



LIBERTY HILL

TRAILS MASTER PLAN

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City Council

Rick Hall, Mayor
Liz Rundzieher, Mayor Pro Tem
Liz Branigan, Council Member
Wendell McLeod, Council Member
Ron Rhea, Council Member
Troy Whitehead, Council Member

Halff Associates, Inc.

Jordan Maddox, AICP (Project Manager)
Matt Buccin, AICP, LEED Green Associate
Brian Binkowski, PLA
Jill Baumgartner, PLA, ASLA
Tyler Richburg, PLA
Phillip Hammond

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Sally McFeron, Senior Planner
Barbara Zwernemann, City Secretary
Pix Howell, City Consultant
Cim Howell, Carbon 12

TABLE OF CONTENTS

01 Introduction and Context	1
Purpose of a City-wide Trails Master Plan.....	2
Benefits of Trails.....	3
Liberty Hills Planning Area	4
Trails Elements of the Parks Master Plan.....	7
Additional Planning Efforts	8
02 Trail Network Implementation	9
Trails Master Plan Principles.....	10
Trail Usage and Design	12
Trail Planning	18
Implementation.....	22

MAPS

01 Introduction and Context	1
Map 1.2, Existing Parks and Trails.....	5
02 Trail Network Implementation	9
Map 2.1, Community Destination Trails	19
Map 2.2, Citywide Future Trails Plan.....	21

TABLES

02 Trail Network Implementation	9
Table 2.1, Trail Standards.....	19



CHAPTER 1

Introduction & Context

PURPOSE OF A CITYWIDE TRAILS MASTER PLAN

A citywide trails plan provides the framework by which the City of Liberty Hill and the private sector can work together to jointly create beautiful and meaningful trail corridors and make informed decisions as to how to pay for trails in an acceptable and efficient manner.

This long-range plan envisions a network of connected trails that allows citizens to navigate throughout the City in an enjoyable, healthy, and inviting manner. This plan will determine important trail corridors and help guide the creation of a citywide network. The plan will provide direction on the ideal location for trail corridors and help the City identify methods of implementation.

This Trails Master Plan is intended to be flexible and adaptable as the City continues to grow and change. The plan will continue to serve for several years, but should be periodically updated to reflect conditions within the City, the adjacent communities, and the greater area.

Why Plan for Trails in Liberty Hill

The concept of trails has been at the forefront of the community development conversation as an implementation goal. The idea of trails is not only beneficial to the quality of life and alternate commuting options for its current residents, but they help foster and facilitate future public and private development as well. Liberty Hill is in a unique position to shape the development pattern of the community. The City can utilize this plan to create new trails in the community during the anticipated influx of residents, business and development.

Trails are commonly requested and are a desired recreation amenity within communities because of the favorable climate in Texas most of the year and the beautiful scenery.

Trails offer a lot to a community, including the following:

- Trails support and help facilitate economic development through the creation of beautiful greenbelts that can revitalize existing areas and improve neighborhoods. They provide access to local businesses and restaurants while providing tourism opportunities for visitors. In the future, a network of places to walk and bike would make Liberty Hill a more attractive place to live and invest.
- Trails encourage a healthy lifestyle by creating opportunities to participate in exercise whether by walking, running, biking or roller blading.
- Trails offer something for everyone, which is why they are so popular. This includes every age bracket from the youngest of children being pushed by their parents to the retired grandparents out for an evening sunset stroll.
- Trails provide access and opportunities to see the beautiful, natural Texas Hill Country. They also provide opportunities to see other neighborhoods and newer parts of the City as they grow.
- Trails help preserve and enhance natural and native greenbelt areas and can beautify street corridors while the trails themselves become a destination.
- Trails improve the transportation system in Liberty Hill by providing alternate ways to get to important destinations such as schools, libraries, parks, recreation centers, pools, City Hall, places of employment, restaurants and retail shopping areas. Trails also provide regional connectivity that will connect Liberty Hill to the surrounding communities.
- Lastly, and most importantly, the development of a citywide trail system clearly speaks to Liberty Hill's commitment to establish a very high quality of life standard for its residents. This commitment to quality tells existing and future residents and stakeholders that Liberty Hill will always seek to be a premier place to live in and to do business.

BENEFITS OF TRAILS

Individual and Community Benefits

- Increased quality of life
- Provides opportunities for people of all ages to be physically active, socially engaged and cognitively stimulated

Health Benefits

- Proximity to nature increases the frequency of exercise and improves mental and social well-being
- Play is critical for child development
- Remaining active can help decrease the risk of heart disease, diabetes, obesity, depression and additional health problems

Economic Benefits

- Raises property value of homes that are near trails
- Can help attract new businesses to the area by increasing the standard of living

Environmental Benefits

- Protects and preserves vital green spaces and critical wildlife habitat
- Educates visitors about the proper use of natural areas as recreational areas
- Contributes to clean air and water



LIBERTY HILL PLANNING AREA

Liberty Hill is an incorporated community in northwestern Williamson County, Texas. It is growing rapidly and currently has 1,612 residents.¹ The City is surrounded by the Cities of Leander (to the south) and Georgetown (to the east) and is located about 29 miles north of Austin.

The City is located between the North and South Forks of the San Gabriel River and is characterized by adjacent farmland and rolling hills along the Shin Oak Ridge. Although it still has a small town feel, its location provides convenient access to great dining, shopping and other entertainment, as well as schools, parks and other outdoor recreation. Liberty Hill will be impacted by the area's development stemming from being part of one of the state's fastest growing areas since it is in the Austin metropolitan area's direct growth path.

This Plan mainly focuses on the trail needs for the citizens within Liberty Hill's 3.7 square mile City limits. As a first-ever Trails Master Plan for a small, but fast-growing city, the initial phase of this planning analysis also starts to evaluate potential needs in the City's statutory and voluntary extraterritorial jurisdiction (ETJ) areas.

