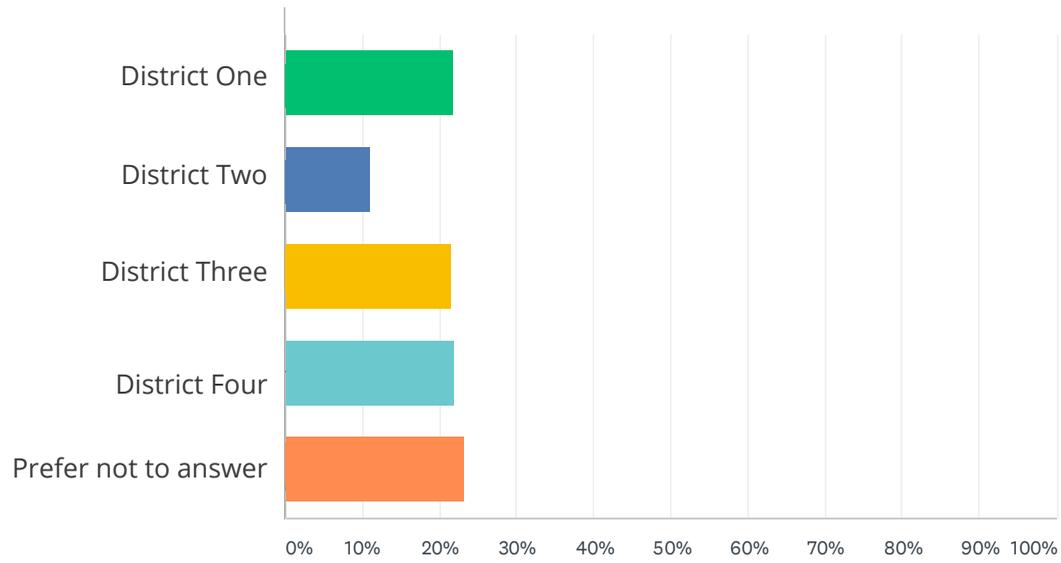
82	There is a white trash can near the back trees about the middle of Katy Soccer Park that is full of dog waste and rainwater. It needs to be drained and emptied.	7/1/2021 8:03 AM
83	More clean bathrooms	7/1/2021 7:27 AM
84	I did use the dog park at Waterloo for the first time last weekend and really enjoyed it. On road biking is largely limited by behavior of car drivers and lack of connection points that are bicycle safe — such as crossing 503 or 75 — or bike safe alternative to Texoma parkway to go south	7/1/2021 7:10 AM
85	I use Waterloo Pool 4 days a week - a major asset to Denison. Thank you so much.	7/1/2021 4:07 AM
86	Need more safety. Security guards maybe at markers on trails or a call box.	7/1/2021 2:04 AM
87	love it	6/30/2021 11:53 PM
88	Look at Omaha NE. Their parka and trail system for that city are fabulous!	6/30/2021 10:51 PM
89	Try and make trails wider so walkers and bikers can be together. I abhor being run over when I have my dogs. I have to stop and move over and bikers aren't friendly about it. Along with water stations	6/30/2021 10:41 PM
90	The restrooms need an improvement	6/30/2021 10:26 PM
91	The small dog park at Waterloo has two gates for mowing with big gaps in which my dogs can get out. The signage is so bad in Creeks and Caves I have never been able to finish it.	6/30/2021 10:06 PM
92	I don't understand why the walking trail at THF Park goes in a very small circle closest to the highway. I would've lined to see it connect to the rest of the trail in 1 big loop.	6/30/2021 9:45 PM
93	I think the direction of these ideas is headed in a positive and beneficial direction. Keep up this kind of progressive work guys! Thanks :)	6/30/2021 9:43 PM
94	Need after hours lighting improvement. Overall VERY nice and appreciated greatly!	6/30/2021 9:39 PM
95	The City of Denison has great parks! Waterloo Lake Park needs sidewalks. Some drivers use Waterloo street as a thoroughfare and consequently speed through the park. Walking on Waterloo street is dangerous	6/30/2021 9:27 PM
96	I wish that there were more time options for lap swimming at Waterloo Pool. I'm very excited that they offer it at 5:30 am!	6/30/2021 8:57 PM
97	Please no Pit Bulls allowed	6/30/2021 8:50 PM
98	no	6/30/2021 8:45 PM
99	Feet wash Station for the volleyball courts	6/30/2021 8:26 PM
100	No	6/30/2021 8:10 PM
101	We need more sidewalks for sure!	6/30/2021 8:02 PM
102	Need sidewalks and no stickers for walking dogs in neighborhood.	6/30/2021 7:47 PM
103	I'm worried about the stability of the new trail at Waterloo. The trail is slowly getting washed out from underneath and there is an area at the head of a trail that has become a pool of standing water for mosquitoes. The trash can at the entrance to the forest was removed and never replaced. The river section that flows under the new bridge is full of trash. The overall upkeep of the park is disappointing.	6/30/2021 7:13 PM
104	Please create safe bicycle paths throughout city. Need hike/bike trails connecting Waterloo Park with THF Park and with downtown Denison.	6/30/2021 6:56 PM
105	Water fountains! We are in dire need for big parks like Ray Park, or Munson, which also needs a HUGE overall in roads and putting in a walking track. Our parks overall are okay, but even basic things like working water fountains or broken benches still need a lot of work.	6/30/2021 6:33 PM
106	Never heard of the stagecoach loop	6/30/2021 6:24 PM
107	Appreciate the maintenance done and thank you. Also use waterloo swimming pool every day.	6/30/2021 6:10 PM
108	More longer trails for hiking and bicycle.	6/30/2021 6:06 PM
109	More trees and picnic tables and trash cans. The sidewalk around forest park is dangerous for running or walking. Very unlevelled where the sidewalk squares are put together. Needs to be repaired.	6/30/2021 6:02 PM
110	Fishing derby events should be for children only. Watching adults fill in spaces and put pressure on ponds and fish was disturbing.	6/30/2021 6:01 PM
111	Munson Park needs a paved walking trail.	6/30/2021 5:58 PM

112	Please bring new innovative outdoor spaces to our town. There are awesome treehouse parks in Oklahoma and an awesome age specific sectioned park in Frisco. THF is a great idea but there needs to be way more to the playground. The options are very limited and not little kid friendly. There need to be more splash pad options that have fun things other than just the water shooting up from the ground. Add prettier flowers and landscaping. More places to sit around bodies of water we have.	6/30/2021 5:57 PM
113	We need an outdoor pool !	6/30/2021 5:28 PM
114	The parks & rec website is awful. It's so hard to navigate and the booking system is so outdated. You need better communication about what the city has to offer. Do a "spotlight" each week about a different amenity.	6/30/2021 5:23 PM
115	We love the parks and spend most of our time at either thf, forest park, or Waterloo playground especially. We like loy lake, it's beautiful but there is a serious cotton mouth snake thing happening there. I've never seen so many in such a short walk... Like 4 in about a 50ft walk so we can't go back there with little kids. A lot of these parks I didn't even realize existed so I'll be digging for more info.	6/30/2021 5:23 PM
116	We have only lived in Denison for 4 years but I am so thrilled with what they've done with Forest and THF. We frequent these parks regularly, and I run at THF 3x/week. I am so happy with these two parks and I am even more grateful for the new Katy Trail coming. I am looking forward to running there as well. I will say, I am nervous about running there (safety concerns) but I will still try it. I'm wondering what the police monitoring will be once it's fully complete. I do see police at THF occassionally and feel safe because of this. I think because Katy is in the woods I feel more nervous. THANK YOU for everything you're doing for our city! We are becoming a healthier community because of your hard work!	6/30/2021 5:23 PM
117	It would be nice to have water spouts at the sand volleyball courts at THF to rinse off the sand	6/30/2021 5:01 PM
118	Before more is added, I would like to see proper repairs completed at existing parks. Such as the playground equipment at Waterloo Lake. I would also like to see more options for public swim times at Waterloo Pool, people who homeschool or are at home could utilize the facilities during the day if offered.	6/30/2021 4:59 PM
119	I would like to see a couple benches around the playground area at Texoma Health Foundation Park so we can sit to watch our children play. The covered pavilion is nice, but fills up easily. A picnic area might be nice. Would love to see the Loy Lake Park restored to it's original glory.	6/30/2021 4:56 PM
120	The Butterfly Garden at Waterloo Park should be maintained by a Master Gardener or Naturalist Group. The waterways of Waterloo need trash removal: maybe a Friends of Waterloo Group could do that.	6/30/2021 4:50 PM
121	More children's playgrounds and splash areas	6/30/2021 4:49 PM
122	Parks and recreation need to be more active in the youth sports. Little league baseball is done by volunteers and the boys & girls club run the girls softball league. Having to use commercial websites to instead of the P & R website for these is ridiculous and a waste of their limited resources.	6/30/2021 4:48 PM
123	Keep making more trails at Waterloo and at Thf parks.	6/30/2021 4:40 PM
124	Develop Loy Lake.	6/30/2021 4:39 PM
125	My family really enjoys the trails for biking and running. Really enjoyed the Waterloo 5k And also enjoy the Waterloo pool swim team.	6/30/2021 4:39 PM
126	THF park needs playground equipment for smaller children as well.	6/30/2021 4:29 PM
127	Something connecting the neighborhoods in the northwest corner of town (Spring Valley/West Crawford neighborhoods) to the Katy trail would be legit... 2 legit 2 quit (had to do it) You guys and gals do great, thank you!	6/30/2021 4:19 PM
128	I think it would be good for families to get outdoors and spend more time together. People are inside on computers and phones too much.	6/30/2021 4:14 PM
129	Would love to see a miniature train ride added to Loy Lake park. Also, some permanent small carnival type rides, mini golf and concessions, etc. It's a beautiful place with endless opportunities.	6/30/2021 4:12 PM
130	Last visit to Loy Lake, a teenager killed a water moccasin close to my 5 year old birthday party. Wouldn't mind having people come around and check for snakes in areas where children tend to play.	6/30/2021 4:11 PM
131	Waterloo Pool is important to Denison as well as to many people living outside Denison. I pray that you plan to continue providing a year-round heated pool for fitness clients as well as lap lanes for swimmers.	6/30/2021 4:11 PM
132	The swimming pool indoor is so important to senior citizens please try to keep this.	6/30/2021 4:09 PM

133	Continue to improve the parks in Munson and the east side as well to balance out opportunities and maintain a city of community pride and involvement	6/30/2021 4:09 PM
134	No	6/30/2021 4:07 PM
135	The gentrification of Denison has caused severe neglect at the parks in those communities, such as Munson Park. There is a focus on creating facilities for white, privileged, and wealthy residents instead of ALL residents. This only depends the racial divide that is already strong I. Denison	6/24/2021 8:48 PM
136	Landscaping at Forest Park is horrible and not well kept for it being near downtown and the stadium.	6/23/2021 9:20 PM
137	Work on our streets first before you spend our tax money on additional parks.	6/23/2021 8:45 PM
138	More clean up of brush and dead trees around Waterloo Lake.	6/17/2021 3:14 AM
139	I would like to see more trails at THF or Waterloo to extend. Giving runners or bikers more mileage. Would love our city to host a half marathon through the trails and or park system. Can not wait for Katy trail to get finished, excited to be able to use it. Very happy with the newer improvements the city has made in our parks. Thank you.	6/16/2021 3:08 PM
140	Waterloo playground by the pavilion needs attention. The bathrooms down by the walking track are always locked and it smells like a sewage leak.	6/14/2021 8:03 PM
141	Playground by the Waterloo park building that you can rent is need need of repair and has been for a while now. Sad to rent the building for parties and to have such a poor playground there!! Please get it repaired ASAP!	6/14/2021 12:03 PM
142	a full court basketball court would be nice.	6/14/2021 8:39 AM
143	Parks and trails need more brighter lighting for safety at night time. I know alot of women who would love to go to the parks and walking trails in the evening but do not because the lack of lighting causes a huge safety issue.	6/13/2021 8:42 AM
144	rainwater drainage issues could be addressed, THF and Waterloo Lake Park.	6/12/2021 9:53 AM
145	Love Waterloo Lake, trails there and the new Katy Trail....just beautiful! Great job on the details like the nice covered bench stations and the beautiful new pedestrian bridge over Loy Lake! Thank you! Keep going!	6/11/2021 11:38 PM
146	Upkeep costs are too high for our town. Take care of what we have!	6/11/2021 4:28 PM
147	Please consider all ages when planning, not just youth.	6/11/2021 3:14 PM
148	Paved trails are needed.	6/11/2021 12:29 AM
149	I love the parks and would love to be able to come to them!	6/10/2021 8:35 PM
150	I would like vending machines available to feed the ducks at Waterloo Park. We go there often and always forget to bring something appropriate to feed them. Paddle boats would also be nice and maybe a drink/snack vendor could occasionally be out there. We love Waterloo Park and the new additions that have been added. Awesome job!	6/10/2021 7:10 PM
151	The biggest need of the park district related to THFP is the HUGE HUGE problem with parking when activities are in session. It's a rough mess and not safe at all. Two way flow of traffic is impossible. Getting a fire truck into the area is impossible. It's horrible. We need to do something. No parking signs aren't enough as people park on our streets anyway. M	6/10/2021 3:05 PM
152	Denison is in much need of a Recreation Centers that includes an outdoor pool. This would promote community engagement for all ages. During the summer are recreationally option including swimming are limited in Denison. We have to go to Sherman just to go swimming. I would much rather keep my money local.	6/10/2021 12:51 PM
153	More trails needed. Convert unused rail lines to trails. Doesn't require paving or excessive cost.	6/10/2021 10:10 AM
154	Waterloo trail needs an mtb trail cut above the main walking trail on the east side of the lake. Something from upper bluffs to the two wooden bridges. That's the main area where hikers and cyclists interact with each other. Also, I would love to see MTB trail at Randell Lake. That area is prime for a true destination trail that would draw cyclists from all over the region, not just for day trips, but for running and bike events that would encourage overnight stay. Denison is in the unique position to be able to connect Waterloo, Randell and Eisenhower to Create something truly special.	6/10/2021 6:58 AM
155	The play ground equipment at Waterloo by the water and big pavilion needs to be fixed. The rock wall and tunnel on that playground have had caution tape around them for far too long. The kids just removed the tape and play anyway. Someone is going to get hurt.	6/10/2021 6:42 AM

