

The City of Little Rock's

Master Trail Plan



2016

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Section 1: Introduction

1.1 Benefit and Purpose

Why trails? Trails can have many benefits to a community in terms of health, the environment, and happiness. Arkansas is the most obese state in the country as of 2014, according to the State of Obesity (Trust for America's Health and Robert Wood Johnson Foundation, 2016). Obesity has many serious consequences, the top being health and financial problems. Using trails can be a great form of exercise which can help make Arkansas a healthier state. Not only can trails have health benefits, but it can also improve the environmental quality in the area we live. We are currently living in an auto-centric age which has harsh consequences on the environment and on the natural resources. These trails will give people a safe and eco-friendly way to get around the city. Trails can also be a place to relax and have fun with friends and family which can increase the happiness of Little Rock.



Photo of downtown Little Rock

Creating an off-road bicycle and pedestrian trail network in Little Rock would increase frequencies of active recreation and transportation, benefiting our health, safety, environment, happiness, and economy and providing greater economic justice for those who cannot drive or cannot afford an automobile.

Increased Active Recreation and Transportation: Increased road capacity causes increased vehicular traffic (Duranton and Turner, 2011). Does the same hold true for increased bicycle and pedestrian facilities? The Little Rock community cites perceived safety/lack of facilities most frequently as to why they don't bicycle for transportation and recreation more (Landosky, personal observation). A United States Department of Transportation survey shows that the presence of bike lanes and paths reduced the perception of endangerment on their ride by half

(Feuerberg, 2004). It is therefore likely that building an off-road bicycle and pedestrian trail system in Little Rock will increase ridership, as seen in Washington across the US (Buehler and Pucher, 2012, but see Feuerberg, 2004).

Public Health: In September 2015, Arkansas earned the dubious distinction of becoming the most obese state in the nation, with an adult obesity rate of 35.9% (Trust for America's Health and Robert Wood Johnson Foundation, 2016). Research shows as bicycles are used more for daily transportation, overall physical activity increases and rates of obesity and diabetes decreases (Pucher et al. 2010). This is not surprising given that, according to the Center for Disease Control, just 30 minutes of moderate to intense exercise per day can have significant health benefits (Shalala, 1999). According to ibike.org, during the first year of biking, new bicyclist can lose around 13 pounds without having to do anything else, such as change eating habits (International Bicycle Fund, 2016).

Public Safety: From 2004-2013, 1435 pedestrians and 474 bicyclists were involved in crashes in Central Arkansas, resulting in 114 pedestrian and 12 bicyclist fatalities (Metroplan, 2015). While there are a number of ways to address this problem, providing people with a transportation and recreation network removed from the inherent dangers of vehicular traffic when on bike or on foot could help lower these numbers substantially.

Environment: While bicycles do have a carbon footprint when being produced, they have virtually none when they are being used because they do not release pollutants or burn any fossil fuels to be able to work, like cars do (National Geographic, 2015). Automobiles, on the other hand are horrible for the environment. Out of all of the carbon dioxide emissions that are produced in America, they give off 30%. They also give off over 80% of the carbon monoxide and over 50% of the nitrogen oxide emissions every year (National Geographic, 2015). Bicycling or walking as transportation can help reduce all of these pollutants, since they do not give off any of them.

Happiness: Trails are mainly used for transportation or recreation purposes. Both are allowing the user to get exercise which has been proved to lead to a happier state of mind. According to Happify, exercising increases the endorphins that are produced in the brain leading to a happier mental state. Outdoor exercise has been shown to decrease stress, anger, and depression even more than the same amount of indoor exercise (Happify, 2016).

Economy: According to American Trails, when businesses are located close to a trail, they have on average credited 25% of their earnings to the trail (American Trails, 2011). \$730 billion dollars every year has been put into the United States economy from outdoor recreation spending and that is not even counting the number of tourism dollars that come from the trails (American Trails, 2011).

Economic Justice: Not all members of our community can afford to own a vehicle. The American Automobile Association (AAA) estimates the annual cost of owning a motor vehicle to range average \$8,698 if the automobile is driven 15,000 miles a year (AAA, 2015). Even if a household is able to afford a vehicle, it may not be able to afford as many vehicles as there are licensed drivers. The annual cost of owning a bicycle is \$308 per year (Sierra Club, 2012).

Even that cost could be substantially lower by using the services of Recycle Bikes for Kids, which provides reliable bicycles for children and adults in our community free of charge. A trail network would create a transportation system that all of our community could afford.

What is the purpose of the plan? This master trail plan was created to be used for these three purposes, but it may be beneficial in other arenas as well.

1. To be a beneficial reference when applying for grant money to help fund the creation of new trails.
2. To use as a clear communication tool when speaking with the public and decision makers.
3. To give Little Rock's bicycle advocates a chance for their trail ideas to be heard and possibly be created so that they can help create the city that they dream of.

1.2 Vision

This plan's vision is to create a trail system that is cohesive and connective in order to be a safe and viable alternative transportation option, but also an appealing recreational facility.

The purpose of this Master Trail Plan for the City of Little Rock is to create city-wide connectivity via an off-street trail system for both transportation and recreation. When building these trails, the number one priority is safety. The trails will comply with bicycle and pedestrian urban trail standards as defined by the American Association of State Highway and Transportation (AASHTO) and the City of Little Rock's standards. In order to have the greatest impact with what funding we may receive, these trails must connect to the existing trails in Little Rock. These trails should also lead to high-value destinations such as schools, parks, commercial districts, grocery stores, restaurants, jobs, transit routes, and neighborhoods to facilitate its transportation function. The trails should especially be located near dense populations to get the highest use out of them. The land used should ideally be publically owned (possibly following utility lines) to avoid additional expenses. The land should also be without site constraints, such as challenging topography, major highways. These attributes were gathered for 30 of the proposed trail's and was used to objectively rank the most important trails to construct. This trail can be used to help people feel more comfortable with riding so that they may eventually be willing to ride on the streets instead of using their cars.

1.3 Goals for the Trails:

1. To increase **alternative transportation** options
2. To give a **safer** place to bike ride
3. To create more recreation facilities for a **healthier** community
4. To help reduce the negative impact on the **environment**
5. To make Little Rock more **bicycle friendly**
6. To boost the **economic viability** of Little Rock

Goal #1 - To increase alternative transportation options: Paying for a car, gasoline, and insurance can add up, so some people cannot afford to or do not want to pay for all of that (as seen in the Economic Justice section). Physical problems or being under the age of sixteen can also prevent people from being able to drive. Then there are some people who just do not want to drive, but would rather ride their bicycle or walk everywhere. All of these types of people need to have a way to get to their destinations and a connected trail system can help increase transportation options.

Goal #2 – To give a safer place to bike ride: While Little Rock has many on-road bicycle facilities; some people do not feel comfortable using them (as seen in the Public Safety section and Increased Active Recreation and Transportation section). Being in that close of proximity to a car can be nerve wracking when trying to ride, so these trails should give people similar transportation route options as the on-road paths. Trails are a place that allows people of all ages and skill levels to ride, while on-road paths may not be ideal for young children or beginner riders. These trails may be used to help people feel more comfortable on bicycles and eventually be able to use the on-street facilities.

Goal #3 – To create more recreation facilities for a healthier community: Bicycle riding, walking, and running are all forms of exercise that can be done on a trail. In order to have a prosperous and growing city, it is important to also have a healthy city (as seen previously in the Public Health section). Trails are a way to encourage the community to get fit.

Goal #4 – To help reduce the negative impact on the environment: As convenient as they are, cars are not good for the environment (as seen previously in the Environment section). Bicycling and walking as a transportation mode instead of driving can help cut down on the negative impacts that automobiles have. This connective system of trails will make alternative transportation safer and convenient so that people will be encouraged to try environmentally friendly transportation modes.

Goal #5 – To make Little Rock more bicycle friendly: Bicycle riding is an activity that people of all ages, income, and backgrounds can participate in. It is a way to get suburban residents to spend time in the city. It can be used as a tool to attract tourists to come see what Little Rock has to offer and could even be a factor in new residents or businesses deciding to locate here.

Goal #6 – To boost the economic viability of Little Rock: Using the trails for transportation or exercise can lower individual's costs on automobile expenses and healthcare bills. When people do not have to spend as much of their money on those necessities, they can spend it on other items. That money can be put back in Little Rock which can help boost the local economy (as seen in the Economy section).

1.4 Defining the Terms

Chalk Trail – A trail that has been drawn on by chalk

Class I – A bicycle path that is completely separate from the road

Class II – A bicycle path that has a separate lane from the automobile lane.

Class III – A bicycle path that shares the road with other vehicles

Grade – The slope percentage of the ground

Highway effect – The hypnotizing effect of starting at a straight road for long periods of time

Sight Distance – How far into the distance you can see

Speed tables – Raised bumps that are the width of the road to warn people to slow down

Switchbacks – A path way that goes back and forth up a hill to make the climb less steep

Section 2: Existing Conditions

2.1 Inventory of Existing Conditions

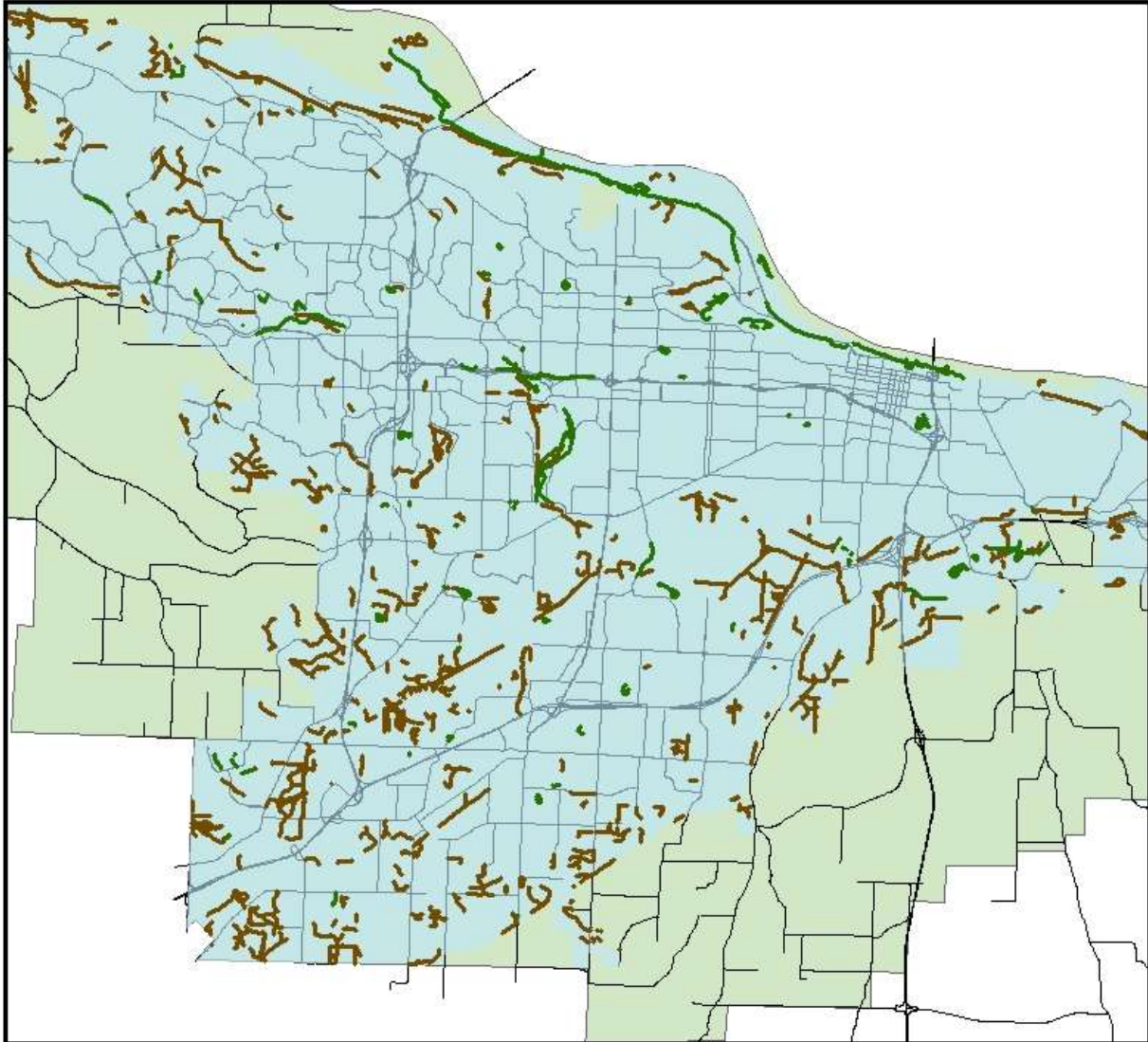
Little Rock, being located in the Natural State, has some beautiful trail options that give people a place to run, hike, bike, roller-skate or horseback ride. These trails are spread out all over the City. The vision of this plan is to be able to connect the existing trails with new ones to create a connective and coordinated trails system that will ideally be able to fulfill all of the goals mentioned in the previous section. This section will describe a few of the main trails that currently exist in Little Rock. On the next page is a map (Figure 2.1) of all of the existing trails in Little Rock.





