









# CITY OF AMARILLO

# **Hike and Bike Master Plan**

SEPTEMBER 2021



# Acknowledgements

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# 1. Introduction

## **Purpose of the Plan**

The Amarillo Hike and Bike Plan is a critical effort in continuing to maintain and enhance the quality of life for residents and visitors. Amarillo residents desire more opportunities to walk and bike throughout the city. Widely, the city lacks trails and safe and comfortable connections for people who want to walk or bike. The lack of walking and biking amenities is especially pronounced when trying get from one part of Amarillo to another or to popular city destinations.

The purpose of this Master Plan is to develop planning guidelines for future implementation. This document is intended as an initial phase in trail planning, identifying a long-term vision for a fully built out trail network and short-term and medium-term strategies to:

- Help focus future trail investment;
- Fill critical gaps and overcome challenging barriers;
- Improve safety and mobility of residents and visitors that use non-motorized transportation;
- Introduce new and creative solutions; and
- Connect Amarillo residents to each other and to the places they love.



## **Planning Process**

This Hike and Bike Plan involved technical analyses and community engagement. Advisory groups comprised of City staff, stakeholders and community leaders provided guidance and input throughout the process. The process included the following committees and boards:

Amarillo Pedestrian and Bike Safety Committee: The Committee met two times to offer insight about the local community, to provide technical feedback on the Plan's vision, strategies and actions, and ensure the Master Plan addresses the needs of all Amarillo community members. The Committee provided research and recommendations that guided this Hike and Bike plan. Highlights from this December 2020 memo are provided in this document.

City Council: The City Council provided direction through stakeholder interviews and received regular updates on plan findings and deliverables.

Park Board Strategic Planning Sub-Committee: The Sub-Committee was established as a part of the Parks and Recreation Master Planning Process and provided guidance and provided guidance for trail strategies during two meetings.

This community input was gained throughout during the following three phases (Figure 1).

**Figure 1: Planning Process** 



## **Alignment with Other Plans and Studies**

The City has several documents guiding the provision of trails, pathways, bike routes, safe routes to school, and wayfinding. The Vision and Strategies in this document were guiding by the following:

- 2008 Downtown Amarillo Strategic Action Plan
- 2010 Hike and Bike Plan
- 2010 Amarillo Comprehensive Plan
- 2019 Amarillo Metropolitan Transportation Plan
- 2021 Amarillo Parks and Recreation Master Plan [Pending Adoption]

### **Hike and Bike Needs**

As a part of the planning process, hike and bike needs were assessed to note where services are deficient and identify opportunities to enhance them. Key takeaways from this analysis are:

- The City has one existing off-street trail that is not within a City-owned park, limiting trail use
- Off-street trails are the most needed trail type in Amarillo, Parks and Recreation Survey 2020 (Table 1)
- Trail use is one of the top recreation activities in the state, 2012 Texas SCORP (Figure 2)
- Trail demand and use throughout in Amarillo has grown since the start of the pandemic, Strava 2020 (Figure 3)
- Multi-use trails are needed to improve park access and non-motorized transportation
- The City has some bike lanes and bike routes providing access to parks, but not a bikeway system
- Loop trails in parks and soft-surfaced trails are needed for recreation

Top 5 Facilities Needed Now In Local Parks by Texas Citizens				
Unpaved trails for walking and hiking	43.6%			
Natural park area/open space	31.8%			
Mountain bike trails	31.4%			
Paved trails for walking, hiking, biking, skating	30.1%			
Wildlife/nature observation sites	27.8%			

Figure 2: Texas SCORP Citizens Survey

Source: Texas SCORP 2012



Figure 3: 2020 Walk/Run/Hike Trips in Potter County

Source: Strava 2020 data

Table 1: Trail Types Most Needed in Amarillo

Parks Survey Response		Percentage
Off-street paved trails for bicycling, walking, rollerblading, skateboarding, etc.		56%
Unpaved trails for recreation/exercise (jogging, horseback riding, mountain biking)		42%
Paths and sidewalks to walk or bike to nearby parks	376	28%
Nature trails with interpretive signage	263	19%
On-street bicycle lanes	247	18%
Connections to the regional trail system	150	11%
Other	17	1%

Source: Parks and Recreation Department Master Plan Survey, 2020

## **Plan Organization**

This document is organized into the following chapters.