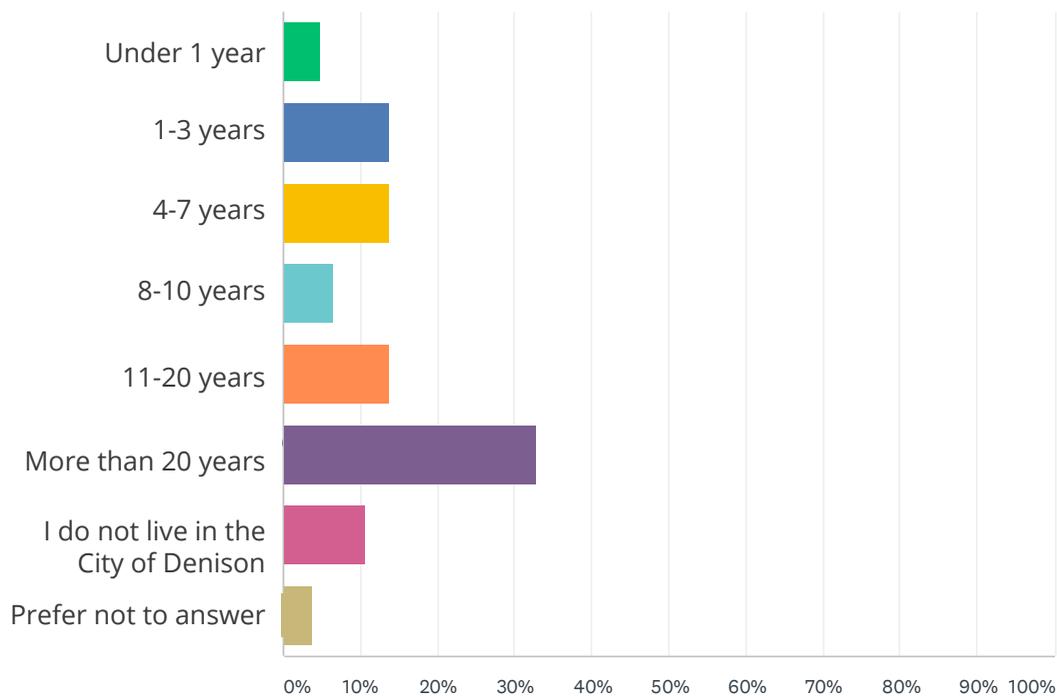
156	Sand volleyball courts at THF Park need more regular grooming, a hose off site for removing sand from players body, and a barrier to keep volleyball from rolling far away from court.	6/9/2021 10:30 PM
157	Trails need better maintenance with regards to vegetation and erosion.	6/9/2021 10:15 PM
158	An incredible amount of revenue and public benefit can come from embracing the cycling/mountain biking community. We love Waterloo trails and would like to see the city welcome further trail development similar to what's being done nearby at Erwin Park in McKinney. Thanks.	6/9/2021 9:50 PM
159	Love the indoor pool!	6/9/2021 9:33 PM
160	We need more Mountain bike trails and keep extending the Katy trail.	6/9/2021 9:24 PM
161	We need more walking biking trails throughout the city	6/9/2021 8:40 PM
162	Please keep investing in extending the Katy Trail to connect downtown to Texoma Health Foundation Park.	6/9/2021 8:21 PM
163	Waterloo track is in need of repair. Potholes and dips are tripping hazards	6/9/2021 8:13 PM
164	Mountain Bike trails are in need of upkeep. Bridges and washouts need maintained. A lot has been created by the rainfall that has eroded some areas present today. Signage is important at designated trail heads. Offering trail users an idea of the trail they are about to take.	6/9/2021 8:12 PM
165	Build and maintain more mountain bike trail. Waterloo trail often needs weedeated.	6/9/2021 7:54 PM
166	I think that mountain biking in north Texas has really grown. Denison could use more trails to keep up with our active community	6/9/2021 7:22 PM
167	We need more biking trails!	6/9/2021 6:48 PM
168	There needs to be some terracing on the backside of the trail have you done the bike trails in Sherman they are varied for different skill levels. and trails are marked and have additional features like jumps and ramps. It would also be a good idea to add a type of gate to trails that can be shut off when the trails are to muddy to keep bikes from tearing the trails up. Many sherman riders come over hear when they shut down binkley park We need to look at adding a multi-use facility that could have indoor basketball or pickleball. Indoor walking track, competition pool and fitness pool. It could be a regional pool that coordinates with THF and TMC for rehab. The current pool is aging and has a limited lifespan but the needs to the community are great.	6/9/2021 3:38 PM
169	There is a need for playground equipment for children under 4 at THF park. There are a lot of families with young children in the neighborhoods there but no play space for toddlers.	6/9/2021 9:23 AM
170	1. Build a new pool at THF (perhaps try to acquire ROW when the 503 intersection is rebuilt). 2. Katy Fields needs a lot of work (more and better parking, better-kept fields, connectivity to Katy Trail). Perhaps purchase all of the land from the old tie plant to expand the park and also build a nice parking lot across Crawford. Acquiring land from Union Pacific to expand the park across Flora would help build this park up as well 3. A skate park is a must-have at 1 or 2 parks.	6/8/2021 6:09 PM

Question 17: In Which City Council District do you live?



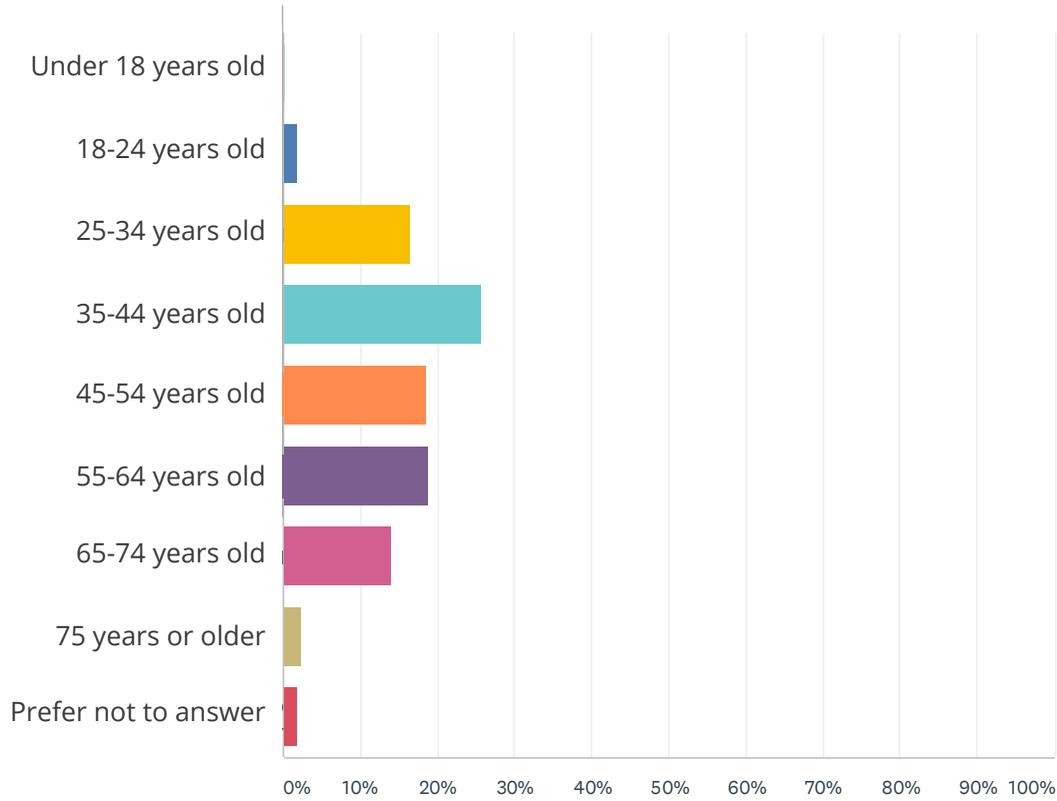
ANSWER CHOICES	RESPONSES	
District One	21.85%	104
District Two	11.13%	53
District Three	21.64%	103
District Four	22.06%	105
Prefer not to answer	23.32%	111
TOTAL		476

Question 18: How long have you lived in Denison?



ANSWER CHOICES	RESPONSES	
Under 1 year	4.89%	24
1-3 years	13.85%	68
4-7 years	13.85%	68
8-10 years	6.52%	32
11-20 years	13.85%	68
More than 20 years	32.79%	161
I do not live in the City of Denison	10.59%	52
Prefer not to answer	3.67%	18
TOTAL		491

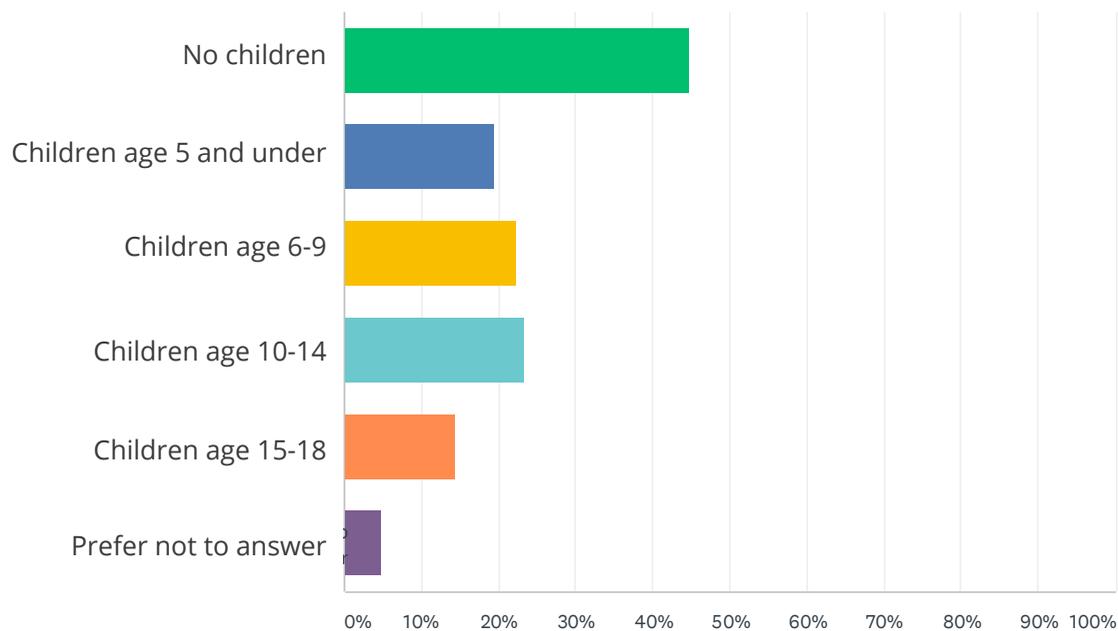
Question 19: What is your approximate age?



