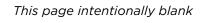


Ozarks Transportation Organization
Bicycle & Pedestrian Trail Investment Study







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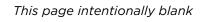
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# **CHAPTER 1: STUDY OVERVIEW**

## Introduction

Trails and greenways are vital transportation, recreation, and quality-of-life assets to Springfield and surrounding communities. Area residents, employees, and visitors enjoy more than 75 miles of linear trails, and that figure continues to grow each year. Recent additions like the Trail of Honor section of the James River Greenway and the Wilson's Creek Greenway section north of Highway 60 demonstrate local and regional agencies' and non-profits' commitment to expanding access to trails and greenways. These trails add to the character, vibrancy, and quality of life that make this region a great place to live.

In the coming years, the trail network will continue to grow. Local and regional agencies have planned more than 190 miles of future trails and greenways, as documented in the Ozarks Transportation Organization's Long Range Transportation Plan. Funding these trail projects will require a combination of federal, state, and local funding sources, as well as contributions from local non-profits, foundations, and other community partners.

One significant source of funding for trail development is the Transportation Alternatives Program (TAP). This federal program funds bicycling, walking, trail development, and other important projects and is administered for the region by the Ozarks Transportation Organization (OTO). Because of the limited funding available through the TAP, roughly \$400,000 each year, the OTO initiated this study in January 2017 to to provide TAP Committee with additional information on the

cost and scope of trail expansion, and inform the strategic allocation of TAP Funds between regional trail and local projects.

The Trail Investment Study is a multi-purpose report examining more than 75 miles of planned trails across the OTO service area and providing general phasing for trail development based on regional priorities as expressed by area residents and members of the OTO Bicycle and Pedestrian Advisory Committee (BPAC), which served as the steering committee for the Trail Investment Study. The study process and resulting document are outlined in the following paragraphs.



Fassnight Creek Greenway (image courtesy of Ozark Greenways).

Residents weigh in with their ideas for trail network expansion in the coming years.

# **Study Outline**

The Trail Investment Study commenced in January 2017 and was completed in October 2017. The study process consisted of six key elements:

- Public Engagement
- Property and Environmental Conditions Inventory
- Development of Final Trail Alignments
- Development of Cost Estimates
- Trail Corridor Prioritization
- Planning and Environmental Linkages (PEL)
   Documentation

Public engagement, final trail alignments, cost estimates, and PEL documentation are described in subsequent chapters. The prioritization process and results are presented in a separate companion document to this study to distinguish this element of the study as living document that will change and be updated over time. The property and environmental conditions inventory and supplemental PEL exhibits are included in the study appendix.

## **Public Engagement**

Public engagement represents a critical component of this Trail Investment Study, and the input from area residents was instrumental to alignment development and corridor prioritization. The multifaceted public engagement process included both general and targeted engagement strategies to educate area residents and stakeholders about regional trail development and generate meaningful input to guide the study process and outcomes. The second chapter of the Trail Investment Study summarizes engagement methods and results.

# **Property and Environmental Conditions Inventory**

The study began with an inventory of property ownership and existing easements along each of the planned priority trail alignments. Concurrently, data was also collected to document environmental conditions along these alignments as well. This included hydrological data such as floodplains and wetlands, archeological data, brownfield sites, hazardous substance investigations, and regulated petroleum and hazardous substance tank facilities. The results of this data

collection and inventory is shown in a series of maps included in the appendix.

## **Development of Final Trail Alignments**

Chapter Three of the study examines the 75 miles of planned priority trails and presents final trail alignments to support future project development efforts. These final trail alignments incorporate input from the public, an understanding of known property and environmental information, and other important information. The study team examined multiple alignment alternatives for each trail segment and compared them using multiple factors, including network connectivity, user experience, logical segment development, connections to cultural and natural resources, environmental conditions, and planning-level, per-mile cost estimates.

The process of developing final trail alignments also included the development of typical trail sections and the identification of locations for future trailheads and trail access points. This information is included in the document appendix.



The online mapping tool offered a unique, interactive experience for residents to provide their input.

## **Development of Cost Estimates**

Accurate cost estimates can help local agencies and project sponsors incorporate trail projects into multi-year capital improvement plans, phase trail development over time based on available funding sources, and even create strong funding applications by demonstrating their preparedness and understanding of the project. The study team prepared detailed cost estimates for each trail alignment. These cost estimates are Chapter Four as a resource for OTO and local agencies for project planning and development purposes.

## **Sample Trail Corridor Prioritization**

One of the most critical elements of this study is to outline a process whereby trail corridors can be prioritized based on principles identified and ranked through the public engagement process. It is imperative that the OTO and local agencies have a clear understanding of which projects can provide the greatest benefit to the regional trail network and the residents and visitors who enjoy this valuable asset.

The sample prioritization process divides the corridors into high-priority, short-term corridors for consideration within the next five years, and lower priority, long-term corridors

**Table 1.1: Ten Highest-Ranked Corridors** 

Trail Corridor	Total Score	Ranking
Maximum Possible Score	37	N/A
Trail of Tears	27	1
North Jordan	24	2
Ward Branch	24	2
Chadwick South	22	4
Lower Jordan	22	4
Wilson's Creek-Battlefield	21	6
Route 66	20	7
South Jordan	20	7
Wilson's Creek	20	7
Republic-Battlefield	19	10

that offer less value and/or face significant project development constraints. Each of the ten high-priority, short-term corridors were then divided into smaller segments that take into account available federal funding sources. These segments represent individual projects that, when completed, will comprise full trail corridors.

The Sample Prioritization & Phasing section of the Trail Investment Study is provided as a separate document to distinguish the unique nature of trail prioritization as fulid, evolving process intended to change over time. While most other sections of the plan represent a snapshot of conditions and opportunities fixed in time, the sample prioritization document will serve as a living document that changes to address demographic and environmental shifts and to capture opportunities as they arise,

# Planning and Environmental Linkages Documentation

Developing a strong understanding of environmental factors related to transportation projects during early planning stages can streamline coordination, analysis, and evaluation efforts during project development. The Planning and Environmental Linkages (PEL) documentation provides an account of environmental conditions related to the trail corridors examined in this study in accordance with the Federal Highway Administration's (FHWA) PEL guidance. The PEL documents provided in Chapter Five are intended for use in support of future National Environmental Policy Act (NEPA) documentation for phased implementation of the identified trail projects.



Residents weigh in with their ideas for trail network expansion in the coming years.

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# **CHAPTER 2: PUBLIC ENGAGEMENT**

## Introduction

Public engagement represents a critical component of this Trail Investment Study, and the input from area residents was instrumental to alignment development and corridor prioritization. The multifaceted public engagement process included both general and targeted engagement strategies to educate area residents and stakeholders about regional trail development and generate meaningful input to guide the study process and outcomes. This chapter summarizes the Trail Investment Study engagement methods and results.

# **Online Engagement**

Online engagement represents a critical component of the overall public engagement strategy. As more and more people turn to online sources for information, news, social interaction, and other common activities, establishing an online presence for the Trail Investment Study provided a medium through which the OTO could interact with a more diverse and representative cross section of the community. In addition to the project website and online mapping tool, the OTO also used its social media accounts to publicize engagement opportunities and encourage participation from area residents.

## **Project Website**

The project website served as a repository for study information, public meeting notices and summaries, project updates, and event information. As the plan documents began to take shape, the website was used to post documents for the general public to view and provide comment on. During the course of the planning process, there were 4,410 individual page views by 510 different visitors. The average visitor spent two minutes and 48 seconds interacting with the project website. April and June saw the most website traffic, likely corresponding to the outreach and social media efforts to drive traffic to the website and to encourage attendance at the open house events.

CONTACT



Project website

## **Online Mapping Tool**

An interactive online mapping tool provided an opportunity to connect with a wider audience not traditionally engaged in planning processes through traditional face-to-face events like public meetings and open houses. The online mapping tool displayed the initial planned priority corridors based on the regional trail planning to date and allowed users to post comments on these planned priority trails. The online mapping tool also allowed users to identify destinations for trail users, challenging intersections and other barriers that limit bicycle and pedestrian activity, other areas or corridors in which they would like to see trails developed, and similar issues and opportunities along each planned priority trail corridor.

During the course of the study, 47 individual users provided 171 votes and comments through the online mapping tool. One of the primary functions of the online mapping tool was to collect votes of support for planned priority trail alignments. In addition, comments from online map users provided additional context and insight with regard to desired trail improvements.

#### **PLANNED PRIORITY TRAIL VOTES**

Each trail alignment received the following number of votes as shown below:

- 7 Chadwick Flyer Rail Trail (North)
- 6 South Creek Greenway
- 5 I-44 Trail
- 4 Route 66 Trail, West Republic Road Trail, Trail of Tears
   Greene Park to Ewing Sports Complex, Wilson's Creek
   Greenway, Chadwick Flyer Rail Trail (South), Etheridge
   Trail, Shuyler Creek Greenway Extension
- 3 Fort Scott Line Rail Trail, Wilson's Creek Blvd Trail, Fassnight Creek Greenway (West), West Wilson's Creek Greenway (North), Trail of Tears - South Creek Greenway Connector, Lower Jordan Creek Greenway, James River Greenway
- 2 West Wilson's Creek Greenway (South), Ward Branch Greenway (Middle)
- 1 Wilson's Creek National Battlefield Trail Connector, Westgate - Fort Scott Line Rail Trail Connector, Ward

View Legend Comment Welcome to the Ozarks Transportation Organization's Trail Investment Study interactive comment map! Select an option below to draw on the map or click on an existing trail (solid green line) or planned priority trail (dotted brown line) Springfield on the map to learn more about it and to provide feedback: Suggest New Trail Route Suggest Key Area Dak Grove Heights A major component of the study is learning more about how area residents currently travel on bike and foot, which trails they use, and which future trails are they likely to use once constructed. We are seeking your assistance in identifying challenges and opportunities related to the existing and planned priority trails network. Please use this map to share your ideas and concerns. Leaflet | Alta Planning + Design | Privacy Policy

Online mapping tool

Branch Greenway (North), Trail of Tears - Battlefield, South Jordan Creek Greenway, North Jordan Creek Greenway, Ward Branch Greenway (South), Division Street -I-44 Trail Connector

 O - Le Compte Road Trail, River Bluff Blvd - Farmer Branch Trail Connector, Division Street Trail, Ward Branch - James River Greenway Connector, Trail of Tears -Golden Avenue, North Jordan Creek Greenway - Jordan Valley Connector, Fassnight Creek Greenway (East), Farmer Branch Greenway, Division Street - Cooper Park Connector

#### **USER COMMENTS ON PLANNED PRIORITY TRAILS**

Comments from the public regarding the planned priority trails displayed on the online mapping tool highlight the value residents place on trails as a recreation and transportation amenity, and reflect residents' desire for increased trail coverage and connectivity. The comments below are grouped by planned priority trail alignments as shown on the map:

#### • Chadwick Flyer Rail Trail (North)

- "The old rail line is no longer used and would be a great addition to Galloway Trail."
- "Making use of the old spur line to CU is a excellent way
  to expand the trial. BNSF has no use for this if line and
  it would be free for the asking. I enjoy the woods on the
  existing line and would not like to see it changed just add
  from Portland School downtown."

#### Chadwick Flyer Rail Trail (South)

- "It would be great to have a trail close to home."
- "This should be a top priority if too is really serious about developing a connected trail plan. This opens up Ozark for bikers all over the region."
- "This trail linkage will be an incredible asset to the community! It'll tie The OC to Lake Springfield. Hope this happens very soon!"

#### • Division Street - Cooper Park Connector

 "Fantastic idea, know many people that would use this trail and every trail added relieves the other trails so everyone can find peace and space while utilizing."

#### Fassnight Creek Greenway (West)

• "Connecting the existing Fassnight Greenway to Phelps Grove Park and then extending it past where it currently ends at Parkview HS would be really beneficial to the central Springfield community, which has a huge student population in need of good quality trails nearby!"

#### James River

• "Another key piece to open up access to the region to bicyclers."

#### Shuyler Creek Greenway Extension

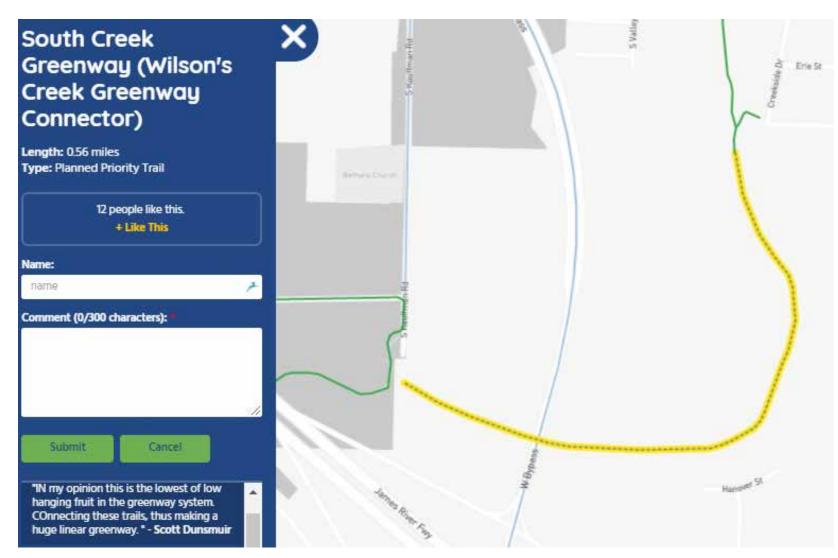
- "Would love to see this trail extended. I walk it on a frequent basis and I want to see how far I can go."
- "I would love to see this trail created! It's very close to my home and my kids I usually have to drive to trails.
   It would be really wonderful to have one in walking distance."

#### South Creek Greenway

- "In my opinion this is the lowest of low hanging fruit in the greenway system. Connecting these trails, thus making a huge linear greenway."
- "Being able to take the South Creek Greenway to the Wilson's Creek Greenway without getting on Battlefield would be GREAT."
- "The South Creek Trail is a great trail that this small extension would enhance greatly."

#### • Route 66/Strafford Trail

 "Our family would use the proposed Strafford trail frequently. We load up bikes and ride the sequoia trail several times a month."



Comments provided by online map visitors helped to determine corridor and project priorities.

- "This would be a great trail! The Strafford area is already very well known to the runners and cyclists around the area. This trail would greatly benefit both groups and would benefit the town of Strafford. This route reminds me of the very successful Katy Trail from Columbia, MO to Rocheport Mo."
- "Living in Strafford for 8 years, I have spent most of my time running on farm roads to get any amount of substantial distance. Many of the roads are unsafe, with low visibility. This community could benefit greatly from this trail. This is an active community."

#### • Trail of Tears - Greene Park to Ewing Sports Complex

• "This is very much needed"

#### • West Wilson's Creek Greenway (North)

- "Not to be greedy but this would give me almost 100% Greenway commute to work (I currently either ride or run to work exclusively)"
- "An alternate is FR 140 and Long Drive to golf path under I-44"

#### • West Wilson's Creek Greenway (South)

- "Another low hanging fruit. It wold connect to another section of pre-existing trail. A pre-existing trail that is almost completely unused & wasted. With the growth of subdivisions in this area it would go farther than any sidewalk expansion (which honestly will never happen in the county)."
- "Existing trail between here and Hazeltine Rd is owned by property owners association"

#### • Ward Branch Greenway (Middle)

- "Easement, funds and contractor are in place for construction of trail on east side of electric substation and use of substation access drive"
- "My family and neighbors use this trail frequently and would love for this project to be prioritized!"

#### Ward Branch Greenway (North)

 "I'd like to see if this could connect with the existing Ward Branch trail that starts at Bradford Pkwy. I think this is an underutilized trail, better signage at the trailhead would be helpful and possibly a crosswalk on Bradford. Thanks..."  "Off-street or on-street connection is needed between Ward Branch Trail and Galloway Road Trail"

#### Ward Branch Greenway (South)

• "I do not think the HOA's for Stone Meadow will ever approve this trail running through the subdivision. I would consider running the trail down Weaver Rd and turn south at the proposed site of the Kansas Expy extension. The city already owns the property and there will be less resistance."

#### · Wilson's Creek Greenway

• "Low hanging fruit. Thanks to 4-wheelers the trail is there just needs improved & then south creek is connected almost in a continuous loop of 10+ miles"

This feedback was used to inform trail corridor prioritization and ultimately the phasing of regional trail network growth for years to come.

#### OTHER ONLINE MAPPING TOOL COMMENTS

In addition to priority trail alignment-specific comments, online mapping tool users also provided comments on existing trails, as well as general comments about regional and area-specific trail development. The following bullet points summarize these other comments:

#### Galloway Creek Greenway

• "Our family, friends, and neighbors love biking on the Galloway Creek Greenway Trail. We think it would be wonderful if access to the trail could be improved by Avenue and the Trail. Many thanks for your consider-

#### • Suggested New Trails and General Comments

- "We need a connection from Nature Center to the Greenway Trails. Please add this trail."
- "Connecting Nature Center Way to The Galloway Creek Greenway. TrailSpring has proposed 100k+ dollars to this project. I have been working towards gaining permissions for this project. I would love any assistance."
- "Connect the southside to the main south creek trail by expanding National Ave sidewalk into trail. This would allow bikers/runners to connect to the longest trail in the area."
- "Connect the end of the south extension to the South Creek Trail to Hwy M so you can continue out to Wilson Creek Battlefield"
- "Connecting the South Creek Greenway with the Galloway Creek Greenway."
- "Connect Martin Park with Miller Park, schools, etc."
- "Bike boulevard on Hampton, trail south of 60."

creating a sidewalk on E. Galloway Street between Luster ation! :)"

## • "I use the Galloway Creek Trail almost every day. We could use more like this." View Legend **Suggested Trail** W Cynthia S W Edward St. WARLSE "Mark bike lanes and extend the the WWick St. proposed trail, can intersect with McBride Schools trails and Wanda Grey - John Liehr\* 1 person likes this. + Like This W Darby St. Comment (0/300 characters): W Elm St W Highpoint St

New trails suggested by visitors to the project website, like this suggested trail connecting the City of Battlefield to the Ward Branch Greenway, will help the Ozarks Transportation Organization and local communities plan for future trail connections.

• "We need biking trails in Republic mo. If we cold connect the existing trails in Battlefield to Republic that would be awesome. But at the very least provide biking trails in Republic Missouri since we are part of green county there's nowhere really safe for kids to ride bikes great walking trails but no patrols here thank you"

# **Open House Events**

During the course of the study, the OTO held four open house events to gain input from community residents about planned trail prioritization and development. Two initial open house meetings were held in April, and two were held in June. The meetings were held in diverse locations to reach a wide audience across the large study area.

## **Initial Open House Events**

Two initial open house events were held on April 19th and April 20th at Library Station in Springfield and the Ozark Community Center in Ozark, respectively. Six attendees signed in at the April 19th meeting, and 13 attendees signed in at the April 20th meeting.

The objective of these first workshops was to gather input on alignments in order to identify preferred alignments to be screened and finalized for estimating. Information shared during these meetings included:

- Goals and Objectives
- Process
- Overall plan network map including key destinations and community assets
- Maps of each corridor and segment
- Property ownership

## **Project Information Board Input**

A number of project information boards allowed open house attendees to vote for project goals, design elements, and other trail features that were most important to them. The votes were tallied for each board and are displayed on the following page. A score of one indicates the highest number of votes received.

#### STUDY GOALS

Open house attendees stressed the importance of interconnectivity, not just between trails and greenways, but between different cities and communities throughout the region. They also highlighted the importance of trails and



## TRAIL INVESTMENT STUDY

## WHAT IS THE TRAIL INVESTMENT STUDY?

The Ozarks Transportation Organization (the OTO), the Springfield metro area's regional transportation planning organization, is embarking on a study to refine and prioritize more than 70 miles of planned trail alignments recommended in previous plans and studies. When complete, the Trail Investment Study will serve as the region's blueprint for trail and greenway investments for the coming years. Critical steps in the study process include property and easement inventory, refinement of conceptual alignments, development of cost estimates for trail design and construction, prioritization of planned trail segments, and documentation of environmental conditions along each trail corridor.

As part of the study process, the OTO wants to hear from you! There are numerous ways you can get involved in the study, from attending open house events to adding ideas to the online interactive map to reviewing draft documents as they are uploaded the study website -www.otorrailstudy.org. Your input is important, so we encourage you to lear more about this study and provide your feedback to help build a safe, accessible, and connected trail network for the Springfield region.



## PROJECT TIMELINE





Stay in the loop with study updates! Visit: www.ototrailety.de

CCC SE CJWA

# **CONNECTIONS TO TRAILS**

PEDESTRIAN-FRIEND

## TRAIL INVESTMENT STUDY

WAYFINDING

BICYCLE-FRIENDLY



BICYCLE PARKING

Stay in the loop with study updates!