Photos of existing trails in Little Rock

City of Little Rock's Master Trail Plan

Existing Trails



Map Legend:

-  Existing Paved Trails
-  Existing Natural Surface Trails

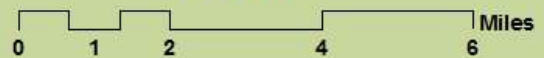


Figure 2.1 Shows all of the existing paved and natural surface trails in Little Rock.

Arkansas River Trail: The Arkansas River Trail is the most well-known trail in Little Rock and it is a great asset for the city. 24 miles of this trail are located in downtown Little Rock and as the name suggests, it is situated near the Arkansas River. In Little Rock, it runs from the William J. Clinton Library and goes all the way down to the Big Dam Bridge and into Two Rivers Park. Many unique sculptures can be found along this trail. This trail has something for everyone with its unique blend of history and art. For more information about this trail: <http://arkansasrivertrail.org/>

Allsopp Trails: These trails are located in Allsopp Park which is on the northwestern side of the city. The park is split into a north and south section, with trails being located in each. Allsopp Park has a mix of both paved and natural surface trails and it is a total of 5 miles long. For more information about this trail: <http://www.littlerock.org/parksrecreation/trails/>

Two Rivers Park: This 1000 acre park is located next to both the Arkansas River and the Little Maumelle River. Two Rivers Park allows for a variety of uses on their expansive land with paved trails for road bikes, pedestrians, or roller skaters and natural surface trails for hiking, mountain biking, and horseback riding.

Boyle Park: This 250 acre park features many wooded trail options. Boyle Park is a locally historical place, adding culture to the trail experience. These trails can be used by hikers and mountain bikers. This park connects to Kanis Park, which can allow users to have a longer trail route.

MacArthur Park: This 36 acre park is located in the center of downtown in the MacArthur Park Historic District. MacArthur Park is lined with paved trails that users can walk or ride their bicycles on.

Rock Creek Trail: This trail is located near a shopping center off of Chenal Parkway on the western side of Little Rock. Being only a little over a mile long, this trail is not one of Little Rock's longest trails, but it does connect to a dedicated bicycle lane road for those who want to extend their ride. For more information about this trail: <http://www.littlerock.org/parksrecreation/trails/>

Little Rock has quite a few trail options to choose from. Attribute Table 2.1 gives more detailed information on each of the trails listed above and a few other existing trails. The trails were measured and observed from aerial photography on ArcGIS so the accuracy may be a little off.

	Width	Length	Condition	Ability to Connect to Other Trails	Accessibility
Arkansas River Trail	11.5, 13, to 17 feet	24 miles	Worn in some places, but overall good	Good	Good
Allsopp Trail	8 to 9 feet	5 miles	Worn, but good	Good	Good
Two Rivers Park	12 feet	3.05 miles	Good	Good	Good
Boyle Park	10,12, to 13 feet	3.2 miles paved, 1.9 unpaved	Good	Good	Good
MacArthur Park	6, 8, to 9 feet	.9 miles	Worn, but good	Good	Good
Rock Creek Trail	7 to 8.5 feet	2.07 miles	Good	Good	Good
Centennial Park	5.5 feet	.12 miles	Worn	Not very good	Good
Craig Park	6.5 to 7.5 feet	.58 miles	Worn, but good	Not very good	Good
Hindman Park	6 feet	.2 miles	Worn	Not very good	Good
Kanis Park	6.5 to 7.5 feet	.75 miles	Worn	Good	Good
Meriwether Park	9 feet	.4 miles	Good	Not very good	Good
Murray Park	8 to 9 feet	5.19 miles	Good	Good	Good
Reservoir Park	8 feet	.13 miles	Worn, but good	Good	Good
Thom Park	9 feet	.26 miles	Good	Not very good	Good
Wakefield Park	8 to 9 feet	.3 miles	Worn	Not very good	Good

Table 2.1 Attributes of a few of Little Rock’s existing trails.

2.2 Existing Freeway Crossings and Their Potential

Little Rock has many major roadways that pose a problem for pedestrians and bicyclists trying to get around the city. In order to have an accessible and connective trail system in Little Rock, utilizing existing bridge crossings can not only benefit those using it, but could save the city money from having to build new road crossing infrastructure. Little Rock currently has four Class I freeway crossings and they each have great potential for making this city friendlier to alternative transportation and recreation.

	Height	Width	Drainage	Condition	Connecting Trails	Accessibility
MacArthur Crossing	103''	94''	Good; drainage holes	Good; rusty	Sidewalks	Not good
Johnson St. Crossing	97''	96''	Good; drainage holes	Good; rusty	Short segment of sidewalks and then roads only	Not good
Kanis Park Underpass	No Issue	96''	Unknown	Good; worn.	Unkempt, paved trails	Not good for any bike but mountain bikes
Mara Lynn Crossing	91''	96''	Somewhat good; slight slope	Good; rusty	Paved path on one side and a steep dirt trail on the other	Not good

Table 2.2 Existing freeway crossings and their attributes.



MacArthur Crossing: This bridge crosses the Wilbur D. Mills Freeway, or Interstate 630, and connects Bragg Street to MacArthur Park. On the northern side of the bridge, there is an uneven 58” ramp. The southern side has both a ramp and stairs which lead to a concrete path that narrows from 104” to a pedestrian sidewalk. A 54” sidewalk is located across the street which, if expanded, could become a good connecting trail. While in a good location, one step to make this crossing more useful would be to increase the grooming frequency, especially after the grass is mowed to increase the safety of bicyclists and pedestrians.

Johnson Street Crossing: This bridge crosses the Wilbur D. Mills Freeway, or Interstate 630, and connects Johnson Street to Lamar Street. On the northern side of the bridge, a short section of 42” sidewalk connects the bridge to neighborhood streets. A bollard blocks the entrance of the crossing from vehicles and leaves 42” of space on either side. Chain link fencing, across the top, sags in the middle, slightly lowering the height within the bridge. The other side of the street leads to another neighborhood with heavily worn 58” sidewalks. One step to make this a more useful cross would be more frequent maintenance of trash and landscaping to keep the area safe for those using it. Protruding pieces of handrails on the side of the crossing should be fixed or gotten rid of in order to avoid the potential harm of cyclists running into them.





Kanis Park Underpass: This crossing goes under the Wilbur D. Mills Freeway, or Interstate 630, and connects Kanis Park to Rodney Parham Road. On the northern side of the underpass, the large neighborhood and trail could be accessed by using the pedestrian crossing signal. Due to the busy nature of Rodney Parham, bicycle crossing signs may need to be placed nearby or the crosswalks should be brightly painted to alert motorists to watch out. A bollard with wide signs attached blocks the entrance of the underpass, leaving 36” and 50” on the sides. The paved trail on the southern side is in bad shape and should be redone and widened to accommodate a multi-purpose use. A worn out 70” bridge, found also along the trail on the southern side, has loose wooden boards which could present a hazard to bicyclists and

pedestrians.

Mara Lynn Crossing: This bridge crosses interstate 430 and connects Mara Lynn Road and Shackleford Road to Natural Resources Drive. On the western side of the crossing, there are steep stairs leading up to a worn 61” sidewalk. A bollard blocks the entrance to vehicular use and leaves 43” on either side. The bridge has a sagging chain link covering which lowers the height slightly in some spaces. Protruding pieces of handrails on the side of the bridge should be fixed or taken down in order to alleviate the danger of bicyclists running into them. The eastern side of the crossing is connected by a steep dirt pathway that is approximately 150’ long and is met by a 48” sidewalk that is in good shape. The dirt trail would most likely have to be regraded before being paved. Utility corridors are located near the pathways on either side of the crossing which could be good routes for new trails.