¹ U.S. Census Bureau. 2016 Population Estimate.

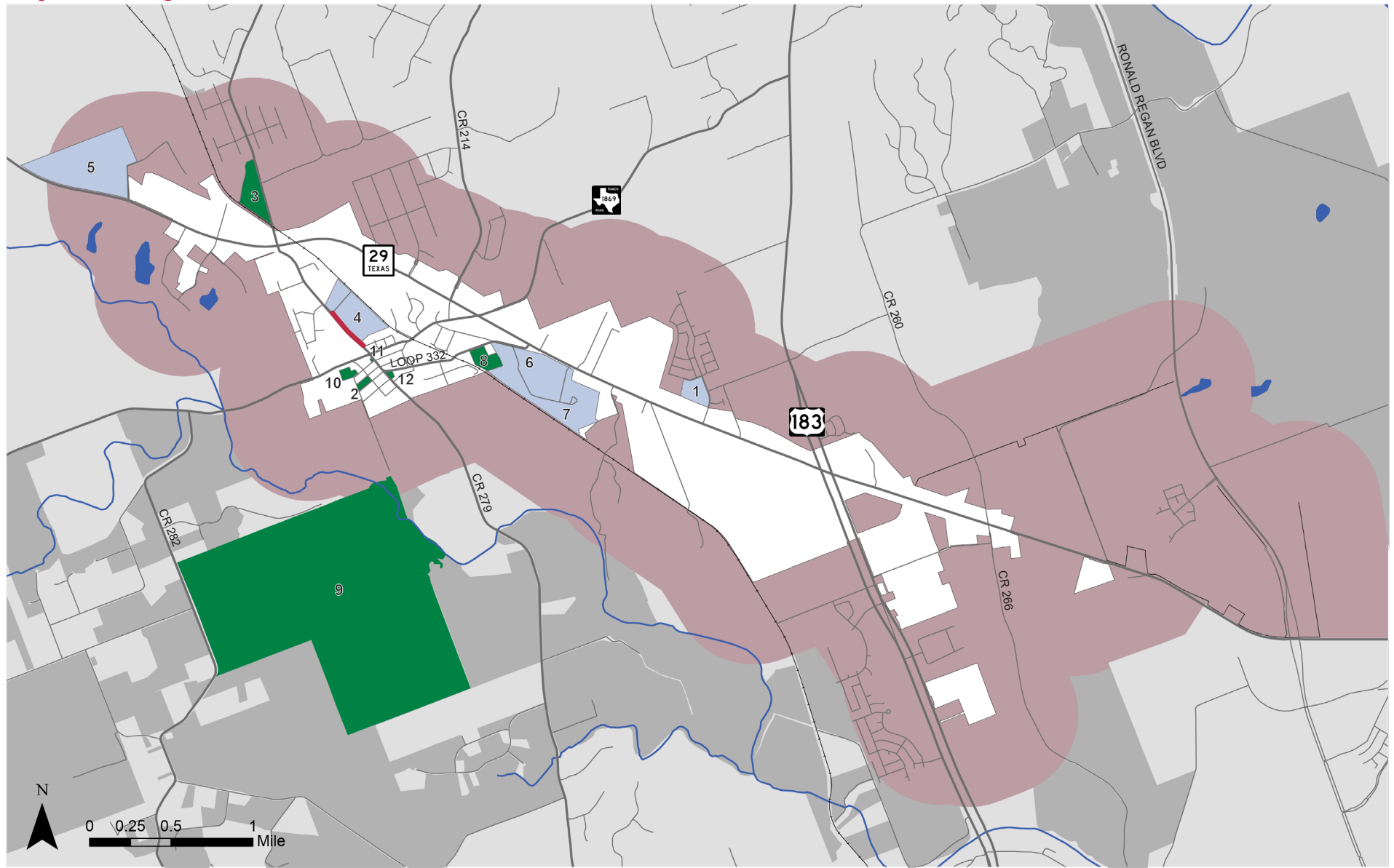
The City of Liberty Hill has a small but growing park and trail system within the City limits. However, only one City pedestrian/trail facility currently exists on Main Street. This six-foot path connects Forest Street in Downtown to the Liberty Hill Elementary School. The City has recently constructed numerous sidewalk improvements within the Downtown area that will serve as additional pedestrian connections to the future trail system.

At the time of this planning effort, the City does not have any greenway trails or shared-use paths; however, a shared-use path along Loop 332 was approved and funded in 2018 to connect the Downtown, Wetzel Park, and VFW Park near the Liberty Hill Public Library and Junior High School.

Set out on Map 1.2, *Existing Parks and Trails*, on page five, are Liberty Hill's community destinations such as parks and schools. Most are located within the historic City center, where Downtown improvements have been a recent priority. The future River Ranch County Park is shown prominently south of Downtown.



Map 1.2, Existing Parks and Trails



LEGEND

■ PARKS	■ VOLUNTARY ETJ	1 BILL BURDEN ELEMENTARY	6 LIBERTY HILL INTERMEDIATE	11 VETERANS MEMORIAL
■ SCHOOLS	■ LAKES	2 CENTRAL PARK	7 LIBERTY HILL JUNIOR HIGH	12 WETZEL PARK
— EXISTING TRAILS	— STREAMS	3 CITY PARK	8 LIONS FOUNDATION PARK	
 CITY LIMITS	— ROADS	4 LIBERTY HILL ELEMENTARY	9 RIVER RANCH PARK (FUTURE)	
■ ETJ	—+— RAILROADS	5 LIBERTY HILL HIGH SCHOOL	10 STUBBLEFIELD LANE PARK	



TRAIL ELEMENTS OF THE PARKS MASTER PLAN

This Trails Master Plan is a direct continuation of the 2017 Liberty Hill Parks Master Plan, which served as the first-ever Parks Master Plan for the City. That policy document is a long-term decision-making guide for staff and elected/appointed officials on such things as capital expenditures, operations, staffing, etc.