TRAFFIC CALMING



















SIDEWALKS

TRAILHEADS

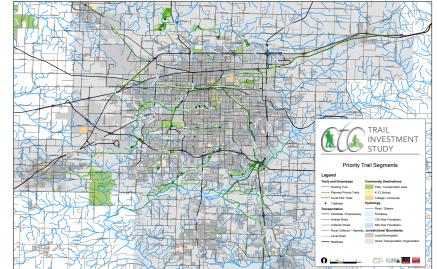












# STUDY GOALS

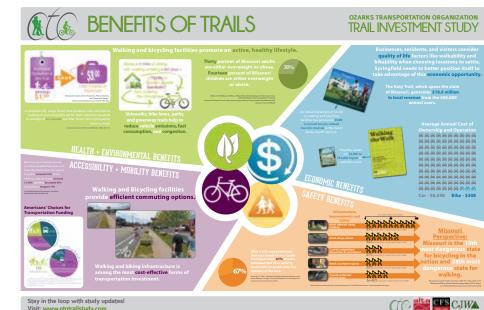
TRAIL INVESTMENT STUDY

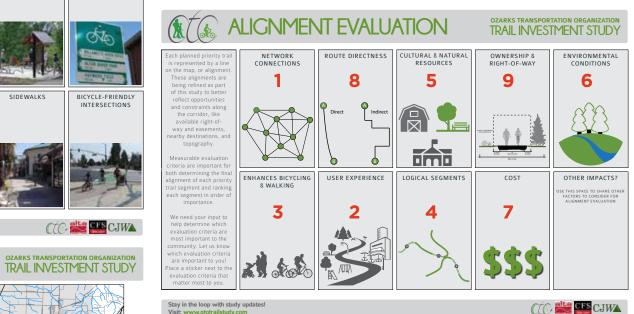
THE TRAIL INVESTMENT STUDY WILL CREATE A PATH FOR COORDINATED TRAIL DEVELOPMENT FOR YEARS TO COME. THE STUDY AIMS TO ACHIEVE THE FOLLOWING GOALS RELATED TO TRAIL PLANNING, DESIGN, FUNDING, AND PRIORITIZATION.

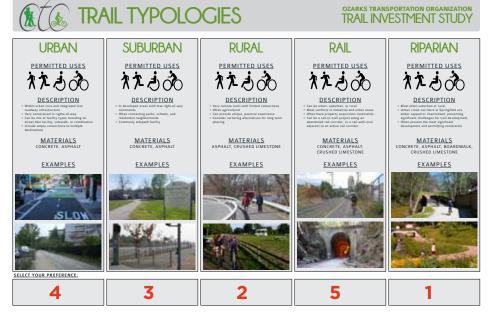
#### PLACE A STICKER NEXT TO THE GOALS THAT ARE MOST IMPORTANT TO YOU











Information boards for the first set of open house events. Three of the boards - Study Goals, Alignment Evaluation, and Trail Typologies - include rankings based on number of votes by attendees at both April open house events. Items scored "1" received the highest number of votes.

## Ozarks Transportation Organization

greenways as a catalyst for economic development and healthier communities.

#### **TRAIL TYPOLOGIES**

Attendees ranked the different representative trail types common to the Springfield region and similar communities across the country. The preference for trails in riparian and rural settings shows a strong desire to increase access to natural resources and provide opportunities for recreation and active travel away from developed areas and traffic.

#### **ALIGNMENT EVALUATION**

Attendees stressed the importance of network connectivity as the most important evaluation criterion for alignment development. The second-most important criterion was user experience, which refers to a trail's ability to connect people

to the surrounding environment, history, and character of the place in which it is located. Least important evaluation criterion were route cost, route directness, and property ownership/right-of-way availability.

#### **General Comments and Feedback**

While the general project information boards and maps displayed at each meeting were the same, each meeting generated input unique to the location in which it was held and the audience in attendance. The following list of comments summarizes the input gathered at these two meetings:

- Would like to see a connection between Strafford and Springfield for biking / pedestrians.
- Would like to see property map uploaded to OTO website.

- Strafford needs a safe travel route for pedestrians.
- Ozark is putting together a trail planning group of their own (Ozark Trace) to help with trail planning.
- The Ozark School district is planning to install a trail around their four elementary schools that they hope will eventually be connected to a trail network.
- Many bicyclists have to travel east from Ozark and then back around to Springfield because there's not a good route currently to make that trip without deviating to the East.
- One visitor indicated that she saw a trail going through her property and was not inclined to allow it since it was a farm and she had many concerns about the ramifications of allowing public access so near to her property. She



Members of the project team review environmental maps at the April 19th open house event in Springfield.



OTO staff and project team members review priority trail projects at the April 20th open house event in Ozark.

## Trail Investment Study (

- was looking at a map (all I saw was a screenshot) from the OTO website that showed the new trail alignment, but it was not one of our priority trails. I mentioned that she could leave a comment card or comment online, so she may be planning to do so. I couldn't tell from her phone where the trail was based on the screenshot.
- In the northwest zone, alleys could be a great opportunity for urban greenways in this area since the alleys are infrequently used. They provide connectivity to this creative district.
- It is critical for trails to allow connectivity to parks, from the priority trails. Opportunities should be defined.
- The City of Strafford connection to Springfield is important for transportation and allow for commuting, as well as for recreation.

- People need to be able to get to priority trails without putting bikes on their cars and driving to the trails.
- Use quiet street connections to access trails, and between parks and trails.
- Strafford is a destination for bike rides.
- Plan for connections in Strafford, as well as loops to highlight the City and provide connectivity to destinations.
- Make sure historic areas and sites are identified along trails and information provided on sites for education and awareness:
- Route 66
- Trail of Tears

- Danforth House (Built in 1833) Walnut Forest which is a key historic area.
- Republic The BNSF connection from the Frisco High Line from Chestnut to Republic would be a high priority connection. This would take precedence over the currently identified priority connection we are looking at. Another option could be a Route MM/Brookline connection.
- Use sub regulations in cities to secure trail ROW.
- A key to alignment development is connection to schools



OTO staff and attendees at the June 21st open house event discuss regional priority trail alignments.



Attendees at the June 21st open house event in Springfield review revised alignments for regional planned priority trails projects.

## Ozarks Transportation Organization

## **Second Open House Events**

On June 21st and June 22nd, open house events were held at Library Station in Springfield and the Republic Library in Republic. These events presented the refined priority trail alignments and generated input regarding refined alignments, prioritization criteria, and other key study elements. Eighteen attendees signed in at the June 21st meeting, and 16 attendees signed in at the June 22nd meeting.

The objective of the second set of workshops was to show preferred alignments that incorporated input from the April open houses and online comments, and to solicit comments on corridor prioritization. Information shared with open house attendees included:

- Goals and Objectives
- Process
- Refined network map that includes comments from the first set of open houses
- Prioritization criteria
- Finalized map of network
- Cost breakdowns for network and individual corridors

## **Project Information Board Input**

Of the six project information boards present at the second public meeting, all of which are shown on the following page, only one board was intended to generate input from meeting attendees. This board listed nine different criteria or themes that were used in the trail corridor prioritization

process. Attendees were provided three stickers to vote for the themes they felt were most important. Attendees were allowed to place all three stickers on a single theme, or spread out their votes for different themes. The results of the voting process highlighted the importance community residents place on safe connections, trail network gap closure, regional coordination and connectivity, and access to local destinations via the trail network.

#### **General Comments and Feedback**

The following comments provide a summary of the input received during the second set of open house events:

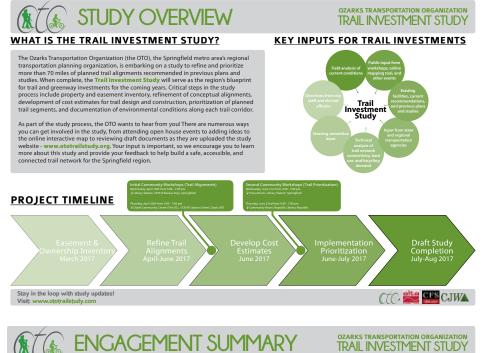
- "Please more trails to Nixa!"
- "Would like to connect new trail on 174 to Wilson's Creek Corridor South"



OTO staff and attendees at the June 21st open house event discuss regional priority trail alignments.



Attendees at the June 21st open house event in Springfield review revised alignments for regional planned priority trails projects.



A SUMMARY OF INPUT FROM PREVIOUS PUBLIC ENGAGEMENT





CORRIDOR PRIORITY CRITERIA OZARKS TRANSPORTATION ORGANIZATION TRAIL INVESTMENT STUDY

DENEFITS OF TRAILS

CARRYS TRANSPORTATION ORGANIZATION TRAIL INVESTMENT STUDY

Walking and bicycling facilities promote an active, healthy lifestyle, which is being and the study updated visiting control and the study updated visiting and bicycling facilities promote an active, healthy lifestyle, which is being and the study updated visiting control and the study updated visiting control and the study updated visiting and bicycling facilities promote an active, healthy lifestyle, which is being and the study updated visiting control and the study updated visiting and bicycling facilities promote an active, healthy lifestyle, which is being and the study updated visiting and bicycling facilities promote an active, healthy lifestyle, which is being and the study updated visiting and bicycling facilities promote an active, healthy lifestyle, which is being and the study updated visiting and bicycling facilities provide (efficient commuting options).

\*\*Bulling\*\*

\*\*Amendment\*\*

\*\*Amen

Stay in the loop with study updates!

Information boards for the second set of open house events held in June. Only one of the seven boards - Corridor Priority Criteria - generated feedback from meeting attendees. The number of votes each priority criteria received is included in red.

- "Key interest is making Park Central downtown district the hub of an interconnected trail system."
- "I'm especially interested in downtown trail connectors!"
- "It would be wonderful to have trail connections in Nixa and Christian County. Thank you!"
- "Reroute the Shuyler Creek Greenway Extension and Etheridge Trail to provide alignment that does not bisect attendees' property"

# **Stakeholder Open House Meeting**

On April 20th, the project team held an open house for area stakeholders, such as property owners, homeowner associations, neighborhood organizations, and other key groups impacted by or interested in trail development. Only one representative attended on behalf of a homeowner association to discuss development of the Ward Branch Greenway (South) through the Stone Meadow subdivision (300+homes). The project team discussed trail development challenges through the subdivision common ground and explored alternative alignments. The following were comments identified by the neighborhood:

- Impact on property values
- Private property impacts
- Concern with the gates communities on each side of the originally defined corridor
- Farm Road 178 (Weaver Road) could be an alternate option.
- Parcel 1816 shown on our maps has a cave located on the property.
- Parcel 1813 has trails that are maintained by the trustees.
- A sidewalk project along Weaver including a Trailhead was developed by the neighborhood in coordination with Greene County.

# **BPAC Advisory Group**

The OTO Bicycle and Pedestrian Advisory Committee (BPAC) served as the advisory group for the Trail Investment Study, providing feedback and direction at critical steps throughout the planning process. The five meetings held with the BPAC Advisory Group developed a shared

understanding of study deliverables and facilitated the development of each subsequent deliverable. The meetings also served as opportunities to refine and distribute messaging and outreach materials for public distribution via BPAC and TAP communication channels. Each of these seven meetings are summarized below, and meeting notes from each meeting are included in the appendix of this document.

## Meeting 1 - March 1, 2017

The initial project advisory group meeting with the BPAC served as a kick-off meeting to discuss general workflow, project schedule, and immediate data needs. The project team is beginning to investigate property ownership, environmental conditions, and other critical factors integral to the development of a working knowledge of each trail corridor.

## Meeting 2 - April 5, 2017

The second BPAC advisory group meeting consisted of an overview of the study vision and goals, an update on the property ownership inventory, a discussion of high-level prioiritization of trail corridors, an overview of public engagement efforts and upcoming meetings, a discussion about alignment evaluation criteria, and a look at the next steps in the process.

## Meeting 3 - May 3, 2017

The third BPAC meeting consisted of an update on the status of the alignment evaluation task and a summary of input received at the initial open house meetings in Springfield and Ozark in mid-April.

## Meeting 4 - June 7, 2017

The third BPAC meeting began with a general project updated, followed by detailed discussions of alignment evaluation and the selection of a preferred alignment. BPAC members were provided with the draft alignments document for review during a 2-week period following the meeting. The meeting continued with a discussion of cost estimates and review of the cost factors that comprise each estimate. The project team then provided an update on the online engagement activities and the upcoming public workshops. The meeting concluded with a look at the current tasks and next steps in the study process.

## Meeting 5 - July 26, 2017

The fifth BPAC advisory group meeting began with a summary of work to-date and transitioned into a review of the updated alignments and cost estimates based on feedback provided by the BPAC and community members at the public meetings. Some final revisions to the preferred alignments were discussed, with the intention of incorporating these revisions into the final study document. After a brief summary of the public meetings in June, the group discussed the draft corridor prioritization results, with a focus on the need for clear and understandable criteria, and the balancing scores between long and short corridors. The BPAC was given additional time to review and provide comments on the draft prioritization process and results. The meeting concluded with a brief overview of the status of the PEL documentation and a look at the final steps in the planning process.

## Meeting 6 - September 6, 2017

The sixth meeting began with an overview of the PEL documentation. The next topic was the updated corridor prioritizastion methodology and results. All comments from the BPAC were addressed in the updated results, and the process was revised to allow the OTO and its partners flexibility to update the results as needs, priorities, and on-the-ground conditions change.

## Meeting 7 - October 11, 2017

The seventh BPAC meeting during the course of the study, while not an official advisory committee meeting, did include discussion of the study. The BPAC members discussed the cost estimates and final corridors selected as short-term, high-priority trail corridors. Comments from this meeting were provided to the project team for consideration.

# **CHAPTER 3: ALIGNMENT EVALUATION & SELECTION**

## Introduction

Refined trail alignments are an essential element of the trail development process as it progresses from conceptual network planning to project selection and preliminary design. As part of the Trail Investment Study, the Ozarks Transportation Organization examined key corridor characteristics, developed alternative and interim alignments where feasible, and identified a preferred final alignment for each of the individual priority trail corridor segments. This memorandum describes the process for the development and scoring of alignment alternatives and ultimate selection of preferred, refined trail alignments.

# Alignment & Alternatives Development

Initial priority trail alignments were the result of area-wide trail and transportation planning efforts and reflected a high-level, conceptual arrangement of trail corridors. Through an assessment of on-the-ground conditions, property and right-of-way information, planned infrastructure improvements, and social, cultural, and environmental characteristics, all trail alignments have been refined to a level for which more detailed cost estimates can be developed and initial design work can be undertaken.

In some cases, corridor opportunities and constraints identified during this assessment have led to the development of alternative alignments. These alternative alignments provide a similar link or segment in the trail network as the original priority trail alignment. In nearly all cases, the alternative alignments terminate at the same locations as the original priority trail alignment. The routing of these alternative alignments, however, reflects a greater sensitivity to local conditions regarding adjacent land uses, rights-of-way and property ownership, topography, future infrastructure and land use development, environmental conditions, etc.





The project team spent three days in the field to document conditions along each planned priority trail alignment and develop alignment alternatives for considerations. Additional site visits were made to gather more information throughout the course of the study.

# **Evaluation Criteria and Alignment Scoring**

For priority trail corridors for which alternative alignments have been developed, it is necessary to select a preferred alignment based on objective, data-driven evaluation criteria. Using evaluation criteria developed at the onset of the Trail Investment Study and verified by the BPAC and open house attendees, the OTO scored each alignment using the evaluation criteria and scoring methodology described in Table 3.1 below.

On the following pages, alternatives for each planned priority trail segment are described, evaluated, and mapped, and the preferred alignment for each segment is identified. The index map and table on the following page identify the section page number for each trail segment.

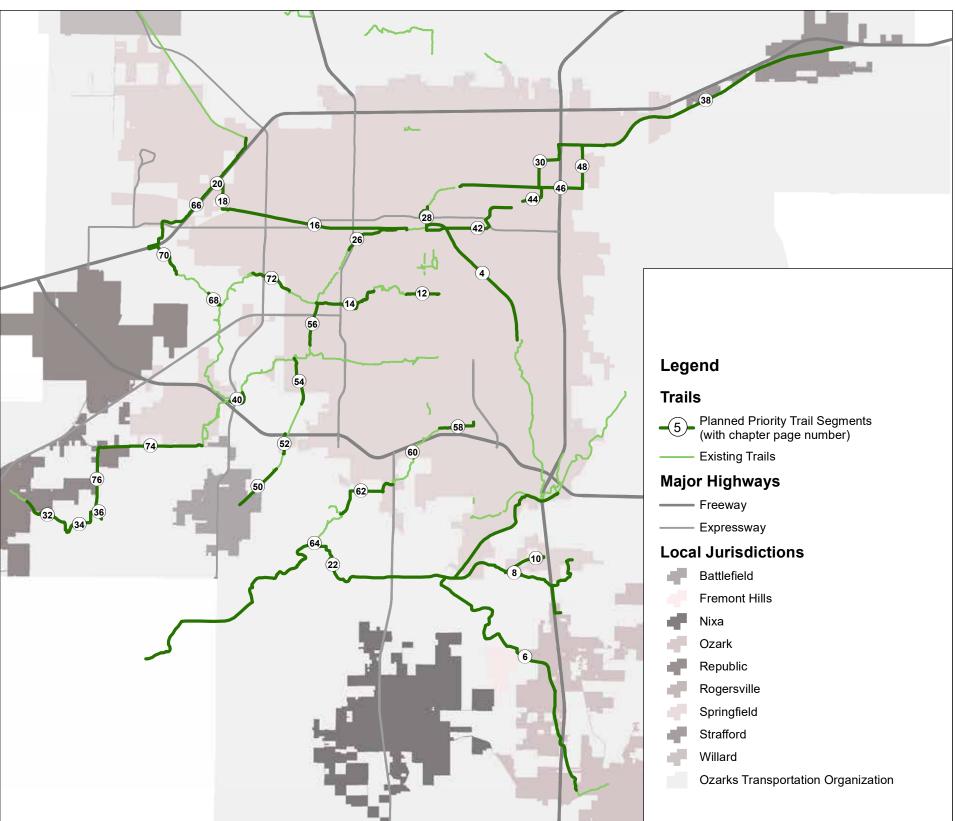
In the appendix of the study, a large-scale map shows the preferred alignments for all planned priority trail segments overlaid onto the existing trail network.

#### **Table 3.1: Alignment Scoring** 1: Network Connections 4: Logical Segments 7: Cost Least number of active transportation Highest number of additional cost elements Does not connect to existing trail at either end connections (trails, on-street bikeways, etc) (over and above basic unit cost) Extends existing trail (connection at one end) Moderate number of active transportation Moderate number of additional cost elements lacksquare1 Value connections (trails, on-street bikeways, etc) (over and above basic unit cost) Fills gap in existing trail corridor (existing trails Value at both ends) Lowest number of additional cost elements Greatest number of active transportation Value connections (trails, on-street bikeways, etc) (over and above basic unit cost) 5: Cultural & Natural Resources Community **Lowest Community** 2: User Experience 8: Route Directness Few to no cultural or natural resources in close Community Offers little to no scenic qualities, on-site Least direct routing alternative amenities, or unique experiences Some cultural or natural resources in close Moderately direct routing alternative Offers some scenic qualities, on-site amenities, or unique experiences Medium Many cultural or natural resources in close Most direct routing alternative proximity Offers many scenic qualities, on-site amenities, 9: Ownership & Right-Of-Way Highest or unique experiences 6: Environmental Conditions Greatest need for property acquisition and/or 3: Enhances Bicycling and Walking Many limiting environmental factors Does not improve walking and bicycling Moderate need for property acquisition and/or Some limiting environmental factors conditions or safety Moderately improves walking and bicycling Few, if any, limiting environmental factors Least need for property acquisition and/or conditions or safety easements Substantially improves walking and bicycling conditions or safety (ie. - no existing facility or alternative)

## Table 3.2: Trail Alignment Index

Trail Segment	Page
Chadwick Flyer Rail Trail (North)	3-4
Chadwick Flyer Rail Trail (South)	3-6
Farmer Branch Greenway	3-8
River Bluff Blvd - Farmer Branch Greenway Connector	3-10
Fassnight Creek Greenway (East)	3-12
Fassnight Creek Greenway (West)	3-14
Fort Scott Line Rail Trail	3-16
Westgate -Fort Scott Line Rail Trail Connector	3-18
Division Street - I-44 Trail Connector	3-20
James River Greenway	3-22
Lower Jordan Creek Greenway	3-26
North Jordan Creek Greenway - Jordan Valley Connector	3-28
North Jordan Creek Greenway Trail	3-30
Shuyler Creek Greenway Extension	3-32
Etheridge Trail	3-34
Wilson's Creek National Battlefield Connector	3-36
Route 66 / Strafford Trail	3-38
South Creek Greenway	3-40
South Jordan Creek Greenway Trail	3-42
Division Street - Cooper Park Connector	3-44
Division Street	3-46
Le Compte Road	3-48
Trail of Tears - Battlefield	3-50
Trail of Tears - Golden Ave	3-52
Trail of Tears - South Creek Greenway Connector	3-54
Trail of Tears - Greene Park to Ewing Sports Complex	3-56
Ward Branch Greenway - North	3-58
Ward Branch Greenway - Middle	3-60
Ward Branch Greenway - South	3-62
Ward Branch - James River Greenway Connector	3-64
I-44 Trail	3-66
West Wilson's Creek Greenway (South)	3-68
West Wilson's Creek Greenway (North)	3-70
Wilson's Creek Greenway	3-72
West Republic Road	3-74
Wilson's Creek Boulevard	3-76

## **Planned Priority Trail Segment Index Map**



## **Chadwick Flyer Rail Trail (North)**

## **Corridor Description**

The Chadwick Flyer Rail Trail (North) will provide a vital link between Downtown Springfield and the popular Galloway Creek Greenway. This trail utilizes the currently active BNSF Kissick Spur, originally part of the longer Chadwick Branch, but now extending only as far south as City Utility's James River Power Station immediately southwest of Lake Springfield. The Galloway Creek Greenway straddles the Kissick Spur from Seminole Street south under James River Freeway/US Highway 60, providing a valuable north-south active transportation corridor in southeast Springfield.