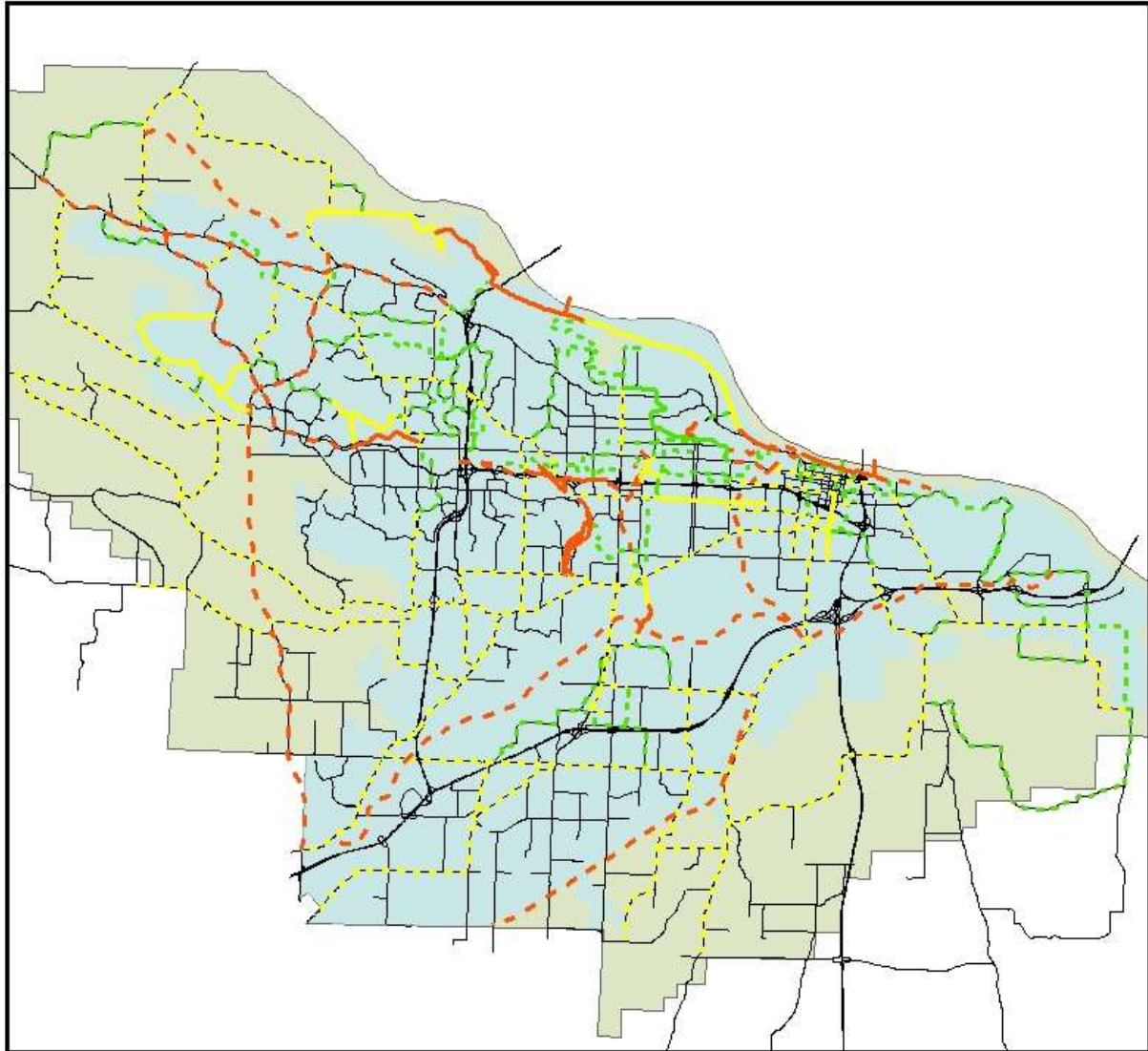
2.3 Bicycle Plan

The city of Little Rock adopted a Master Street Plan that has a Bicycle Plan section in order to create better bicycle accessibility. This plan focused on completing the streets of Little Rock which includes a broad section on bicycle paths. The Bicycle Plan (represented in Figure 2.3) focuses on many of the same things that this plan does, except that the Master Trail Plan only covers off road, paved and non-paved, trails which allow room for more details and more trail proposals. Since the Bicycle Plan is used for completing the streets of Little Rock, it does not mention many of the non-transportation existing trails that are included in the Master Trail Plan.

Little Rock currently has quite a few existing trails, as seen in the Inventory of Existing Trails in Little Rock section. The master bike plan lists the Class I, Class II, and Class III bike routes throughout the city, but it does not include all of the trail routes. The Master Trail Plan includes all of the Bicycle Plan's existing and proposed Class I bike paths, all of the existing trails, and a list of proposed trails. The Bicycle Plan emphasizes safety and proper construction in order to continue growing a healthy bicycle community. That emphasis is continued into the Master Trail Plan, as well.

Bicycle Plan

Existing and Proposed Routes



Map Legend:

-  Class I
-  Class II
-  Class III



Figure 2.3 Master Bike Plan routes.

Section 3: Design Standards

3.1 Standards for Trail Connectivity Construction

These standards are for only for connective trails. Small trail loops may have lesser standards. The construction of trails needs to be designed in a way that riders and walkers can utilize it safely. These standards are for paved, multi-purpose trails. The standards were gathered from Little Rocks Parks and Recreation department. Typically, they are constructed of asphalt or crushed limestone, but concrete may be required in flood plains. When the trail is still being created, it may be built with 100% crushed material, industrial sand, or compacted soil, but it still must be able to drain.

Width: A minimum width of 18 feet is necessary for multi-use paved Class I bike paths. 12 feet of that is the tread width, which is the area that the users are on. The trail must be wide enough for the maintenance vehicles to be able to drive on. When going under bridges, that number expands to 14 feet as an added precaution. On both sides of the tread width, there needs to be a 3 foot shoulder that is the same level as the path. These shoulders are needed so that people can have a safe zone to recover or pull over without being in the way. The shoulders may be constructed of turf.

Height: When building the trail, there must be a minimum of an 8 foot clearing height. 10 feet is recommended, in order to safely accommodate tall bicyclists. There may not be any branches or infrastructure within the 8 foot minimum height along the width of the trail.

Design Specifications: There must be a minimum of 200 horizontal feet between switchbacks. A horizontal radius of at least 100 feet at the center line is required. The trail may be designed to a speed of up to 35 miles per hour. The cross slope cannot be greater than 2%. The trails must be built to be permanent and use landscaping as a buffer. The path should have a 6 inch gravel base with 2 inches of flexible paving on top. Another option is for it to be constructed with compacted soil under 4 inch flexible pavement.

Grade: The average grade cannot exceed 5%, but it can be lower. 10% is the maximum grade on multi-use trails, but it must be lowered after 500 feet. In order to know what each grade is like see Table 3.1.

Trail Grade	Flat Rest	Moderate Climb	Moderately Steep	Steep	Intense Climb
Percentage	0%	5%	10%	15%	20%

Table 3.1 Shows the trail grade scale.

Sight Distance: There must be a minimum of 100 feet of sight distance from a street intersection, so users have plenty of time to be prepared to stop. Bike intersections must have 30

feet of sight distance to them. Long straight stretches of trail should not be constructed in order to avoid the highway effect.

3.2 Standards for Drainage Structures

Due to the unpredictable nature of weather, trails must have drainage structures so that rain does not cause damaging flooding. Floods can erode the pathways and make it difficult for users to get through safely. This section lays out a few requirements that the drainage structures must meet.

Drainage structures should be no closer to the trail than 3 feet, but it should be located farther if it is possible. The trail surface drainage should have a sloped surface of $\frac{1}{4}$ " in for every 1 foot to allow it to properly drain. It should be graded towards the upside of the hill. Water should not be taken across a trail because debris will get on the trail and it can cause ice patches to occur.

3.3 Standards for a Typical Trail Head

These standards are based on site needs. Trail heads are the starting and entry points of the trail system. They should be built to accommodate the needs of the people who use them and be accessible. Trail heads should usually include a parking lot for people to have a place to park their car while they are on the trail, if there is enough space and if it is warranted. There should be uniform signage so that users may find their way around the trails and decide which trail to take. Bathrooms are typically useful to include, especially when the trail is located in a remote area. Water fountains are also important. Bike repair stations, bike racks, and benches are not necessary, but may be desired at a trail head. Whenever locating items such as water fountains and benches along the trail, they must be placed at least 3 feet away from the edge of the trail to prevent injury.

3.4 Trail Recommendations

This section lists recommendations for an enjoyable and environmentally friendly trail, but they are not required.

- It is recommended that the trail is located at least 25 feet away from the edge of a stream so that it does not impact it, but there can be exceptions that justify it needing to be closer.
- In order to avoid damage to roots, trails should be located uphill from the tree.
- Switchbacks should be avoided whenever possible.
- When intersecting with a street or another road, they should meet at a 90 degree angle.

- When the slope of a hill is over 5%, side hill construction should be done.
- To make the trail more enjoyable and less likely to flood, grade reversals should occur every 20 to 50 feet.
- The grade of the trail should not be more than half the side slope or hillside grade in order to avoid a fall-line trail.

Section 4: Implementation

4.1 Possible Routes



Local bike enthusiasts in Little Rock have thought for a long time about where new trail routes could be located. These trail ideas were put onto a map in ArcGIS. An overview map of Little Rock is shown in Figure 4.1 to show what the entire trails system could look like. In order to give a more detailed view, the maps were separated into nine different sections that cover all of Little Rock. These maps contain both the trails that already exist and the possible new trails. They are shown on the next few pages (Figure 4.2 – 4.10).

Each of the trails shown in the following maps were closely looked at and a list of the top 30 trails to build was created. An attribute table was created of the top 30 trails to give more detailed information. These attribute tell how long the trail will be, how wide, the condition of the land, and the benefits of building that trail. The trail areas were measured and observed from aerial photography on ArcGIS so the accuracy may be a little off. The complete attribute table is shown below in Table 4.1, Table 4.2, and Table 4.3.

After creating the attribute table, the trails were then ranked due to amenities that they would connect with and land constraints. The trails that scored the lowest are the highest priority because they would have the most benefits and would be the easiest to construct. The ranking list is shown below in Table 4.4, Table 4.5, and Table 4.6.

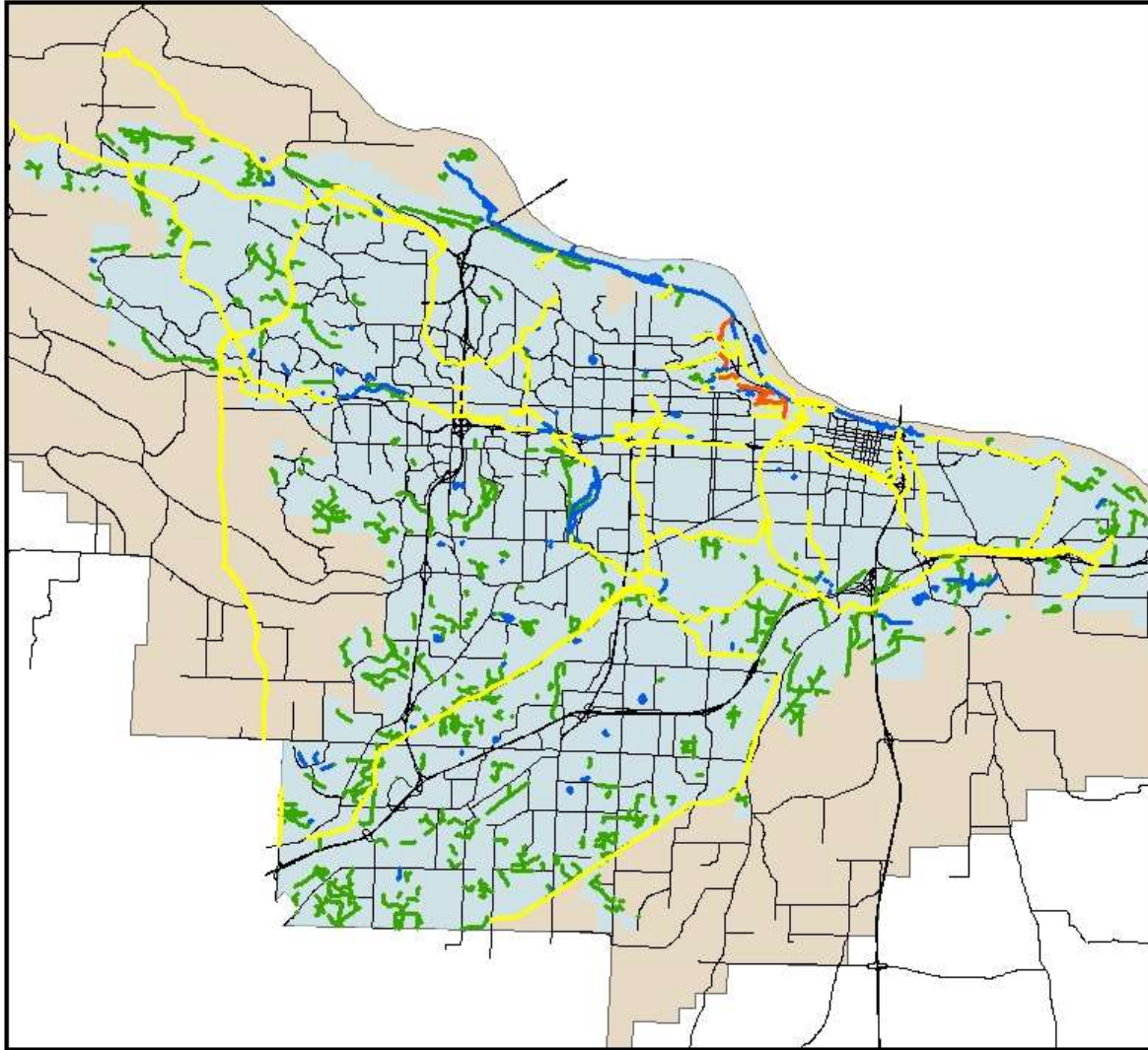
Most of the high ranking trials were located in downtown Little Rock. The potential trails going from the Arkansas River Trail to MacArthur Park, looping around the interstate, back into MacArthur Park through the interstate crossing, and ending back on the Arkansas River Trail were personally ridden by staff. These trails had great potential due to the expansive underutilized



greenspace next to the freeway. The trails could be an excellent loop to connect many neighborhoods and businesses to the downtown.