ANSWER CHOICES	RESPONSES	
Under 18 years old	0.20%	1
18-24 years old	1.83%	9
25-34 years old	16.46%	81
35-44 years old	25.81%	127
45-54 years old	18.70%	92
55-64 years old	18.90%	93
65-74 years old	14.02%	69
75 years or older	2.24%	11
Prefer no to answer	1.83%	9
TOTAL		492

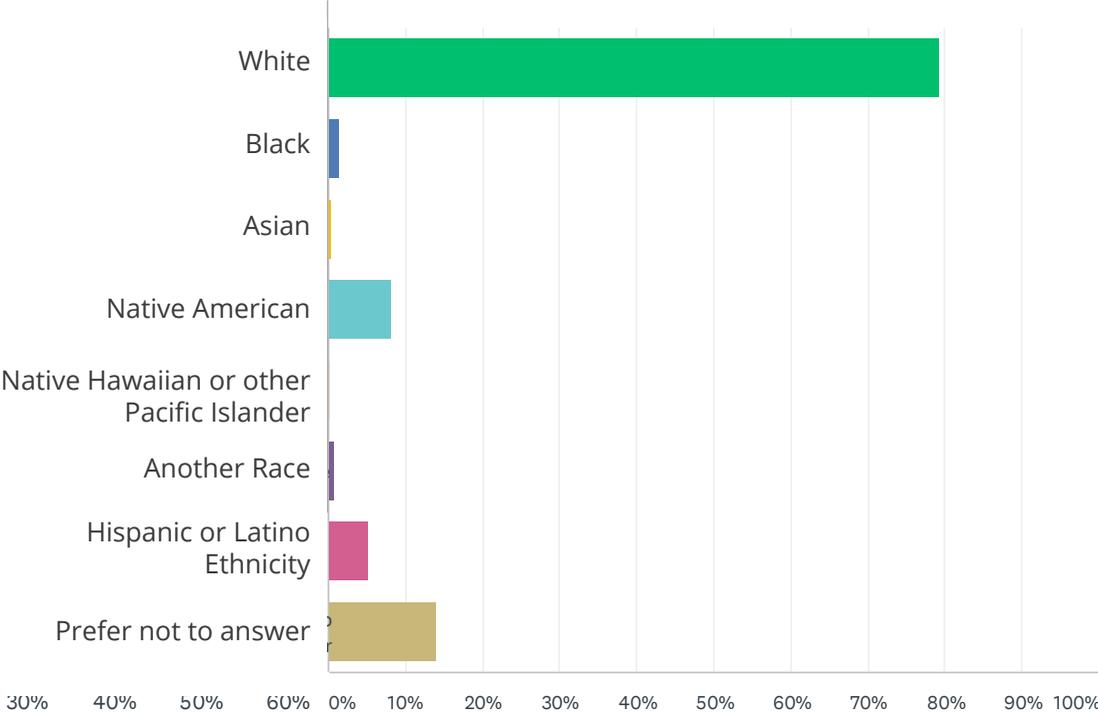
Question 20: Are there any members of your household that are children 18 years old or younger?

Answered: 488 Skipped: 113



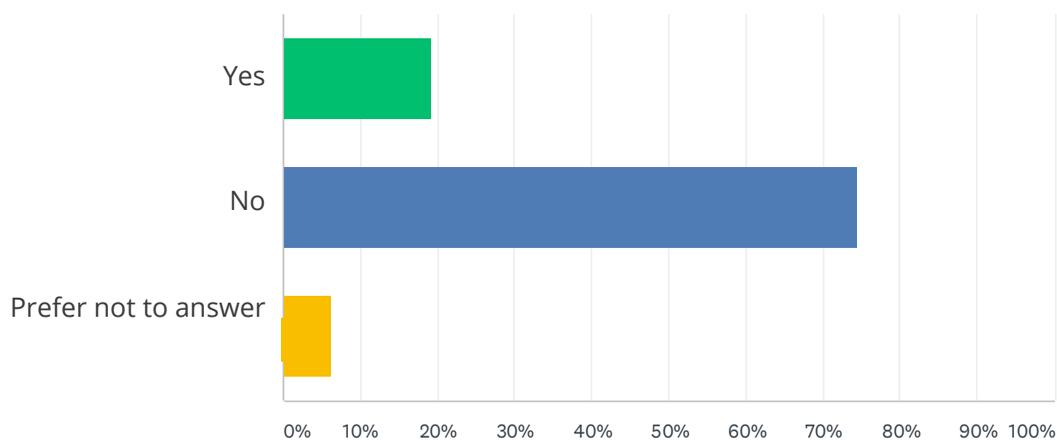
ANSWER CHOICES	RESPONSES	
No children	44.67%	218
Children age 5 and under	19.47%	95
Children age 6-9	22.34%	109
Children age 10-14	23.36%	114
Children age 15-18	14.34%	70
Prefer not to answer	4.71%	23
Total Respondents: 488		

Question 21: What is your race/ethnicity?



ANSWER CHOICES	RESPONSES	
White	79.23%	389
Black	1.43%	7
Asian	0.41%	2
Native American	8.15%	40
Native Hawaiian or other Pacific Islander	0.20%	1
Another Race	0.81%	4
Hispanic or Latino ethnicity	5.30%	26
Prefer not to answer	14.05%	69
Total Respondents: 491		

Question 22: Do you or someone in your household belong to a recreational organization or athletic association in the City of Denison?



ANSWER CHOICES	RESPONSES	
Yes	19.14%	94
No	74.54%	366
Prefer not to answer	6.31%	31
TOTAL		491

#	PLEASE SPECIFY THE RECREATIONAL ORGANIZATION OR ATHLETIC ASSOCIATION THAT YOU OR A MEMBER OF YOU HOUSEHOLD BELONG TO.	DATE
1	highschool football	7/12/2021 1:00 PM
2	Kickball	7/8/2021 9:44 PM
3	Because they are comparably awful to any successful programs	7/8/2021 8:11 AM
4	Sparks Basketball	7/7/2021 1:18 PM
5	Denison little league	7/7/2021 11:42 AM
6	Waterloo swim/ Denison girl scouts	7/7/2021 11:35 AM
7	TSA, LittleLeague	7/7/2021 11:14 AM
8	Softball	7/7/2021 10:30 AM
9	Our Daughter is a Stingerette and plays Golf for Denison	7/7/2021 10:13 AM
10	Texoma soccer association	7/7/2021 10:03 AM
11	Texoma Soccer	7/7/2021 9:49 AM
12	Camp Gladiator	7/4/2021 3:30 PM
13	Be cool if we had a walking club here in Denison	7/3/2021 5:48 PM
14	Waterloo Pool	7/3/2021 12:58 AM

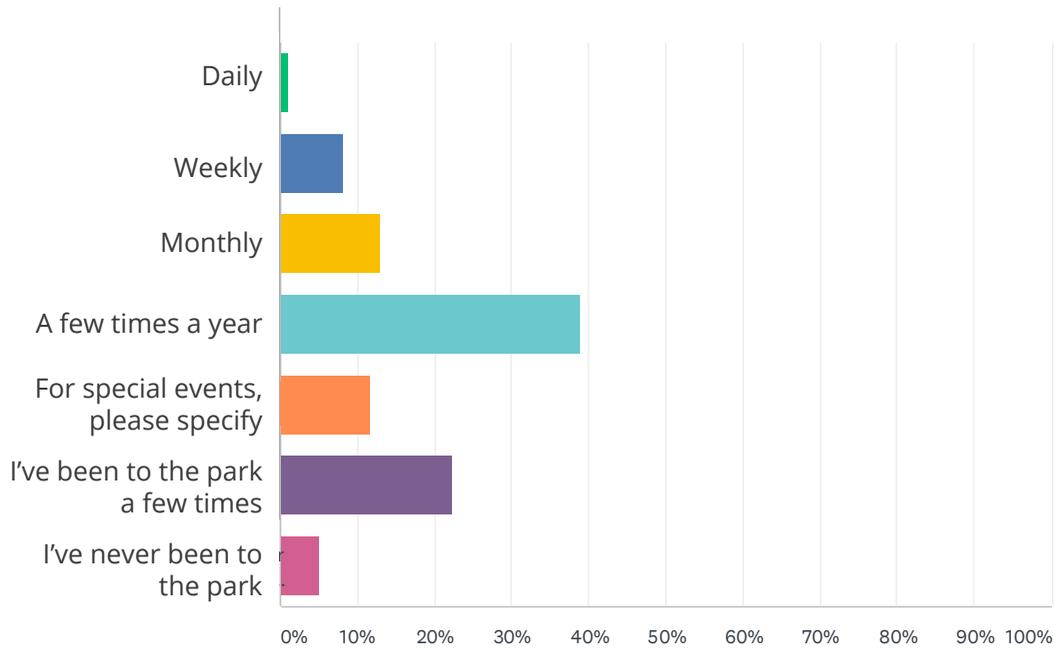
15	Waterloo Pool	7/2/2021 8:15 PM
16	pool	7/2/2021 6:00 PM
17	Softball	7/2/2021 3:07 PM
18	Waterloo pool	7/2/2021 8:33 AM
19	NTX MTB	7/2/2021 7:53 AM
20	Dolphins	7/2/2021 3:46 AM
21	Killer bees	7/1/2021 5:13 PM
22	Waterloo Pool	7/1/2021 3:20 PM
23	Boys and Girls Club	7/1/2021 3:05 PM
24	Indoor pool	7/1/2021 3:04 PM
25	Little League and B&G Club Softball	7/1/2021 2:55 PM
26	denison little league	7/1/2021 11:31 AM
27	Volleyball league	7/1/2021 10:54 AM
28	Texoma Soccer	7/1/2021 10:13 AM
29	Softball	7/1/2021 9:45 AM
30	TSA B&G Club Denison ISD	7/1/2021 9:26 AM
31	Adult Kickball	7/1/2021 9:23 AM
32	Texoma Soccer, Denison Little League, Boys and Girls Club	7/1/2021 6:22 AM
33	Anytime Fitness Gym & Waterloo Pool	7/1/2021 4:08 AM
34	Pool	6/30/2021 10:52 PM
35	Swim team	6/30/2021 9:29 PM
36	Dance Xplosion	6/30/2021 9:22 PM
37	Boys & girls club-member & sports, killer bees sports	6/30/2021 9:12 PM
38	Waterloo Pool	6/30/2021 9:00 PM
39	Typo on number 18	6/30/2021 8:13 PM
40	Texoma Youth Soccer	6/30/2021 8:08 PM
41	Waterloo pool	6/30/2021 7:52 PM
42	Denison Swarm Baseball	6/30/2021 7:19 PM
43	Texoma soccer association	6/30/2021 5:59 PM
44	Texoma Soccer Association	6/30/2021 5:02 PM
45	Denison Little League	6/30/2021 4:58 PM
46	Waterloo pool	6/30/2021 4:47 PM
47	Swimming teams	6/30/2021 4:43 PM
48	Waterloo Pool water aerobics	6/30/2021 4:41 PM
49	Dolphins	6/30/2021 4:41 PM
50	Little League and TBA Baseball	6/30/2021 4:32 PM
51	Texoma Soccer	6/30/2021 4:24 PM
52	Denison Dolphins	6/30/2021 4:21 PM

53	TSA	6/30/2021 4:18 PM
54	Avid swimmer at Waterloo pool	6/30/2021 4:10 PM
55	Waterloo pool	6/30/2021 4:08 PM
56	Boys and Girls Club (softball)	6/30/2021 4:04 PM
57	Nautilus	6/30/2021 4:01 PM
58	Kickball	6/30/2021 4:00 PM
59	Softball, soccer, baseball	6/17/2021 3:15 AM
60	Texoma soccer organization- on Sherman teams though as we moved from Sherman and they wanted to stay on their same teams.	6/14/2021 12:07 PM
61	TSA, Girls Softball	6/10/2021 6:44 PM
62	USA Cycling, Dallas Off Road Bicycling Association	6/10/2021 7:01 AM
63	NTX MTB	6/9/2021 11:03 PM
64	Boys and girls club sports	6/9/2021 9:42 PM
65	Denison dolphins swimming team	6/9/2021 9:35 PM
66	Nautilus	6/9/2021 8:22 PM
67	Swimming	6/9/2021 8:15 PM
68	Swim team	6/9/2021 7:55 PM
69	Texoma Soccer Association (TSA)	6/9/2021 6:43 PM
70	Denison Dolphins	6/9/2021 5:06 PM
71	Denison Dolphins	6/9/2021 4:05 PM
72	Denison Dolphins	6/9/2021 3:44 PM
73	Texoma Soccer Association and USA Swimming	6/9/2021 3:39 PM
74	Texoma Soccer Association	6/9/2021 9:26 AM

Questions 23 & 24 asked the survey respondent if they would like to continue the survey to answer questions specific to Loy Lake Park and Katy Park to inform the individual park design concepts, which were parallel efforts to this Denison Park & Trails Master Plan.