## **Original Alignment (Preferred)**

There is only one alternative for this segment that is in keeping with the intent of the priority trail planning effort. The original priority trail alignment follows the Kissick Spur for the duration, from its northern terminus at Sherman Parkway opposite Jordan Valley Park, to its southern terminus at Seminole Street and the northern trailhead of the Galloway Creek Greenway. Although the current right-of-way width varies from 60' to 100' or greater, current BNSF policy prohibits shared-use paths parallel to tracks on railroad right-of-way or on railroad access roads. Acquiring easements across properties adjacent to the trail would require negotiations with more than 80 individual property owners. There are no nearby alignments that can provide a shared-use path



BNSF Spur Rail Corridor as it turns south, just east of National Avenue.

of similar character or quality, and, despite the aforementioned trail development difficulties, this original alignment is the preferred alignment. Development for this trail should be considered long-term, requiring either deactivation and abandonment, or a change in railroad policy to permit trails parallel to tracks within railroad right-of-way.

## **Interim Alignment**

Given the lack of alternative alignment options to provide an off-street shared-use path, and the long-term nature of rail-to-trail development, an interim alignment consisting on-street bikeways and sidewalks along existing public rights-of-way has been identified. This interim alignment travels entirely along existing and planned bike lanes and shared lane bike routes and reaches a maximum distance of 1.5 miles from the original alignment. Streets along this route include Oak Grove Ave, Cherokee Street, Langston Street, Freemont Ave, Monroe Street, Weller Ave, Pickwick Ave, and Trafficway Street. The interim alignment's divergence from the original corridor reduces its ability to serve residents and destinations in the Oak Grove and Bingham neighborhoods, particularly those to the east of the BNSF Spur. Wayfinding signage and traffic calming enhancements can reduce traffic stress for bicyclists along this corridor and should be considered if the interim alignment is pursued and developed.

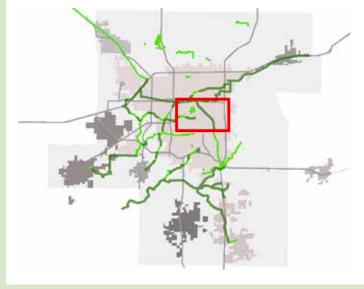


BNSF Rail Corridor traveling north across Sunshine Street.

Given the long-term nature of this rail-to-trail project, and the importance of connecting the Galloway Greenway to Jordan Valley and Downtown Springifield, the interim alignment should be pursued as a short-term strategy to connect these popular destinations.

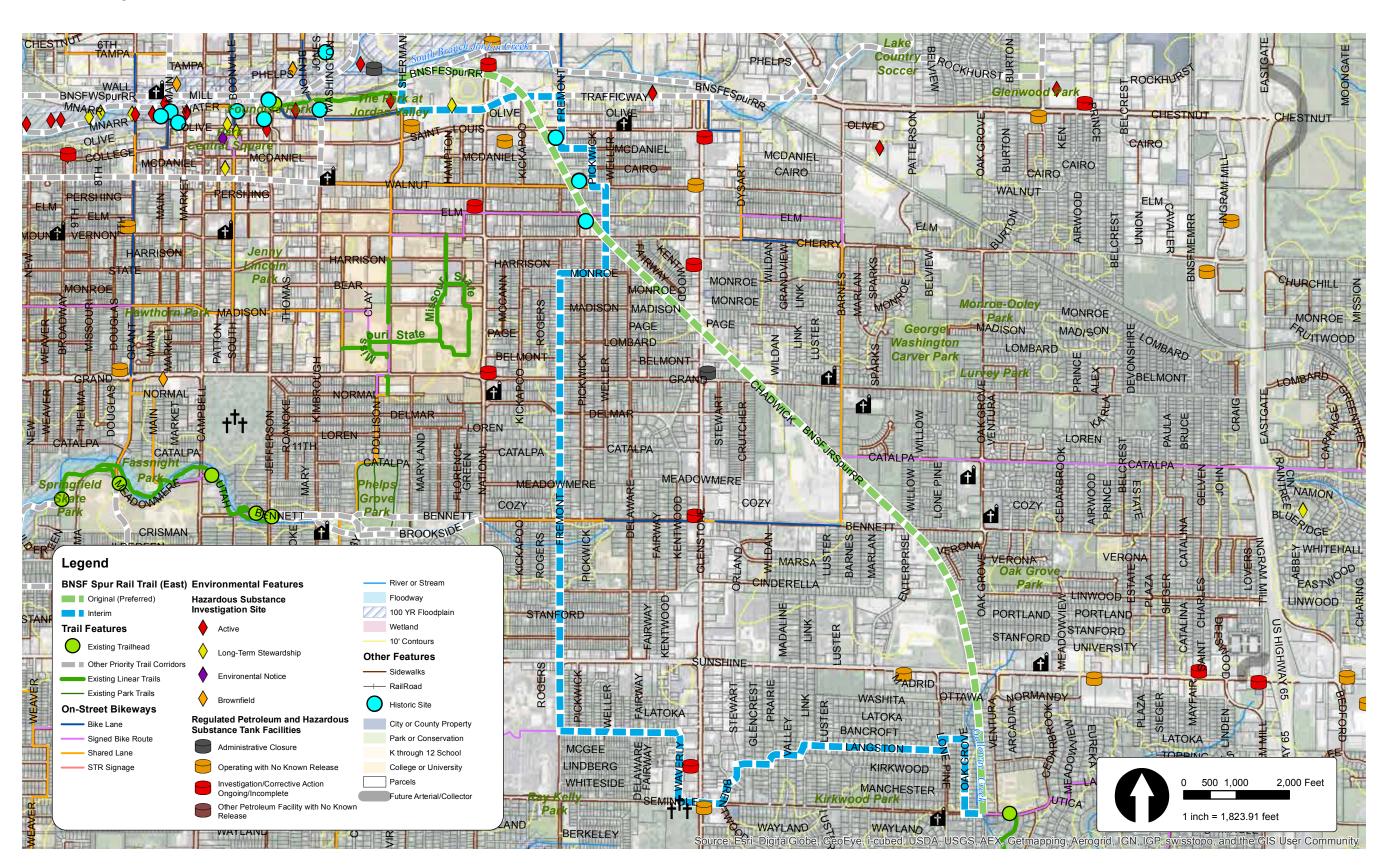
Alignment Scoring			
Score	Priority	Original	Interim
Network Connections	High	•	•
User Experience	High	•	$\circ$
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	$\bigcirc$	•
Route Directness	Low	•	0
Ownership / Right-of-Way	Low	$\circ$	•

# Planning level cost for preferred alignment: \$4,756,288.



Chadwick Flyer Rail Trail (North) Greenway north extension priority trail corridor location.

## **Chadwick Flyer Rail Trail (North)**



## **Chadwick Flyer Rail Trail (South)**

## **Corridor Description**

The Chadwick Branch of the old St. Louis San Francisco Railroad was originally established to transport timber and railroad ties produced in Christian County for railroad expansion to the west. The Chadwick Flyer made daily trips on the corridor, carrying both cargo and passengers between Springfield and Chadwick, Missouri. The majority of the Chadwick Branch was left abandoned after the Great Depression. As a shared-use path corridor, the Chadwick Flyer Rail Trail offers a vital connection between the City of Ozark and the growing regional trail system.

## **Original Alignment**

The original alignment for the south segment of the trail begins southwest of Lake Springfield at the James River Greenway and future east-west primary arterial. It travels south and east along the abandoned Chadwick Branch railroad right-of-way for its entirety until reaching the Ozark Community Center and Finley River Greenway. Major crossings include State Highway CC, Fremont Road, 21st Street, a new bicycle and pedestrian bridge over US Highway 65, and Jackson Street.

## Alternative Alignment #1 (Preferred)

The first alternative alignment begins one quarter mile west of the Chadwick Branch rail corridor at the James River Greenway crossing over the James River. It travels south along the east bank of the river, then east to the abandoned rail corridor. The trail turns south along a future primary arterial road before reaching Westwind Drive and crosses the unnamed creek. The trail continues along the unnamed creek until State Highway CC, crosses over the unnamed creek, and travels through the north and east legs of the Highway CC and Fremont Road intersection. The trail resumes on the abandoned rail corridor south of Fremont Road to 22nd Street, south along the east side of 21st Street

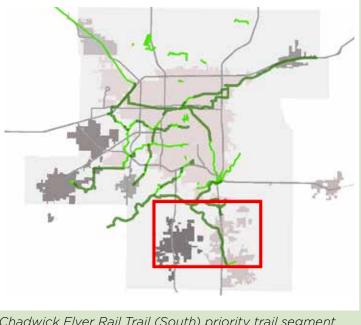
to Longview Road. The trail continues south on the planned extension of 21st Street to 20th Street, crosses 20th Street to the abandoned rail corridor, then crosses over US Highway 65 on a new bicycle and pedestrian bridge. The trail follows the abandoned rail corridor south, crosses Jackson Street through a new underpass east of the Finley Creek tributary, and connects to the Finley River Greenway at the Ozark Community Center.

## **Alternative Alignment #2**

The second alternative alignment begins at the same location as the original alignment and follows the same path until reaching 21st Street. The alternative then travels along the east side of 21st Street to Longview Road, turns east on Longview Road and along the future secondary arterial roadway connecting Longview Road to State Highway NN. The alignment turns south and travels along the future secondary arterial roadway between US Highway 65 and State Highway NN south to 17th Street, then south along the west side of 17th Street. The alignment rejoins the abandoned Chadwick Branch railroad corridor and travels south to across Jackson Street and connects to the Finley River Greenway at the Ozark Community Center.

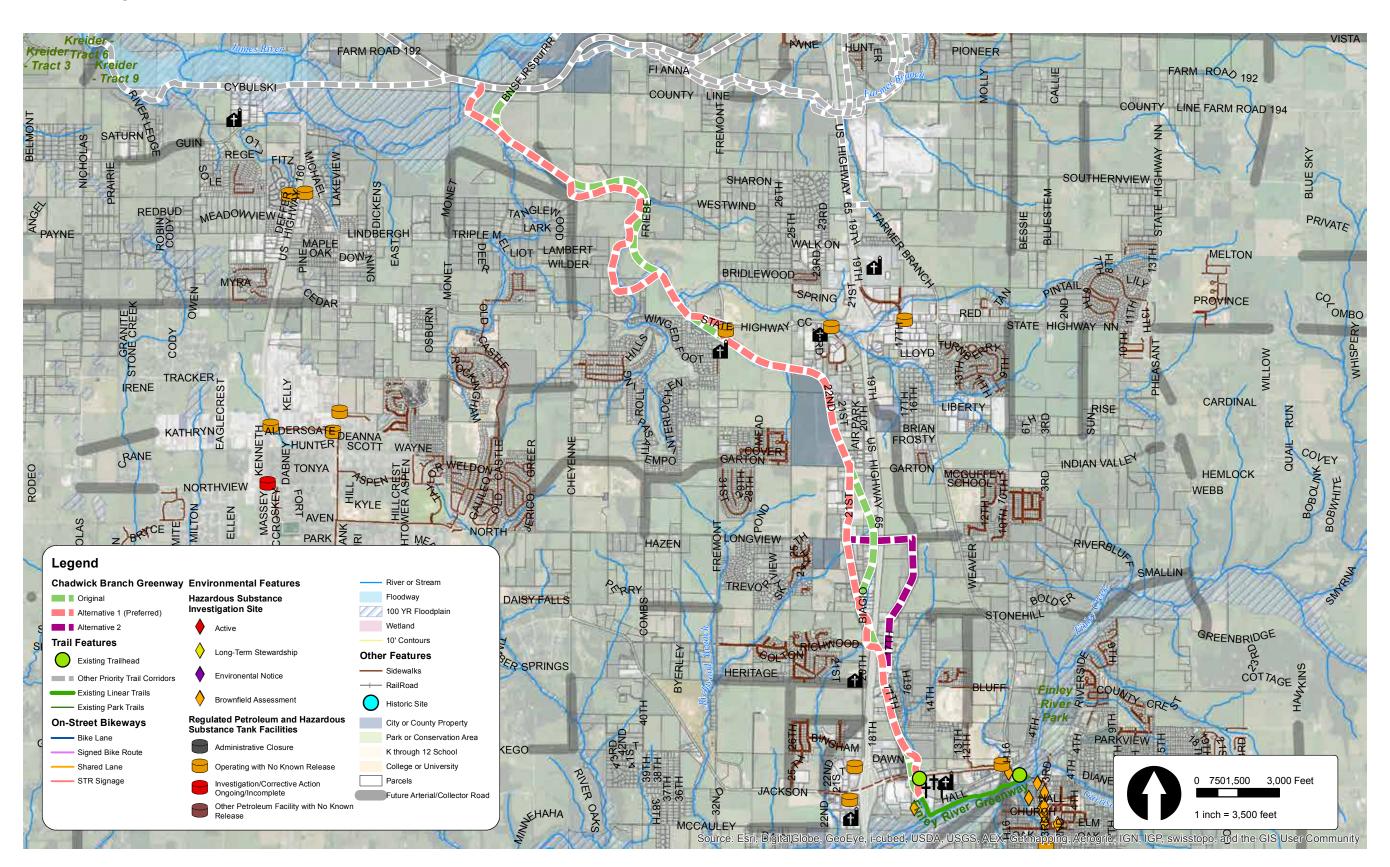
Alignment Scoring				
Score	Priority	Orig	Alt 1	Alt 2
Network Connections	High	•	•	
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	•	•	•
Cultural & Natural Resources	Med.	•	•	•
Environmental Conditions	Med.	•	•	•
Cost	Low	•	$\bigcirc$	•
Route Directness	Low	•	•	•
Ownership / Right-of-Way	Low	•	•	•

# Planning level cost for preferred alignment: \$9,476,277.



Chadwick Flyer Rail Trail (South) priority trail segment location.

## **Chadwick Flyer Rail Trail (South)**



## **Farmer Branch Greenway**

## **Corridor Description**

Located in southeast Springfield and unincorporated Greene County the Farmer Branch Greenway parallels the Farmer Branch of the James River from the abandoned Chadwick Branch Rail line to the Millwood Golf and Racquet Club. The corridor's connections to multiple planned trails and its natural riparian character make it a valuable addition to the regional trail network. However, the lack of adjacent population and regional destinations (aside from future trail connections) limit the greenway's impact in the near term.

## **Refined Original Alignment**

The alignment begins at the intersection of the Chadwick Branch Greenway and James River Greenway on the BNSF Spur (formerly the Chadwick Branch Greenway) just west of Crenshaw Road. The alignment follows the future primary arterial road (Rivercut Parkway) alignment northeast across the Farmer Branch through City Utility-owned parcels. The alignment then veers east from the future roadway alignment and crosses back to the south side of the Farmer Branch and continues east on the south side of the creek. crossing both Farm Road 169 and Farm Road 175 at-grade before reaching US Highway 65. The alignment continues under US Highway 65 and crosses Farmer Branch Road atgrade, continuing eastward on the south side of the creek. The alignment travels along the south and east side of the creek until reaching the confluence of the Farmer Branch and Hunt Branch. The alignment crosses both branches and travels northward along the west side of the Hunt Branch before connecting with the Millwood Golf & Racquet Club golf course cart path until reaching its terminus at Millwood Drive, just east of the Hunt Branch. The difficulties of trail development through private golf courses are substantial, especially through the interior of the course.

A southern segment of the trail branches off from the main alignment east of US Highway 65 and travels south along the highway to a public accessway between two parcels. The trail segment travels west along this accessway to connect to Farmer Branch Road just north of Southernview Road.

## **Alternative Alignment (Preferred)**

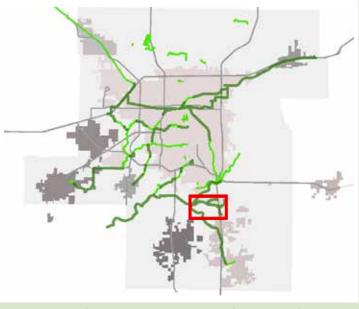
The alignment begins at the intersection of the Chadwick Branch Greenway and James River Greenway on the BNSF Spur (formerly the Chadwick Branch Greenway) just west of Crenshaw Road. The alignment follows the future primary arterial road (Rivercut Parkway) alignment northeast across the Farmer Branch through City Utility-owned parcels until it reaches Kissick Avenue, at which point the trail turns south to the Farmer Branch and east along the riparian corridor. The trail continues east across three parcels, crosses Farm Road 175 at-grade, and maintains its alignment adjacent to the creek eastward under US Highway 65, at-grade across Farmer Branch Road, and at-grade across Farm Road 194. The trail stays on the north and west side of the Farmer and Hunt Branches as it continues north to the edge of the Millwood Golf & Racquet Club. Once reaching the club, the trail travels along the south and west perimeter of the golf course so as to reduce conflict and interference with the course. Upon reaching Millwood Drive, the trail turns east and reaches its end immediately east of the Hunt Branch. The alternative alignment also provides a connection to the south as described in the original alignment.

## **Interim Alignment**

To address likely difficulties in trail development through the private Millwood Golf & Racquet Club, an interim onstreet alignment has been developed to link the trail from its crossing at Farmer Branch Road to its northeast endpoint on Millwood Drive near the Hunt Branch. The interim alignment travels north along Farmer Branch Road and east along Millwood Drive to make this connection. Improvements may include widened shoulders on Farmer Branch Road to provide shoulder bike lanes, traffic calming and shared lane markings on Millwood Drive, and wayfinding signage along the entire interim route to guide users along the route and to nearby destinations and amenities.