- Chapter 1: Introduction—Provides information about the Plan's purpose and process and identifies primary hike and bike needs.
- Chapter 2: Strategies and Actions—Describes a vision, strategies and actions to guide future trail decisions over the short and long-term.
- Chapter 3: Implementation—Describes a strategy for department coordination and identifies funding opportunities.
- Appendix A: Design Standards—Details different trail designs.





# 2. Trails Vision, Strategies and Actions

While there are many tried and true methods of retrofitting communities with trail connections, Amarillo's network requires specific strategies and actions that are tied to a community vision. This chapter presents a trails vision concept with strategies and actions to foster citywide trail connectivity.

## **Trails Vision Concept**

The Vision for Amarillo's trails is depicted in Map 1 and identifies a variety of trail types for pedestrians and bicyclists. These multi-use trails build off Amarillo's existing trails and bike lanes, incorporates the recommendations from the 2010 Hike and Bike Master Plan Update, and provides a framework for the Hike and Bike Strategies found throughout this chapter. The vision concept is intended to:

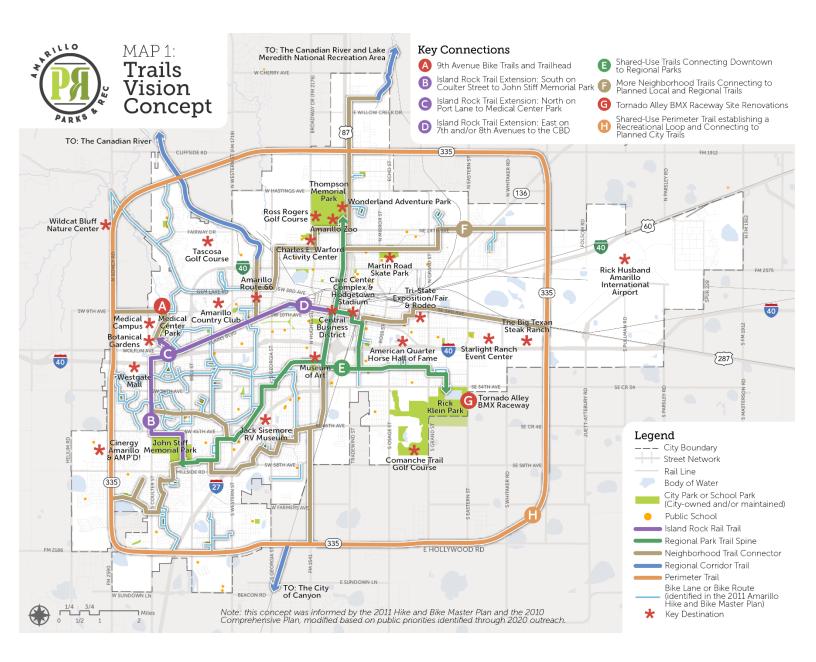
- Establish a safe and comfortable network that connect residents and visitors to local and regional recreation, amenities and destinations;
- Provide a network of trail routes to connect residential neighborhoods to parks, schools, bus routes, libraries, commercial centers, and other community destinations; and
- Provide loop trails or recreation trails in parks for walking, dog walking, jogging, nature interpretation, mountain biking and other wheeled uses (e.g., scooters, skateboards, tricycles, wheelchairs, strollers, etc.).