The results for the following questions are from the respondents who selected yes to continued to the park specific portion of the survey.

Question 25: How often do you or members of your household visit Loy Lake Park today?



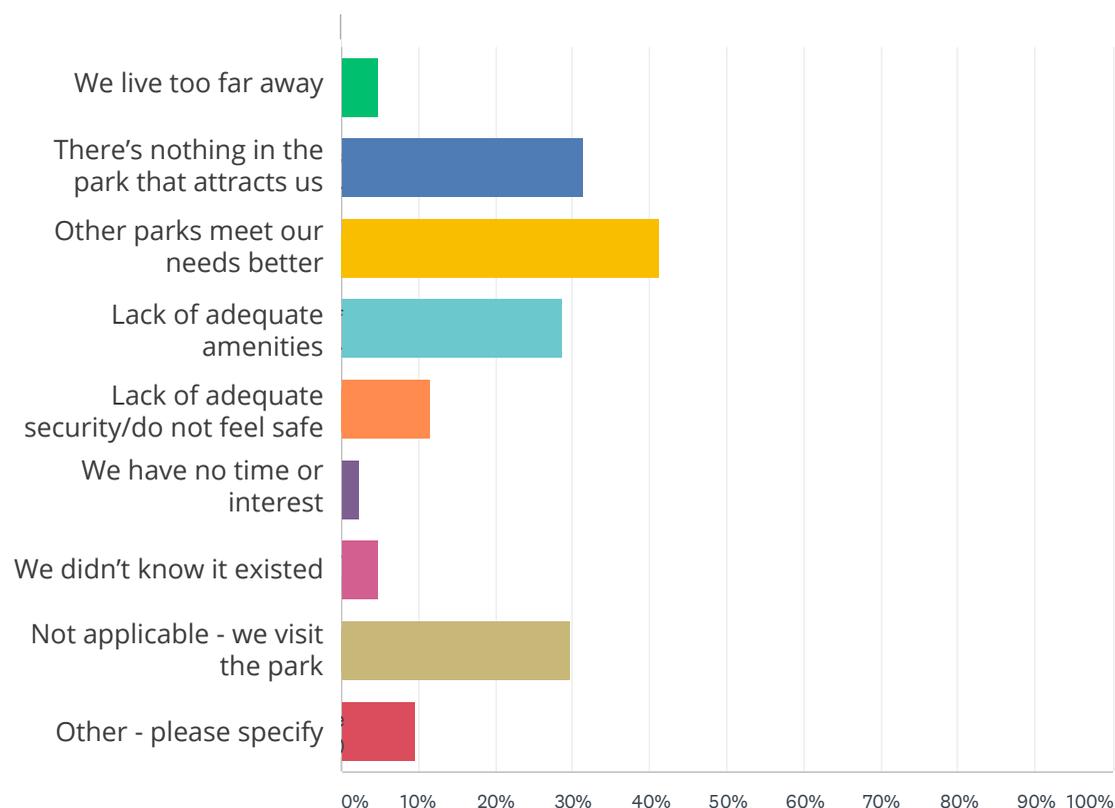
ANSWER CHOICES	RESPONSES
Daily	0.94% 3
Weekly	8.18% 26
Monthly	12.89% 41
A few times a year	38.99% 124
For special events, please specify	11.64% 37
I've been to the park a few times	22.33% 71
I've never been to the park	5.03% 16
TOTAL	318

#	PLEASE SPECIFY THE SPECIAL EVENTS YOU'VE ATTENDED AT LOY LAKE PARK	DATE
1	Christmas Lights, Frontier days, trade days	7/14/2021 9:00 AM
2	Christmas lights	7/14/2021 3:26 AM
3	Christmas lights event	7/9/2021 4:34 PM
4	Christmas light and just cycling	7/8/2021 11:04 PM
5	Holiday Lights	7/8/2021 1:12 PM
6	Fair, lights, family pictures	7/7/2021 10:05 PM
7	Christmas lights	7/7/2021 4:19 PM

8	We miss the Fair! We go to the Frontier Village. And we love to visit the Veterans Memorial. We also enjoy the peace and quiet. Bird Watching.	7/7/2021 10:40 AM
9	Christmas lights	7/7/2021 10:14 AM
10	Running.	7/7/2021 10:00 AM
11	We like to walk around the lake but have to wear rubber boots because the bridge is broken over the little creek area.	7/5/2021 2:29 AM
12	Love frontier village, and love walking there	7/3/2021 6:00 PM
13	Craft shows	7/3/2021 10:47 AM
14	Christmas lights	7/1/2021 9:18 PM
15	Holiday Lights	7/1/2021 9:05 PM
16	County fair, historic homes with our Cub Scout troop twice.	7/1/2021 7:09 PM
17	Frontier days - other events	7/1/2021 5:17 PM
18	Christmas lights, Grayson County Fair	7/1/2021 3:35 PM
19	Frontier Village or just driving through. Sometimes a picnic. Walking my dog.	7/1/2021 3:05 PM
20	Christmas lights, county fair, picnics	7/1/2021 2:57 PM
21	Stock show holiday lights	7/1/2021 12:12 PM
22	Holiday lights. Cultural events	7/1/2021 11:22 AM
23	Texoma Livestock Show. Frontier Village	7/1/2021 11:00 AM
24	holiday lights, livestock show, small fairs	7/1/2021 10:45 AM
25	Stockshow, County Fair when it was held there, Holiday Lights	7/1/2021 10:15 AM
26	Stock shows, fishing, jackpot shows, fair, car shows, disd activity day, light show, fishing	7/1/2021 9:32 AM
27	Annual lights, livestock show, frontier village	7/1/2021 9:27 AM
28	holiday lights, halloween trick or treat	7/1/2021 9:16 AM
29	Christmas Lights	7/1/2021 7:24 AM
30	fishing, walking	6/30/2021 11:06 PM
31	Holiday Lights	6/30/2021 10:58 PM
32	Lights in December	6/30/2021 10:32 PM
33	Christmas Lights	6/30/2021 9:50 PM
34	Christmas Lights, FFA/4H type events, rodeo	6/30/2021 9:49 PM
35	Christmas lights	6/30/2021 9:34 PM
36	Christmas Lights	6/30/2021 9:32 PM
37	Christmas lights, livestock show	6/30/2021 9:26 PM
38	christmas lights	6/30/2021 8:07 PM
39	Christmas lights	6/30/2021 8:00 PM
40	Christmas Lights, Frontier Village events, Car Shows, Fair	6/30/2021 7:30 PM
41	Denison ISD Yearly Family Picnic	6/30/2021 7:18 PM
42	Stock show	6/30/2021 7:14 PM
43	Livestock show, carnival, Frontier Village, walking, fishing, FB type tight TV t	6/30/2021 7:10 PM
44	FFA fair, Christmas lights watch the geese	6/30/2021 6:16 PM

45	Holiday lights	6/30/2021 5:30 PM
46	Christmas Lights	6/30/2021 5:27 PM
47	Festivals - Holiday Lights - Car Shows-When they held the car shows there it was nice as it was more shaded with all the trees as opposed to downtown Denison. Afterwards sometimes they had a band in the evening under the stars. Attended the carnivals that were held there. Would love to see some summer nights concerts held at the park.	6/30/2021 5:15 PM
48	Christmas lights	6/30/2021 5:04 PM
49	Holiday Lights, Grayson County Fair	6/30/2021 5:00 PM
50	Great grandson feeds the ducks corn in the winter	6/30/2021 4:54 PM
51	Christmas lights, frontier village	6/30/2021 4:48 PM
52	Holiday lights, Frontier Village	6/30/2021 4:44 PM
53	Holiday Lights	6/30/2021 4:25 PM
54	Christmas lights, frontier village, FFA events	6/30/2021 4:21 PM
55	Pool—3 days a week	6/30/2021 4:18 PM
56	Christmas Lights	6/30/2021 4:18 PM
57	Lights!	6/17/2021 3:19 AM
58	We go the trade days or my runner group runs through there.	6/16/2021 3:12 PM
59	Frontier village heritage days program is great fun!	6/14/2021 12:08 PM
60	Christmas Lights	6/11/2021 11:44 PM
61	Games	6/11/2021 4:32 PM
62	Annual Church Picnic and Holiday Lights	6/11/2021 4:30 PM
63	Christmas lights, Frontier village, trade days in arena	6/11/2021 3:23 PM
64	Holiday lights, ducks unlimited banquet	6/10/2021 8:42 PM
65	Christmas Lights, Fair	6/10/2021 7:19 PM
66	Only Holiday Lights	6/10/2021 6:47 PM
67	Christmas Lights, Ag stuff	6/10/2021 7:05 AM
68	Christmas lights and supported running rallies	6/10/2021 6:46 AM
69	Swim team and walking	6/9/2021 9:38 PM
70	Christmas Lights	6/9/2021 9:21 PM
71	Christmas lights	6/9/2021 8:19 PM
72	Holiday lights, TEXOMA Expo & Livestock Show	6/9/2021 8:18 PM
73	Christmas lights, rodeo	6/9/2021 5:08 PM
74	Lights and Shows at LOY as well as events at museum.	6/9/2021 3:44 PM
75	School field trips, 5Ks, Ghost Tours	6/9/2021 2:49 PM
76	Christmas lights, Halloween trick or treating	6/9/2021 9:32 AM
77	Holiday lights	6/7/2021 10:01 PM

Question 26: If you or your household do not visit Loy Lake Park, why don't you?

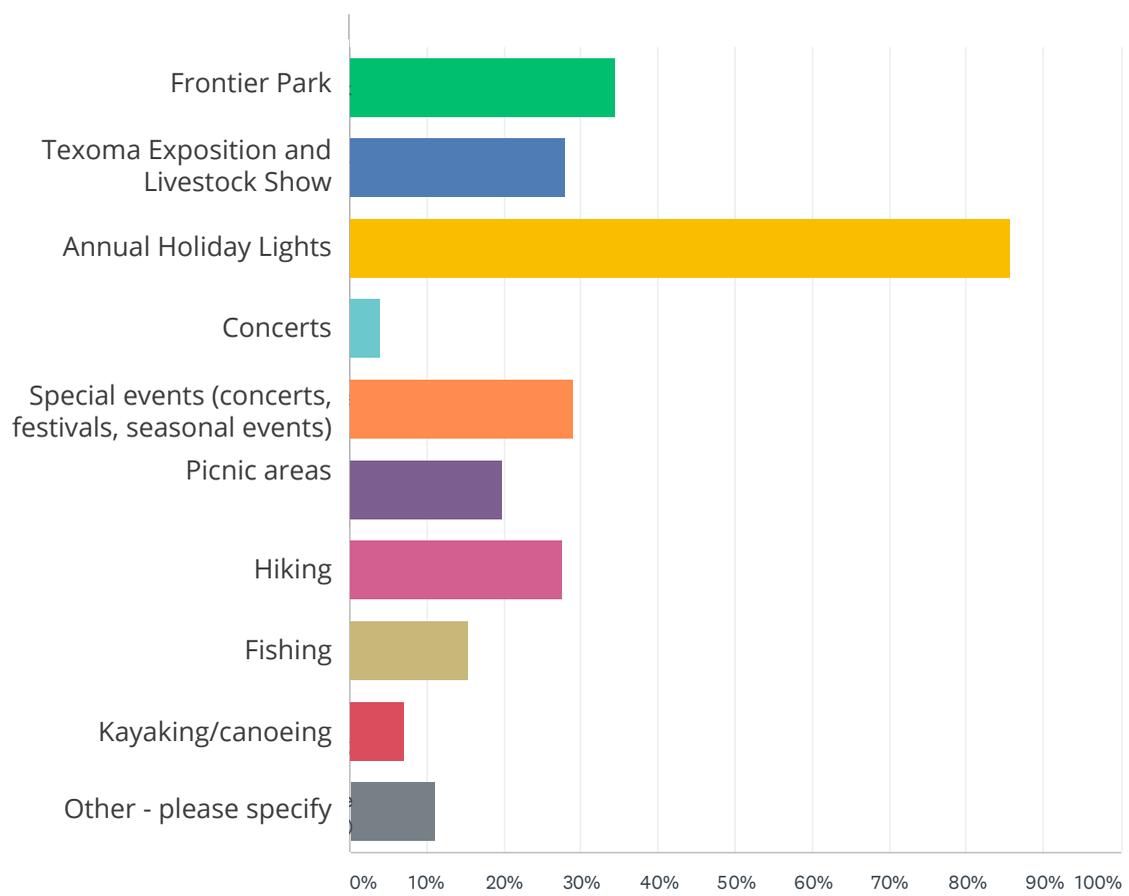


ANSWER CHOICES	RESPONSES
We live too far away	4.76% 12
There's nothing in the park that attracts us	31.35% 79
Other parks meet our needs better	41.27% 104
Lack of adequate amenities	28.57% 72
Lack of adequate security/do not feel safe	11.51% 29
We have no time or interest	2.38% 6
We didn't know it existed	4.76% 12
Not applicable - we visit the park	29.76% 75
Other (please specify)	9.52% 24
Total Respondents: 252	