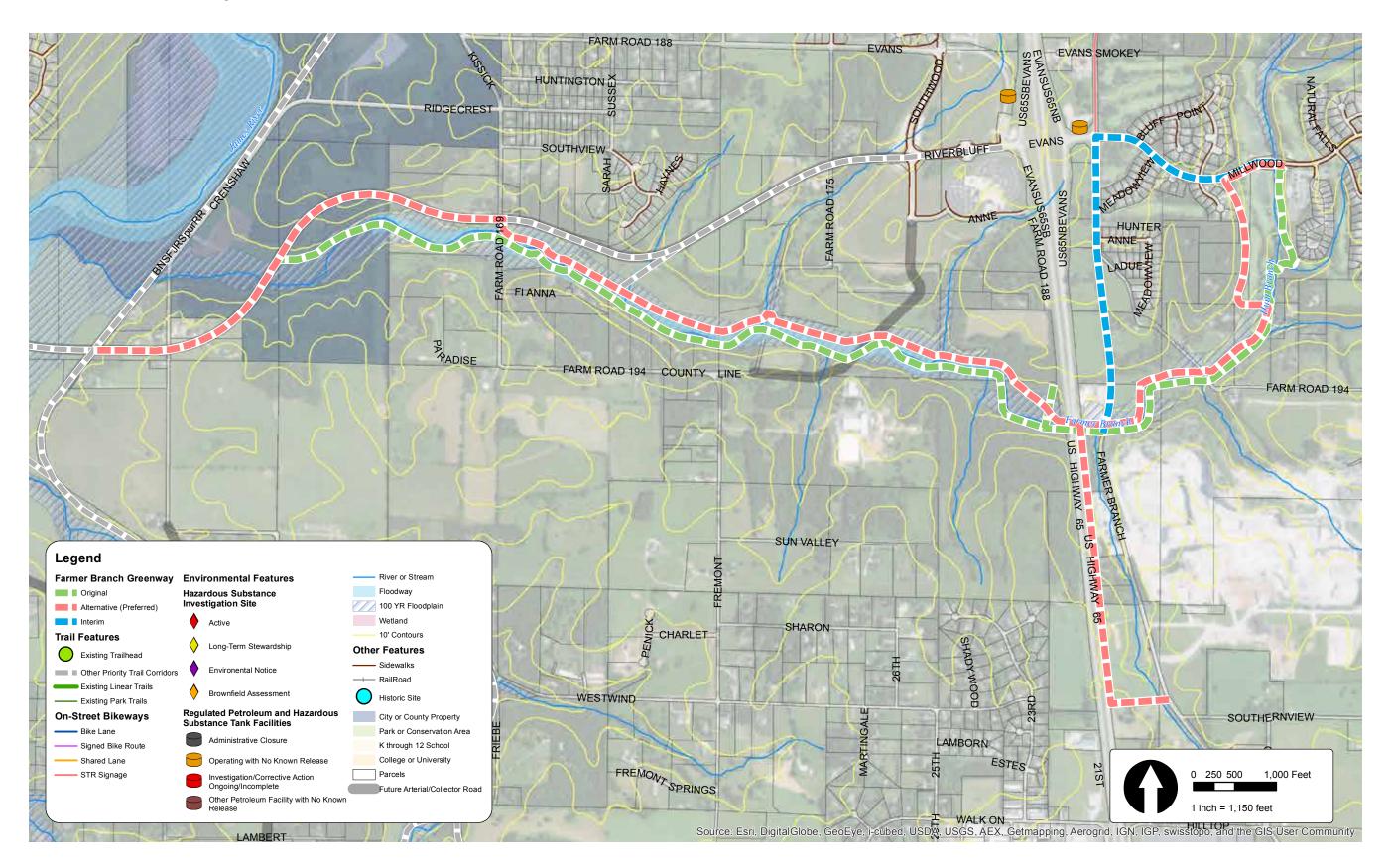
Alignment Scoring				
Score	Priority	Orig	Alt	Int
Network Connections	High		•	
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	$\circ$	0	$\bigcirc$
Cultural & Natural Resources	Med.	•	•	•
Environmental Conditions	Med.	•	•	•
Cost	Low	•	•	0
Route Directness	Low	•	•	0
Ownership / Right-of-Way	Low	•	•	

Planning level cost for preferred alignment: \$6,514,081.



Farmer Branch Greenway priority trail segment location.

## **Farmer Branch Greenway**



## **River Bluff Blvd - Farmer Branch Greenway Connector**

## **Corridor Description**

The River Bluff Blvd – Farmer Branch Greenway Connector provides a direct link from the Mercy Orthopedic Hospital to the Farmer Branch Greenway, linking hospital visitors and trail users to a planned network of greenways converging south of Lake Springfield. This planned priority trail segment travels along the future extension of East River Bluff Boulevard westward towards the planned Farmer Branch Greenway intersection with the Chadwick Branch Flyer Trail and the James River Greenway. This trail segment is heavily dependent on the future construction of the Farmer Branch Greenway and the primary arterial roadway.

## **Refined Original Alignment (Preferred)**

The refined original alignment begins at the MoDOT Commuter Parking Lot located at the northwest corner of the intersection of East River Bluff Boulevard and US Highway 65. From this location, the trail travels west along the north side of East River Bluff Boulevard and crosses the south and west legs of the intersection at Southwood Road before continuing west along the south side of the East River Bluff Boulevard future primary arterial. The trail continues for 3,000 feet from Southwood Road before diverging from the future arterial alignment and continues in a southwesterly direction until reaching the Farmer Branch Greenway planned priority trail.

## **Alternative Alignment**

The alternative alignment begins at the location as the original alignment and follows the same path through the Southwood Road roundabout. The alternative continues west along the south side of the future East River Bluff Boulevard primary arterial until reaching Farm Road 169 and connecting to the preferred alignment for the Farmer Branch Greenway.

Alignment Scoring			
Score	Priority	Original	Alt
Network Connections	High		•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	0	$\circ$
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

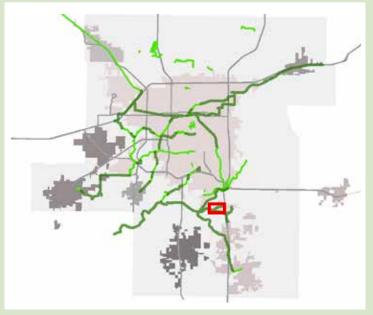
Planning level cost for preferred alignment: \$1,326,646.



The MoDOT Commuter Parking Lot on River Bluff Blvd can serve as a trailhead for greenway users (Source: Google Street View).

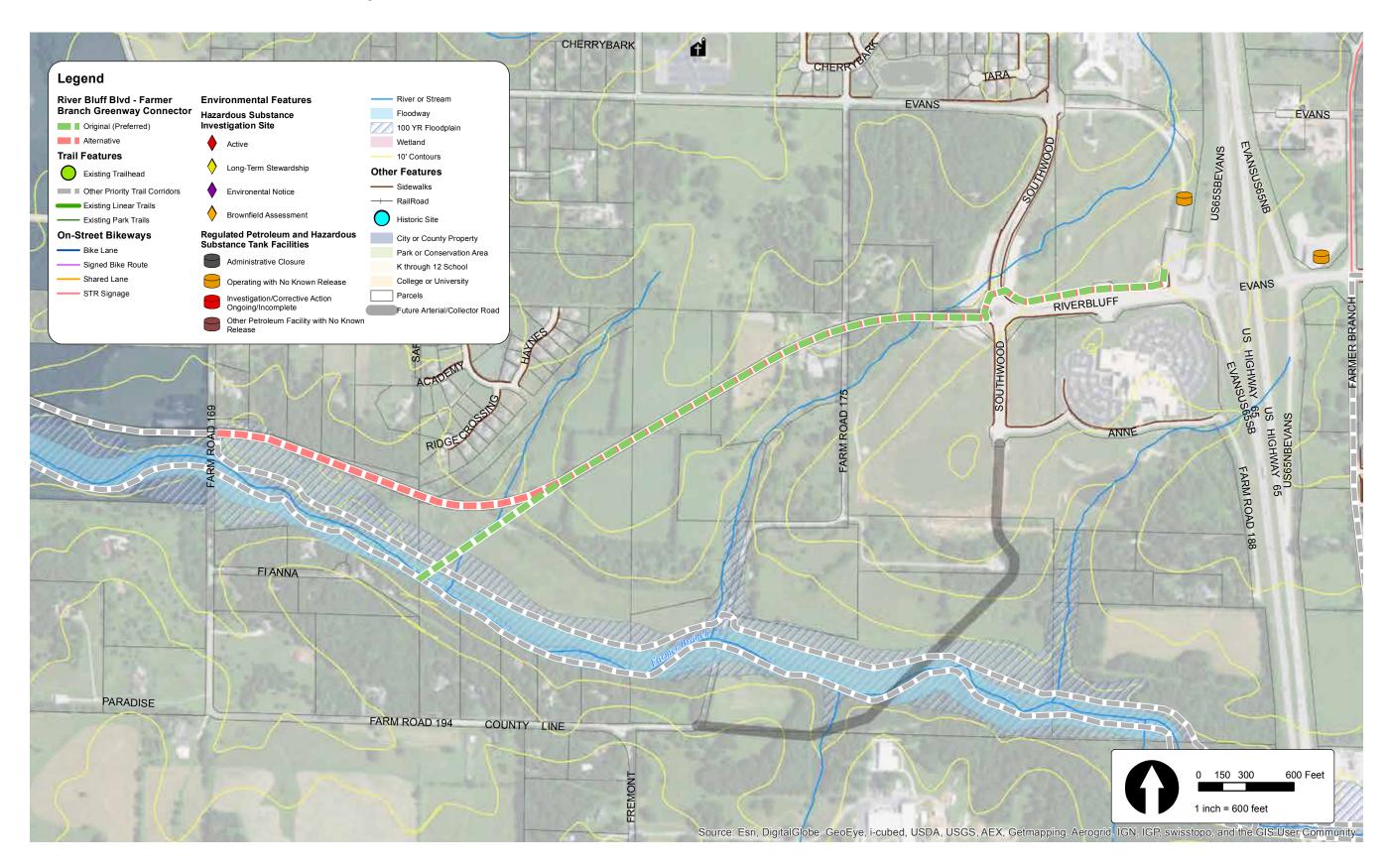


The future primary arterial roadway extends west from the recently constructed roundabout (Source: Google Street View).



River Bluff Blvd - Farmer Branch Greenway Connector priority trail segment location.

## **River Bluff Blvd - Farmer Branch Greenway Connector**



## **Fassnight Creek Greenway (East)**

## **Corridor Description**

The Fassnight Creek Greenway is central Springfield's premier riparian trail, connecting numerous parks, schools, and cultural institutions. Extensions to the existing trail to the east and west, both of which are identified as planned priority trail projects, will further enhance this amenity's reach and impact.

## **Original Alignment**

The original alignment for the east segment begins at the intersection of Jefferson Avenue and Bennett Street at the current eastern terminus of the Fassnight Creek Greenway. The alignment travels east along Bennett Street, turns south at Kimbrough Avenue, then travels east along the capped Fassnight Creek to Clay Avenue. From Clay, the alignment continues east along the south side of Brookside Drive until Linwood Circle, at which point it crosses to the north side of Brookside Drive and continues east until its terminus at National Avenue.

## Alternative Alignment 1

The first alternative alignment begins at the same eastern terminus of the existing Fassnight Creek Greenway, travels east along Bennett Street, and crosses Clay Avenue into



The Fassnight Creek Greenway currently ends at Jefferson Avenue

Phelps Grove Park just south of the Bennett Street and Clay Avenue intersection. The alignment continues through Phelps Grove Park just north of the channelized Fassnight Creek Greenway until reaching Kings Avenue, at which point crosses Fassnight Creek and maintains a position between the creek and Brookside Drive until reaching its end at National Avenue.

## **Alternative Alignment 2 (Preferred)**

The second alternative alignment begins at the same eastern terminus of the existing Fassnight Creek Greenway, travels east through city-owned parcels adjacent to Bennett Street, then assumes a sidepath position east of Kimbrough Avenue until reaching Clay Avenue. The alignment crosses Clay Avenue at the north leg of the intersection and continues east through Phelps Grove Park on the existing paved path. The alignment then continues east across Virginia Avenue and Kings Avenue and is positioned along north side of the Springfield Art Museum until it ends at National Avenue.

## **Interim Alignment**

The interim alignment follows existing signed bike routes and dedicated bike lanes on Bennett Street, Clay Avenue, and Brookside Drive to provide a short-term solution to guide

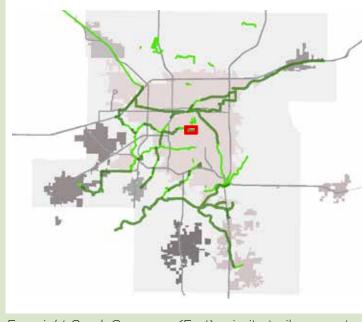


A bike tune-up station opposite Phelps Grove Park at Bennett Street and Clay Avenue.

trail users through the corridor. The addition of wayfinding signage can identify the interim solution as an extension of the greenway until such time that the preferred alignment can be developed.

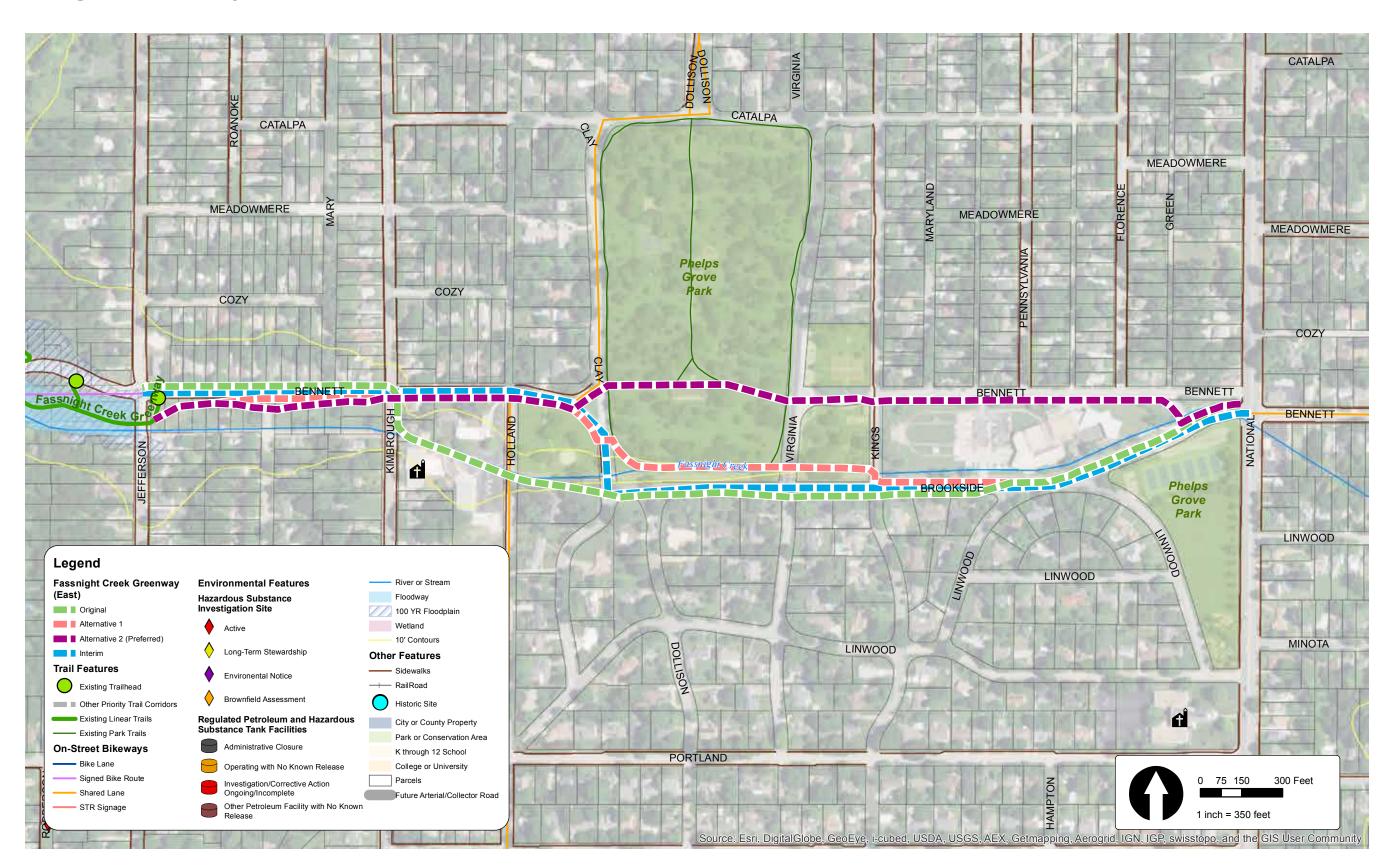
Alignment Scoring					
Score	Priority	Orig	Alt 1	Alt 2	Int
Network Connections	High			•	•
User Experience	High	•	•	•	$\circ$
Enhances Bicycling & Walking	High			•	$\bigcirc$
Logical Segments	Med.	•	•	•	•
Cultural & Natural Resources	Med.	•	•	•	•
Environmental Conditions	Med.	$\circ$	$\circ$	•	•
Cost	Low	•	$\bigcirc$	$\bigcirc$	lacktriangle
Route Directness	Low	•	•	•	•
Ownership / Right-of-Way	Low	•		•	•

# Planning level cost for preferred alignment: \$1,157,822.



Fassnight Creek Greenway (East) priority trail segment location.

## **Fassnight Creek Greenway (East)**



## **Fassnight Creek Greenway (West)**

## **Corridor Description**

The Fassnight Creek Greenway is central Springfield's premiere riparian trail, connecting numerous parks, schools, and cultural institutions. Extensions to the existing trail to the east and west, both of which are identified as planned priority trail projects, will further enhance this amenity's reach and impact. This west extension links Fassnight Park, Parkview High School, and the Springfield Skate Park to Ewing Sports Complex and existing segments of the Wilson's Creek and Jordan Creek Greenways.

## **Original Refined Alignment (Preferred)**

The original alignment begins at the southeast corner of Ewing Sports Complex and the intersection of the Wilson's Creek Greenway and the Lower Jordan Creek Greenway. The alignment must cross over Wilson's Creek and under the Missouri and Northern Arkansas Railroad. The south bank of the creek is elevated above the north bank, creating challenges for bridge design and construction.

Once across Wilson's Creek, the trail travels east across four properties before reaching Kansas Expressway. The trail crosses under Kansas Expressway on the south side of Fassnight Creek and continues east along through the Elfindale Retirement Community parallel to the creek, exiting the community just west of Fort Avenue and crossing to

The creek was dammed over 100 years ago by Alice O'Day, an early owner of the original 206-acre Elfindale estate.

the north side of the creek. The alignment then crosses Fort Avenue at-grade with an improved crosswalk and rectangular rapid flashing beacon and travels roughly 250 feet northeast before crossing back to the south side of Fassnight Creek. The alignment continues on the southeast side of Fassnight Creek through multiple agricultural and partially forested parcels until it reaches the trailhead at the western terminus of the existing Fassnight Creek Greenway at the Springfield Skate Park.

## **Interim Alignment**

This interim alignment addresses difficulties that may arise with trail development east of Kansas Expressway through the retirement community and agricultural parcels adjacent to Fassnight Creek. The interim alignment begins within the Kansas Expressway right-of-way on the west side of the bridge over Fassnight Creek and travels south to Elfindale Street. This initial segment of the interim alignment is envisioned as a shared-use path. At Elfindale Street, the facility type transitions to dedicated bike lanes and adjacent sidewalks on Elfindale Street east to Fort Avenue. The alignment transitions again to shared lane markings and wayfinding signage, traveling north on Fort Avenue, east on Portland Street, and north on Grant Avenue to connect to the existing Fassnight Creek Greenway at Meadowmere Street. Fort

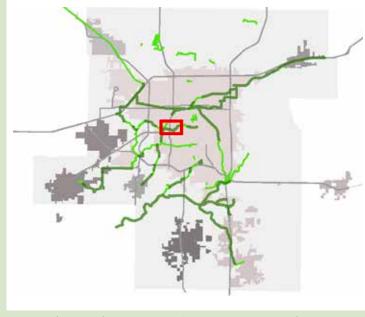


A view of Elfindale Street looking east from the Cornerstone Church.

Avenue, Portland Street, and Grant Avenue are all signed and marked bike routes, so little improvements beyond way-finding signage will be necessary to support these segments of the interim alignment.

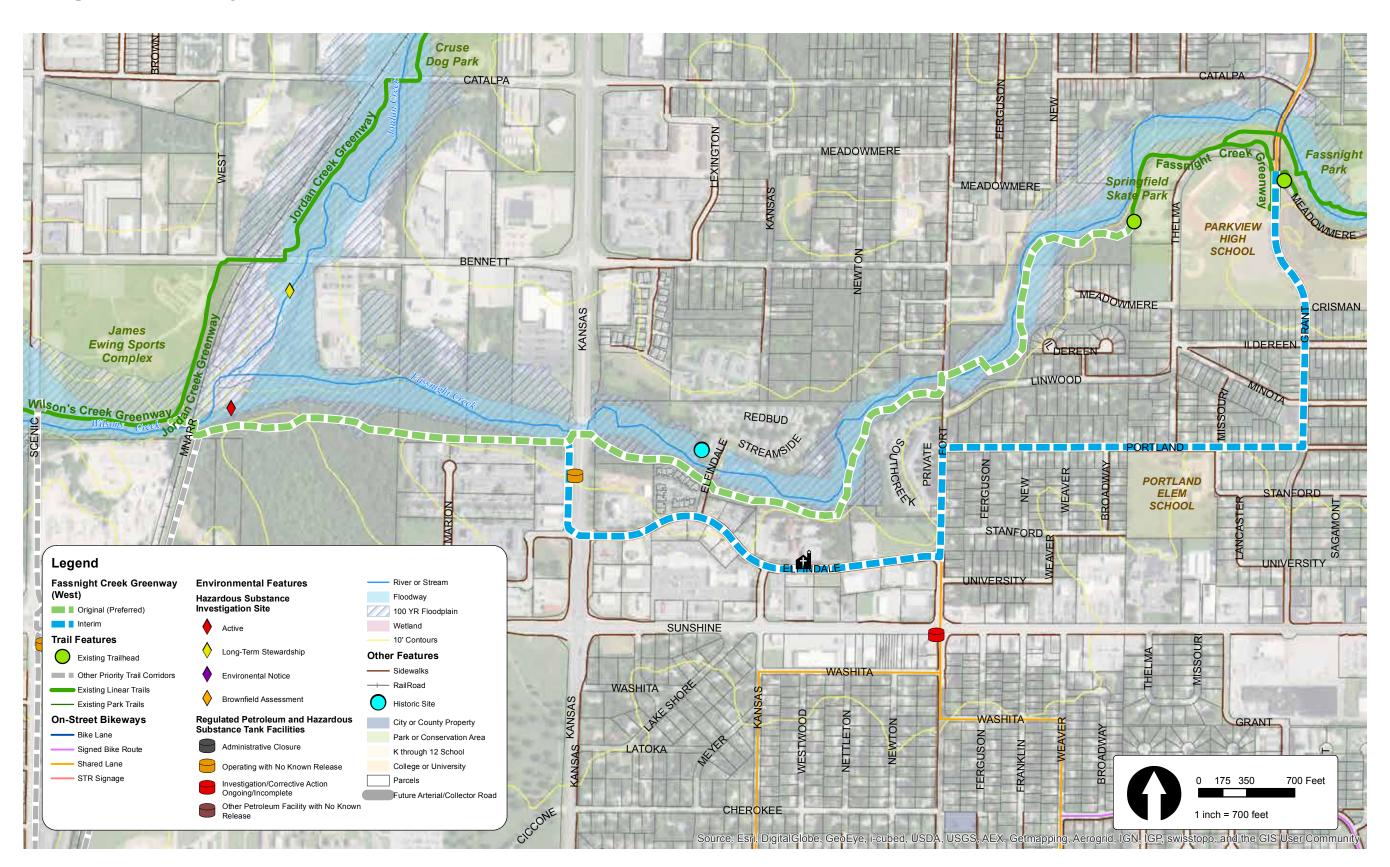
Alignment Scoring			
Score	Priority	Original	Alt
Network Connections	High		•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	
Environmental Conditions	Medium	•	•
Cost	Low	•	
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

# Planning level cost for preferred alignment: \$2,727,627.



Fassnight Creek Greenway (West) priority trail segment location.