## **Strategies and Actions**

- 1. Identify a Citywide trails vision and system of on- and off-street trails through collaborative Citywide planning and implementation.
  - a. In the long-term, strive to create a system of trails, bike routes, and paths, considering the following trail types and classifications to separate bicyclists and pedestrians from automotive traffic where feasible.
    - i. Rock Island Rail Trail (Class I or IV)
    - ii. Regional Park Trail Spine (Class I or IV)
    - iii. Perimeter Loop Trail (Class I or IV)
    - iv. Neighborhood Connectors (Class II bike lanes)
    - v. Regional Tributary Trails (depends on regional trail type)
    - vi. Bike Routes (Class III shared bike route)
    - vii. Other Pedestrian Sidewalks and Paths
  - b. Continue to advance this vision, refine recommendations, identify potential alignments, prioritize projects, and update the implementation strategy when updating relevant City and regional plans, such as the Amarillo Regional Multimodal Mobility Plan, the Transportation Improvement Plan, the Comprehensive Master Plan, and the Hike and Bike Trails Master Plan.
  - c. Coordinate City trail efforts among the departments of Transportation, Public Works, and Park and Recreation, defining roles and responsibilities for implementation and maintenance of the trails and non-motorized transportation system.
  - d. Refocus the Pedestrian and Bicycle Safety Advisory Committee as the Bicycle, Pedestrian, and Trails Advisory Board (BPTAB) to ensure a truly connected system and to advocate for trail development, provide guidance on trail safety, and reviews plans and policies regarding bicycle, pedestrian, and multiuse trail projects.
  - e. Incorporate the trails vision into Department capital improvement plans for implementation.
- 2. Vary trail types, surfacing, and amenities to support different trail experiences.
  - a. Establish Citywide bikeway and pedestrian trail and path design guidelines and development criteria to standardize their development. Define standards for the following, including corridor and trail width, surfacing, and support amenities:
    - i. Multiuse Paths (Class I) are paved, multiuse rights-of-way completely separated from streets. These may include a softsurfaced buffer for jogging. For Class I trails, consider a 10- to 12foot-wide paved path striped for dual-directional use, plus an adjacent 4-foot-wide soft surfaced trail for jogging and lowimpact uses.
    - ii. Bike Lanes (Class II) are on-street corridors designated for bicyclists using stripes and stencils. Bike lanes may include buffer

PEDESTRIAN AND BIKE COMMITTEE **FINDINGS** 

### Bike Routes Vs. **Bike Lanes**

- Of the 100 miles of bike facilities in the 2010 Amarillo Bike and Ped Plan, only 23% of the planned facilities are bike lanes.
- Bike lanes are more predictable than bike routes, they increase cyclist and motorist comfort on the road, and reduce the number of cyclists riding on the sidewalk.

- striping to provide greater separation between bicyclists and parked or moving vehicles.
- iii. Bike Routes (Class III) are streets designated for bicycle travel and shared with motor vehicles. Routes may be marked by signage and shared lane bicycle markings (aka "sharrows"). Traffic calming devices may be included on these routes as needed to discourage drivers from using the boulevard as a through route.
- iv. Protected Bike Lanes (Class IV) provide on street space that is exclusively for bicyclists and physically separated from motor vehicle travel lanes, parking lanes, and sidewalks by elements such as curbs, bollards, or planter boxes.
- v. Nature trails are hard- or soft-surfaced trails in parks and greenways intended to support nature interpretation, access to nature, hiking and off-road biking.
- vi. Park loop trails are wide, looped or meandering pathways in parks intended to support walking, dog walking, and recreational biking.
- vii. Park paths provide access to amenities and facilities in parks. These typically connect parking lots or park entries to elements within the park.
- viii. Develop various trail length, types, and challenge levels to expand trail-related recreation options. Include both hard- and soft-surfaced trails.