#	OTHER (PLEASE SPECIFY)	DATE
1	We forget its there actually but its a really nice place to walk and walk the dog	7/8/2021 2:48 PM

2	Need basketball courts	7/7/2021 8:40 PM
3	People living out of their cars staying there	7/7/2021 4:35 PM
4	While we do visit, we would visit more of the above were in existence.	7/7/2021 10:40 AM
5	Things have been busy but plan to get out.	7/7/2021 10:05 AM
6	Not much to do there	7/7/2021 9:35 AM
7	Not aware of what is offered	7/7/2021 9:27 AM
8	only available after hours	7/5/2021 5:36 AM
9	not enough parking and need parking close to dog park	7/3/2021 2:37 PM
10	No walking trails	7/1/2021 5:17 PM
11	Mosquitoville and unkept trails	7/1/2021 2:58 PM
12	We tried the Xmas lights, but the line was insane	7/1/2021 7:16 AM
13	No easy way to bike from Waterloo to Loy Lake to THF	6/30/2021 7:04 PM
14	not well maintained	6/30/2021 6:30 PM
15	Old amenities, need replacing and add more tables and benches	6/30/2021 6:16 PM
16	I don't know ☹	6/30/2021 5:28 PM
17	The trails are not passable.	6/30/2021 5:00 PM
18	lake is no good for kayaking! I call it the black lagoon.	6/30/2021 4:50 PM
19	Trails are poorly maintained.	6/24/2021 8:51 PM
20	walk/bike trail around lake. basketball courts. Easier lake access.	6/12/2021 9:59 AM
21	Would visit more but it's not very well maintained	6/10/2021 8:42 PM
22	The trail isn't accessible and there aren't enough places to sit.	6/10/2021 1:04 PM
23	Need a connection point (sidewalk designated a trail) between Waterloo near Hyde park area and connecting to Loy Lake.	6/9/2021 8:19 PM
24	The lake is too shallow and hard to reach. The cat tails and lillies have taken over the lake. The trail that goes around is great but in disrepair and needs better signage. No way to cross spillway.	6/9/2021 3:44 PM

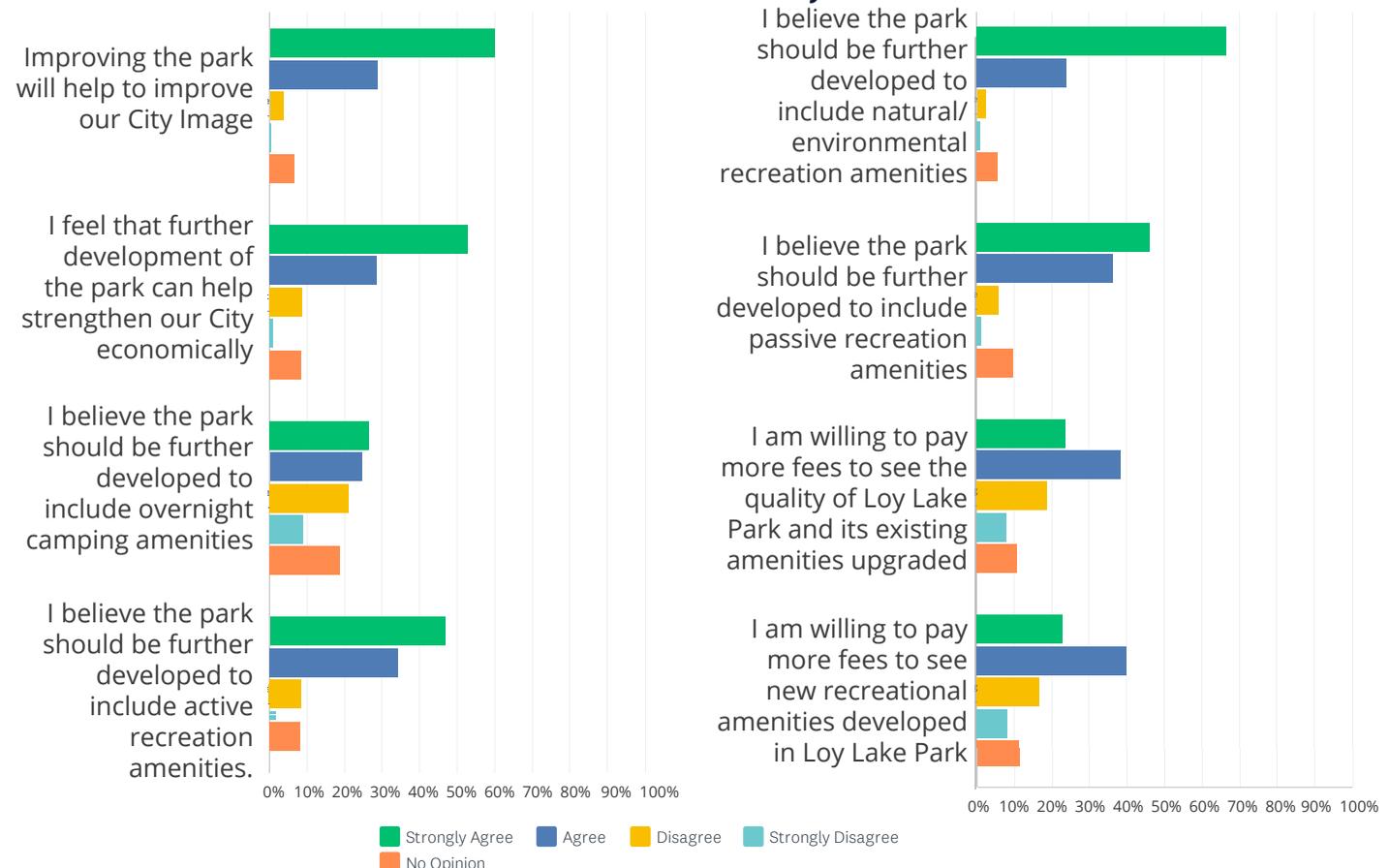
Question 27: What type of activities do you or members of your household participate in at Loy Lake Park?



ANSWER CHOICES	RESPONSES	
Frontier Park	34.46%	102
Texoma Exposition and Livestock Show	28.04%	83
Annual Holiday Lights	85.81%	254
Concerts	4.05%	12
Special events (concerts, festivals, seasonal events)	29.05%	86
Picnic areas	19.93%	59
Hiking	27.70%	82
Fishing	15.54%	46
Kayaking/canoeing	7.09%	21
Other (please specify)	11.15%	33
Total Respondents: 296		

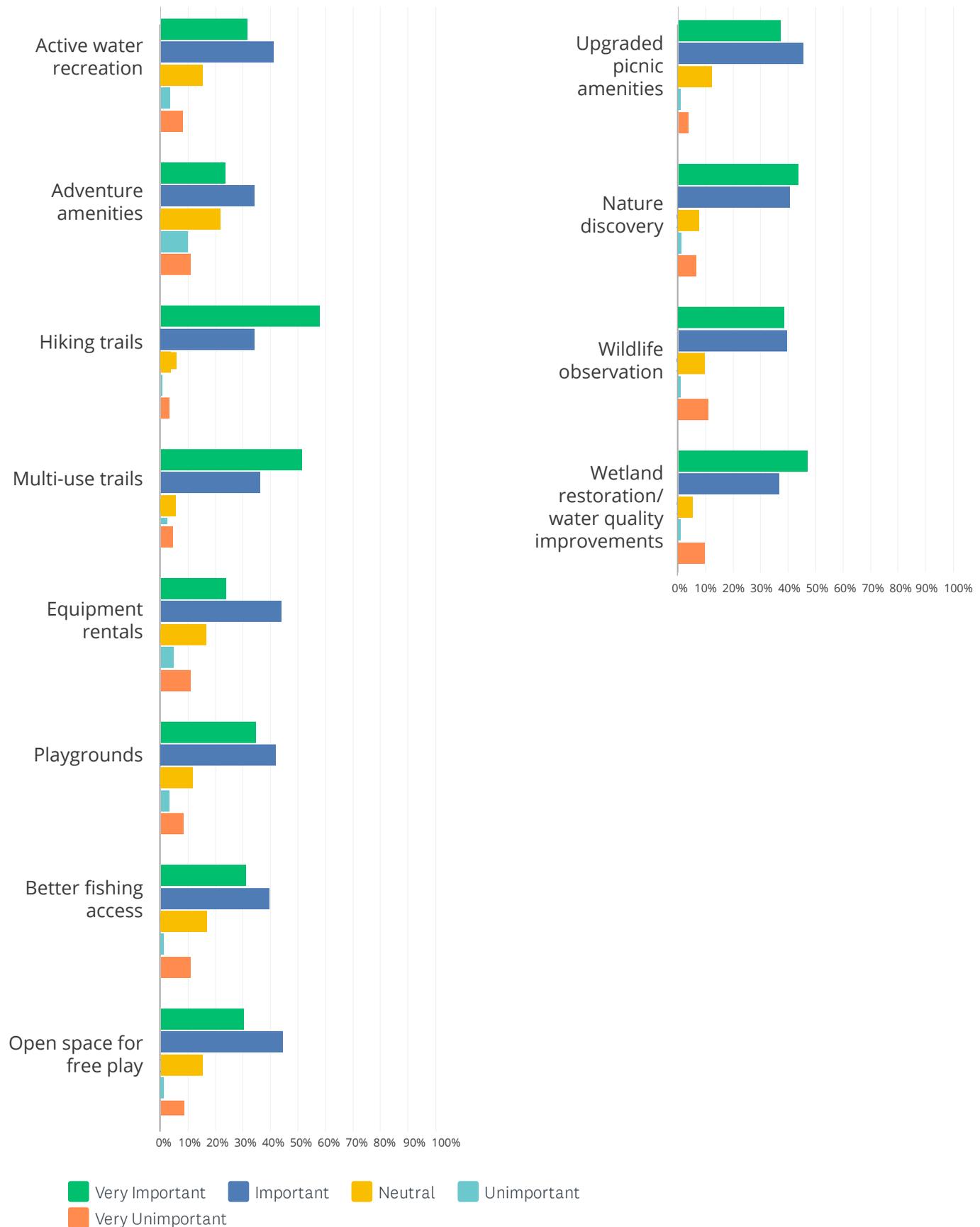
24	Ducks Unlimited Banquets	6/30/2021 5:00 PM
25	some playground time	6/30/2021 4:54 PM
26	Waterloo pool- year round	6/30/2021 4:18 PM
27	i never been to it	6/23/2021 9:23 PM
28	It's Frontier Village not Frontier Park.	6/23/2021 8:52 PM
29	Running path	6/16/2021 3:12 PM
30	I usually run over from Waterloo or THFF	6/9/2021 11:35 PM
31	Cycling	6/9/2021 11:05 PM
32	Swimming team	6/9/2021 9:38 PM
33	Lake has a Algae Problem	6/9/2021 4:50 PM

Question 28: Please indicate your level of agreement with each of the following statements about Loy Lake Park.