## **Fassnight Creek Greenway (West)**



## Fort Scott Line Rail Trail

## **Corridor Description**

The Fort Scott Line Rail Trail travels from Downtown to Nichols Junction through the West Central, Westside, Heart of the Westside, Fairfield Acres, and Bissett neighborhoods. As a rail-trail, this planned priority trail provides a unique recreation and transportation experience for area residents and visitors and a direct, low-stress connection to Downtown Springfield for thousands of residents. Roughly half the 4-mile corridor consists of active rail, while the other half is inactive and the tracks have been removed.

## **Refined Original Alignment (Preferred)**

The original alignment has been slightly modified, but still utilizes the BNSF rail corridor to connect neighborhoods in west Springfield to the heart of the city. The section of rail between Nichols Junction and Hillcrest Avenue is inactive, and the tracks and bridge over West Bypass have been removed. East of Hillcrest Avenue, the spur still services adjacent properties, and there are numerous at-grade crossings. The eastern terminus of this rail trail project connects to the existing Jordan Creek Greenway at Jefferson Avenue, one block west of the Park at Jordan Valley. Despite its status as



BNSF Rail Corridor, looking west from West Bypass.

the preferred and only shared-use path alignment for this corridor, the long-term nature of rail-to-trail development along a partially active rail corridor and the BNSF's current policy prohibiting rail-with-trail projects limit this project's potential as a high-priority project.

## **Interim Alignment**

Given the lack of alternative alignment options to provide an off-street shared-use path, and the long-term nature of rail-to-trail development, an interim alignment along existing public rights-of-way has been identified. This interim alignment travels west on Water Street from Jefferson Ave, then along Boonville Avenue, Mill Street, and Main Avenue northward into West Central Springfield. The interim alignment then continues west along West Nichols Street to its western terminus, then south along Orchard Crest and west along Junction Street, where the alignment connects with the proposed sidepath along Gate Avenue. Existing shared lanes are present on Mill Street, Main Avenue, and Nichols Street. Wayfinding signage and traffic calming enhancements can reduce traffic stress for bicyclists along this corridor and should be considered if the interim alignment is pursued and developed.

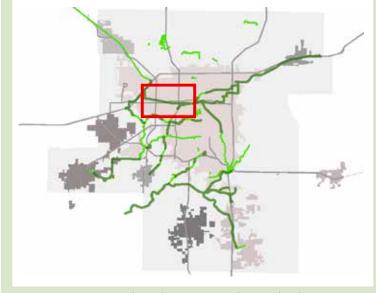


BNSF Rail Corridor bridge over the Kansas Expressway.

This interim alignment is called out in the Plan 2040 LRTP as a future bike lane connection. Priority should be given to this alignment for this interim connection, due to the preferred alignment being a long term corridor connection.

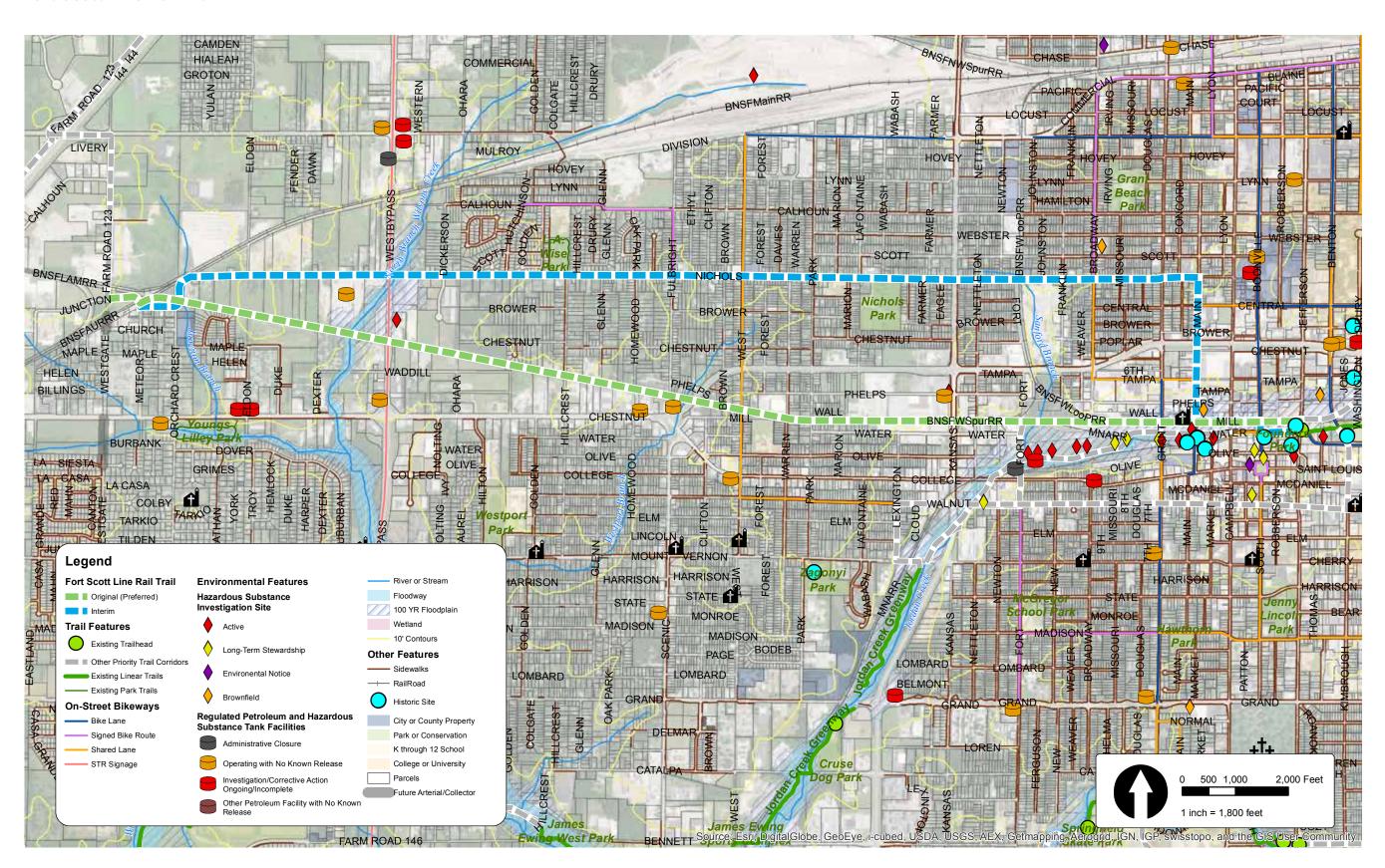
Priority	Original	Interim
High	•	•
High	•	$\circ$
High	•	
Medium	•	•
Medium	•	•
Medium	•	
Low	$\bigcirc$	•
Low	•	0
Low	$\bigcirc$	•
	High High High Medium Medium Low Low	High High High  Medium Medium  Medium  Low  Low

# Planning level cost for preferred alignment: \$5,656,077.



Fort Scott Line Rail Trail priority trail corridor location.

#### **Fort Scott Line Rail Trail**



# **Westgate Avenue (Farm Road 123)**

#### **Corridor Description**

Along with Division Street, Westgate Avenue provides a vital link between the BNSF Spur Rail Trail (West) and the Interstate 44 Trail and the Frisco Highline Trail northwest of the City of Springfield. Westgate Avenue is functionally classified as a secondary arterial with two lanes of travel and right-of-way widths between 66' and 71'. The segment is one of many planned priority trails along the corridor leading from Downtown Springfield to the Frisco Highline Trail. The development of a trail facility alongside Westgate Avenue will be dependent on the development of connecting trail segments along this corridor, or on major roadway reconstruction. There are currently no programmed improvements identified in the OTO 2015-2018 Transportation Improvement Program.

#### **Refined Original Alignment (Preferred)**

The trail facility recommended for Westgate Avenue consists of a shared-use path within the existing right-of-way located to the east of the roadway and adjacent drainage channel. Compared to a potential trail location on the west side of the roadway, this refined alignment on the east crosses fewer parcels and is not constrained by above-ground utilities.

Alignment Scoring		
Score	Priority	Original
Network Connections	High	$\circ$
User Experience	High	•
Enhances Bicycling & Walking	High	•
Logical Segments	Medium	•
Cultural & Natural Resources	Medium	$\bigcirc$
Environmental Conditions	Medium	•
Cost	Low	•
Route Directness	Low	•
Ownership / Right-of-Way	Low	•

#### Planning level cost for preferred alignment: \$749,757.



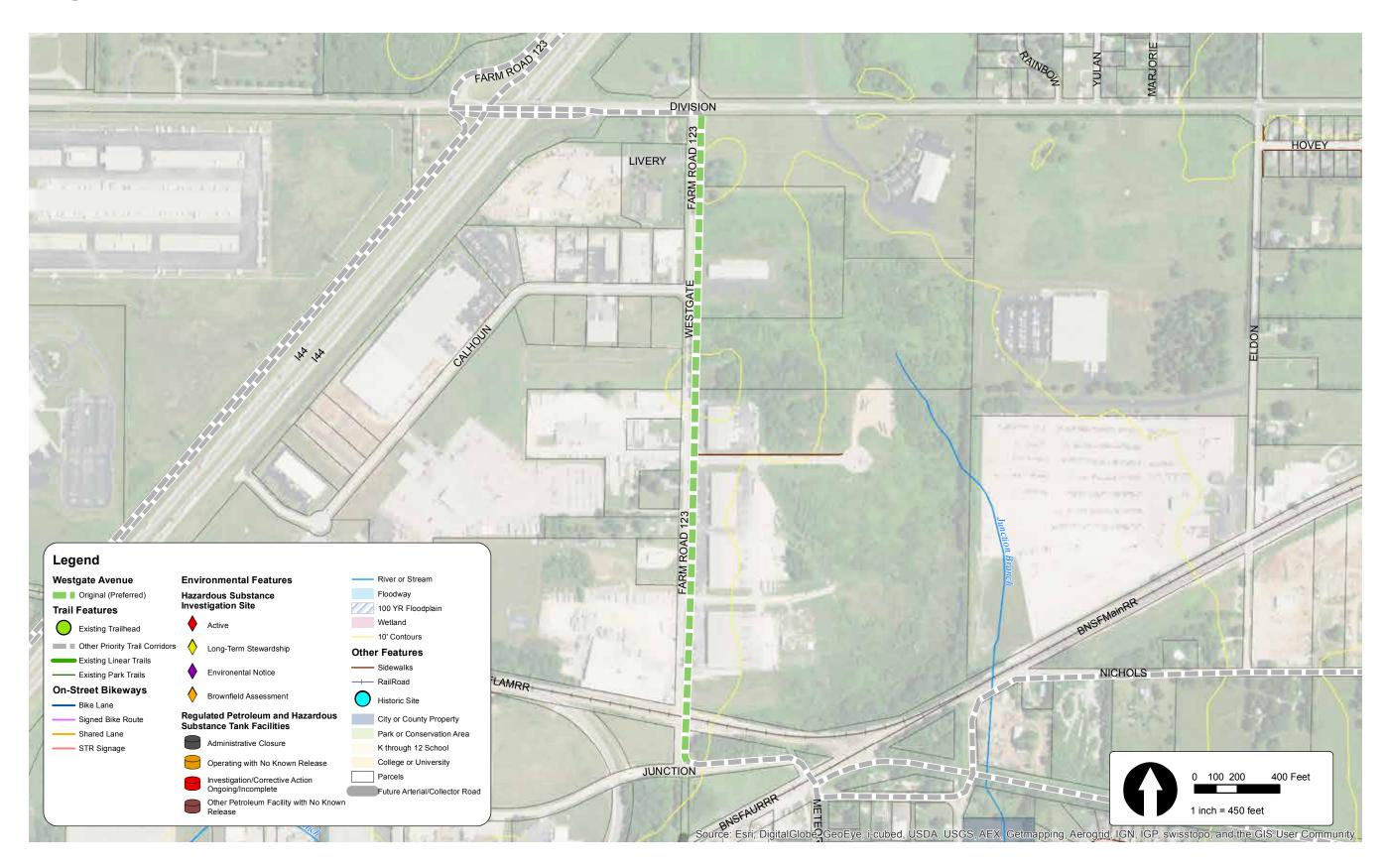
View of Westgate Avenue looking north from Junction Street (Source: Google Street View).



View of Westgate Avenue looking north from Calhoun Street (Source: Google Street View).



## **Westgate Avenue (Farm Road 123)**



## **Division Street - I-44 Trail Connector**

#### **Corridor Description**

At just over two tenths of a mile, this Division Street - I-44 Trail Connector is one of the shortest segments among all planned priority trails, but its value to the regional trail network is critical nonetheless. Along with Westgate Avenue, the Division Street - I-44 Trail Connector represents a vital link between the Fort Scott Line Rail Trail and the Interstate 44 Trail, both of which are identified as planned priority trails. The Division Street connection to the Interstate 44 Trail is just 1.3 miles south of the Frisco Highline Trail, one of the region's most popular trail corridors and the second longest rail-trail in Missouri at 36 miles.

With narrow shoulders and a posted speed limit of 45 MPH, current conditions along the corridor are unsuitable for bicycle and pedestrian travel. In addition, the bridge over Interstate 44 will impact alternative selection. While Division Street (Highway EE) between Highway AB and West Bypass (Highway 160) is programmed for pavement and safety improvements in 2017, these improvements do not include bridge improvements or replacement. The two alignments described below reflect potential path placement options based on the future of this bridge. If scheduled for replacement, the path should be incorporated into a new bridge

design. If the scheduling of a replacement is long-term and this trail corridor is identified as a high-priority, short-term project, a separate bicycle and pedestrian bridge should be constructed to move the project forward. Given the lack of existing trail connections along this short corridor and the cost associated with bridge construction, it is unlikely that this project, regardless of the preferred alignment, will be a high priority unless replacement of the bridge is programmed for the near future.

#### Refined Original Alignment (Preferred)

The original alignment for the Division Street - I-44 Trail Connector utilizes the south side of the existing 90-foot plus right-of-way to provide a shared-use path for non-motorized transportation. The path would extend from Westgate Avenue to the future Interstate 44 Trail immediately west of the Division Street bridge over Interstate 44. This alignment is dependent upon replacement of the existing bridge and would require the incorporation of a 10' shared-use path on the south side of the bridge. The cost savings from incorporating the path into future bridge construction would be significant compared to the cost of a separate bridge for bicycle and pedestrian travel.



View of Division Street looking west over I-44 (Source: Google Street View).



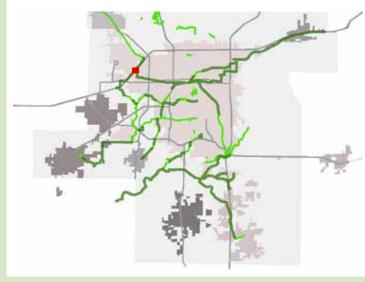
View of Division Street looking west over I-44 (Source: Google Street View).

#### **Alternative Alignment**

The alternative alignment follows the same path as described above, using the south side of the Division Street right-of-way for trail development; however, this alignment calls for the construction of a separate bicycle and pedestrian bridge south of the existing Division Street bridge over Interstate 44.

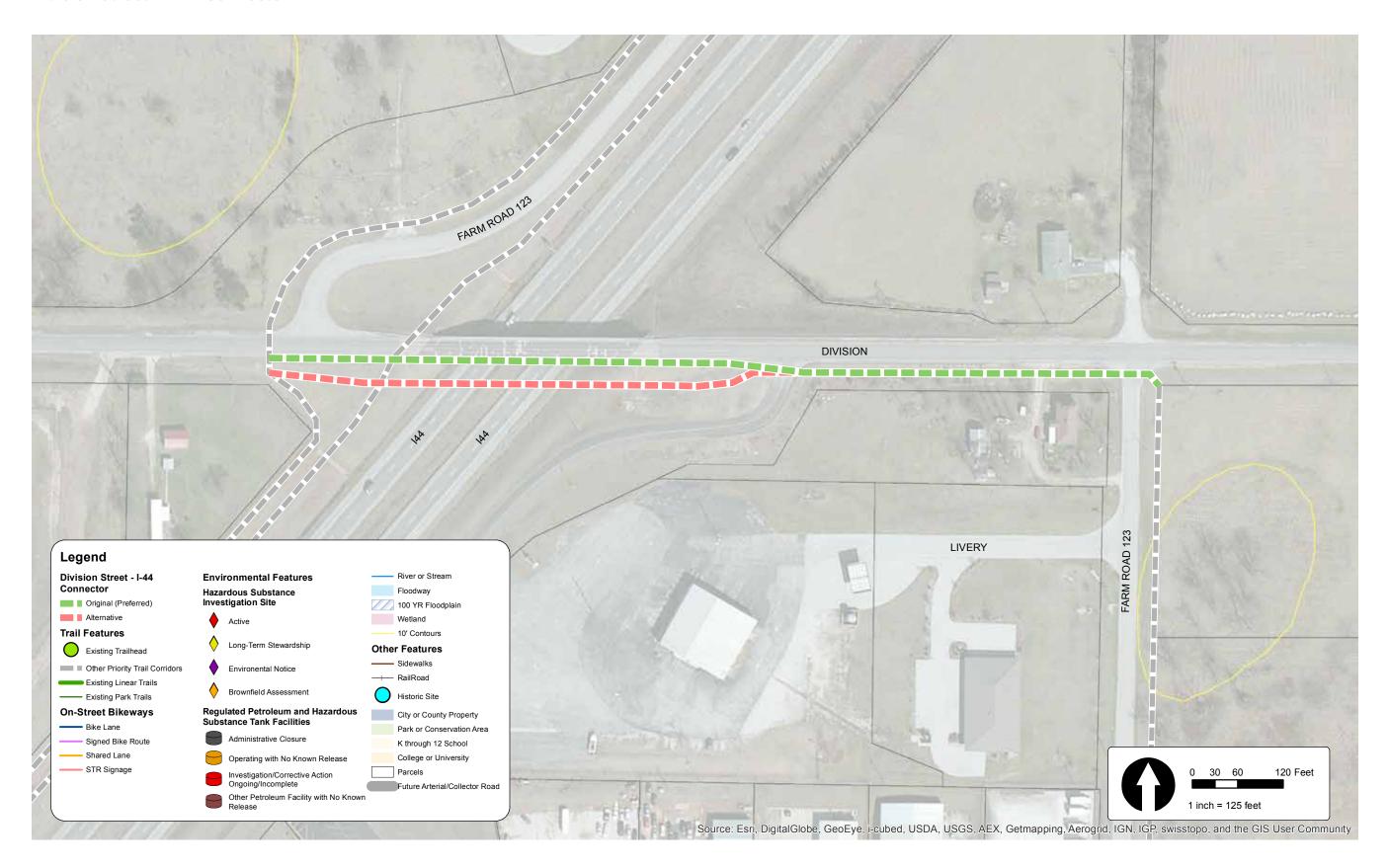
Alignment Scoring			
Score	Priority	Original	Alt
Network Connections	High	•	•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	
Logical Segments	Medium	$\circ$	$\circ$
Cultural & Natural Resources	Medium	$\bigcirc$	$\bigcirc$
Environmental Conditions	Medium	•	•
Cost	Low	•	$\bigcirc$
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

# Planning level cost for preferred alignment: \$179,181.



Division Street - I-44 Trail Connector priority trail segment location.