3. Identify opportunities to provide off-street trails and greenways.

- a. Evaluate and pursue linear trail opportunities in corridors such as railways, creeks, and utility easements to support active transportation, recreation and health.
- b. Evaluate and pursue means to improve pedestrian and bicycle connectivity via use of rights-of-way, easements, joint use agreements or partnerships, land acquisition from willing owners, or other possible opportunities.
- c. Require dedication or easements for trails as part of the development review process, where appropriate.
- d. Establish trailheads in areas where trails are highly used and/or in areas with regional connectivity potential.
- e. Augment the interconnected trail system by providing trails and specialized hiking/biking facilities in parks, such as BMX tracks, mountain biking trails, and bike pump tracks, bike skills course, big wheel/tricycle tracks, etc.

PEDESTRIAN AND BIKE COMMITTEE **FINDINGS** 

### Bike Parks and **Trails**

- With Palo Duro Canyon's network of trails, the Texas Panhandle is arguably one of the top destinations for mountain biking in the State of Texas.
- Amarillo has a strong, vibrant volunteer committee willing to build trails.
- 4. Support non-motorized transportation by providing trails and bikeways in or along street rights-of-way.
  - a. Identify trail segments that might be planned and built within street rights-of-way to establish safe pedestrian and bicycle routes where off-road trails are not an option.
    - i. Incorporate bicycle and pedestrian facilities into new roadway projects, providing pedestrian access at intersections and across medians.

- ii. Identify locations where complete street elements may be applied at the collector street level (e.g., narrowing pavement to establish wider sidewalks, trails, ped-scale lighting, tree preservation and landscaping, etc.).
- iii. Develop a sidewalk inventory to identify missing segments that need to be completed to provide a contiguous system.
- b. Develop City striping standards to safely accommodate bicyclists.
- c. Integrate and coordinate multi-modal transportation facilities with transit facilities where feasible to optimize the use of dedicated rights-of-way.
- d. Establish a contiguous sidewalk system in newly developed residential areas and in existing neighborhoods. Provide easements or paths to connect cul-de-sac bulbs close in proximity.
- e. For Class III bike routes, consider establishing bike boulevards on local streets with low vehicle traffic and with traffic controls (diverter islands, traffic circles, enhanced landscaping, signage and markings).
- f. Establish safe mid-block street crossings at locations where Class I trails cross major roadways.
- 5. Prioritize trail projects to connect to key destinations.
  - a. Establish Citywide trail prioritization criteria to prioritize planned routes for implementation.
  - b. Target trail development in economically disadvantaged areas where residents are more likely to rely on transit and non-motorized transportation.
  - c. Prioritize extensions of existing trails and connections to fill missing linkages. For example, extend the Rock Island Rail Trail to nearby destinations, e.g., the Central Business District and Medical Center Park.
  - d. Create a multiuse trail spine [see sidebar] or web that connects major regional parks to downtown.
  - e. Prioritize trail loops—whether localized or citywide.
  - f. Establish safe routes and accessible paths from residential areas to schools, parks, and libraries.
  - g. Connect trails to park sites that provide recreational hiking and biking options, such as BMX tracks, bike pump tracks, bike skills courses, nature trails, jogging trails, tricycle tracks, walking tracks, mountain bike trails, etc.

PEDESTRIAN AND BIKE COMMITTEE **FINDINGS** 

### **Trail Spines**

- A Trail Spine is usually a separated path that runs through the community and helps with connectivity.
- Amarillo does not have trail spines and lacks north to south trail connections.
- 6. Coordinate with public, private, and regional partners to enhance trail opportunities for City residents and visitors.
  - a. Work with the private sector to promote the development of bicycle and pedestrian facilities, such as bike parking at businesses, bike lockers and showers, dedicated pathways or walking loops in business parks, paths to adjacent developments and transit stops, connections and gateways to city trails, etc.
  - b. Create a trail sponsorship program that encourages or incentivizes businesses to sponsor the development and/or maintenance of trail links that provide nearby bike and pedestrian access.
  - c. Identify a liaison to the Amarillo Metropolitan Planning Organization (MPO) to ensure that City interests in hiking and biking are represented in the implementation of the new Multi Modal Transportation Plan.