City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

-  Possible Natural Surface Trails
-  Possible Paved Trails
-  Existing Paved Trails
-  Existing Natural Surface Trails

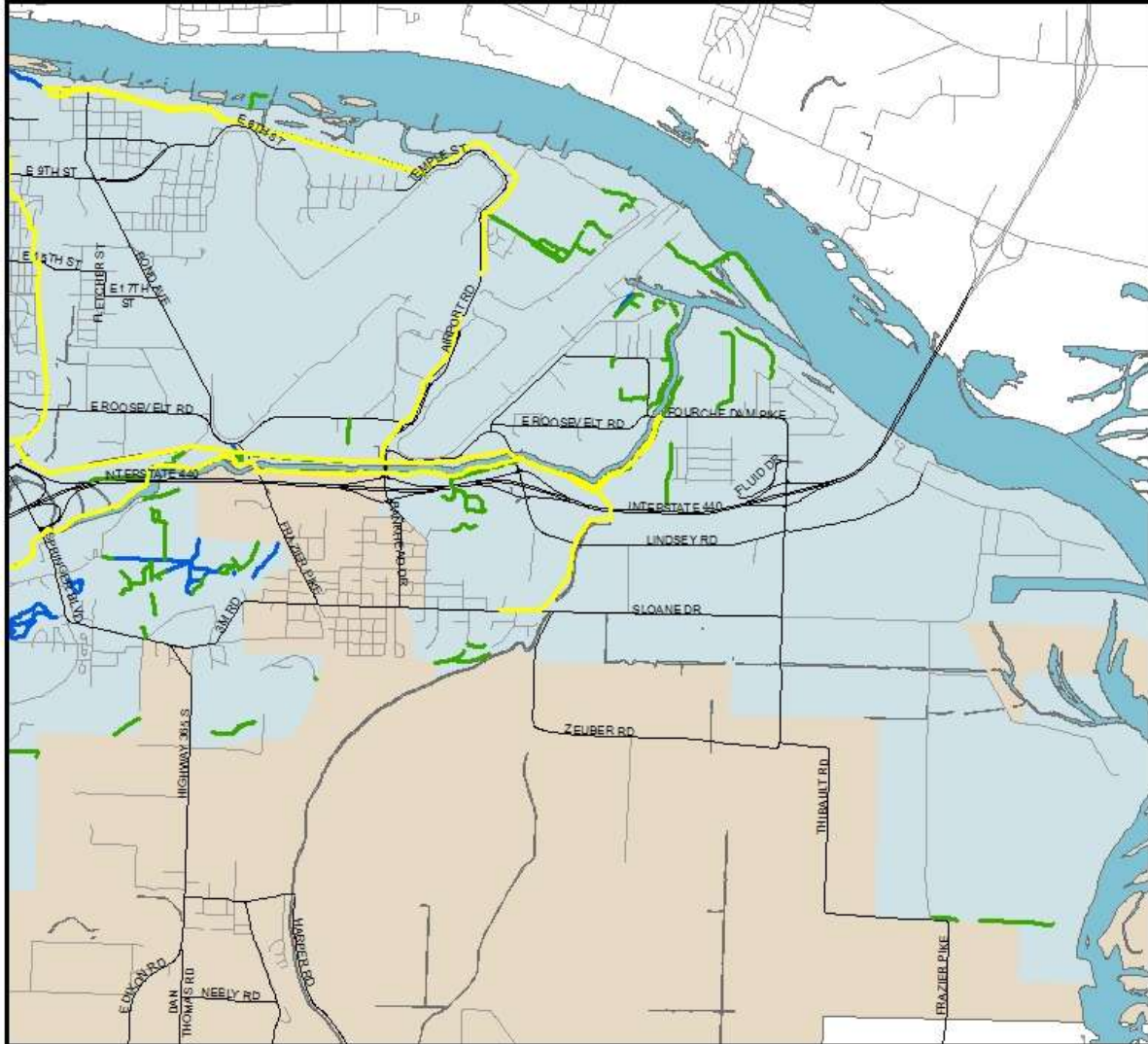
OVERVIEW MAP



Figure 4.1 Shows an overview of the existing and possible trails in Little Rock.

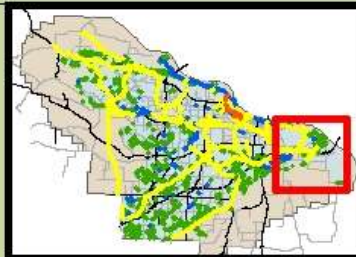
City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

- Possible Natural Surface Trails
- Possible Paved Trails
- Existing Natural Surface Trails
- Existing Paved Trails



EAST

0 0.5 1 Miles

NORTH

Figure 4.2 Shows a detailed view of the existing and possible trails in Little Rock.

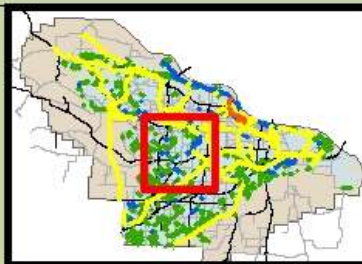
City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

-  Possible Natural Surface Trails
-  Possible Paved Trails
-  Existing Natural Surface Trails
-  Existing Paved Trails



MIDWEST

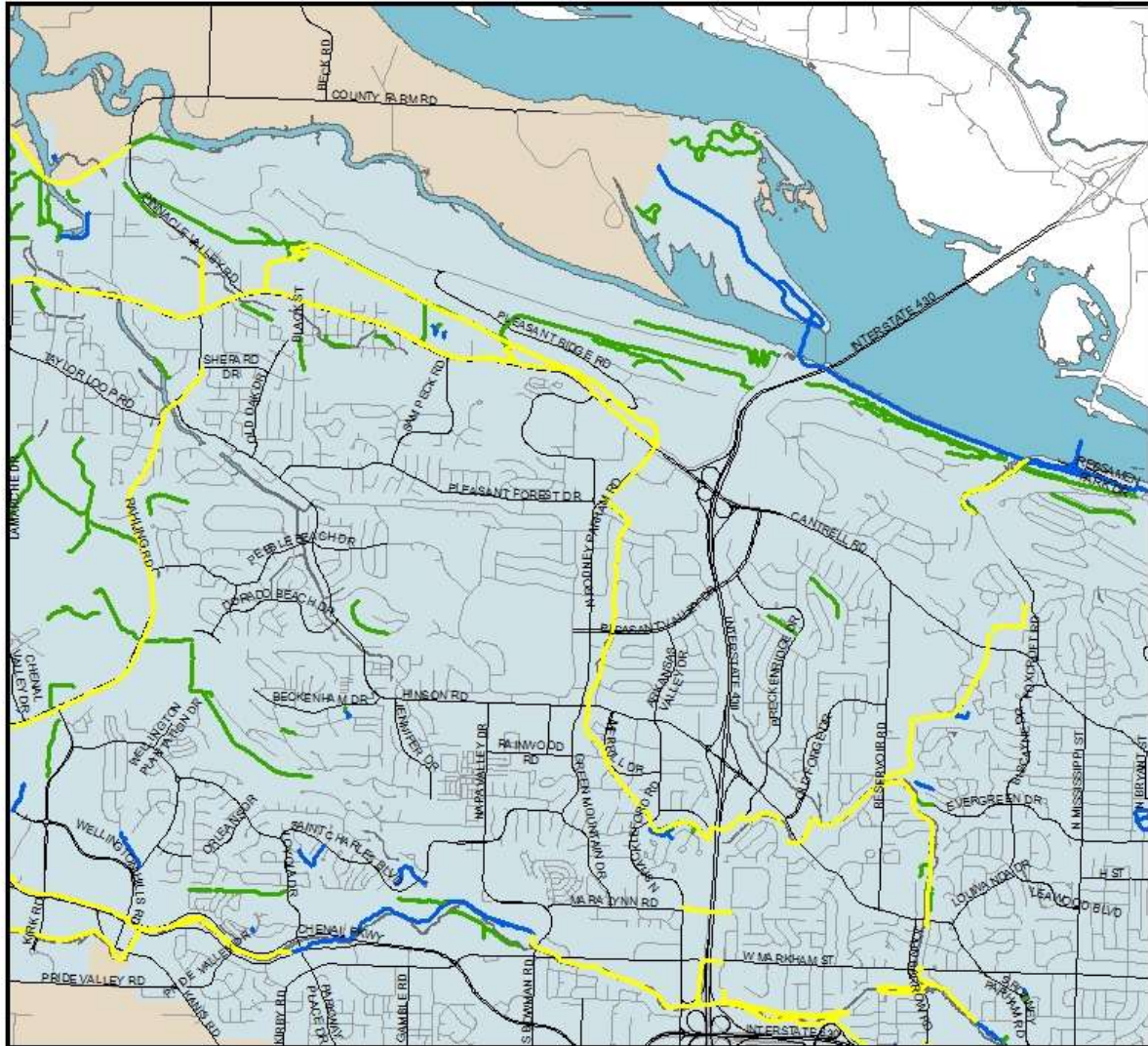
0 0.5 1 Miles

NORTH

Figure 4.3 Shows a detailed view of the existing and possible trails in Little Rock.