#### **Division Street - I-44 Connector**



# **James River Greenway**

#### **Corridor Description**

The James River Greenway corridor is among the longest linear corridors in the regional trail network. The corridor spans over 13 miles from Galloway Greenway east of US Highway 65 to the river's confluence with Wilson's Creek, less than a mile south of Wilson's Creek National Battlefield. While one of the most natural and undeveloped corridors identified for trail development, residential development along the corridor is gradually shaping the character of the surrounding environment as suburban development expands towards the River from Battlefield and Springfield to the north and from Nixa and Ozark to the south. Future arterial and collector roadways have been identified for the area and may provide opportunities for trail development in conjunction with roadway construction and continued private development.

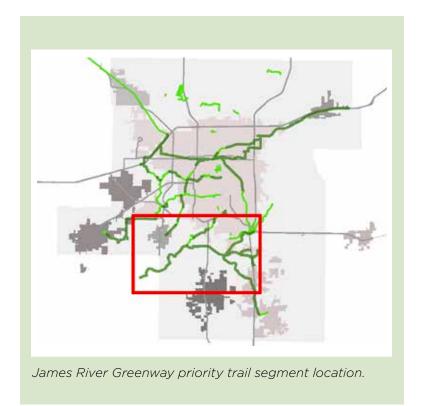
#### **Refined Original Alignment**

The refined original alignment begins at the confluence of the James River and Wilson's Creek and travels northeast up the James River along the northwest bank of the river. The alignment crosses to the south side of river and travels along the south bank of the river through the northern wooded edge of the residential River Bluff Drive parcels. The alignment crosses Nelson Road at-grade and continues east along the south and east side of the James River, passing through residential and agricultural property before crossing to the west side of the river at Blue Springs Road. The alignment travels north and east before reaching Rivercut Golf Course. The alignment continues through Rivercut Golf Course to Rivercut Parkway near the course entrance, and then travels east between Rivercut Parkway and the James River until reaching Farm Road 141 at Farm

Road 190. The alignment crosses Farm Road 141 and travels east along the south side of Farm Road 190 through City of Springfield property. The alignment then travels north along Farm Road 143 to the future primary arterial (Rivercut Parkway Extension), at which point the alignment travels east alongside the future primary arterial for nearly three miles, at which point it connects with two planned priority greenways - the Farmer Branch Greenway and the Chadwick Branch Flyer Trail. The trail turns north and travels northeast along the BNSF Kissick Spur Subdivision along the south side of the James River Power Station and Lake Springfield. The alignment then crosses the James River on the existing railroad bridge west of US Highway 65 before existing the railroad corridor and traveling west along to the Galloway Creek Greenway via the path connecting the greenway to the Springfield Conservation Nature Center trails.



An existing segment of the James RIver Greenway Trail along the north shore of Lake Springfield



# **James River Greenway**

#### **Alternative Alignment (Preferred)**

The alternative alignment also begins at the confluence of the James River and Wilson's Creek and travels northeast along the north and west bank of the James River. The alignment veers from the riparian corridor and continues northeast to Old Limey Road, then east along the north side of Old Limey Road for 0.8 miles, at which point the alignment crosses the future expressway near the intersection of Old Limey Road and Nelson Mill Road. The trail continues east along the north side of the future primary arterial that connects Old Limey Road to Guin Road and turns north from the future roadway after crossing to the east side of

the James River. The alignment travels north across Blue Springs Road and along the bank of the James River and then crosses the James River near the Rivercut Golf Course. The alignment continues through the golf course property, maintaining a path closer to the James River than the original alignment. The path exits the golf course at its entrance from Rivercut Parkway and travels east through Rivercut Park between the parkway and the James River. The alignment turns south at Farm Road 141 and east across Farm Road 141 before meandering through light groves and open space in the Kreider Park properties. The alignment crosses to the east side of the James River at the utility transmission

corridor and follows the corridor east for nearly two miles, crossing the James River, US Highway 160 (Highway 13/ Campbell Avenue) and two small ephemeral tributaries. The trail then connects to the future primary arterial roadway and travels along this roadway to the BNSF Kissick Spur Subdivision. The alignment travels to the northeast along this rail corridor until reaching city-owned property adjacent to Lake Springfield, then north along Lake Springfield and the James River to its terminus at the Galloway Creek Greenway trailhead at the James River Bridge.



The future James River Greenway will tie into the James River Water Trail at the Southwood Access near US 65



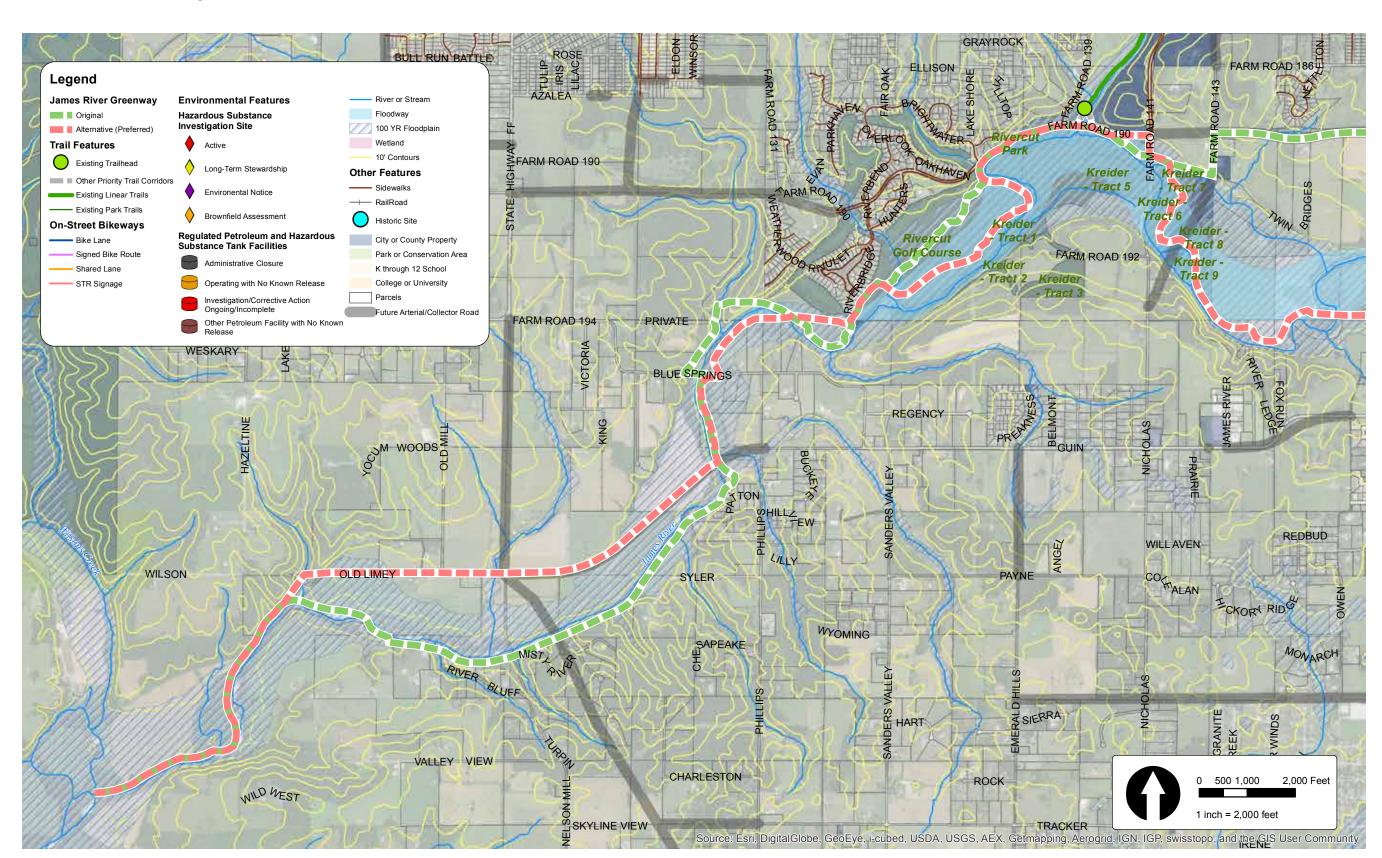
The alternative alignment travels between the James River and the Missouri Veterans Cemetery accessible by Southwood Road.

Score	Priority	Original	Alt
Network Connections	High	•	
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	0	0
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

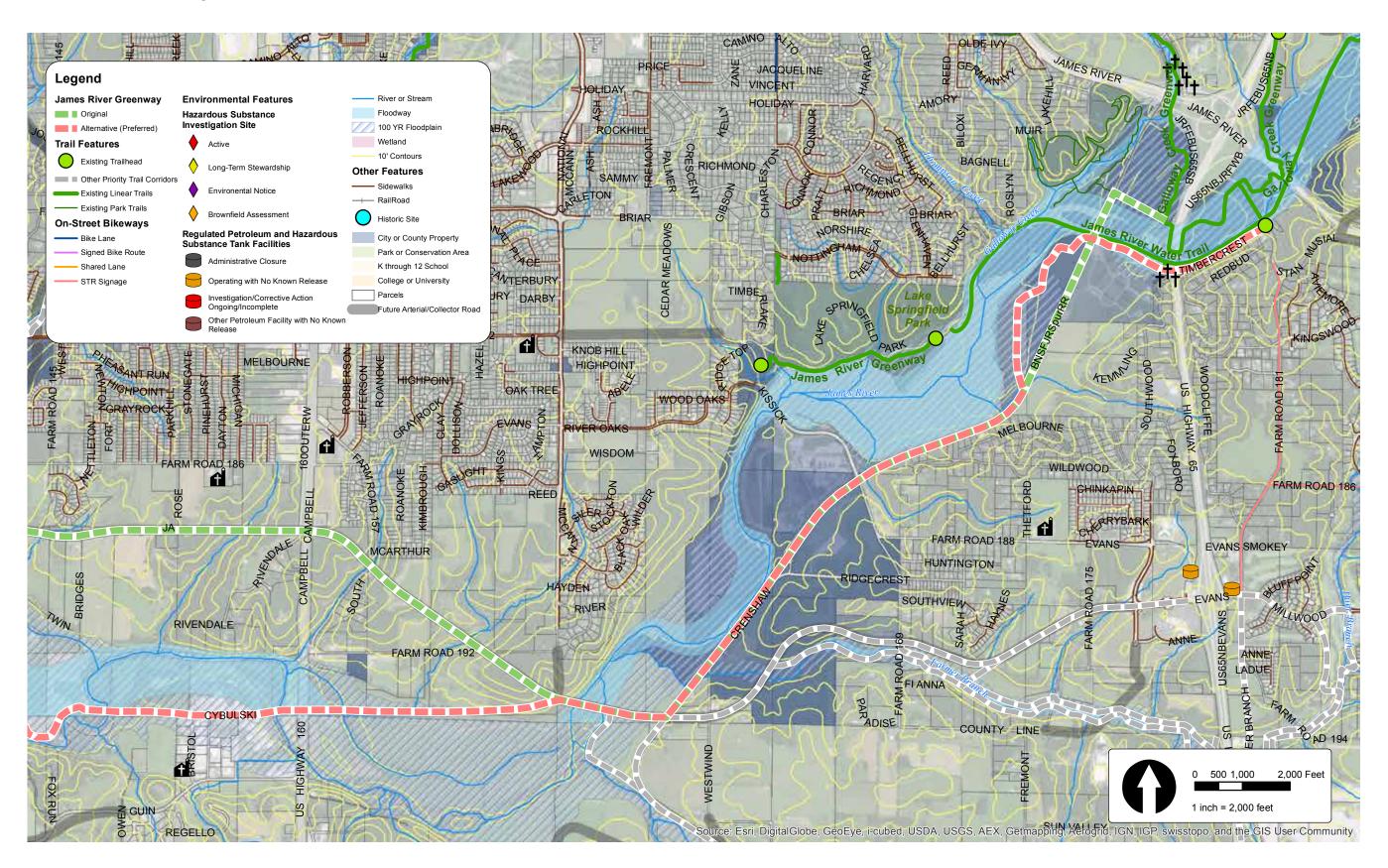
\$21,627,030.

## Ozarks Transportation Organization

## **James River Greenway (West)**



## **James River Greenway (East)**



# **Lower Jordan Creek Greenway**

#### **Corridor Description**

The Lower Jordan Creek Greenway provides a link between Downtown Springfield and the Ewing Neighborhood in west Springfield, where additional connections to the existing Wilson's Creek Greenway and the planned Fassnight Creek Greenway will afford residents and visitors more than 13 miles of contiguous trails facilities along the city's beautiful urban waterways. This planned priority trail segment of the Jordan Creek Greenway begins at Mt. Vernon Street west of the Kansas Expressway and follows the creek northeast to Campbell Avenue at Water Street, where it links to multiple on-street bikeways and planned trails. The prevalence of heavy industrial uses surrounding the creek presents both alignment and environmental challenges to greenway development.

#### **Refined Original Alignment (Preferred)**

The original alignment begins at the existing segment of the Jordan Creek Greenway immediately south of Mt. Vernon Street west of Jordan Creek. At the present, there is no public access to this half-mile segment of the greenway. The alignment crosses the creek at Mt. Vernon Avenue and continues north on the east side of the creek under the Kansas Expressway. An at-grade crossing will be required at Walnut Street. Property acquisition or easements will be necessary to extend the greenway north from Walnut Street to College Street.

At College Street, the trail will cross to the north side of the street and continue east along College Street within the existing right-of-way. Excess curb-to-curb width can be reclaimed from this 40-foot plus two-lane road for the development of a side sidepath (continuing the sidepath theme established at the Route 66 Roadside Park a half block to the east) or a two-way cycle track and adjacent sidewalk. The alignment then turns north at Fort Avenue and travels along the east side of the road and crosses Jordan Creek on a new bicycle/pedestrian bridge. The alignment turns east along the north side of Jordan Creek and travels through West Meadows, an integral component of the Jordan Valley Concept Plan and part of the City of Springfield's efforts to greenlight the Jordan Creek and transform the corridor

into a premier urban park. The path through West Meadows, identified as the main path in the West Meadows Conceptual Landscape Plan, continues east under Grant Avenue and crosses Main and Campbell Avenues at-grade, transitions to an on-street path at Water Street, and remains as such until it reaches the existing Jordan Creek Greenway at Jefferson Avenue.

The most significant refinements to the original alignment occur from Walnut Street to West Meadows, where industrial developments along Jordan Creek present significant environmental and property acquisition challenges. In addition, the refined alignment through the West Meadows site are dependent railroad removal and replacement as identified in the West Meadows Proposed Track Construction and Removal concept from the 2006 Springfield Railroad Reconfiguration and Grade Separation Study.

#### **Alternative Alignment**

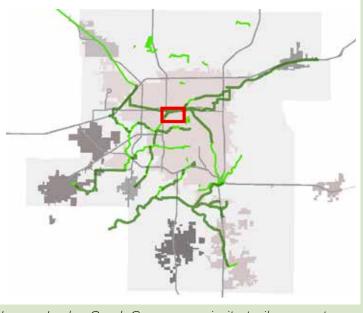
The alternative alignment follows the same path as the refined original alignment from Walnut Street to Fort Avenue, but continues north on Fort Avenue to the Fort Scott Line Rail Trail, a planned priority trail whose development is largely dependent on railroad abandonment or significant rerouting. However, future construction and removals of tracks identified in the West Meadows Proposed Track Construction and Removal plan show this rail corridor remaining active east of Hillcrest Avenue for the foreseeable future.

#### **Interim Alignment**

The interim alignment provides an on-street alternative by way of Lexington Avenue and existing bike routes on Walnut Street and Kimbrough Avenue. The addition of wayfinding signage and other traffic calming elements can offer bicyclists and pedestrians a more comfortable and navigable facility and improve transitions between facility types from off-street trail to on-street bikeway. Should the interim alignment be improved to the level of comfort that it becomes an all-ages bikeway, the wayfinding signage can incorporate greenway branding elements to further establish the corridor as an integral link in the greenway network.

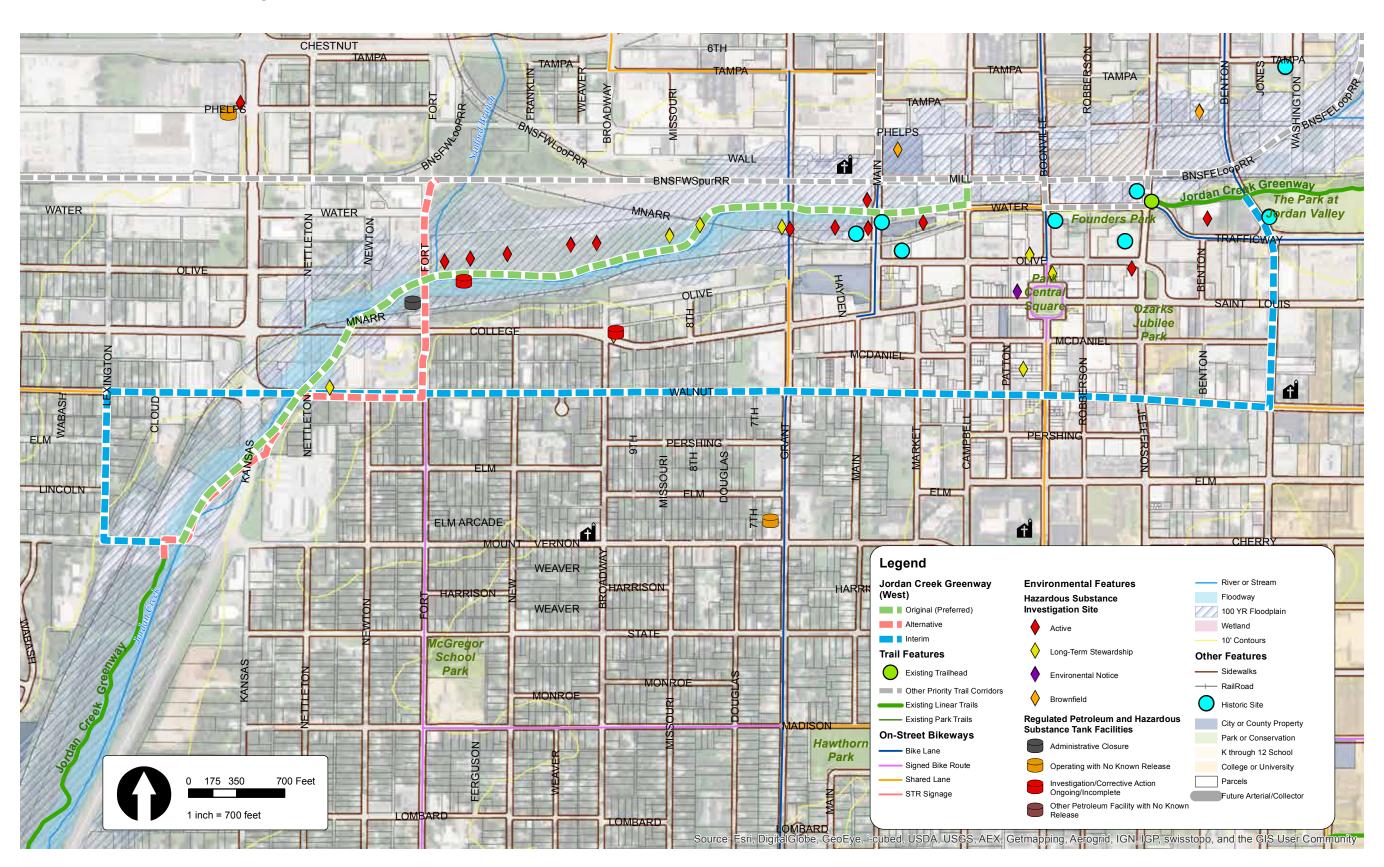
Alignment Scoring				
Score	Priority	Orig	Alt	Int
Network Connections	High		•	•
User Experience	High	•	•	$\circ$
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	•	•	•
Cultural & Natural Resources	Med.	•	$\bigcirc$	•
Environmental Conditions	Med.	•	•	•
Cost	Low	$\bigcirc$	•	•
Route Directness	Low	•	•	$\circ$
Ownership / Right-of-Way	Low	•	•	•

# Planning level cost for preferred alignment: \$2,111,523.



Lower Jordan Creek Greenway priority trail segment location.

## **Lower Jordan Creek Greenway**



# North Jordan Creek Greenway - Jordan Valley Connector

#### **Corridor Description**

Multiple greenways converge at around Jordan Valley Park, highlighting the density of popular recreation, education, and cultural destinations in the heart of Springfield. The North Jordan Creek Greenway - Jordan Valley Connector segment connects the existing North Jordan Creek Greenway, which currently terminates at Sherman Avenue north of Central Street, to the Jordan Creek Greenway in Jordan Valley Park. This short trail segment provides direct connections to multiple destinations and attractions, including Ozark Technical Community College, Drury University, the IDEA Commons, Jordan Valley Park, Silver Springs Park, and Hammons Field.