- d. Collaborate with the MPO, Potter and Randall counties, and other regional entities (e.g., Texas Department of Transportation, Texas Parks and Wildlife, National Park Service, Bureau of Land Management) to identify opportunities to connect any future regional trails to the City's proposed trail network by aligning where trails leave/enter the city.
- e. Help advocate for regional trails that provide bike and pedestrian access to parks, natural areas, and greenways beyond the City's boundaries, such as the City of Canyon's trails, the Cross Bar Management Area, Lake Meredith National Recreation Area and Palo Duro Canyon State Park.

# 7. Support bicycling, walking, and trail-related recreation through site and trail enhancements.

- a. Identify locations for and provide trailheads and/or trail rest areas with bike racks, seating, shade, drinking fountains, restrooms, trash receptacles, and self-service bike repair stations where appropriate at regional, community or special use parks with trail connections and at popular bicycling destinations.
- Provide support amenities periodically along trails, such as benches and shade. (Note: avoid providing restroom, drinking fountains, trash receptacles and other high-maintenance elements along trail corridors, except at trailheads as noted above.)
- c. Establish a comprehensive wayfinding and signage program along trails and bike routes. Signage should:
  - i. Identify routes and mileage;
  - ii. Promote trail safety, rules/regulations, and appropriate trail uses; and
  - iii. Provide wayfinding and identify distances to parks and other key destinations such as schools, commercial/entertainment areas, and major public facilities.
- d. Consider creating a permanent or temporary "Safety Town" that offers children a safe place to learn how to navigate by walking and biking one-way streets, curves, traffic signals, overpasses, etc.

# 8. Encourage the use of the pedestrian and bicycle network through trail programs and services.

- a. Establish a hike and bike trails map and information guide. Publish bike and walking route information online and in the City's public materials such as the recreation program guide.
- b. Enable and encourage children to walk and bicycle to school by embracing "Safe Routes to Schools" objectives.
- c. Implement bicycle safety programs to educate children, youth and families about trail etiquette and use.
- d. Develop a multi-modal share the road public awareness program.
- e. Develop a citywide database to monitor bicycle and pedestrian accidents.
- f. Coordinate trail programs, drop-in walks, nature hikes, and community-wide trail events and bike rides to encourage use of the pedestrian-bike network.

PEDESTRIAN AND BIKE COMMITTEE FINDINGS

# Education and Advocacy

- Safety rules are important to reiterate including:
  - Cyclists have the right to be on the road
  - Divers must yield to those in a crosswalk
  - Distracted driving dangers
- Events and programs to promote cycling may encourage community members to become healthier and more compassionate drivers.

# 3. Implementation

This chapter recommends an approach to ongoing coordination, identifies possible funding mechanisms, and provides design standards for a variety of trail types. Combined, this provides a framework for decision makers to plan, design, and implement the Amarillo Hike and Bike Plan.

## **City Department Coordination**

A walkable, bikeable, and interconnected city is a priority for residents, requiring collaboration among City departments and other agencies. The Parks and Recreation Department will need to work with the Public Works Department to establish a holistic trail system that connects on-street and off-street trail improvements. With trail demand anticipated to continue to be high postpandemic, trail needs will be critical to address across various levels of government. The following roles are guidelines for each department:

#### **Public Works Department**

- Plan for priority trail routes by coordinating with the Parks and Recreation Department.
- Develop a bicycle and pedestrian network within the public rights-of-
- Fill sidewalks gaps and widen sidewalks along primary trail routes.
- Maintain bicycle and pedestrian facilities within the rights-of-way.

#### **Parks and Recreation Department**

- Plan for priority trail routes by coordinating with the Public Works Department.
- Increase trail connectivity and trail recreation through strategic agreements and land purchases.
- Maintain trails on Department managed properties.

## **Funding Opportunities**

Implementation of the Amarillo's future hike and bike network will likely require funding from a number of sources. The variety of trail types included in the Hike and Bike Vision, the integration of recreation and transportation, and the identification of partnership opportunities results in a large variety of potential funding opportunities.