	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
Improving the park will help to improve our City image	60.13% 190	28.80% 91	3.80% 12	0.63% 2	6.65% 21	316	1.44
I feel that further development of the park can help strengthen our City economically	53.02% 167	28.57% 90	8.89% 28	0.95% 3	8.57% 27	315	1.24
I believe the park should be further developed to include overnight camping amenities	26.52% 83	24.60% 77	21.09% 66	8.95% 28	18.85% 59	313	0.39
I believe the park should be further developed to include active recreation amenities (e.g. better water access, zip lines)	46.82% 147	34.39% 108	8.60% 27	1.91% 6	8.28% 26	314	1.16
I believe the park should be further developed to include natural/environmental recreation amenities (e.g. boardwalks, nature trails, bird watching locations)	66.67% 210	24.13% 76	2.54% 8	0.95% 3	5.71% 18	315	1.53
I believe the park should be further developed to include passive recreation amenities (e.g. camping, fishing, picnicking)	46.33% 145	36.42% 114	6.07% 19	1.28% 4	9.90% 31	313	1.20
I am willing to pay more in fees to see the quality of Loy Lake Park and its existing amenities upgraded.	23.81% 75	38.41% 121	18.73% 59	8.25% 26	10.79% 34	315	0.51
I am willing to pay more in fees to see new recreational amenities developed in Loy Lake Park	23.00% 72	40.26% 126	16.93% 53	8.31% 26	11.50% 36	313	0.53

Question 29: Please indicate how important or unimportant it is for the following amenities to be provided or added to Loy Lake Park.



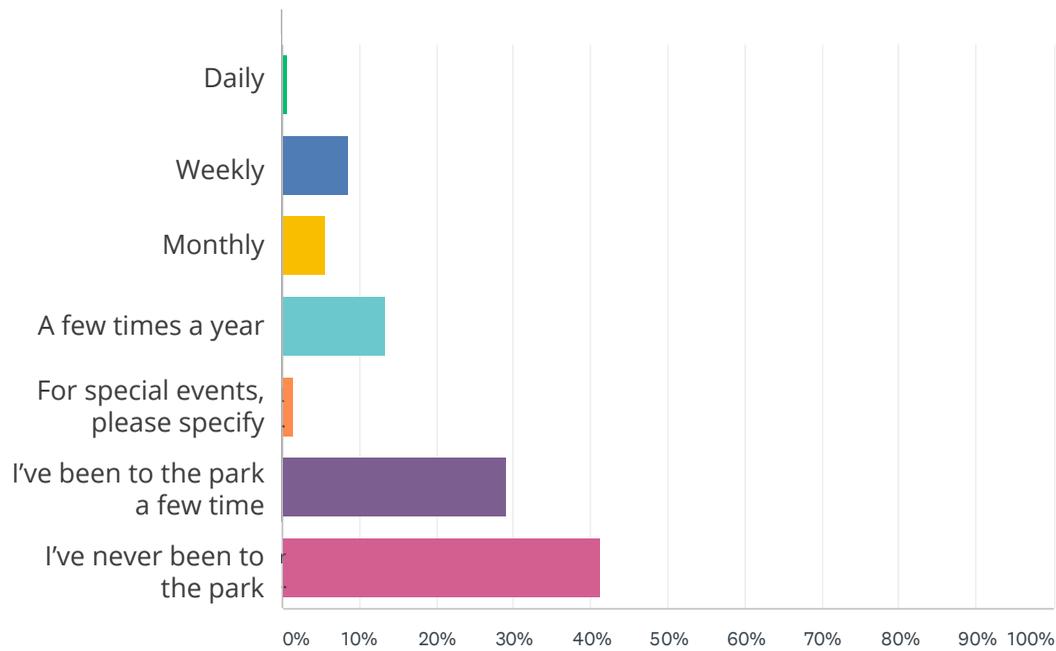
	VERY IMPORTANT	IMPORTANT	UNIMPORTANT	VERY UNIMPORTANT	NO OPINION	TOTAL	WEIGHTED AVERAGE
Active water recreation (e.g. rowing, swimming areas, canoeing/kayaking, water sports)	31.65% 100	41.14% 130	15.51% 49	3.48% 11	8.23% 26	316	0.82
Adventure amenities (e.g. rope course, climbing walls, zip lines)	23.57% 74	34.08% 107	21.66% 68	9.87% 31	10.83% 34	314	0.40
Hiking trails (e.g. nature trails, boardwalks, trail access points)	57.96% 182	34.39% 108	3.82% 12	0.64% 2	3.18% 10	314	1.45
Multi-use trails (e.g. bicycle, pedestrian, equestrian)	51.43% 162	36.19% 114	5.40% 17	2.54% 8	4.44% 14	315	1.29
Equipment rentals (e.g. bikes, kayak/canoes, paddle boards)	23.89% 75	43.95% 138	16.56% 52	4.78% 15	10.83% 34	314	0.66
Playgrounds (e.g. themed, adventure, nature)	34.71% 109	42.04% 132	11.78% 37	3.18% 10	8.28% 26	314	0.93
Better fishing access (e.g. barge, pier, shoreline)	31.19% 97	39.55% 123	17.04% 53	1.29% 4	10.93% 34	311	0.82
Open space for free play (e.g. frisbee, kite flying)	30.25% 95	44.59% 140	15.29% 48	1.27% 4	8.60% 27	314	0.87
Upgraded picnic amenities (e.g. pavilions, tables, barbeque grills)	37.26% 117	45.54% 143	12.42% 39	0.96% 3	3.82% 12	314	1.06
Nature discovery (e.g. trails, nature play, interpretative/educational signage)	43.63% 137	40.76% 128	7.64% 24	1.27% 4	6.69% 21	314	1.18
Wildlife observation (e.g. bird watching, observation tower, fish habitat)	38.61% 122	39.56% 125	9.81% 31	0.95% 3	11.08% 35	316	1.05
Wetland restoration/water quality improvements	46.98% 148	36.83% 116	5.40% 17	0.95% 3	9.84% 31	315	1.23

Question 30: What other types of amenities would you like to see at Loy Lake Park?

#	RESPONSES	DATE
1	Drone activities	7/12/2021 1:08 PM
2	Lighting	7/9/2021 12:45 PM
3	I think it would be a great idea to offer overnight camping options for tents and rvs alike	7/8/2021 2:48 PM
4	I am all for updating the major parks in the city but I believe first and for most, all of the parks in the city need to be addressed and made equal before adding more amenities to the bigger parks.	7/8/2021 1:12 PM
5	More walking trails	7/8/2021 8:25 AM
6	Basketball courts	7/7/2021 8:40 PM
7	For sure better picnic settings. Tables are falling down.	7/7/2021 4:35 PM
8	More trails please.	7/7/2021 12:26 PM
9	More areas to observe and conserve nature and teaching areas to educate on Denison's flora and fauna. A quiet area for meditation, yoga, Tai Chi...	7/7/2021 12:21 PM
10	Absolutely do NOT want camping allowed.	7/7/2021 10:20 AM
11	Just lots of variety for people to visit.	7/7/2021 10:05 AM
12	A public pool.	7/7/2021 10:00 AM
13	I love the water recreation rental, climbing walls and zip line ideas. We have no where for rock climbing except to drive all the way to McKinney. Love the idea of the nature discovery too. We go to Hagerman a lot and we enjoy the signs they have up for nature facts. Makes it a learning experience.	7/7/2021 9:35 AM
14	Restrooms and safety	7/5/2021 9:17 AM
15	Camping for sure would be cool	7/5/2021 5:36 AM
16	I would like to see the bridge in the woods around the lake rebuilt as well as a bridge to get across the spillway when wet.	7/5/2021 2:29 AM
17	Rock Climbing area	7/4/2021 7:52 AM
18	Loy lake has some major potential...I'd love to see Denison put a lot into this park...I think if done right...the city can bring in users from other areas (aka Sherman, Durant...metroplex)... can have fees for some activities maybe have daily, weekly, seasonal or yearly passes...even a lifetime visit pass or a honorary pass each cost goes for upkeep for Loy lake to offset the cost to the taxpayers.	7/3/2021 6:00 PM
19	Roads maintained better	7/3/2021 10:47 AM
20	Mountain bike trail	7/2/2021 9:17 AM
21	Mainly better access to the water. So overgrown you can't get to it to fish or canoe. Hiking trails would also be great.	7/1/2021 8:07 PM
22	Courtesy docks, fishing piers, better kayak launch facility	7/1/2021 5:37 PM
23	No camping	7/1/2021 5:17 PM
24	Butterfly gardens, wildflowers	7/1/2021 3:29 PM
25	Dirt trails. Please no concrete	7/1/2021 2:58 PM
26	Signage, parking, more information, etc.	7/1/2021 2:57 PM
27	Water park option for older children	7/1/2021 2:48 PM
28	Keep it simple and natural. Wildflowers for Monarch butterflies (milkweed host plant) etc.	7/1/2021 11:00 AM
29	family friendly enviroment for fishing, camping, picnics	7/1/2021 10:45 AM
30	A boat ramp for launching small john boats.	7/1/2021 9:48 AM
31	Better fishing opportunities	7/1/2021 9:47 AM
32	Better fishing access and more stocking in the lake	7/1/2021 9:32 AM

33	Easier access for non motor vehicles	7/1/2021 7:16 AM
34	Better landscaping	6/30/2021 10:32 PM
35	In general just that the human-made areas are intertwined into the natural ecology as seamlessly as possible (as example see Ft. Collins, CO)	6/30/2021 9:49 PM
36	More concerts	6/30/2021 8:55 PM
37	A late may-late July Mon-Fri 7:30-5:30 day camp for kids school aged.	6/30/2021 8:07 PM
38	Better overall trail access and maintenance.	6/30/2021 7:18 PM
39	Paddle boats	6/30/2021 7:10 PM
40	Better bathrooms/water fountains. Maintain the wildness of the park while updating the trails and amenities	6/30/2021 6:37 PM
41	benches, water stations, rest room facilities, improved roads and parking. lighting and security	6/30/2021 6:30 PM
42	Add another swimming pool.	6/30/2021 6:17 PM
43	Parks should be free to public. Security is very important when so much bad can happen to a fun time.	6/30/2021 6:16 PM
44	I would just love to see the lake restored and an area designated for swimming (as it once had)with a sandy beach area.	6/30/2021 5:15 PM
45	Water fountains and trash cans!	6/30/2021 5:06 PM
46	Maintain/restore stone benches, bridges, steps.	6/30/2021 5:00 PM
47	Areas for small children	6/30/2021 4:52 PM
48	Better parking areas.	6/30/2021 4:50 PM
49	Hiking and biking trails	6/30/2021 4:44 PM
50	Water play area for kids	6/30/2021 4:37 PM
51	frisbee golf.	6/30/2021 4:12 PM
52	dunno	6/23/2021 9:23 PM
53	Preservation of the history within the park.	6/23/2021 8:52 PM
54	good location for a new year round swimming pool	6/23/2021 5:34 PM
55	restroom facilities.	6/12/2021 9:59 AM
56	Leave it to nature	6/11/2021 4:32 PM
57	Yoga and Tai Chi classes	6/11/2021 3:23 PM
58	It would be the perfect location for another disc golf course.	6/11/2021 9:35 AM
59	I would love to see native plant wetland botanical garden. It would be	6/10/2021 8:42 PM
60	N/A	6/10/2021 7:19 PM
61	Loy lake needs to be dredged out.	6/9/2021 10:36 PM
62	Mountain bike trail.	6/9/2021 10:22 PM
63	Mountain Bike Trails!	6/9/2021 9:52 PM
64	When growing up, Loy Lake used to be a destination where families could get together grill/picnic and shoot fireworks.. I wish I could experience this with my kiddo..	6/9/2021 9:21 PM
65	More maintained mountain bike trail. Clear vegetation around shoreline to allow bank fishing. Get rid of weeds in lake to make fishing easier.	6/9/2021 8:01 PM
66	Restoration of the amphitheater on the west end of the lake.	6/9/2021 6:48 PM
67	Lake needs dredging or removal of the Algae / Grass	6/9/2021 4:50 PM
68	a nature trail system to encourage reclamation of parks and animals. A fishing pier or fish feeding station. Kayak rentals or paddleboats	6/9/2021 3:44 PM
69	Accessible and safer walking/biking trails, similar to the progress made at Waterloo	6/9/2021 2:49 PM
70	I think upgrading the picnic areas would be a huge help for the park. Also, adding a play area for kids. I love the idea of rock climbing. rope courses and paddle boat rentals.	6/9/2021 9:32 AM

Question 31: How often do you or members of your household visit Katy Park?