#### **Original Alignment**

The original alignment begins at the intersection of Jefferson Avenue and Trafficway Street, where it connects with the existing Jordan Creek Greenway, and travels north along the east side of Jefferson Avenue. Once north of the BNSF East Loop railroad tracks, the alignment turns east along the railroad right-of-way and continues northeast along the tracks until reaching Sherman Avenue, at which point the trail turns

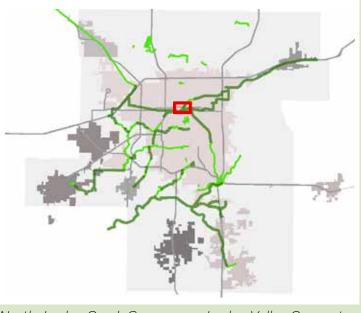
south on Sherman Avenue, crosses the railroad tracks, and then crosses the two-lane Sherman Avenue at the existing crosswalk leading to the North Jordan Creek Greenway. Current BNSF policy restricting bicycle and pedestrian trails within railroad right-of-way limits the opportunity for trail development until the railroad is abandoned or sold, or until current BNSF policy changes.

#### **Alternative Alignment (Preferred)**

The alternative alignment begins at the east end of Jordan Valley Park at Sherman Avenue and travels north from the Jordan Creek Greenway on the west side of Sherman Avenue. The alignment turns west on the existing sidepath on the south side of Chestnut Expressway, which travels north under Chestnut Expressway and continues parallel to the BNSF East Loop railroad tracks to Central Street. The alignment continues east on the south side of Central Street, crosses the west and north legs of the Central Street / Sherman Avenue intersection, and connects to the existing North Jordan Creek Greenway. Improvements to the Sherman Avenue bridge over the Jordan Creek North Branch will be required to accommodate the shared-use path.

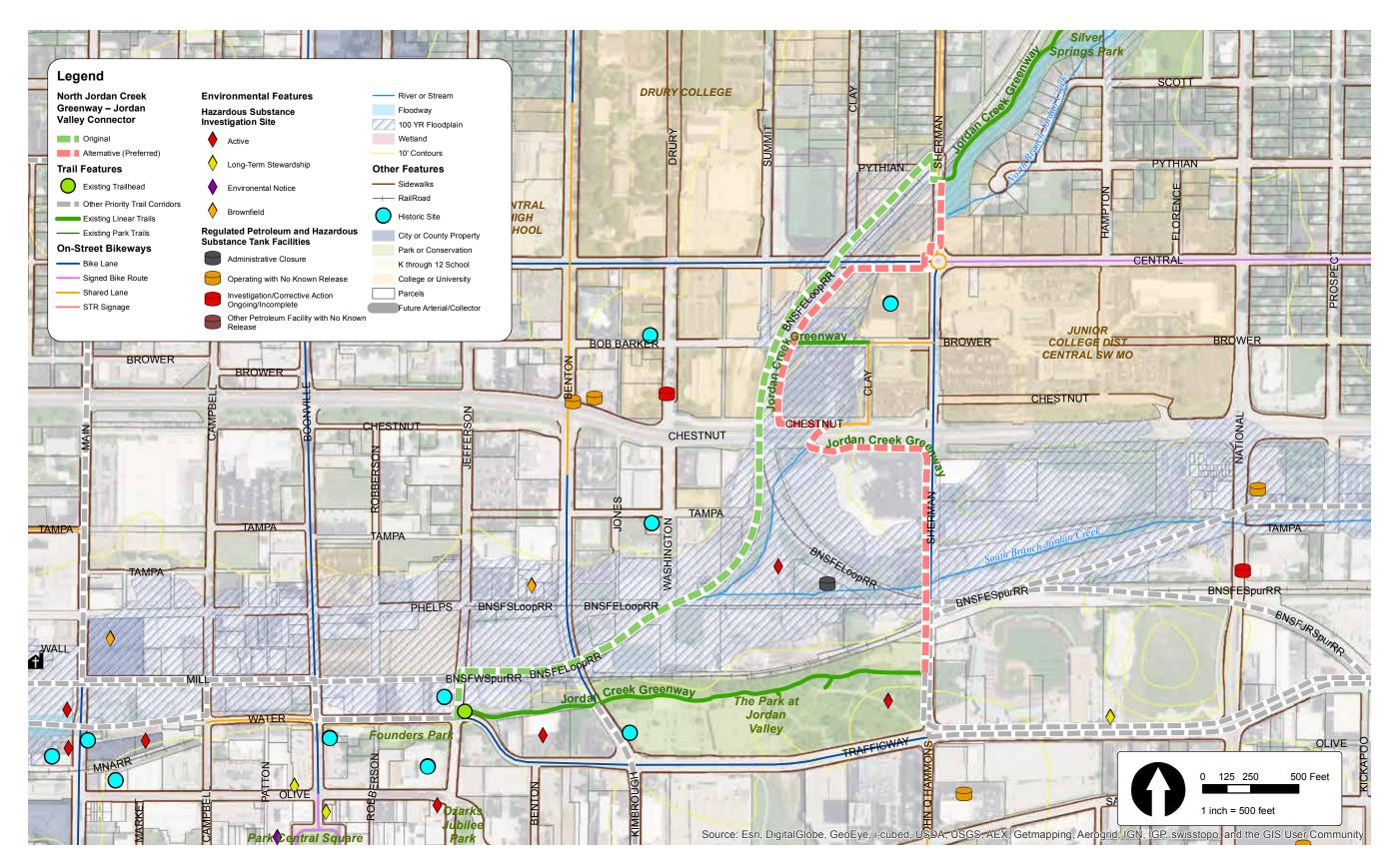
Alignment Scoring			
Score	Priority	Original	Alt
Network Connections	High	•	•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	0	•

# Planning level cost for preferred alignment: \$1,152,341.



North Jordan Creek Greenway - Jordan Valley Connector priority trail segment location.

# North Jordan Creek Greenway - Jordan Valley Connector



# **North Jordan Creek Greenway**

#### **Corridor Description**

The North Jordan Creek Greenway travels up the North Fork of the Jordan Creek from its confluence with the South Fork near Jordan Valley Park to its origins in Northeast Springfield. While much of the creek has been channelized or covered, the North Fork connects numerous parks, neighborhoods, and destinations and provides opportunities for trail development. The planned priority trail segment identified and analyzed for this study begins at the northern terminus of the existing North Jordan Creek Greenway in Smith Park near the intersection of Fremont Avenue and Division Street, and extends north east across residential, industrial, and agricultural land uses to the Springfield Underground entrance on Kearney Street, east of US Highway 65.

#### **Refined Original Alignment**

The original alignment extends east from the North Jordan Creek Greenway trailhead in Smith Park and crosses under Division Street through the double box culvert and continues east across multiple residential parcels before reaching Glenstone Avenue. Many of these houses have been acquired by the City of Springfield through its Floodplain Acquisition Program, a core property acquisition vehicle for creek daylighting, stormwater mitigation projects, and riparian trail development. The trail continues east under Glenstone Avenue via the creek culvert and travels northeast along the wooded creek corridor until reaching Blaine Street at Barnes Avenue. The alignment crosses Blaine Street and continues on the north side of the street to Packer Road. Trail development along Blaine Street will likely occur in tandem with roadway and stormwater improvements. The alignment continues east across Packer Road, crosses the BNSF Thayer Subdivision railroad with a new grade separated crossing, and travels over the Associated Wholesale Grocers and Springfield Underground parcels before reaching the US Highway 65 right-of-way. From there, the trail travels north along this right-of-way, then crosses under the US Highway 65 bridge over the BNSF Cuba Subdivision railroad. The trail continues along the south side of the railroad tracks on Springfield Underground property to Le Compte Road, where it connects with the planned priority trail on Le Compte Road from Division Street to Kearney Street.

#### **Alternative Alignment #1**

The first alternative alignment travels east along Division Street from the North Jordan Creek Greenway trailhead in Smith Park to Glenstone Avenue, where it crosses to the northeast corner and travels along the North Fork of the Jordan Creek Greenway to Blaine Street east of Thoman Street. The alignment continues east on the south side of Blaine Street, crosses to the north side at Barnes Avenue, then continues east until Packer Road. As with the original alignment, trail development along Blaine Street will likely depend on future roadway and stormwater improvements. The alignment crosses Packer Street and travels north to across the BNSF Thayer Subdivision and BNSF Cuba Subdivision railroads, then turns east along the Cuba Subdivision to the US Highway 65 right-of-way. The trail alignment then travels north along the west side of US Highway 65 to Kearney Street, turns east and travels along the south side of Kearney Street across US Highway 65 by way of a new bicycle and pedestrian bridge and connects to the Route 66 planned priority trail near the entrance to the Springfield Underground.

## **Alternative Alignment #2 (Preferred)**

The second alternative alignment beings at the North Jordan Creek Greenway trailhead in Smith Park and travels east along the south side of Division Street to Packer Road. The alignment functions as a sidepath facility and crosses all

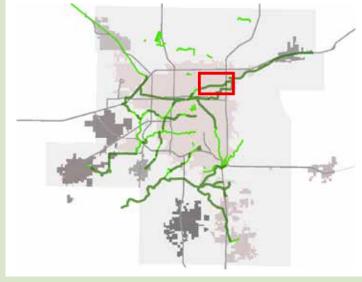


The 1st and 2nd alternative alignments travel along the north (left) side of the BNSF Cuba Subdivision from Packer Road to US Highway 65 (Source: Google Street View).

intersections and drives at-grade. The alignment crosses
Division Street at the east leg of the Division Street and
Packer Road intersection and travels north along Packer
Street to Blaine Street. The second alternative alignment
then follows the same path as the first alternative alignment
to their mutual terminus connecting to the Route 66 planned
priority trail on Kearney Street east of US Highway 65.

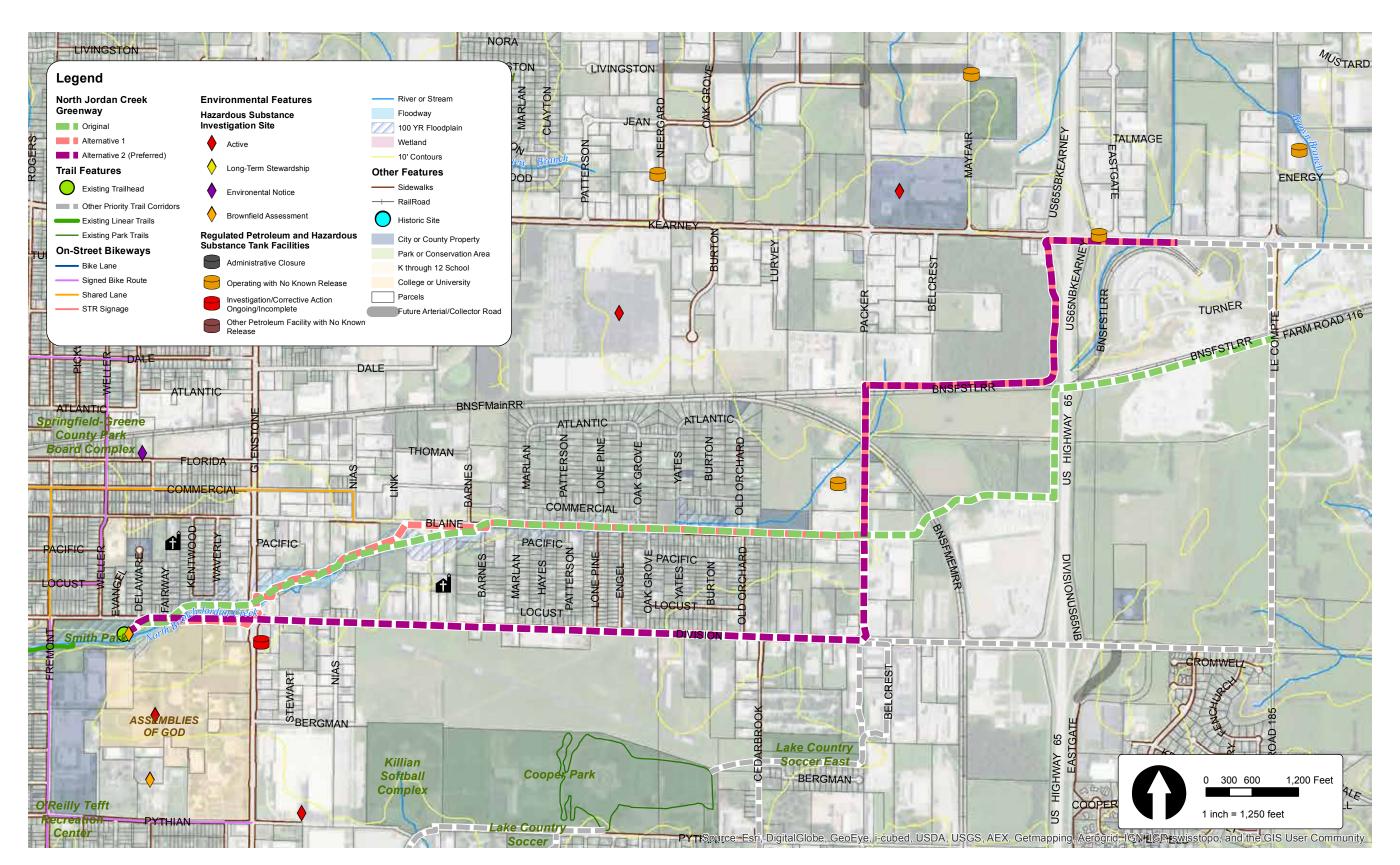
Alignment Scoring				
Score	Priority	Orig	Alt	Alt
Network Connections	High		•	•
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	•	•	•
Cultural & Natural Resources	Med.	•	•	•
Environmental Conditions	Med.	•	•	•
Cost	Low	$\circ$	•	
Route Directness	Low	•	•	$\circ$
Ownership / Right-of-Way	Low	0	•	•

# Planning level cost for preferred alignment: \$5,395,502.



North Jordan Creek Greenway priority trail segment location.

## **North Jordan Creek Greenway**



# **Shuyler Creek Greenway Extension**

#### **Corridor Description**

Located in east Republic and unincorporated Greene County, the Shuyler Creek Greenway Extension is a 1.4-mile addition to the existing Shuyler Creek Greenway, which currently ends 1,000' east of Oakwood Avenue. While the existing greenway segment is suburban in character and surrounded by residential lots, the planned extension offers a more rural trail experience as it winds through old growth forests and over gently undulating farmland hills. Along with the planned priority trail segments to the east (Etheridge Trail, Wilson's Creek Boulevard, and West Republic Road), the Shuyler Creek Greenway Extension provides a vital link between the City of Republic and the regional trail network.

#### **Refined Original Alignment**

The refined trail alignment begins at the eastern end of the existing Shuyler Creek Greenway and travels southeast along the intermittent creek along the rear edge of residential parcels in the Stoney Creek Estates subdivision. Easements will be required from eight residential property owners in this subdivision. The alignment crosses East Elm Street, crosses the creek bed roughly 250' south of the roadway, and

A view of the proposed Shuyler Creek Greenway Extension looking south from the existing eastern end of the greenway.

continues eastward along the north side of the creek flood-way. The alignment crosses Farm Road 97 and meanders through the Nau Angus Farms parcels along the 100-year floodplain to Farm Road 99. If necessary, an alternative route through these parcels may be considered to lessen the trail's impact on agricultural and/or livestock operations.

The alignment continues across Farm Road 99 and along the south and west side of the creek until it reaches the City of Republic-owned parcel at the northeast corner of Farm Road 99 and Farm Road 186, at which point it crosses the creek and connects with the planned Etheridge Trail.

Should any of the rural parcels be subdivided and developed, the City of Republic and Greene County should work with developers to incorporate the greenway into subdivision platting and infrastructure development.

#### **Alternative Alignment 1 (Preferred)**

This alignment alternative follows East Elm Street/Farm Road 182 east along the south side of the road and connects with the Etheridge Trail alternative alignment 1 east of Farm Road 99.



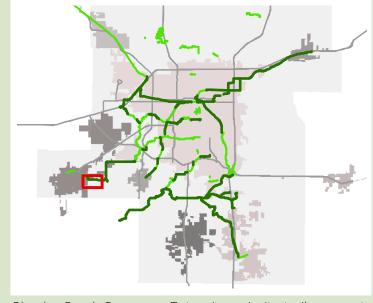
A view of the alignment crossing at East Elm Street (Farm Road 182) between Cedarbrook and Stoney Creek Estates.

#### **Alternative Alignment 2**

This alignment alternative follows the same path as the original alignment until reaching Farm Road 97, at which point it travels south along Farm Road 97, then east along the parcel lines until reaching Farm Road 99 immediately south of Shuyler Creek.

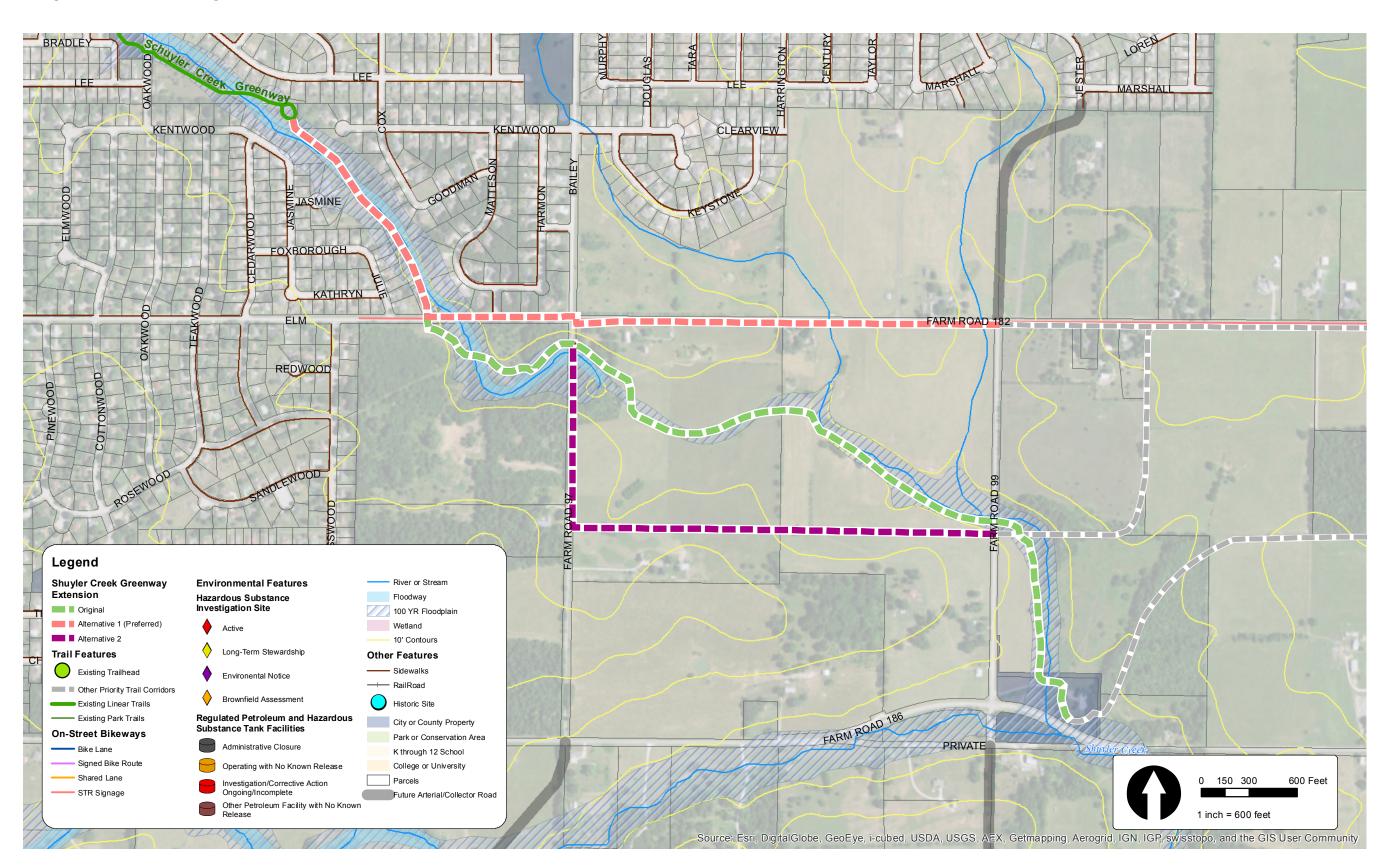
Alignment Scoring				
Score	Priority	Orig	Alt 1	Alt 2
Network Connections	High	•	•	•
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	•	•	•
Cultural & Natural Resources	Med.	•	•	•
Environmental Conditions	Med.	•	•	•
Cost	Low	•	•	•
Route Directness	Low	•	•	•
Ownership / Right-of-Way	Low	$\circ$		$\circ$

# Planning level cost for preferred alignment: \$1,812,609.



Shuyler Creek Greenway Extension priority trail segment location.