### PRIORTY TRAIL **PROJECTS**

- Constructing the 9<sup>th</sup> Avenue Bike Trails and Trailhead
- Extending the Rock Island Trail to:
  - Medical Canter Park
  - o Downtown
  - o John Stiff Memorial Park
- Establishing a citywide on-street bicycle network
- Building a north to south trail spine that connects to regional parks and Amarillo destinations
- Renovating the Tornado Alley BMX Raceway

It is recommended that the City establish a funding strategy for trail improvements throughout the community for construction and maintenance and continue to prioritize trail and other active transportation improvements as part of the roadway improvements and CIP planning. Future Parks and Recreation bods should include priority trail projects. City leadership may also want to explore the incorporation of trail improvements into a future bond measure as support for trails have scored high throughout public process of the 2021 Parks and Recreation Master Plan.

It should be noted that several of the funding sources identified below require a local contribution or local match.

### **City and County**

- Interlocal Agreement Funds
- Bond Projects

#### Panhandle Regional Planning Commission (Texas Association of Regional Councils)

- Sustainable Development Calls for Projects
- State of Texas
- Texas Parks and Wildlife Department (TPWD)
- Downtown Revitalization Program at the Texas Department of Agriculture
- Outdoor Recreation Grants
- Recreational Trails Grants

#### **Texas Department of Transportation (TXDOT)**

- Transportation Alternatives Program (TAP)
- State Energy Conservation Office
- Energy Efficiency and Conservation Block Grant

### **Other Federal Transportation Funding Sources**

- Highway Bridge Replacement and Rehabilitation Program
- Highway Safety Improvement Program
- National Highway System
- Surface Transportation Program
- Federal Transit Administration Programs
- Interstate Maintenance (through TxDOT)
- Transportation and Community and System Preservation

#### Other Federally Funded Programs including Bicycle and Pedestrian Opportunities

- U.S. Department of Housing and Urban Development
- Community Development Block Grant
- U.S. Army Corps of Engineers (USACE)

### Other Sources of Funding for Trail Development

- The Trust for Public Land
- Land Trusts
- Communities Foundation of Texas
- Meadows Foundation
- Recreational Equipment, Inc.
- Foundation Directory On-Line
- Private Donations Partnerships with Volunteer Groups

## **Appendix A - Design Standards**

Trail design standards were adopted in 2010 Hike and Bike Plan Update. The following core attributes of different trail types were established then and are needed for quality Amarillo Trails.

#### I. Wide Curb Lanes

- A. Current arterial design standards incorporate a 14' outside lane measured from lane stripe to back of curb. This is 13.5' from curb face and includes a 2' gutter pan. This leaves a vehicle with an 11.5' lane and the bicycle in the 2' gutter pan.
- B. All new Arterial's should be built using a 15' outside lane measured to back of curb. The curb and gutter section should be expanded to 36". This would provide a 12' vehicle land and a 30" gutter pan for the bicycle.
- C. This would require the City's standard 65' section to go to a 67' section and the standard 49' section to go to a 53" section. The costs of the wider section would be borne by the city and developers.

#### II. Bike Lanes

- A. Bike lanes adjacent to the curb should be a minimum of 6' measured from face of curb.
- B. A bike lane adjacent to parking should be minimum of 5' wide with stripes on both sides.

#### III. Shoulders

roadway A. Rural sections should have a minimum 6' shoulder.

#### IV. Sidewalk

- A. Current City standards require a 4' sidewalk in residential areas and a 6' sidewalk adjacent to commercial development. Sidewalks are usually placed at the back of the curb.
- B. The standard pedestrian zone width for all new residential sidewalks recommended to be minimum of 5 feet.
- C. The standard pedestrian zone with for all new sidewalks next to arterial streets is recommended to be a minimum of 6 feet.

#### V. Multi-Use Path

A. A path used by bicycle and pedestrians should be at least 10' wide with 3' side clearance and 10' overhead clearance.