The Parks Master Plan identifies a plan of action for development and improvements to the parks and recreation system as funding becomes available. It allowed the City to step back and assess the community preferences for the future and build consensus and commitment.

The community provided the vision for the future by participating in various forms of public engagement. Surveys, public hearings, and open houses were conducted to establish the direction for Liberty Hill's park system. The plan identifies a community vision, goals, and priority needs based on Liberty Hill residents' feedback and input.

The community vision articulated in the plan states that "Liberty Hill intends to achieve a diversified, connected, and equitably distributed parks and open space system by 2030 through development, redevelopment, expansion, and acquisition." Among the high priority needs identified by the community, trails was listed as the number-one outdoor facility need. Through the strength of this new master plan and the priority ranking of trails, the City secured a grant for its first shared-use trail in 2018.

The Parks Master Plan included a recommended list of actions needed to accomplish the vision. Goal three of the plan was focused on that highest-priority need for trails, with each action listed below:

Goal 3.1 - Evaluate opportunities to establish trail linkages from Liberty Hill to neighboring communities and regional trail systems.

Goal 3.2 - Evaluate opportunities to establish a trail from downtown to City Park.

Goal 3.3 - Proactively plan and implement a citywide trail system.

These high-priority goals are implemented, in part, by the establishment of the Trails Master Plan. Later in this document, trail locations and connections are explored in and around the Downtown area, and beyond with regional connections.



ADDITIONAL PLANNING EFFORTS

Unified Development Code

The City's Unified Development Code (UDC) operates as a regulatory document for future development. The aim of the UDC is to establish consistent development standards which promote desirable development in "priority growth areas." These areas include Liberty Hill's Downtown, Highway 29, and Highway 183.

In accordance with the UDC, the Official Zoning Map designates a central area of intensified commercial development and mixed-use activity in Downtown Liberty Hill. The UDC identifies appropriate subdivision regulations to control this intensification of development within the downtown. Appropriate modifications could help to further promote trail connectivity from downtown to adjacent areas.

With the intent to protect the environment, promote quality of life for present and future citizens, and enhance the rich heritage of Liberty Hill, the UDC sets out a framework for distinct and connected growth within the community.

Transportation Plan 2018

The Transportation Plan for Liberty Hill identifies future need for corridor preservation. The document advises preservation of corridors by establishing setbacks, dedications, and expansion of major arterial infrastructure. In the reconstruction of roadways, accommodations have been planned for pedestrian and bicycle uses.

As necessary corridor adjustments and improvements are made, facilities can be added alongside roadways for shared-use paths. These paths offer an opportunity for connectivity to trails that will serve non-motorized transportation throughout the community.

Liberty Hill has found that traffic growth is outpacing population growth, which is accounted for in the plan document. Opportunities for new infrastructure will help alleviate this problem and accommodate several different modes of connection.





CHAPTER 2

Trail Network Implementation

TRAILS MASTER PLAN PRINCIPLES

The system of trails and pedestrian connections recommended in this Trails Master Plan will allow the City to improve not only recreation opportunities but also to influence the growth and appearance of Liberty Hill in a positive manner. This Plan seeks to be both visionary and practical in the outlook and implementation steps, ensuring attainable action.

The long-range vision is an integrated system of off-street and on-street corridors that allow a trail user to comfortably move from one community location to another, while providing access to regional components and communities of Central Texas. Connections to and from Liberty Hill neighborhoods and community features will be easily traversed through accessible, safe, and attractive trails.

The primary principles of the Plan are as follows:

- **Create a citywide system of trails** - The goal is to generate an interconnected and continuous system that permits travel across all of Liberty Hill. Trails can serve many functions, such as, transportation and recreation. The City should create amenities, enhancements and facilities that can allow for commuting and short trips to residential, recreational, retail and public destinations.
- **Provide a variety of trail opportunity types** - Provide trails that are appropriate for a variety of activities including walking, running, biking and in-line skating. Provide nature trail opportunities and equestrian facilities and trails where possible.
- **Access** - Access to the trail system must be maximized. This may range from sidewalk connections to the trails, to trailheads with parking, shade structures and restrooms. The City can encourage the use of the trail system by providing access throughout the trail system.
- **Connectivity** - Where possible, trails corridors and alignments should be designed to improve connections between parks, neighborhoods, schools, retail and key community destinations. The citywide trail network is planned to connect to adjacent cities and other regional trail networks such as the San Gabriel Regional Trail.
- **Trails should enhance Liberty Hill** - Trails should enhance the appearance of the City, whether through new pedestrian features, landscape and habitat improvements along the trail corridors, or by revealing natural areas not previously visible or available to the trail users.
- **Create a feeling of safety on all trails** - Trails should provide smooth, continuous, and walkable corridors that are safe and visible.
- **Form partnerships with other entities** - The citywide trails network should encourage the formation of public and private partnerships that can help create the whole system more quickly.
- **Character of the City** - Trail segments should be designed to promote the physical and historical character of Liberty Hill. They should relate to adjacent neighborhoods while maintaining a connection to the citywide corridor designs and approaches. Trail corridors provide unique opportunities to learn about the history, culture and accomplishments of Liberty Hill. Trails provide access to the natural environment in the City, and should offer plenty of opportunities to learn about nature. Include interpretive signs and features that provide opportunities for learning about Liberty Hill and its cultural and environmental heritage.