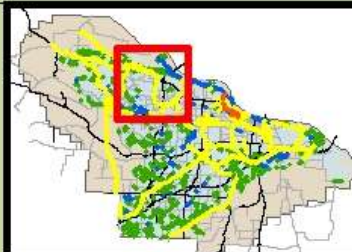
City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

- ~ Possible Natural Surface Trails
- ~ Possible Paved Trails
- ~ Existing Natural Surface Trails
- ~ Existing Paved Trails



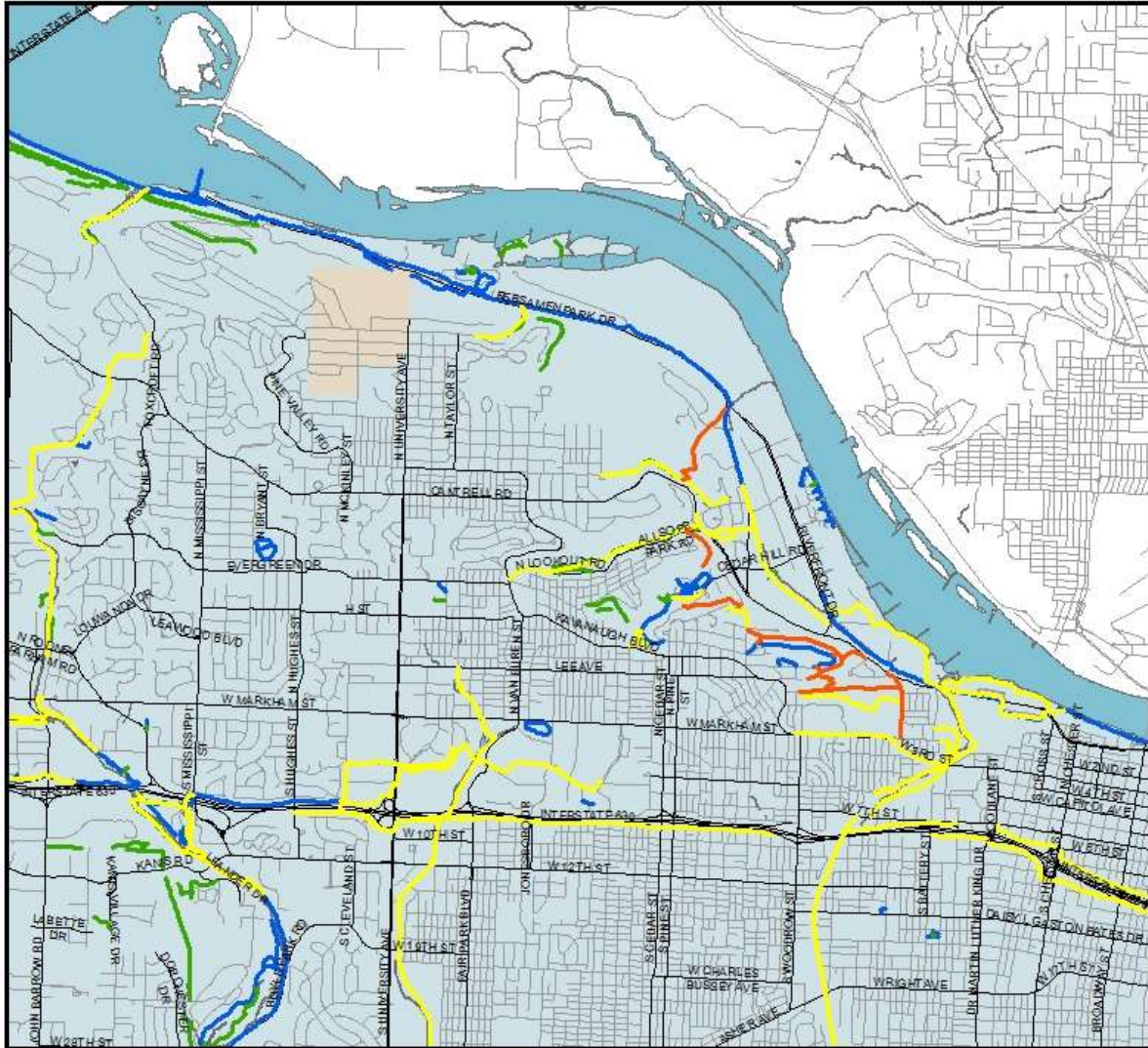
NORTH

0 0.5 1 Miles



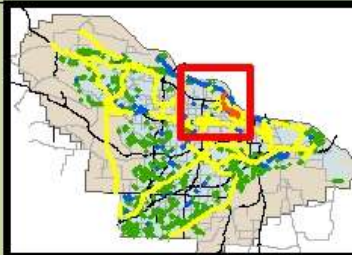
Figure 4.4 Shows a detailed view of the existing and possible trails in Little Rock.

City of Little Rock's Master Trail Plan Existing and Possible New Trails



Map Legend:

- Possible Natural Surface Trails
- Possible Paved Trails
- Existing Natural Surface Trails
- Existing Paved Trails



NORTH DOWNTOWN

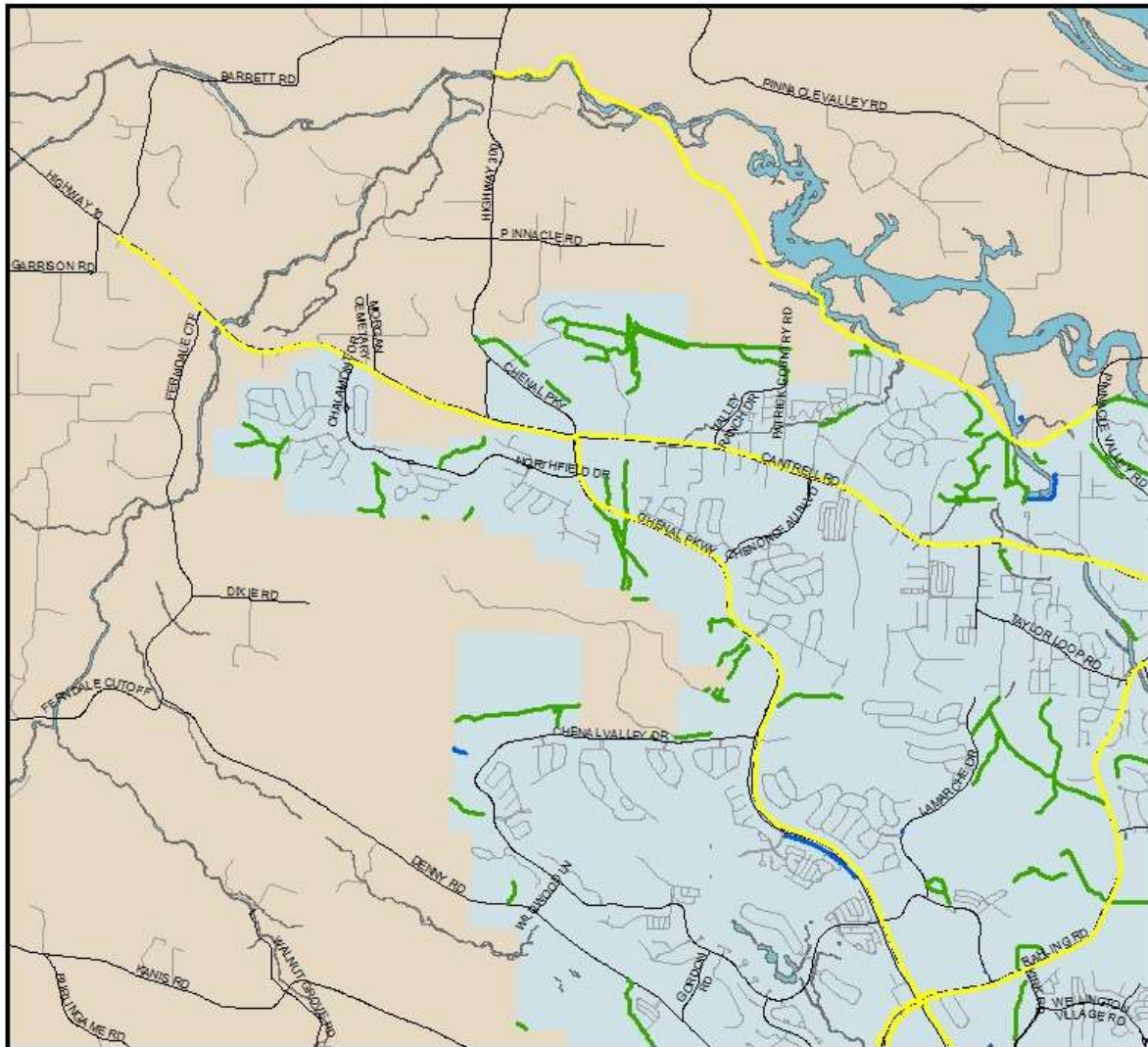
0 0.5 1 Miles



Figure 4.5 Shows a detailed view of the existing and possible trails in Little Rock.

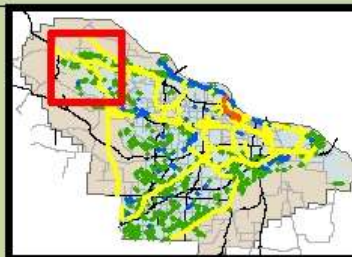
City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

- Possible Natural Surface Trails
- Possible Paved Trails
- Existing Natural Surface Trails
- Existing Paved Trails



NORTHWEST

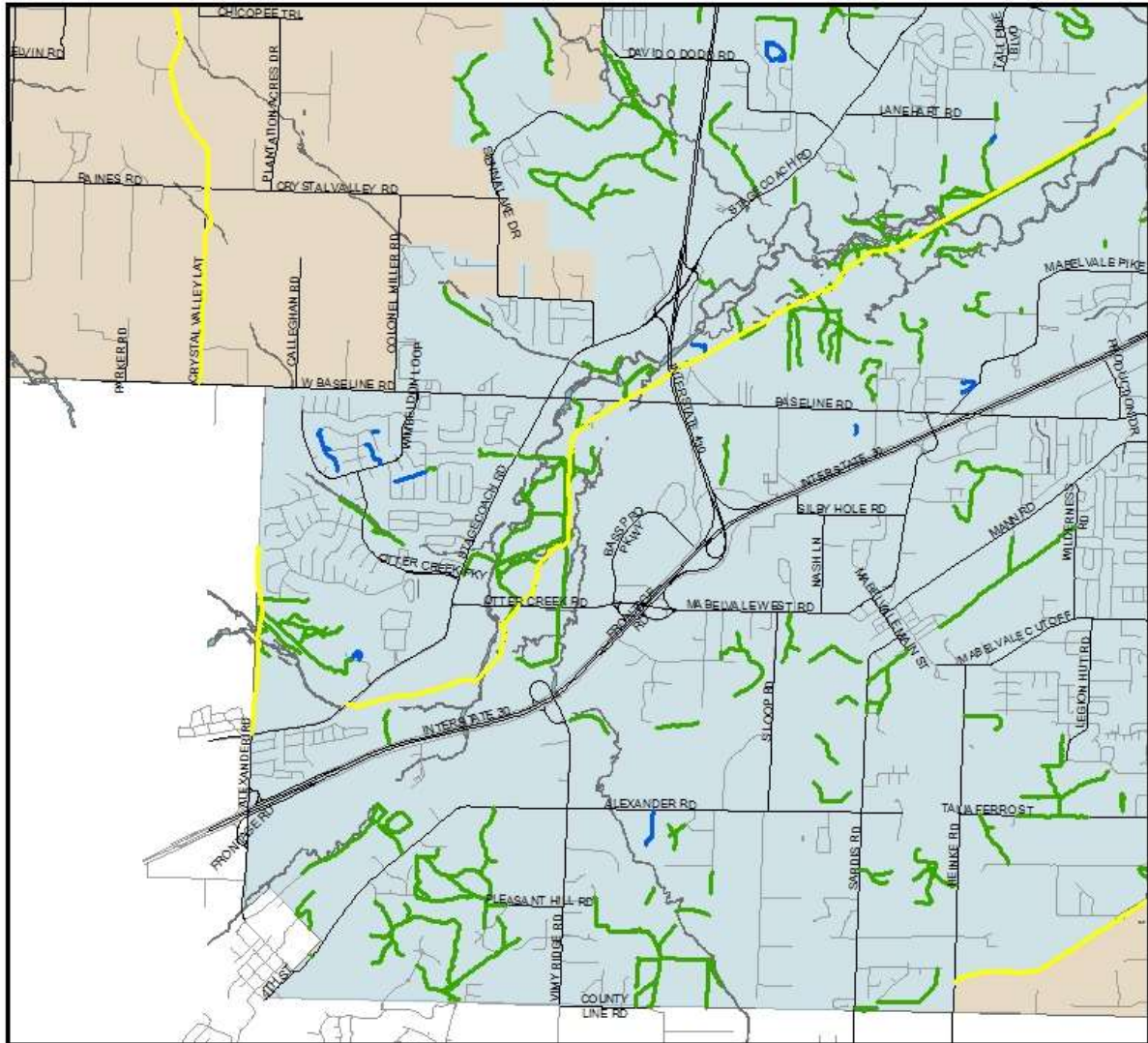
0 0.5 1 Miles



Figure 4.6 Shows a detailed view of the existing and possible trails in Little Rock.