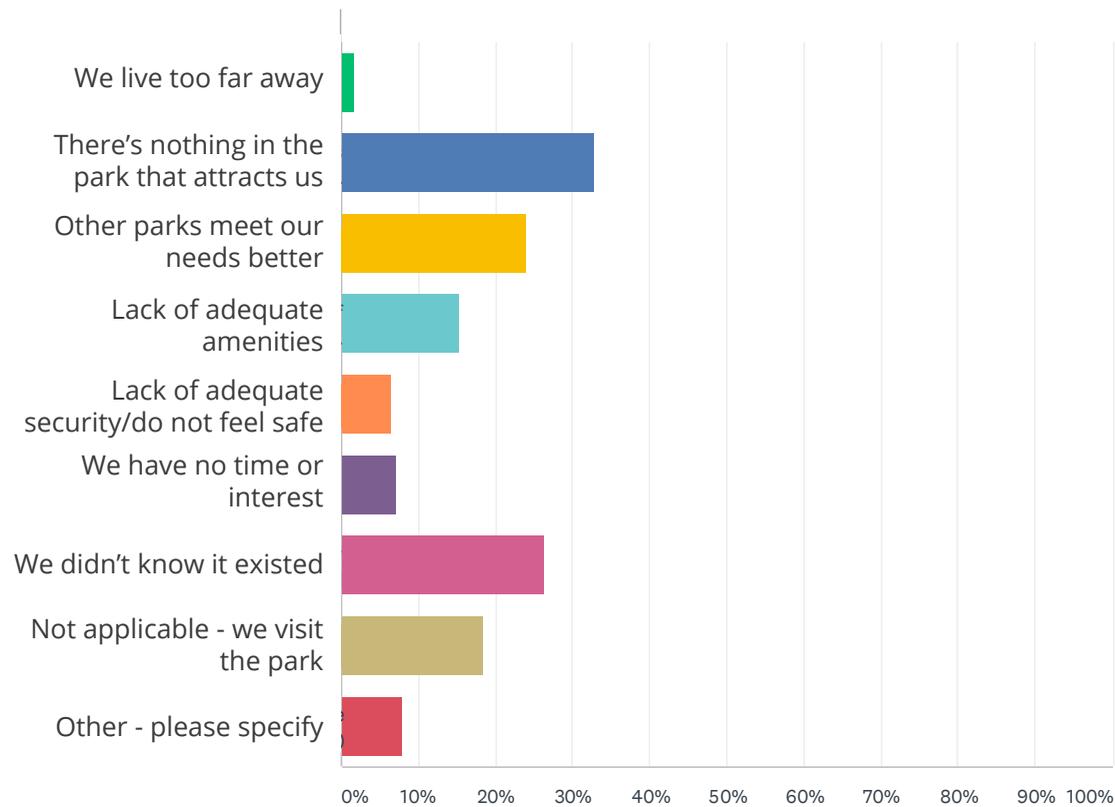


ANSWER CHOICES	RESPONSES
Daily	0.71% 1
Weekly	8.51% 12
Monthly	5.67% 8
A few times a year	13.48% 19
For special events, please specify	1.42% 2
I've been to the park a few times	29.08% 41
I've never been to the park	41.13% 58
TOTAL	141

#	PLEASE SPECIFY THE SPECIAL EVENTS YOU ATTENDED AT KATY SOCCER COMPLEX	DATE
1	I am all for updating the major parks in the city but I believe first and for most, all of the parks in the city need to be addressed and made equal before adding more amenities to the bigger parks.	7/8/2021 1:13 PM
2	My kids used to practice sports there when they were young.	7/7/2021 11:52 AM
3	Watching soccer practices of friends kiddos.	7/7/2021 10:42 AM
4	Games	7/3/2021 6:03 PM
5	Soccer practice	7/1/2021 5:18 PM

6	Baseball practice a few years ago	7/1/2021 2:57 PM
7	Soccer practice	6/30/2021 7:40 PM
8	Hit golf balls, we need a golf practice range	6/30/2021 6:20 PM
9	Soccer practice	6/17/2021 3:22 AM
10	Soccer practice	6/10/2021 6:49 PM
11	Soccer Training	6/9/2021 6:56 PM
12	Texoma Soccer Practice	6/9/2021 3:47 PM

Question 32: If you or your household do not visit Katy Park, why don't you?

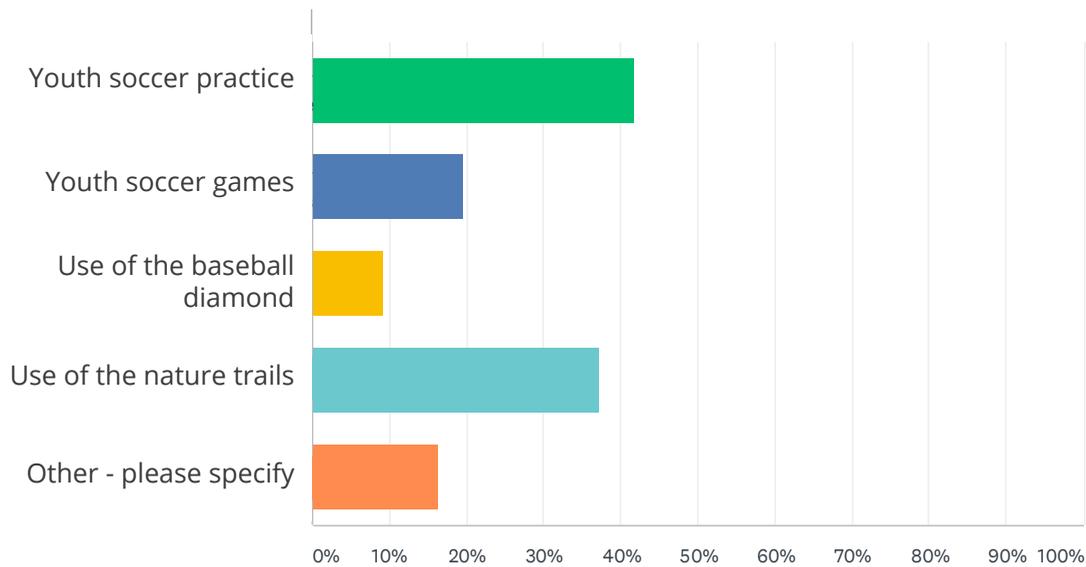


ANSWER CHOICES	RESPONSES
We live too far away	1.60% 2
There's nothing in the park that attracts us	32.80% 41
Other parks meet out needs better	24.00% 30
Lack of adequate amenities	15.20% 19
Lack of security/don't feel safe	6.40% 8
We have no time or interest	7.20% 9
We didn't know it existed	26.40% 33
Not applicable - we visit the park	18.40% 23
Other (please specify)	8.00% 10
Total Respondents: 125	

#	OTHER (PLEASE SPECIFY)	DATE
1	The Katy complex grounds are extremely dangerous. The ground it self is hard and makes it	7/7/2021 10:14 PM

	dangerous to play soccer on it.	
2	no Lights	7/7/2021 9:26 AM
3	No kids	7/4/2021 10:26 PM
4	N/A	7/3/2021 6:03 PM
5	Homeless people live in the woods beside the park	7/3/2021 12:56 AM
6	Son played soccer there but is grown now.	7/2/2021 8:21 PM
7	not soccer people	7/1/2021 10:49 AM
8	Lack of restrooms and water fountains.	6/11/2021 7:07 PM
9	Needs better parking and drainage	6/9/2021 3:47 PM
10	No parking	6/7/2021 10:03 PM

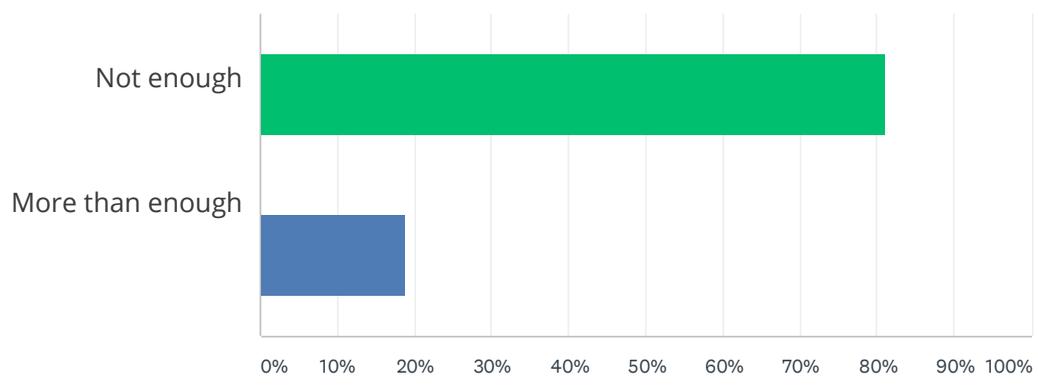
Question 33: What type of activities do you or members of your household participate in at Katy Park?



ANSWER CHOICES	RESPONSES
Youth soccer practice	41.86% 36
Youth soccer games	19.77% 17
Use of the baseball diamond	9.30% 8
Use of nature trails	37.21% 32
Other (please specify)	16.28% 14
Total Respondents: 86	

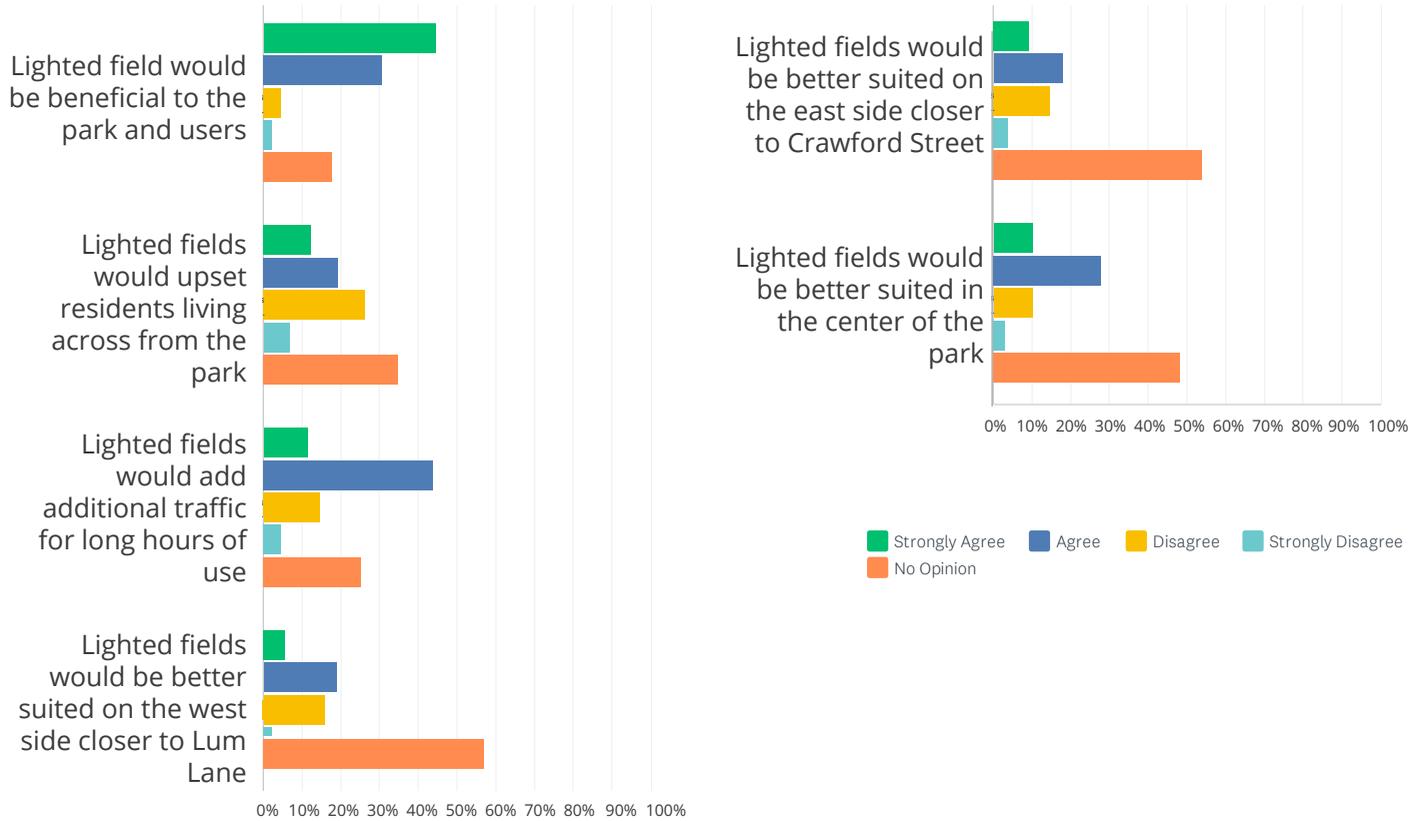
#	OTHER (PLEASE SPECIFY)	DATE
1	None	7/9/2021 4:36 PM
2	N/A	7/8/2021 2:51 PM
3	Adult soccer	7/7/2021 10:14 PM
4	No kids	7/4/2021 10:26 PM
5	We don't, didn't know it had more than soccer fields	7/1/2021 3:00 PM
6	walk our dog	7/1/2021 8:09 AM
7	W	7/1/2021 6:23 AM
8	Is there access via walking or biking from my house?	6/30/2021 8:07 PM
9	Green space	6/30/2021 6:40 PM
10	would use trails if there were any	6/30/2021 6:33 PM
11	Hit golf balls	6/30/2021 6:20 PM
12	We don't use or visit Katy Soccer Complex	6/30/2021 6:12 PM
13	None	6/30/2021 5:19 PM
14	No activities	6/11/2021 9:51 PM

Question 34: Do you think there is enough parking at Katy Park?