TRAIL USAGE AND DESIGN

Trail Users

Trails should be designed for a variety of users. Activity on a trail provides a sense of safety and comfort and inspires others who are not as active to use the trail. Users of trails may include the following:

- **Walkers seeking exercise and recreation** are often accompanied by a companion and may occupy a large part of the trail since they walk next to each other. These users may consist of senior citizens, parents with children, or someone walking their dog.
- **Joggers and runners** use trail corridors for exercise and activity. The greater speed of these users may at times conflict with slower users of the trails. Softer trail surfaces, such as decomposed granite, may be preferred for these users but require more costs to maintain and operate.
- **Recreational and inexperienced cyclists** use trails for exercise and activity. These users typically use trails for long distances, preferring connectivity of the trail system and a variety of scenery.
- **Mountain biking** users can travel on crushed rock or more natural trail surfaces and prefer trails with challenging topography.
- **Higher speed, experienced cyclists and commuters** are usually more interested in higher speeds. These riders often favor roadways over off-street trails for the speed, as well as connectivity to employment centers among commuters. For off-street trails, alignments with shallower curves are preferred by these users, and because of the higher speeds, increased trail widths are suggested to decrease conflicts with other trail users.

Trail Design

Trails in Liberty Hill should include several types of facilities, each with its own size and character requirements. This trail system will link community destinations with an integrated network of trails designed for users of all ages, skill levels, environments, and desired activities.

Design standards are an important component for a working trail system because they outline the recommended minimum requirements and additional support items for all types of trails.

At a minimum, trails should follow the standards established by the American Association of State Highway Transportation Officials (AASHTO). These standards have been developed and refined over a significant period of time and offer the most comprehensive safety standards. In some specific cases, variations from AASHTO may be acceptable to respect the character or special conditions of an area.

Listed below are some sources for the most commonly used standards for trail design. Trails should comply with current and up-to-date standards.

- AASHTO (American Association of State Highway and Transportation Officials)
- ADAAG (Americans with Disabilities Act Accessibility Guidelines)
- TTI (Texas Transportation Institute)
- TMUTCD (Texas Manual on Uniform Traffic Control Devices)
- TxDOT (Texas Department of Transportation)
- TAS (Texas Accessibility Standards)
- ITE (Institution of Transportation Engineers)

Recommended Trail Standards

It is recommended that Liberty Hill adopt customized design standards in written and graphic format and make these identifiable for those designing and constructing the facilities. Table 2.1, *Trail Standards*, includes recommendations for types of trails and preferred design standards such as size and materials. The pages that follow depict cross-sections for these trail types and recommendations as to where each trail is appropriate to locate throughout the community.

Table 2.1, Trail Standards

Trail Type	Width	Surface Material	Minimum Corridor Width	Other Amenities
Sidewalks	5' - 6'	Concrete	Varies	Crosswalks, signage, ramps
Nature Trails	4' - 12'	Natural surface, crushed granite	60' min. width	Minimal wayfinding signage
Neighborhood Trails	6' - 10' (8' preferred)	Concrete, asphalt, crushed granite	15' min. width	Crosswalks, signage
Shared-Use Sidepath	8' - 12' (10' preferred)	Concrete	15 - 20' width (6' min. from back of curb preferred)	Streetscaping elements including trees, benches, lighting
Greenway Trails	8' - 12' (10' preferred)	Concrete or asphalt (concrete preferred)	25' min. width	Parking, location maps, water fountains, shade shelters, bicycle racks, interpretive / historic signage
Regional Trails	10' - 14' (12' preferred)	Concrete	40' min. width	

Nature Trails can vary in width and are typically found within parks. Nature trails are typically not part of the trail planning effort but are an important amenity to the trail system as they offer a different type of user experience.



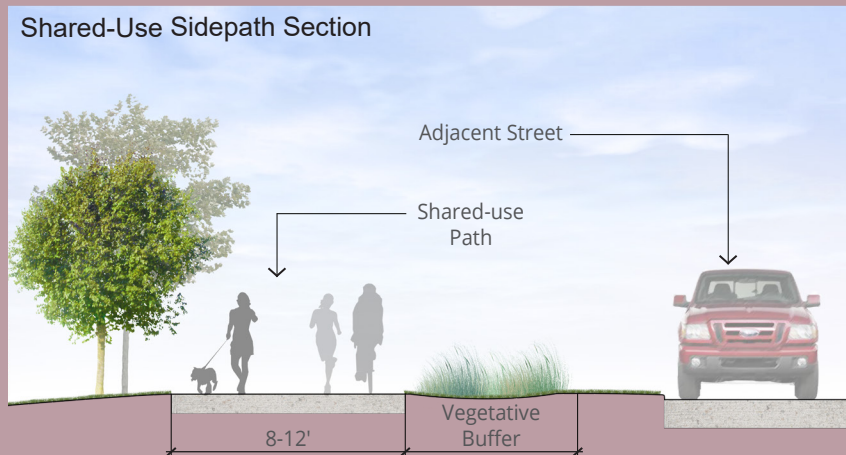
Sidewalks are important pedestrian facilities that can connect people to parks and trails. Sidewalks are located adjacent to streets and are not part of the trail planning efforts; however sidewalks do serve as critical linkages.