City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

- Possible Natural Surface Trails
- Possible Paved Trails
- Existing Natural Surface Trails
- Existing Paved Trails

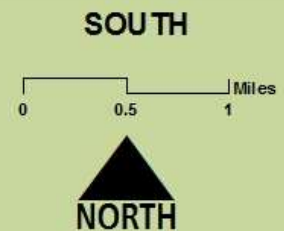
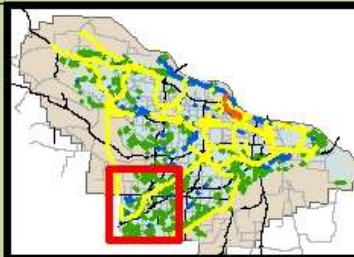
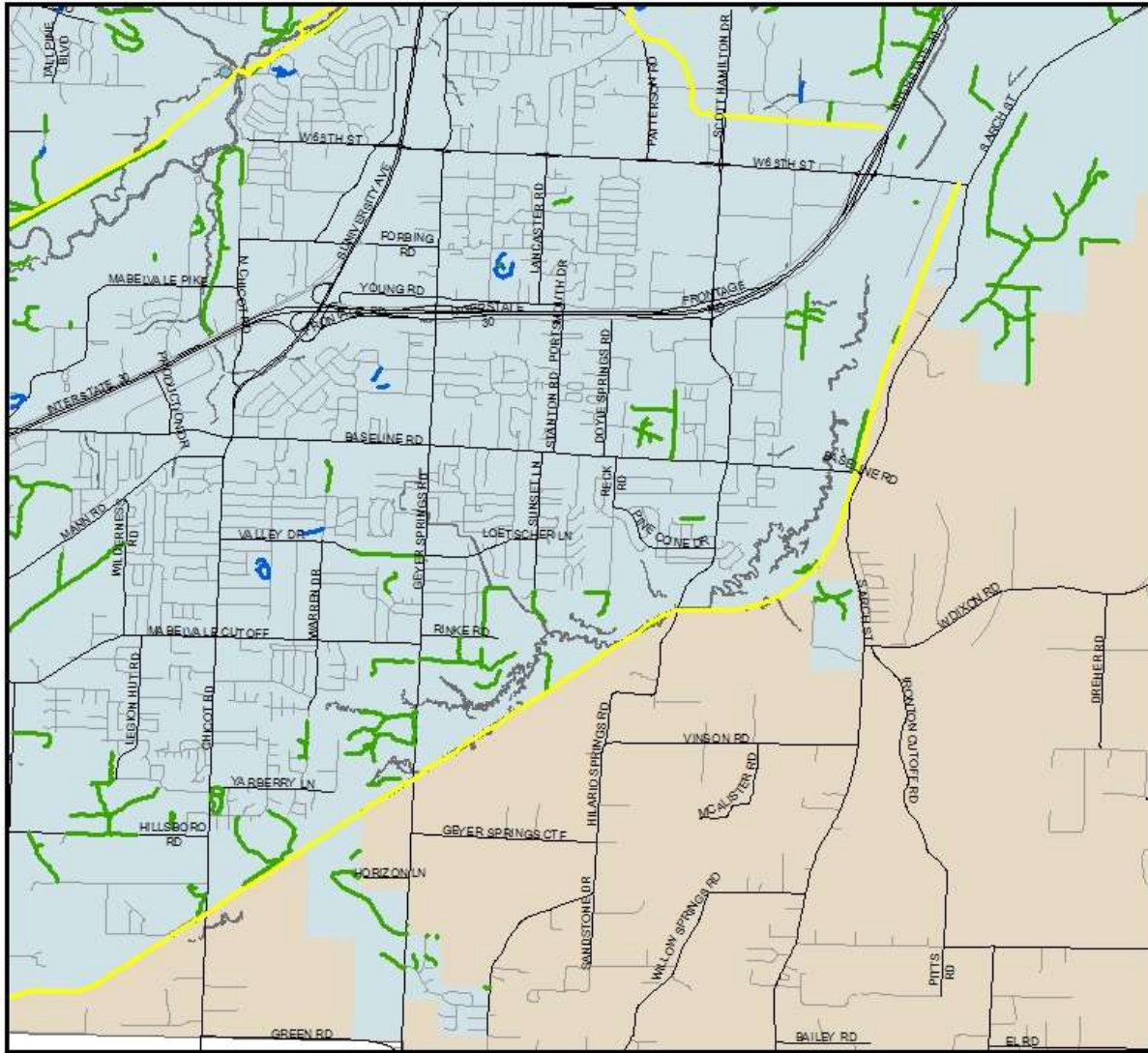


Figure 4.7 Shows a detailed view of the existing and possible trails in Little Rock.

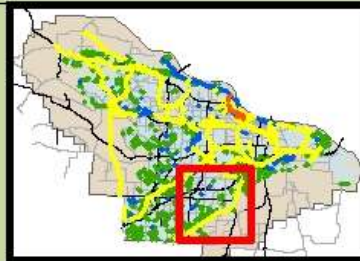
City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

-  Possible Natural Surface Trails
-  Possible Paved Trails
-  Existing Natural Surface Trails
-  Existing Paved Trails



SOUTHEAST

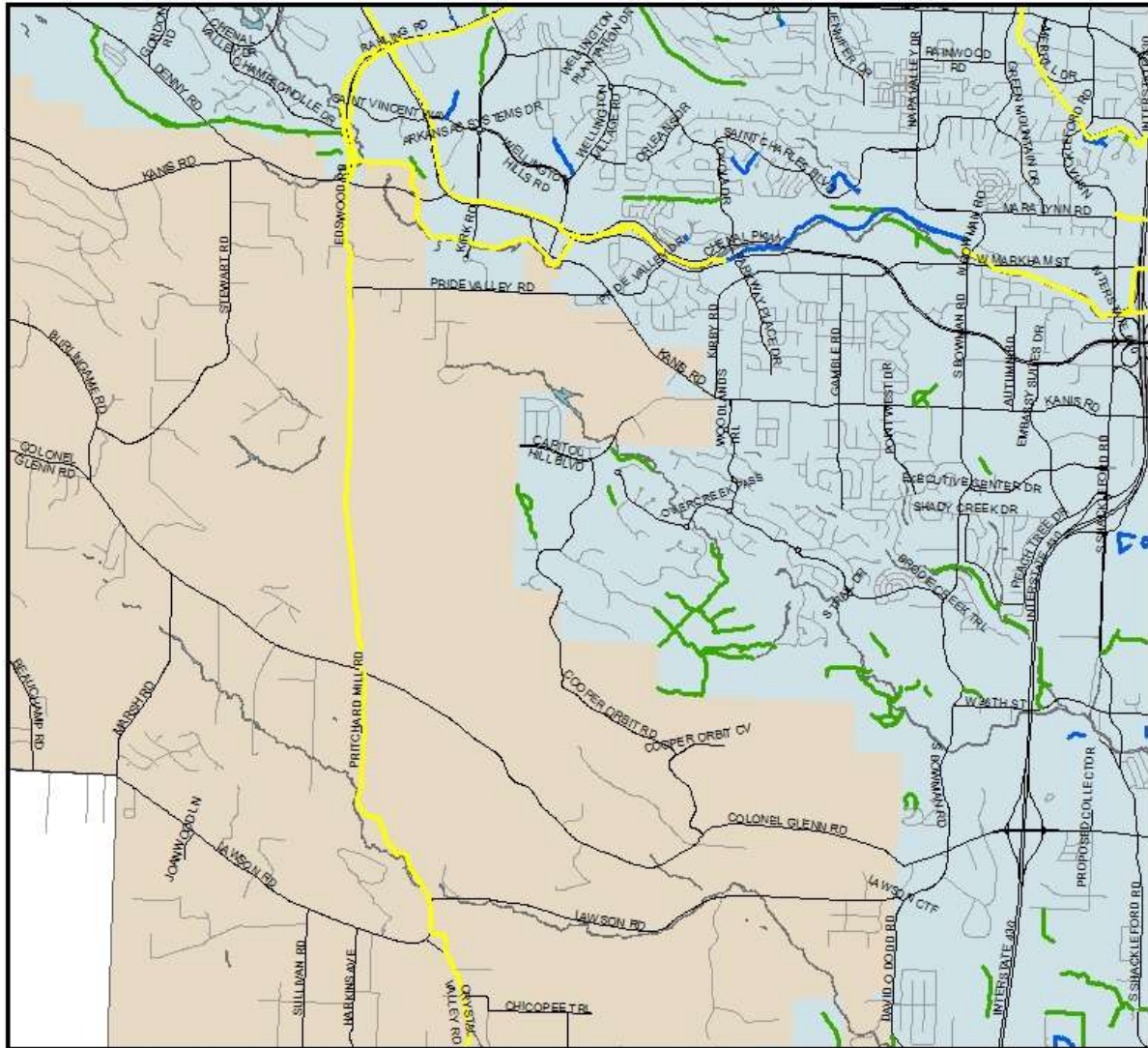
0 0.5 1 Miles

NORTH

Figure 4.8 Shows a detailed view of the existing and possible trails in Little Rock.