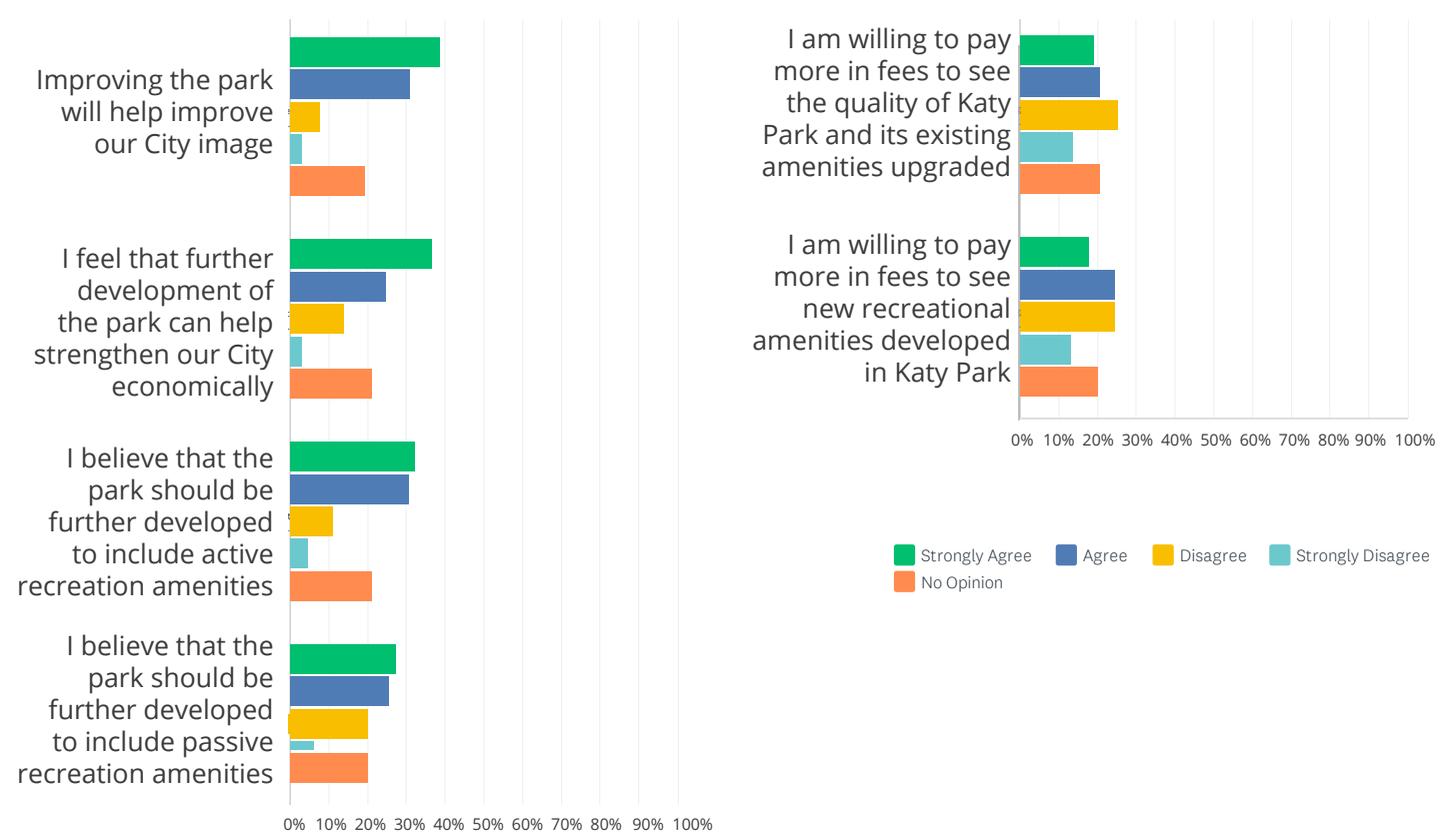
ANSWER CHOICES	RESPONSES	
Not enough	81.19%	82
More than enough	18.81%	19
TOTAL		101

Question 35: Please indicate how strongly you agree or disagree with the following statements regarding having a lighted field at Katy Park.



	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
Lighted fields would be beneficial to the park and users	44.62% 58	30.77% 40	4.62% 6	2.31% 3	17.69% 23	130	1.11
Lighted fields would upset residents living across from the park	12.40% 16	19.38% 25	26.36% 34	6.98% 9	34.88% 45	129	0.04
Lighted fields would add additional traffic for long hours of use	11.54% 15	43.85% 57	14.62% 19	4.62% 6	25.38% 33	130	0.43
Lighted fields would be better suited on the west side closer to Lum Lane	5.56% 7	19.05% 24	15.87% 20	2.38% 3	57.14% 72	126	0.10
Lighted fields would be better suited on the east side closer to Crawford Street	9.38% 12	17.97% 23	14.84% 19	3.91% 5	53.91% 69	128	0.14
Lighted fields would be better suited in the center of the park	10.32% 13	27.78% 35	10.32% 13	3.17% 4	48.41% 61	126	0.32

Question 36: Please indicate your level of agreement with each of the following statements about Katy Park.



	STRONGLY AGREE	AGREE	DISAGREE	STRONGLY DISAGREE	NO OPINION	TOTAL	WEIGHTED AVERAGE
Improving the park will help to improve our City image	38.76% 50	31.01% 40	7.75% 10	3.10% 4	19.38% 25	129	0.95
I feel that further development of the park can help strengthen our City economically	36.72% 47	25.00% 32	14.06% 18	3.13% 4	21.09% 27	128	0.78
I believe that the park should be further developed to include active recreation amenities (e.g. multi-purpose fields, playgrounds, outdoor fitness equipment)	32.28% 41	30.71% 39	11.02% 14	4.72% 6	21.26% 27	127	0.75
I believe that the park should be further developed to include passive recreation amenities (e.g. picnic shelters, nature trails)	27.34% 35	25.78% 33	20.31% 26	6.25% 8	20.31% 26	128	0.48
I am willing to pay more in fees to see the quality of Katy Soccer Complex and its existing amenities upgraded	19.23% 25	20.77% 27	25.38% 33	13.85% 18	20.77% 27	130	0.06
I am willing to pay more in fees to see new recreational amenities developed in Katy Soccer Complex	17.69% 23	24.62% 32	24.62% 32	13.08% 17	20.00% 26	130	0.09

COMMONLY USED TRAIL & BIKEWAY SIGNAGE



R9-7 THE SHARED-USE PATH RESTRICTION

Location: Installed on facilities that are to be shared by pedestrians and bicyclists.



D11-1 BIKE ROUTE

Location: At the beginning of each route and at intersections.
Size: 24"x18" (min. for trails)



D4-3 BICYCLE PARKING AREA

Location: Installed where it is described to show the direction to a designated bicycle parking area. The arrow may be reversed as appropriate.



R3-17 BIKE LANE

Location: Sign spacing should be determined by engineering judgment based on prevailing speed of bicycle and other traffic, block length, distance from adjacent intersections, and other considerations.



R9-5 USE PEDESTRIAN SIGNAL

Location: At crosswalk
Size: 12"x18" (min. for trails)



R3-17A AHEAD

Location: Should be mounted directly below a R3-17 sign in advance of the beginning of a marked bicycle lane.



R9-6 BICYCLE YIELD TO PEDESTRIAN

Location: At crosswalk
Size: 12"x18" (min. for trails)



R3-17B ENDS

Location: Should be mounted directly below a R3-17 sign at the end of a marked bicycle lane.



DI-1B, D3-1 DIRECTIONAL SIGNS

Location: At intersections where access to destinations are available.
Size: 24"x6" (min. for trails)



W16-1 SHARE THE ROAD

Location: Where there is a need to warn motorists to watch for bicyclists traveling along the highway.



M4-11, 12, 13, M7-1, 2, 3, 4, 5, 6, 7 BIKE ROUTE SUPPLEMENTAL PLAQUES

Location: Where bike lanes begin, end, or change directions.
Size: 12"x4", "12"x9" (min for trails)



W11-1 BICYCLE WARNING

Location: Oriented towards motorists at trail crossing.
Size: 18"x18" (min. for trails)



BIKE MAY USE FULL LANE



W11-2 PEDESTRIAN WARNING

Location: Oriented towards motorists at trail crossing.
Size: 18"x18" (min. for trails)



R5-3 NO MOTOR VEHICLE

Location: Entrance to trail
Size: 24"x24" (min. for trails)



RI-1 STOP

Location: At trail intersections and crossings.



RI-2 YIELD

Location: At trail intersections and crossings.
Size: 18"x18" (min. for trails)



WI-1, 2, 3, 4, 5 TURN & CURVE WARNING

Location: At turns and curves which exceed design speed criteria.
Size: 18"x18" (min. for trails)



W3-1 STOP AHEAD

Location: Where stop signs visibility is obscured.
Size: 18"x18" (min. for trails)



W2-1, 2, 3, 4, 5 TRAIL INTERSECTION WARNING

Location: At trail intersections where no stop or yield sign is required; locations with limited sight lines.
Size: 18"x18" (min. for trails)



W3-2 YIELD AHEAD

Location: Where yield sign visibility is obscured.
Size: 18"x18" (min. for trails)



PLEASE STAY ON TRAIL

Location: In environmentally-sensitive areas of where the trail travels near wildlife and heavy vegetation
Size: 12"x18" (min. for trails)



W3-3 SIGNAL AHEAD

Location: Where traffic signal visibility is obscured.
Size: 18"x18" (min. for trails)

TRAIL CLOSED: NO ENTRY UNTIL MADE ACCESSIBLE & SAFE FOR PUBLIC USE

Location: Where trail or access points are closed due to hazardous conditions or construction.
Size: 18"x18" (min. for trails)

TRAIL REGULATIONS/RULES OF THE TRAIL

Location: Entrance to trail
Size: 18"x18" (min for trails)

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PARK CONCEPT PLANS

KATY PARK FINAL MASTER PLAN



Denison TEXAS

Moving Forward. Kicking Back.





Rendering of the eastern most field with lighting and the trailhead with additional parking.



Rendering of the proposed "Active Core" in the center of the complex from Flora Lane. Showing new parking, playground space, splash pad.



Rendering of the "active core" from the west side, showing parking, splash pad, and pickle ball courts.



Rendering of the "active core" showing the splash pad and playground with the drainage channel running between the two spaces.



Rendering of the picnic area and pavilion in the “active core.”



Rendering of the backyard area in the “Active Core,” where amenities such as barbecue stations, table tennis, and corn hole boards can be implemented and serve as a gathering space for park users.

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CITY OF DENISON

**PARKS & TRAILS MASTER
PLAN**