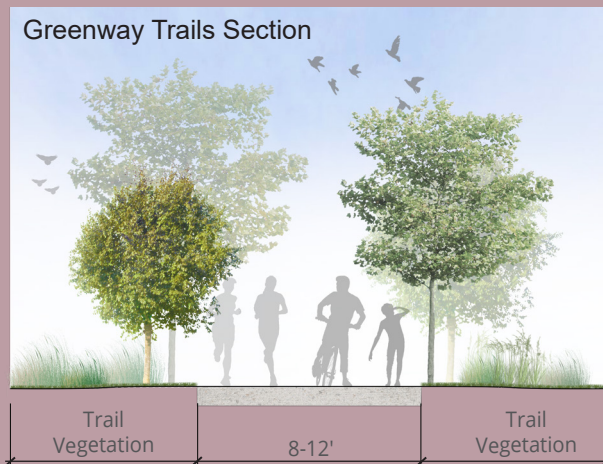


Recommended Trail Cross-Sections

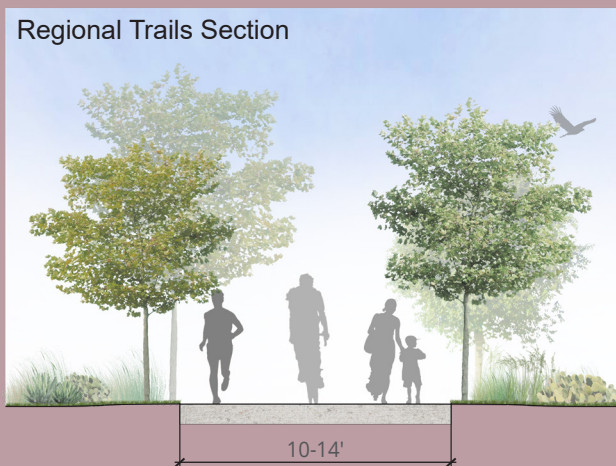
Neighborhood Trails are appropriate in the case of district and residential application. Often, these facility types are constructed within a neighborhood as a means for nearby residents to engage in close-by, low-intensity outdoor recreation. Neighborhood trails can be seen in districts surrounding subdivisions, residential drainage easements, retention/detention pond facilities, and local parks. The trails may provide network connection to other trail systems but are typically contained within a single land-use. Neighborhood trails will more than likely be constructed by a developer and not be considered by the City as a capital improvement.



Shared-Use Sidepaths serve for multi-modal and non-motorized pathways where roadways already deliver connection. As it relates to a city's arterial roadway system, shared-use sidepaths best achieve their purpose when designed for multiple uses: recreation, transportation, connection, or leisure. When space is available, separation from the roadway and ample width for multiple users at one time enables the sidepath trail to operate as vital arterials in an overarching citywide system of pedestrian/bike connections. These trails should ideally lead to community destinations or other trail types in the hierarchy, such as greenways, neighborhood, or regional trails. These trails can be constructed as development occurs adjacent to major streets, either within the right-of-way or in an easement. Shared-use sidepaths can also be substituted for a sidewalk in these circumstances, oftentimes with City participation.



Greenway Trails operate similarly to a shared-use sidepath with the exception that this particular facility offers access to areas where motorized connection is not prevalent. As a result, greater immersion into nature can be achieved via greenways or alternative transportation routes for cyclists and other multi-modal users. Cities may use off-street and greenway trails as opportunities to promote outdoor recreation, offer branch connections between residential areas and urban districts, and beautify strips of vacant public land. Just like with shared-use sidepaths, these facilities achieve its highest purpose when ample width is provided for multiple users on the path at one time.



Regional Trails deliver a network of trail connections over the greatest footprint out of all the aforementioned facilities. Typically, a joint effort between municipalities or within a county-level of planning, portions of regional trails can be applied specifically when cities aim to open multi-modal connections into and beyond their locale. Regional trails are appropriate for corridors that lead into the network of citywide trails as means for higher-intensity outdoor recreation and interregional multi-modal transportation. For this reason, regional trails optimally have the largest width of the suggested facilities to safely allow for higher traffic and speeds.

Features and Amenities

For the trails network to be a successful community amenity, the trails should appeal to a wide variety of users. To accomplish this, the trails should be designed to provide a high level of user conveniences. Users will be more likely to frequent the trails if amenities are provided. Suggested trail amenities are listed as follows:

Water fountains provide drinking water for trail users.



Bicycle parking racks allow trail users to safely park their bikes during a stop, particularly at parks and other destinations.

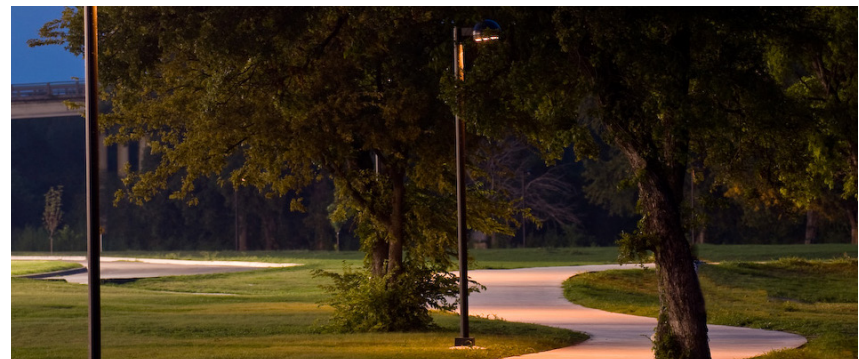


Interpretive signs can enhance the trail experience by providing information about the history of Liberty Hill. Installations can also discuss local ecosystems, environmental concerns, and further educational information.



Art installations make a trail network uniquely distinct. Local artists can be commissioned to provide art for the trail network. Many trail art installations are functional as well as aesthetic, as they may provide spaces to sit and play on. Art can allow the trail to become a destination in and of itself, as opposed to just a corridor.

Pedestrian-scale lighting improves safety and enables the trail to be used year-round due to the varying seasons and light levels. In addition, it increases the aesthetic beauty of the trail. Lighting fixtures should be consistent with other light fixtures in the City to create a unified theme.



Restrooms are appropriate at major trailheads or in parks along the trail route. Restrooms can be a challenge to locate in areas remote to urban utilities.

Trail furniture, such as benches, encourages people of all ages to use the trail by ensuring that they have a place to rest along the way. Benches can be simple (e.g., wood slats) or more decorative (e.g., stone, wrought iron, concrete).



Trash receptacles and dog waste pick-up stations are important trail amenities that can help keep the trails maintained. Periodic containers at access points should be provided. In addition, dog waste pick-up bag dispensers should be located at trailheads and main neighborhood access points on the route. Signs should be located on the trail notifying dog owners to pick up after their dogs.