City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

-  Possible Natural Surface Trails
-  Possible Paved Trails
-  Existing Natural Surface Trails
-  Existing Paved Trails

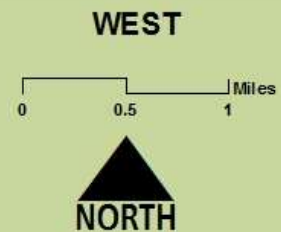
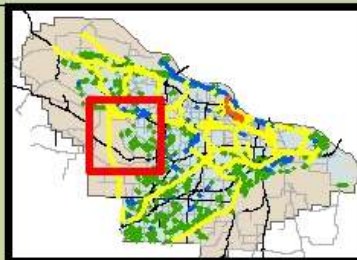
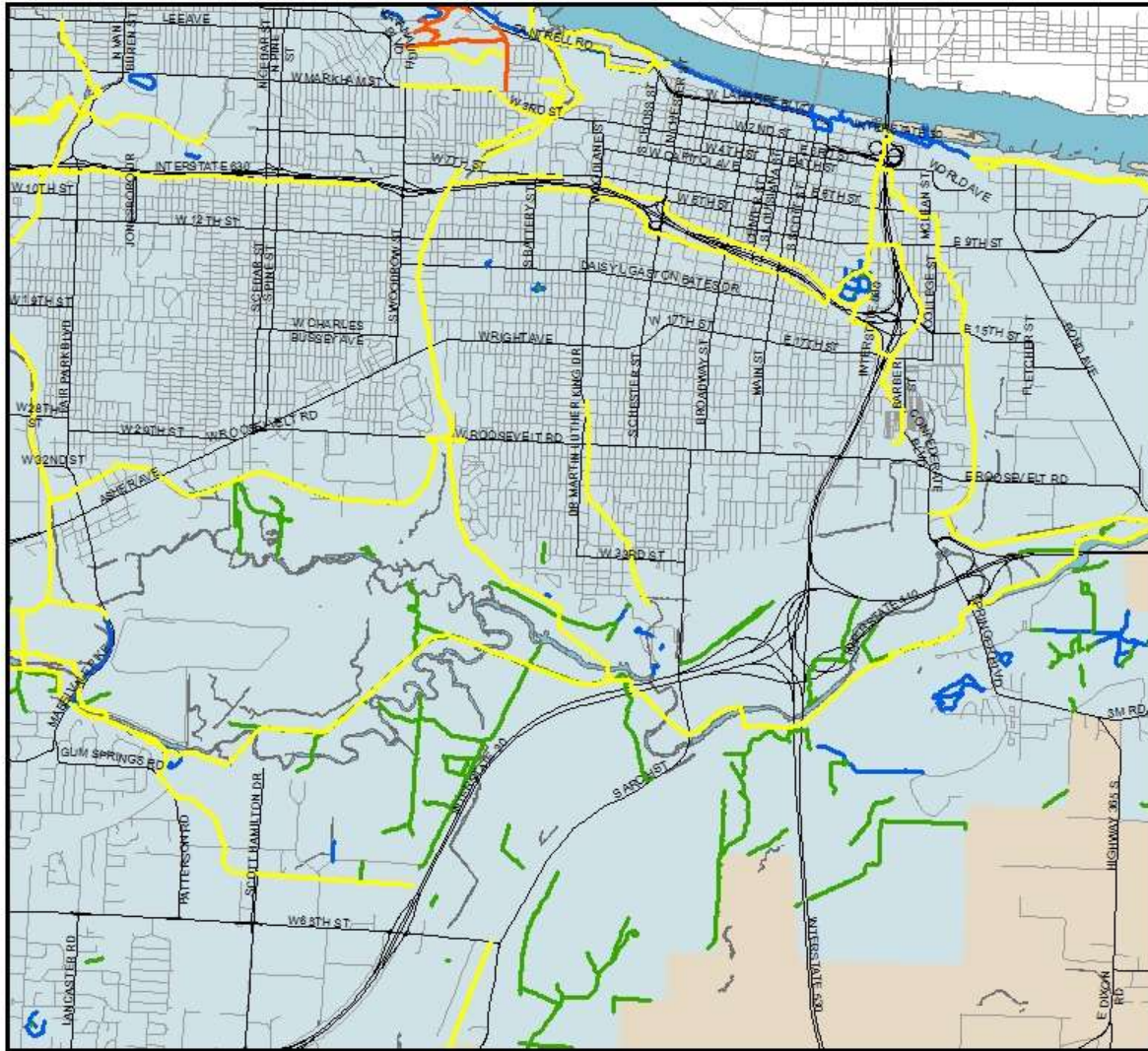





Figure 4.9 Shows a detailed view of the existing and possible trails in Little Rock.

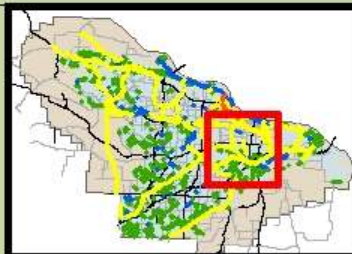
City of Little Rock's Master Trail Plan

Existing and Possible New Trails



Map Legend:

-  Possible Natural Surface Trails
-  Possible Paved Trails
-  Existing Natural Surface Trails
-  Existing Paved Trails



EAST DOWNTOWN

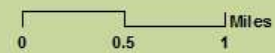


Figure 4.10 Shows a detailed view of the existing and possible trails in Little Rock.

Width		Length	Condition	Ability to Connect to Other Trails	Accessibility	Existing or Proposed	Reason for Building
12 feet paved	.86 miles	Some trees and hills, but for the most part good	Good	Good	Proposed	Would help extend the River Trail and connect to another long stretch of trail	
12 feet paved	3.14miles	Some trees and hills, but for the most part good	Good	Good	Proposed	Would extend the River Trail and connect the airport to downtown with a trail	
12 feet paved	2.8 miles	Hilly with lots of trees and at	Good	Not very good	Proposed	Would connect many neighborhoods to a trail system and would give central Little Rock a long route	
12 feet paved	.35 miles	Hilly with lots of trees, but already has an existing natural surface trail	Good	Good	Proposed	Would give a large neighborhood direct access to Murray Park and the Arkansas River Trail	
12 feet paved	.9 miles	Hilly with lots of trees and may require bridges	Good	Somewhat good	Proposed	Would give direct access to Rock Creek Trail and Boyle Park	
12 feet paved	.8 miles	Require going through public property, but good terrain	Good	Good	Proposed	Would give MacArthur Park a direct connection to the Arkansas River Trail and to downtown	
12 feet paved	5.3 miles	Good terrain and a few existing trails already on this route, but about half the distance is private property	Good	Good	Proposed	Would connect the airport to the Arkansas River Trail and many houses	
12 feet paved	2.48 miles	On an existing natural surface trail	Good	Not very good	Proposed	Long stretch of trail in a natural environment and could be connected to the Arkansas River Trail and gives a neighborhood trail access	

Table 4.1 Give a detailed look at the proposed trails the proposed trails.

	Width	Length	Condition	Ability to Connect to Other Trails	Accessibility	Existing or Proposed	Reason for Building
River Mountain to South Ridge Road	12 feet paved	1.38 miles	On an existing natural surface trail	Good	Good	Proposed	Would give a neighborhood close access to the Arkansas River Trail
Natural surface trail from Otter Creek Road to Mabelvale Pike	12 feet paved	6.8 miles	On mostly an existing natural surface trail, but may require bridges	Somewhat Good	Not very good	Proposed	Would give Little Rock a long stretch of trail with a rural feel
Boyle Park to the trail at Mabelvale Pike	12 feet paved	1.89 miles	Lots of trees and bridges may be needed	Good	Good	Proposed	Would connect two different trail systems with each other and have a trail near a commercial area
Rebsamen Park to Kavanaugh	12 feet paved	1.36 miles	Mostly on an existing natural surface trail, but there are buildings in the way	Somewhat Good	Not very good	Proposed	Would help give lots of houses a closer connection to the Arkansas River Trail
Foxcroft Road to Murray Park	12 feet paved	.49 miles	Lots of trees, but along an existing natural surface trail	Good	Good	Proposed	Would give a neighborhood direct access to the Arkansas River Trail
Markham to Rock Creek Trail	12 feet paved	.44 miles	On a slope of the bank of a creek	Good	Not very good	Proposed	Would extend the Rock Creek Trail and give a large neighborhood access to a trail
Country Club Lane to Magnolia Avenue	12 feet paved	.79 miles	Lots of trees, but along an existing natural surface trail	Somewhat Good	Not very good	Proposed	Would give a large neighborhood close access to the Arkansas River Trail
Fourche Dam Pike to Frazier Pike	12 feet paved	2.3 miles	Lots of trees and some slope, but on almost all public land	Not Good	Good	Proposed	Would create a scenic trail for the small neighborhood at the top of trail
Blue Bird Drive to Hooper Drive	12 feet paved	1.7 miles	Lots of roads and private property	Good	Good	Proposed	Would connect a large neighborhood to War Memorial and UAMS and would extend an existing trail
Reservoir Road to Rodney Parham and Brookside	12 feet paved	1 mile	Lots of trees and a creek, but along some existing natural surface trails	Somewhat Good	Good	Proposed	Lots of open space in a natural environment, large neighborhood surrounding it to use it

Table 4.2 Continues the list in the previous table, giving more details on the proposed trails.

	Width	Length	Condition	Ability to Connect to Other Trails	Accessibility	Reason for Building
Rodney Parham and Old Forge to Reservoir Road	12 feet paved	.58 miles	Lots of trees and a creek	Somewhat Good	Not very good	Connects a park and business center to a large neighborhood
Reservoir Road to Huntington Road	12 feet paved	1.4 miles	Lots of trees and private property	Somewhat Good	Somewhat good	Connects large neighborhoods and gives them trails
Arch Street to Craig Park	12 feet paved	2.59 miles	Lots of trees, a creek, and railroad tracks, but it's almost all an existing trail	Good	Not very good	Would extend the park trail and upgrade an existing trail to more use
Mabelvale Road trail to Craig Park	12 feet paved	.3 miles	Lots of trees and a creek	Good	Not very good	Would extend two existing natural surface trails and give a longer trail to the large neighborhood next to it
Park on Shackleford to trail behind Warwick Road	12 feet paved	.7 miles	Lots of trees and roads, but part on an existing trail	Good	Good	Would connect large neighborhoods that are separated by the freeway
Lee Avenue to 28th Street	12 feet paved	2.38 miles	Freeway in the path of trail and lots of private property, but few trees and hills	Somewhat Good	Somewhat good	Would connect large neighborhoods and commercial areas that are separated by a freeway
Dennison Street to Arkansas River Trail	12 feet paved	.97 miles	Some hills and lots of trees, and railroad in the way of the path	Good	Somewhat good	Would connect large neighborhoods and the Capitol to the Arkansas River Trail
Woodrow Street to 2nd Street	12 feet paved	.8 miles	A few hills, but clear land	Somewhat Good	Not very good	Would connect the neighborhood and school to the Capitol
Berry Street to Park Street	12 feet paved	.57 miles	A few hills, but clear land	Somewhat Good	Good	Would connect the neighborhood to the school and give both a short trail
22nd Street to Interstate Park	12 feet paved	1.14 miles	Railroad track separating park from neighborhood	Good	Good	Would connect a large neighborhood to a trail
Park on Shackleford to Rodney Parham and Cantrell	12 feet paved	2.37 miles	Lots of trees, a creek, and lots of roads	Good	Good	Would connect commercial areas and neighborhoods by trail
UALR to Arkansas Livestock Show	12 feet paved	2.6 miles	Some roads and trees, but a large part on an existing natural surface trail	Somewhat Good	Good	Would give the University a trail to get to places on

Table 4.3 Continues the list in the previous table, giving more details on the proposed trails.