Maps and directional signage provide information so that users can navigate the trail network. A comprehensive sign system makes a trail system stand out and also brand the trail from a marketing standpoint. Informational kiosks with maps at trailheads and other pedestrian generators can provide adequate information for someone to use the trail network with little prior introduction, which is ideal for places with high out-of-area visitation rates as well as for the residents. Directional signage should convey a unique theme so trail users know which trail they are on and where it goes, while also having a similar design to that of the larger regional system for users to have a sense of connection to the broader community. The theme can be conveyed in a variety of ways: engraved stone, medallions, bollards and mile markers. A central information installation at trailheads and major crossroads also helps users find their way and acknowledge the rules of the trail. Signs can also have enforced rules and regulations to ensure safe use of the trails and allow for quick response in emergency situations.



TRAIL PLANNING

Community Destination Trails

Connecting key destinations in Liberty Hill is critical to a successful trail system. Map 2.2, *Community Destination Trails*, on Page 19, depicts a planned network of trails that connect key destinations in the central part of the community. These are the highest-priority trails in the City and should be the focus in the short-term. These destinations include the following:

1. Liberty Hill City Park
2. Stubblefield Lane Park
3. Central Park
4. Wetzel Park
5. Veterans Park
6. Liberty Hill Elementary School
7. Lions Park
8. Bill Burden Elementary School
9. Liberty Hill Junior High
10. Liberty Hill High School
11. River Ranch County Park (Future county park)

Proposed off-street trails include the addition of trails along the South San Gabriel River and along the existing railroad that runs through the City. This type of trail provides a more aesthetically pleasing experience for the trail user when compared to on-street trails since it is located along key scenic features in the area.

On-street trails are located along streets. This type of trail can be located in the right-of-way or directly adjacent and provides easy access to key destinations around the City since there is already an extensive street network in place.

It is recommended that the City of Liberty Hill determine the appropriate and most feasible trail type to apply to each route, based on the recommended trail type classifications identified earlier in the chapter. Due to constraints in right-of-way, availability of access and connections, the trails will vary along each route and may be constructed to interim standards based on conditions.



Map 2.1, Community Destination Trails



Citywide Future Trails Plan

The City of Liberty Hill has large, sprawling planning area due to its extensive voluntary ETJ area. The City is expected to expand its boundaries in the future, extending its planning area further to the north and west. This offers opportunity to consider long-range road and trail routes, serving existing and future residents.

The adopted 2018 Liberty Hill Transportation Plan provides the opportunity to consider more trail locations as the City grows. The Transportation Plan projects that sidewalks will be constructed as part of future streets, which provide options for oversizing, shared-use paths, and regional trail connections.

Map 2.2, *Citywide Future Trails Plan*, on Page 21, depicts future streets in accordance with the Transportation Plan. These corridors are mostly future projections, although some follow existing alignments. As the City and other mobility agencies plan for construction projects in these locations, it is imperative that pedestrian and bicycle planning be part of those efforts.

It is not recommended that on-street bicycle lanes be designed on high-speed thoroughfares, so including a shared-use multi-modal trail facility on at least one side of a major street is advised. On high-speed streets, pedestrians and vehicles should have a comfortable, safe separation zone between them, whether a landscaped area, drainage facility, or other type of clear zone.

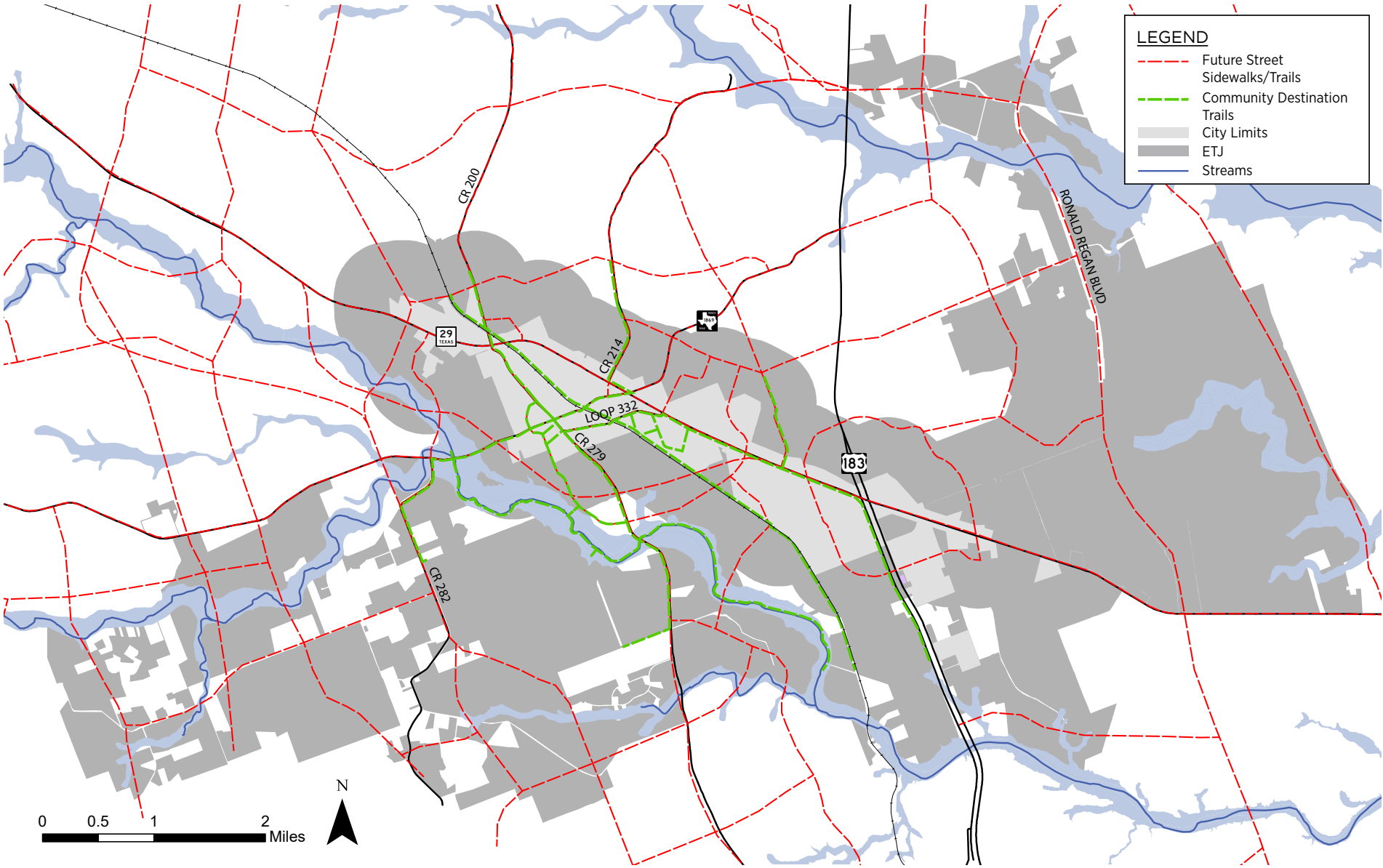
The citywide future trails plan includes the Community Destination Trails described on the previous pages. As these are the highest-priority trails for Liberty Hill, future trails in the ETJ and beyond should be the focus of private developments and regional transportation planning, and not a priority for City capital expenditures. As the City grows, new destinations and new trail routes should be considered.