Proximity to Schools		Connectivity to Food	Publicly Owned Land	Topography /Site Constraints	Connectivity to Stores	Connectivity to Housing	Connectivity to other Trails	Total Score
<p>*Is this trail located near schools? 1 = Within 500 feet or less, 2 = Between 500 feet to a quarter mile, 3 = Between a quarter mile to a half mile, 4 = Between a half mile to one mile, 5 = More than a mile</p>		<p>*Does this trail connect to places where one can get food? 1 = Within 500 feet or less, 2 = Between 500 feet to a quarter mile, 3 = Between a quarter mile to a half mile, 4 = Between a half mile to one mile, 5 = More than a mile</p>	<p>*Is this trail located on public land? 1 = All, 2 = Mostly, 3 = Half, 4 = Hardly, 5 = None</p>	<p>*Is this trail without site constraints? 1 = Yes, 2 = There are a few, 3 = Half, 4 = Almost all land is constrained, 5 = Completely Constrained</p>	<p>*Does this trail connect to stores? 1 = Within 500 feet or less, 2 = Between 500 feet to a quarter mile, 3 = Between a quarter mile to a half mile, 4 = Between a half mile to one mile, 5 = More than a mile</p>	<p>*Does this trail directly connect large numbers of people? 1 = 200 or more houses, 2 = 200 to 100 houses, 3 = 100 to 50 houses, 4 = 50 houses to 25 house, 5 = Less than 25 houses</p>	<p>*Does this trail connect to other trails? 1 = Direct connection (0 to 50 feet away), 2 = between 50 to 100 feet, 3 = between 100 and 200 feet, 4 = between 200 t score and 500 feet, 5 = 500 feet or more away</p>	
Ranking System:								
<p>*Is this trail located near schools? 1 = Within 500 feet or less, 2 = Between 500 feet to a quarter mile, 3 = Between a quarter mile to a half mile, 4 = Between a half mile to one mile, 5 = More than a mile</p>		<p>Food = Restaurants, groceries stores, fast food chains, or food trucks/stands</p>		<p>Constraints = Trees, steep topography, railroad tracks or roads, or water</p>	<p>Stores = Clothing stores, home good stores, auto stores, convenient stores, etc.</p>		<p>* Trail = paved bicycle and pedestrian path</p>	

Table 4.4 Shows the criteria each trail was ranked on.

Trail Location	Topography					Connectivity to other Trails	Total Score
	Proximity to Schools	Connectivity to Food	Publicly Owned Land	/Site Constraints	Connectivity to Stores		
Arkansas River Trail to MacArthur Park	1	1	2	2	1	2	10
Boyle Park to the trail at Mabelvale Pike	2	1	2	4	1	1	12
Blue Bird Drive to Hooper Drive	2	1	2	3	1	2	12
Berry Street to Park Street	1	2	1	1	2	1	12
22nd Street to Interstate Park	2	1	4	2	1	1	12
End of River Trail at 2nd to Temple Street at the airport	1	2	2	3	1	3	13
From the trail next to the I630 access road to John Barrow Road to the trail off of N Bowman Road and Markham	1	1	3	5	1	1	13
The airport to Springer Boulevard to the Arkansas River Trail	2	1	3	3	1	1	13
Trail Behind Pinnacle Valley and Cantrell Road	2	2	3	2	2	1	13
Woodrow Street and 2nd Street	1	1	2	2	1	1	13
Rock Creek Trail to Boyle Park	3	1	2	4	1	2	14
Otter Creek Road to Mabelvale Pike	1	2	3	4	2	1	14
Markham to Rock Creek Trail	3	1	2	5	1	1	14
Park on Shackelford to Converse Drive to the trail behind Warwick Road	1	1	5	4	1	1	14
Dennison Street to the Arkansas River Trail	1	1	5	4	1	1	14
Shackelford trail to Rodney Parham and Cantrell	1	1	5	4	1	1	14
Rebsamen Park to Kavanaugh	2	1	3	4	1	1	15
River Front Drive to the trail on Rebsamen Park Drive	2	1	5	4	1	2	16
River Mountain to Pleasant Ridge Road	4	3	2	2	3	1	16

Table 4.5 Shows the ranking scores of the trails, with the lowest score being the highest ranked.

Trail Location	Proximity to Schools				Topography				Connectivity			Total Score
	Connectivity to Food	Publicly Owned Land	/Site Constraints	Connectivity to Stores	Connectivity to Housing	Connectivity to other Trails	Connectivity to Food	Publicly Owned Land	/Site Constraints	Connectivity to Stores	Connectivity to Housing	
Reservoir Road to Rodney Parham	1	2	2	5	1	1	4	16				
Reservoir Road to Huntington Road	3	1	3	5	1	1	2	16				
Lee Avenue to 28th Street	1	1	4	3	1	1	5	16				
UALR to Arkansas Livestock Show	1	1	4	3	1	1	5	16				
Rodney Parham and Old Forge to Reservoir Road	2	2	3	5	1	1	4	18				
Country Club Lane to Magnolia Avenue	3	1	5	4	1	1	4	19				
Mabelvale Road trail to Craig Park trail	3	4	2	5	2	2	1	19				
Arch Street to Craig Park	3	4	1	3	3	5	1	20				
Scenic Road to Rebsamen Park Drive	3	3	4	5	3	2	1	21				
Fourche Dam Pike to Frazier Pike	3	1	2	4	2	4	5	21				
Foxcroft Road to the Arkansas River Trail	4	4	5	2	3	3	1	22				

Table 4.6 Continues showing the ranking scores of the trails, with the lowest score being the highest ranked.

4.2 Trail Recommendations and Suggested Policy

A great trail encourages people of all ages and of varying interests to utilize and enjoy it. This section will list several different methods of ways to achieve that. Not only should it get more people riding, but also make the trail experience better and positively benefit the city.

Trail Friendly Schools:

- Establish a bicycle loan program at the local schools so that students may check out bicycles, just like they would a book. The bicycles would come from abandoned bikes found around the city or donations of old or new bikes. Allowing children to borrow a bicycle for no charge could be very beneficial to lower income neighborhoods.
- Incorporating a bicycle class during local schools physical education time would be a beneficial way for children to learn about the benefits of bicycling and safety tips.
- Schools should install bicycle racks to encourage students to bike to school.
- Encourage schools to form an afterschool cycling clubs as a new sport that children can participate in, especially at the schools that have close access to the trails.
- Host chalk trail events with the local schools to give students a fun bicycling experience.

Trail Beautification:

- While riding, trails have the opportunity to expose users to art and culture. Incorporating local sculptures and murals along a trail can make the experience even more aesthetically pleasing. Art work can teach people about Little Rock's history and can another unique feature that draws visitors in.
- Allow local artists to paint sections of the paved trail as another form of public art.
- Place bicycle racks near trail heads so that riders may leave their bike while they eat, shop, or work in the city. These bike racks can be colorfully painted or creatively shaped to attract more interest.
- Create extreme paths for brave bikers to heighten their experience and draw in thrill seeking cyclists from out of town.
- Paint sections of the trail with luminescent paint to create a new and exciting experience at night.

Safety:

- Installing frequent light posts help make trails a safer evening or early morning activity. Underpasses especially need to be lighted.
- Community trail watch coalitions should be created to increase trail safety.
- Create neighborhood watch groups so that residents can take turns watching their sections of the trail and can alert the police about any suspicious behavior.
- Place speed table at dangerous intersections to encourage people to watch out for cyclists and pedestrians. The speed tables can be brightly painted to add extra awareness.
- Have the police department conduct frequent patrols near trails.

Trail Attractions:

- Host fun community events to encourage people to use the trails more often. For instance, bicycle trail races or trail bird watching events.
- Incentivize restaurants and stores near trail heads to encourage bicyclists and pedestrians to stop in their store. They could offer special discounts to people who rode to their store.
- Encourage bicycle food trucks to locate near busy parts of the trail to create a complete experience for users. Add lots of seating areas at the designated areas.
- Add scenic multi-use areas to bring people to the trails for more than just biking and walking. These could be dog parks, picnic pavilions, or even outdoor wedding areas.
- Host holiday themed events such as decorating the trail with Christmas lights, having an autumn trail festival, or making the trail haunted for Halloween.
- Create fun bicycle tours for tourists to go on such as a ghost tour, historical tour, or a nature tour.

4.3 Trail Funding

This section shows different ways that funding may be obtained for building new trails and helping Little Rock have a more connected trails system. There may be other funding sources available for trails that are not on this list.

Recreational Trails Program (RTP): This grant, from the Department of Transportation's Federal Highway Administration, is used specifically for recreational trails or their facilities. This grant may provide up to 80 percent of the funds, but requires at least 20 percent matching.

http://www.fhwa.dot.gov/environment/recreational_trails/

Transportation Alternative Program (TAP): This grant, from the Department of Transportation's Federal Highway Administration, helps fund facilities for alternative transportation, including trails. This program may provide up to 80 percent of the cost, with a minimum of 20 percent matching funds.

<http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm>

Trails for Life: This grant can award \$35,000 for a ¼ mile fitness loop or up to \$70,000 for a trail that improves the health and fitness in the city.

<http://www.americantrails.org/resources/funding/trailsforlifeAR.html>

Blue and You Grant: This grant is offered by blue cross and blue shield to help make Arkansas healthier. The grant can range anywhere from \$5,000 to \$150,000, or a mini-grant of \$1,000. The grant could be used for trails or fitness stations.

http://www.blueandyoufoundationarkansas.org/grant_guidelines/

Transportation Investment Generating Economic Recovery Grant (TIGER): This grant can help fund large projects for building this trail system. This grant can provide millions of dollars, but it is used to fund all types of transportation projects, not just trails. This grant may be good for building a new pedestrian crossing bridge.

<https://www.transportation.gov/tiger>

People for Bikes Community Grants: This grant helps local governments fund the creation of new bicycling paths and trails.

<http://www.peopleforbikes.org/pages/community-grants>

International Mountain Bicycling Association Grant Program (IMBA): This grant helps local communities be more mountain biking friendly and helps out with trail projects.

<https://www.imba.com/resources-grants/imba-grants-program>

Congestion Mitigation and Air Quality Improvement Program (CMAQ): This grant is used to help communities reduce the amount of pollutants in the air. The grant usually covers 80 percent of the cost with a 20 percent matching cost for the state. This grant may be used on bicycle and pedestrian projects.

http://bikeleague.org/sites/default/files/lab_cmaq.pdf

Rivers, Trails and Conservation Assistance Program: This program, which is a part of the National Parks Service, does not offer any money, but it helps with recreational planning and designing.

Contact: Guy Headland

guy_headland@nps.gov

(479) 443-1996

112 W Center St., Suite 700

Fayetteville, AR 72701

Fax (402) 661-1571

National Trails Fund (NTF): This grant is part of American Hiking Society and it can give anywhere from \$500 to \$5,000 in funding to help improve trails or safety on trails.

<http://www.americanhiking.org/national-trails-fund/>

Section 5: Contributors

From May 2016 to August 2016, many hours of time have been spent and many people have worked to help create this plan.

Elizabeth Treat – Author

John Landosky – Author and Editor

Michael Sprague – New Trail Ideas

Cody Oden – New Trail Ideas

Mark Webre – Trail Standards

Leland Couch – Trail Standards

Grant Morris – Trail Standards

Amanda Jones – Grant Sources



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