Regionally, efforts are underway for the continuation of the 183A shared-use path from RM 1431 to SH 29. Additionally, the San Gabriel River has already been identified for study by the City as a potential future regional trail corridor that could connect Liberty Hill to Georgetown and other destinations. CR 279/Bagdad Road is the primary artery to Leander, where planning efforts have begun for a multi-use trail that will eventually connect the two communities.

Liberty Hill's next step is to move beyond the planning effort into the implementation stages to ensure that all opportunities for funding and cost-sharing on future trails will be explored.



Map 2.2, Citywide Future Trails Plan



IMPLEMENTATION

This Trails Master Plan will be implemented through targeted, consistent actions taken by Liberty Hill to ensure steady progress. To achieve success, partnerships will need to be cultivated, funding sources identified and aggressively pursued, development regulations refined, and an ongoing commitment shown from elected officials and the broader community.

This Trails Master Plan follows the general guidelines for local area master plans established by the Texas Parks and Wildlife Department (TPWD). This plan will be filed along with the Liberty Hill Parks Master Plan with the TPWD, allowing the City to be positioned for trail grant opportunities as they become available.

The time-frame for the future trail system within Liberty Hill's jurisdiction is long-range and ongoing. Periodic review of the planning effort is suggested to provide a chance for further community feedback and to react to major events or occurrences that may adjust the recommendations of this Plan.

Who Will Implement This Plan?

The implementation of the Trails Master Plan will be led by the City of Liberty Hill. However, everyone in Liberty Hill has a vested interest in creating a robust trail network. Other important implementation partners will include:

- All area governmental entities, including the City of Liberty Hill, Williamson County, Liberty Hill Independent School District (ISD), Capital Area Metropolitan Planning Organization (CAMPO), Central Texas Regional Mobility Authority (CTRMA), and Texas Department of Transportation (TxDOT).
- Adjacent communities such as Leander and Georgetown, seeking regional connectivity and partnerships.
- City of Liberty Hill departments, including Public Works and Planning and Development.
- Property owners, developers, commercial entities, and others in the business community in Liberty Hill.
- Community homeowner associations (HOAs) and other collective groups of neighborhoods.



Recommended Actions

Complete San Gabriel River Trail Study

Complete the 2018 study of the South San Gabriel River corridor from Downtown Liberty Hill to its eastern extent, with eventual connection to Garey Park. Establish an action plan by gaining support from the cities of Leander and Georgetown and community stakeholders and pursuing a phased construction plan. This study is a crucial first step in determining the challenges, costs, and opportunities that a regionally connected San Gabriel Trail faces. The completed study will be a blueprint for action moving forward.

Update Unified Development Code (UDC)

Consider amendments to the Unified Development Code to ensure consistent dedication and construction of sidewalks, trails, and shared-use paths along streets identified on the Liberty Hill Transportation Plan and this Plan.

Private residential and non-residential developments should be carefully reviewed to determine if key trail corridors shown in this Plan can be integrated into the proposed development, whether on-street or in a greenway. In some cases, the City may consider funding portions of the recommended trails over and above the minimum standard so as to expedite construction and linkages of the overall trail system.

Leverage Partnerships with Williamson County and Neighboring Communities

Work with the elected officials and staff members of Williamson County, City of Leander, and City of Georgetown to coordinate planning efforts, trail routes, and funding sources. Seek teaming opportunities to pursue federal, state, and private grant money opportunities which may be mutually beneficial to all stakeholders.

Generate Capital Funding For Trails

Consider a bond issuance or an annual capital allocation to fund acquisition of property or easements for trail corridors, and construction for both on-street and off-street trails. It will be necessary to acquire property and/or easements for off-street trails where right-of-way or public access easements may not be in place along planned corridors. At some point in the future, in order to achieve the goals of this plan, some action will need to be taken.

Focus Short-Term (<10 Years) Efforts on Community Destination Trails

In the next 10 years, efforts should be focused on the first tier trails system, which are those trails represented on Map 2.1, *Community Destination Trails*, connecting key community destinations, such as schools and parks. These trails are located near the Downtown, in close proximity to parks and other Downtown amenities and community features. Planning and funding should be targeted to this system of trails before the outer tier of trails.

Coordination with Ongoing and Future Transportation and Drainage Improvements

Major infrastructure improvements such as new streets or drainage facilities can provide a potential opportunity for trail development. New roads can be sized to include street sidepaths on one side, accommodating both pedestrians and cyclists. Stormwater facilities can be planned in such a manner that they include trails along one or both sides, and can be oriented to be compatible with adjacent homes.

Every effort in the City, whether private or public, whether funded by the City or by another agency, should be considered early on as a potential bicycle facility or shared-use path candidate. Adequate right-of-way should be acquired early so as to provide corridors for trails. It is very challenging, politically and financially, to acquire land and retrofit trails once development around it has occurred.

Periodic Update of Trails Master Plan

Review the Trails Master Plan with an update every five years, to coincide with the Parks Master Plan update. A Trails Master Plan is a living document, and should be reviewed and updated periodically. As development and construction of new trails occur, an inventory should be created and maintained. When the time comes to update the overall Parks Master Plan, at the five-year and 10-year intervals, the Trails Master Plan should be integrated into those updates so that continuity between the two plans is maintained.

Trail Funding

Funding for trails in Liberty Hill can come from a variety of sources. Trails will be constructed using local public dollars, grants from regional organizations, the state of Texas, and federal sources. Developers locating new residential neighborhoods will construct trails that will also aid in the creation of much of the future trail network. Opportunities to partner with Williamson County for more regional trails may also be a possibility.

The Liberty Hill Parks Master Plan includes an appendix with a list of available parks, recreation, and trail funding sources. There are many state and national organizations that offer funds to acquire and construct trails in Liberty Hill. These include examples such as the Land and Water Conservation Fund, Recreational Trails Program, and Safe Routes to School Program.

Important considerations associated with funding are listed below:

- If possible, funding should be continuous and steady. Annual designation of funds for trail development will result in a steady growth in the City's trail network, and allow the residents of Liberty Hill to see a continuous flow of new trail segments each year, rather than in periodic bursts.
- Construction of major trail corridors should be the focus of public expenditures. Key segments, such as the Community Destination Trails near Downtown should be the main focus of public expenditures for trails in the near-term.
- Trails within and mostly serving private developments and individual neighborhoods should be timed to be completed with construction of nearby homes.
- Funds designated for trail development should not be taken from park development. Both parks and trails are very important to the future quality of life in Liberty Hill, and funding one should not imply that the other need not be funded.



Trail Construction Steps

An action plan selected for the implementation of each specific trail corridor should coordinate all of the subsequent steps:

- **Identify** the trail corridor and primary **funding** source.
- **Preliminary items** - Environmental analysis, property easement or right-of-way needs analysis, preliminary concept design, possible feasibility study, allocation of general budget.
- **Permits** - By City of Liberty Hill, possibly Williamson County, and all involved trail corridor owners (e.g., TxDOT, utility companies and pipeline companies).
- **Design** - Preparation of construction documents, specifications and cost estimates, followed by bid documents and bidding procedures after permits and funding are clarified.
- Physical **construction** of the trail.

Trail Maintenance

As the trail network begins to grow, it is critical to not overlook the upkeep of these facilities, much like a City would maintain a street. Trail maintenance is critical to the overall long-term success and safety of trails in Liberty Hill. Maintenance activities usually consist of pavement stabilization, facility upkeep, sign replacement, mowing, litter removal and painting. An effective maintenance program requires continuity and often involves a high level of resident involvement. Regular maintenance on an annual basis will not only improve trail safety, but also extend the life of the trail. The benefits of a good maintenance program are far-reaching and include the following:

- A high standard of maintenance is an effective advertisement to promote the trail as a regional and state recreational resource.
- Good maintenance can be an effective deterrent to vandalism, litter and encroachments.
- Good maintenance is essential to preserve positive community relations among the nearby property owners and the managing agency.
- Good maintenance can make enforcement of rules on the trail more efficient. Local clubs and interest groups will take pride in “their” trail and will be more apt to assist in the protection of the trail.
- A proactive maintenance policy will help improve safety on the trail.

Continuing trail maintenance likely consists of some, if not all, of the subsequent activities:

Surfacing - Where concrete is the surface material, cracks, and water damage will need to be fixed occasionally.

Where drainage problems occur on the trail, ditches and drainage structures will need to be kept clear of debris to avoid washouts on the trail and maintain positive drainage. Checks for erosion on the trail should be made in the wet season, and right after any storm that brings flooding to the local area.

The trail surface should be kept free of debris, especially broken glass and other sharp objects, loose gravel, leaves and stray branches. Trail surfaces should be cleaned regularly. Soft shoulders should be well maintained to maximize their usability.

Vegetation - In general, plantings should be positioned far enough apart to maintain good visibility and avoid creating the feeling of an enclosed space. This will also give trail users good, clear views of their surroundings, which improves the aesthetic experience of the trail. Under-story vegetation in the majority of trail right-of-way should not be permitted to grow taller than 36 inches, except in cases where the under-story vegetation is natural, desirable and part of the habitat required for wildlife. Trees species selection and location should be made that reduces vegetative litter on the trail and root uplifting of pavement. Vertical clearance on the trail should be regularly checked, and any branches hanging over the trail should be trimmed to a minimum vertical clearance of 10 feet.

Some basic measures should be taken to protect the trail investment. This consists of at a minimum bi-annual mowing on each side of the trail to avoid invasion of vegetation into the pavement area. Higher levels of maintenance could be required.

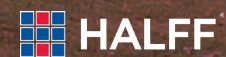
Wherever possible, vegetation control should be accomplished by mechanical means, organic means or by hand. Some species could require spot application of state-approved herbicide.

Litter and illegal dumping - Staff or volunteers should remove litter on the trail. Trash cans should be located at access points such as trailheads.

Illegal dumping should be controlled by vehicle barriers, regulatory signage and fines as much as possible. When it does occur, it should be removed as soon as possible to prevent additional dumping. Neighborhood volunteers, friends groups, alternative community service crews and inmate labor should be considered in addition to maintenance employees.

Signage - Trail signage should be replaced on an as-needed basis.

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Halff Associates, Inc.

9500 Amberglen Blvd.

Building F Suite 125

Austin, Texas 78729

(512) 777-4600

www.halff.com