## **Shuyler Creek Greenway Extension**



# **Etheridge Trail**

#### **Corridor Description**

Located in unincorporated Greene County between the City of Republic and Wilson's Creek National Battlefield, the Etheridge trail is 0.9-mile rural trail connecting the planned Shuyler Creek Greenway extension to Farm Road 182, just west of Wilson's Creek Boulevard. The corridor that contains Shuyler Creek Greenway, Etheridge Trail, Wilson's Creek Boulevard, and West Republic Road provides a critical link for the City of Republic to the regional trail network. The rural character of the Etheridge Trail combines rolling pastoral hills and dense woods to create a unique trail user experience in the region.

#### **Refined Original Alignment**

The Etheridge Trail begins near the intersection of Farm Road 186 and Farm Road 99 on a parcel owned by the City of Republic. The trail exits the northeast corner of this parcel and travels through the eastern, wooded portion of the Etheridge lot before continuing east across an agricultural field. The alignment continues east along the parcel boundary and the edge of two densely wooded parcels before

turning north and traveling along an unimproved grass drive of a rear flag lot to its northeast terminus at Farm Road 182. The alignment crosses no major streams, roadways, or topographical challenges, but will require easements from at least six landowners in order to be completed.

#### **Alternative Alignment 1 (Preferred)**

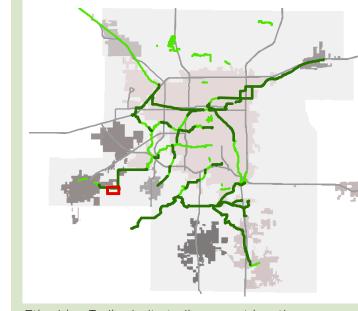
This alternative alignment begins north of original alignment east of the intersection of Farm Road 182 and Farm Road 99 and travels along the south side of Farm Road 182 until its terminus connecting to the planned Wilson's Creek National Battlefield Connector.

#### **Alternative Alignment 2**

The second alternative alignment begins at Farm Road 99 immediately south of Shuyler Creek and travels directly eastward along the parcel line, then north along the parcel line to Farm Road 182. The alignment turns east and travels along the south side of Farm Road 182 and until its terminus connecting to the planned Wilson's Creek National Battlefield Connector.

Score	Priority	Orig	Alt 1	Alt 2
Network Connections	High	$\bigcirc$	$\bigcirc$	$\bigcirc$
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	$\circ$	0	$\circ$
Cultural & Natural Resources	Med.	•	•	•
Environmental Conditions	Med.	•	•	•
Cost	Low	•	•	•
Route Directness	Low	•	•	•
Ownership / Right-of-Way	Low	$\bigcirc$		$\circ$

**Alignment Scoring** 

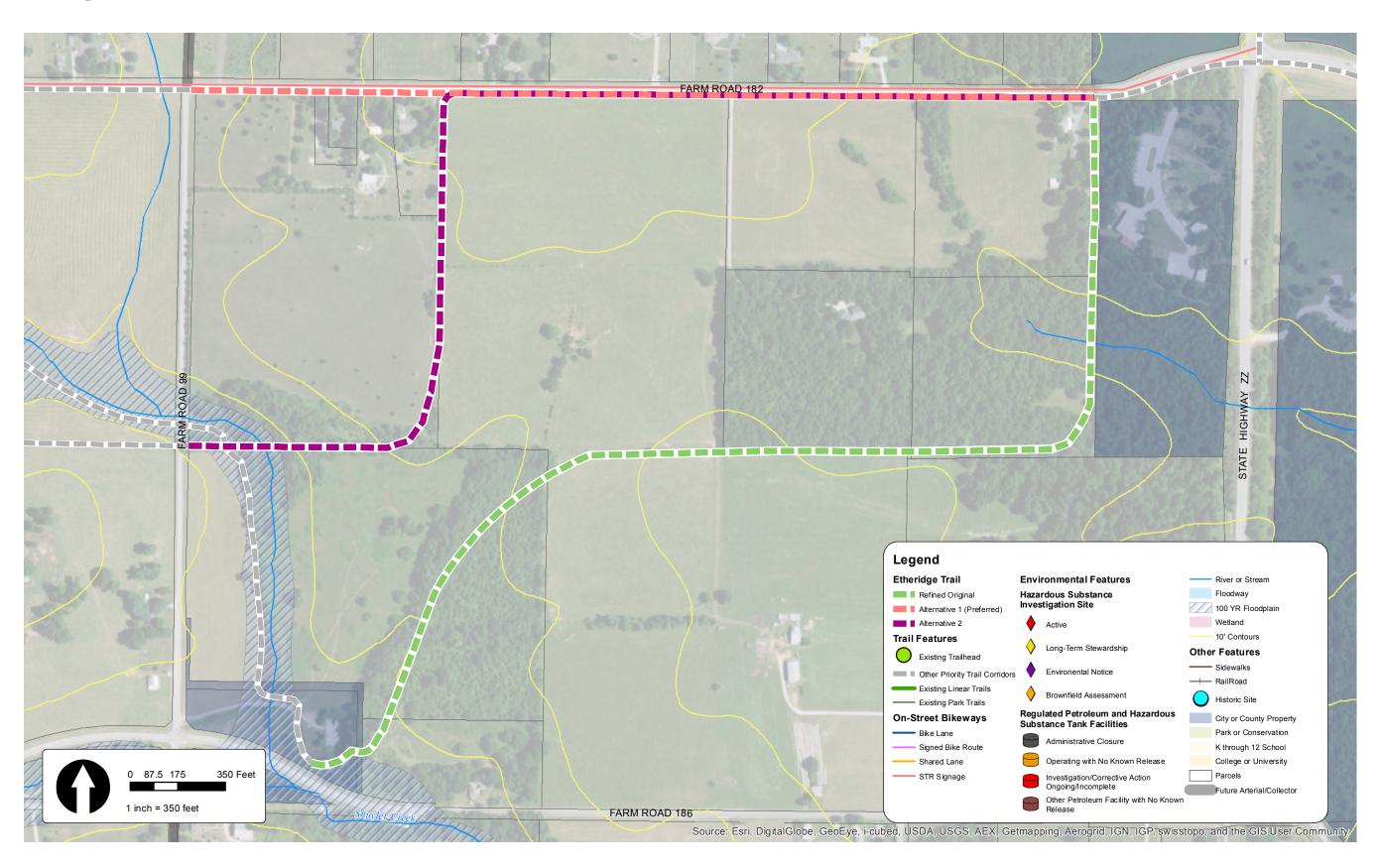


Etheridge Trail priority trail segment location.



View of the northeast end of the Etheridge Trail from Farm Road 182 (Source: Google Street View).

## **Etheridge Trail**



## Wilson's Creek National Battlefield Connector

#### **Corridor Description**

Wilson's Creek National Battlefield is one of the most prominent historic amenities in the Springfield region. Despite its importance, access to the site for people walking and bicycling is limited. The Wilson's Creek National Battlefield Connector provides direct access to the site and, along with connecting planned priority trail segments, serves as an important link between the City of Republic and the regional trail system. Once in the historic site, trail users have access to the battlefield's 5-mile loop trail.

### **Refined Original Alignment**

The trail segment alignment begins west of the intersection of Wilson's Creek Boulevard and Farm Road 182, connecting to the planned Etheridge Trail. The shared-use path travels east along the south side of Farm Road 182 within the existing right-of-way, which widens from roughly 60' at the west end of the alignment to 200' at the intersection of Wilson's Creek Boulevard. The alignment maintains its position on the south side of the road as it crosses Wilson's Creek Boulevard and enters Wilson's Creek National Battlefield immediately adjacent to the existing drive and connects with the existing pedestrian system that begins at the parking lot.

Score	Priority	Original
Network Connections	High	•
User Experience	High	•
Enhances Bicycling & Walking	High	•
Logical Segments	Medium	•
Cultural & Natural Resources	Medium	•
Environmental Conditions	Medium	•
Cost	Low	•
Route Directness	Low	•
Ownership / Right-of-Way	Low	•

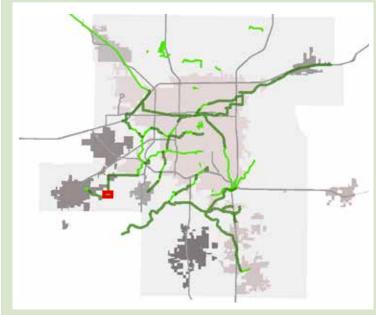
Planning level cost for preferred alignment: \$513,281.



Farm Road 182 west of Wilson's Creek Boulevard.

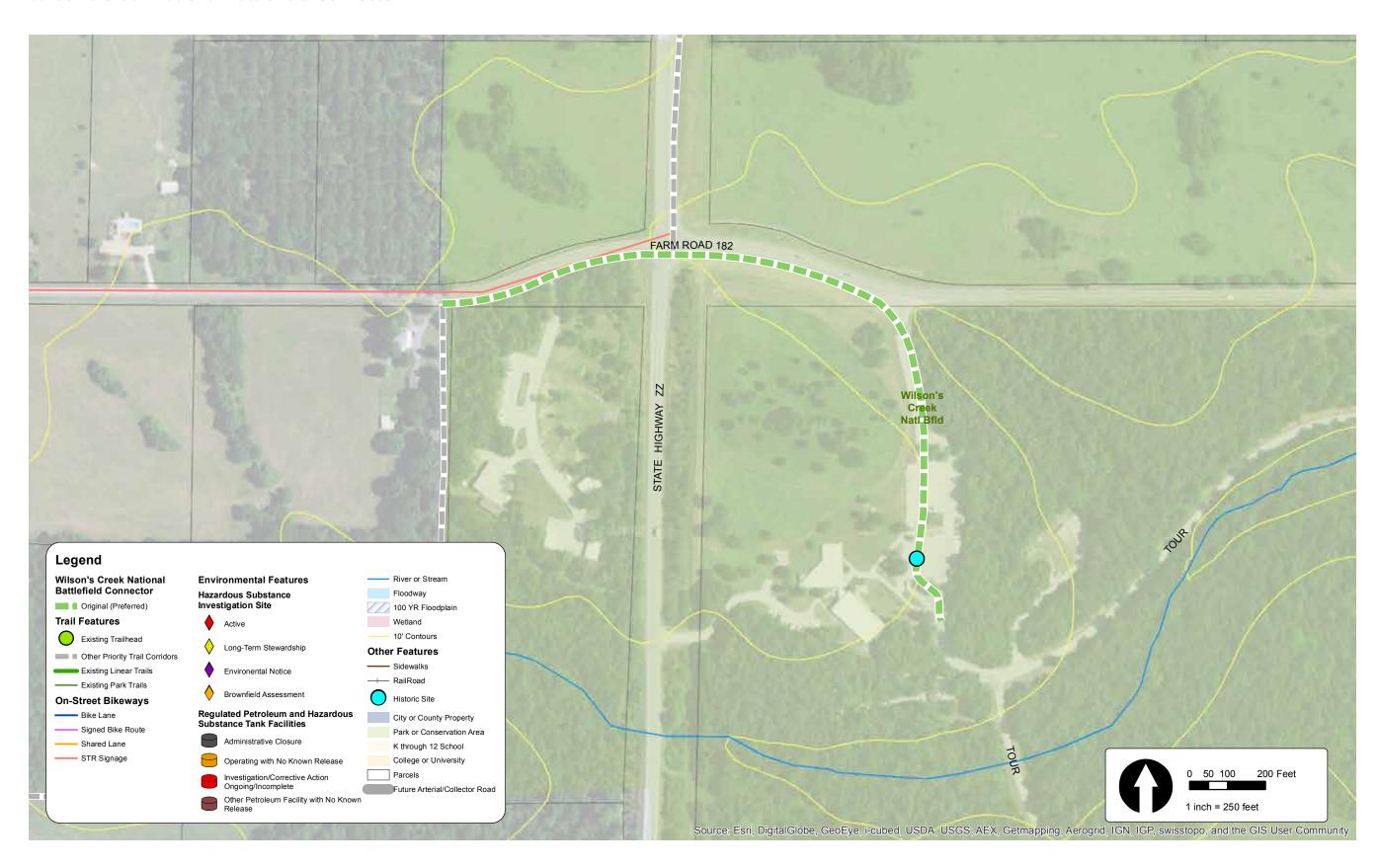


Farm Road 182 west of the Wilson's Creek National Battlefield.



Wilson's Creek National Battlefield Connector priority trail segment location.

#### **Wilson's Creek National Battlefield Connector**



# **Route 66 Trail (Strafford Trail)**

### **Corridor Description**

The Route 66 Trail provides a regional connection between the City of Strafford and the City of Springfield via Kearney Street and State Highway OO, the original US Route 66, and parallel to the BNSF Railroad. This corridor represents Strafford's only planned priority trail link to the regional trail system. The historical significance of Route 66 can be used as a branding and design element to further emphasize the corridor's history as an integral element of early 20th Century automobile culture.

#### **Refined Original Alignment**

The original alignment begins on the south side of Kearney Street between Le Compte Road and US Highway 65, adjacent to the Springfield Underground site. The trail travels east along the south side of Kearney Street, connect with the planned priority trail on Le Compte Road. It continues east along Kearney Street, crosses to the north side of Kearney Street at Partnership Boulevard, then continues east along the north side of Kearney Street. While the south side of Highway OO has fewer cross streets and drives, challenges with topography, hydrology, and available width restrict trail development, and therefore the north side of Highway OO is more favorable. The trail remains on the north side of Highway OO, connecting with numerous job centers and employers, a planned Strafford public park, and numerous businesses and destinations in the City Strafford.

Score	Priority	Original
Network Connections	High	•
User Experience	High	•
Enhances Bicycling & Walking	High	•
Logical Segments	Medium	0
Cultural & Natural Resources	Medium	•
Environmental Conditions	Medium	•
Cost	Low	•
Route Directness	Low	•
Ownership / Right-of-Way	Low	•

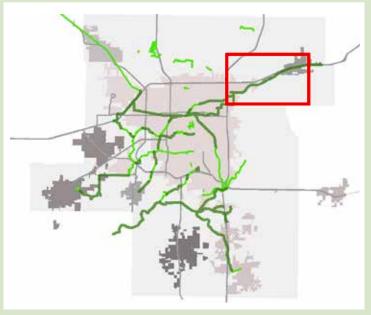
# Planning level cost for preferred alignment: \$8,953,021.



A view of the Route 66 Trail corridor looking east from Mulroy Road.

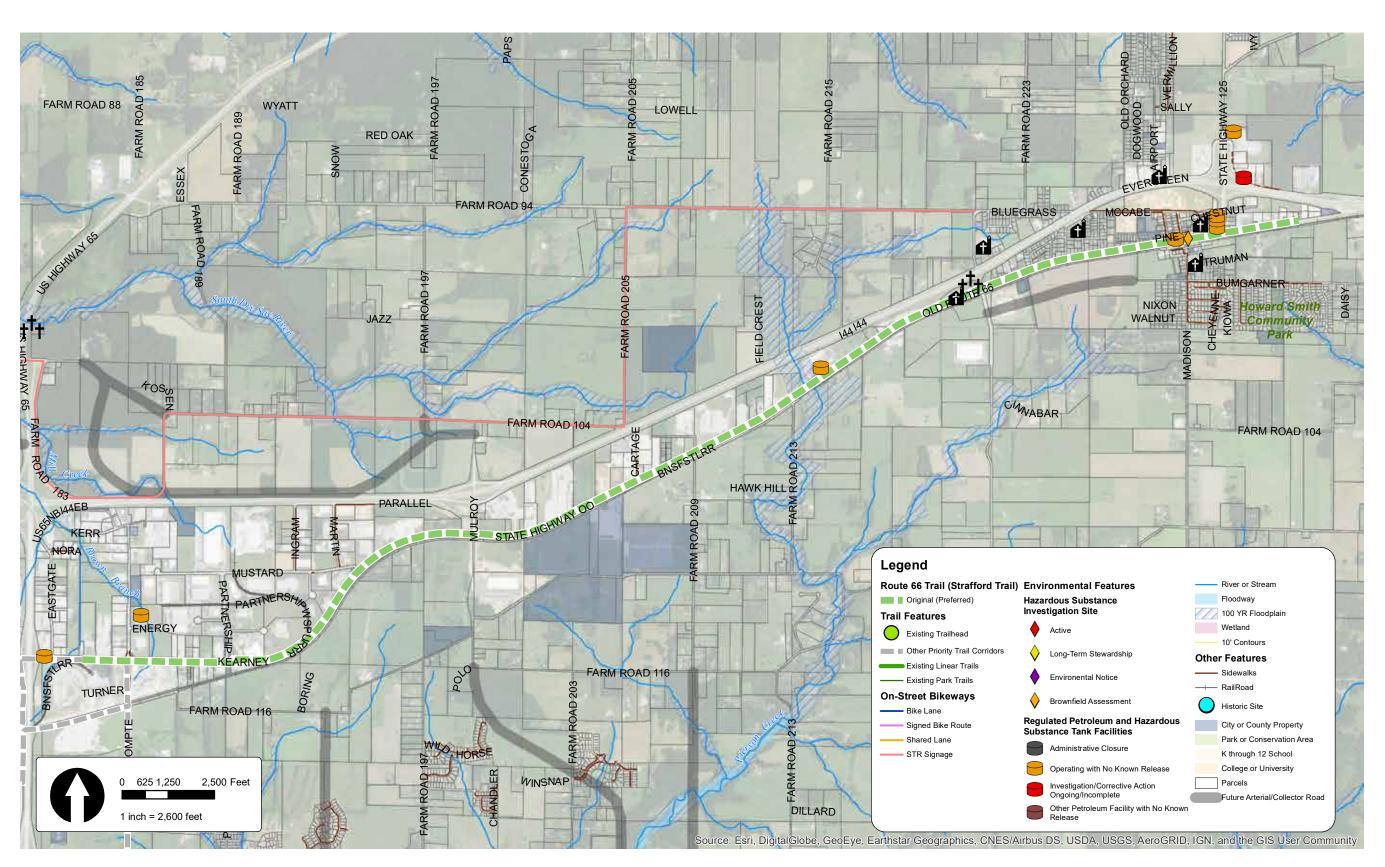


A view of the Route 66 Trail corridor looking west from Highway 125 in the heart of Strafford.



Route 66 Trail (Strafford Trail) priority trail segment location.

#### **Route 66 Trail (Strafford Trail)**



# **South Creek Greenway**

### **Corridor Description**

The South Creek Greenway planned priority trail segment represents the missing link connecting the South Creek Greenway to the Wilson's Creek Greenway. While currently served by an on-street route with dedicated bike lanes and shared travel lanes, trail users lack a seamless connection between these two facilities. Once complete, this will link the South Creek Greenway to Tal's Trailhead and will offer greenway users more than 14 miles of continuous travel and recreation on separated paths.

#### **Refined Original Alignment (Preferred)**

The refined original alignment continues from the southern terminus of the existing South Creek Greenway, roughly 0.25 miles south of West Battlefield Road near intersection of Creekside Drive and Rockford Street. The path continues south along the east side of South Creek and will require a new bicycle and pedestrian bridge crossing the South

Branch of the South Creek. The trail continues to hug the edge of the floodway as it travels alongside the creek, under West Bypass (State Highway FF), and connects to the existing trail stub at Wilson's Creek.

#### Interim Alignment (Existing)

To address the existing gap in the trail network, the City of Springfield, in partnership with Ozark Greenways, has created an on-street route to connect the Wilson's Creek and South Creek Greenways. The route includes bike lanes along West Battlefield Road to West Bypass, and a signed shared route along Farm Road 123 south to Tal's Trailhead. While this on-street connection provides a wayfinding element connecting the two greenways, it cannot offer the same level of comfort and user experience of a riparian trail, and therefore must be considered an interim solution until such time that the South Creek Greenway extension is complete.

Alignment Scoring			
Score	Priority	Original	Interim
Network Connections	High	•	•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	$\bigcirc$
Environmental Conditions	Medium	•	•
Cost	Low	0	•
Route Directness	Low	•	0
Ownership / Right-of-Way	Low	0	•

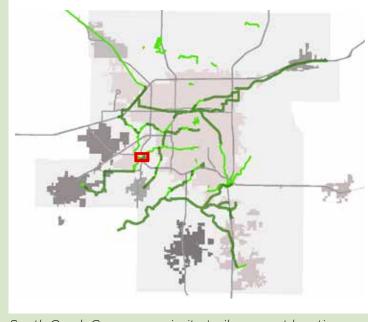
# Planning level cost for preferred alignment: \$928,882.



Southern terminus of the South Creek Greenway, just south of the Creekside Drive access.

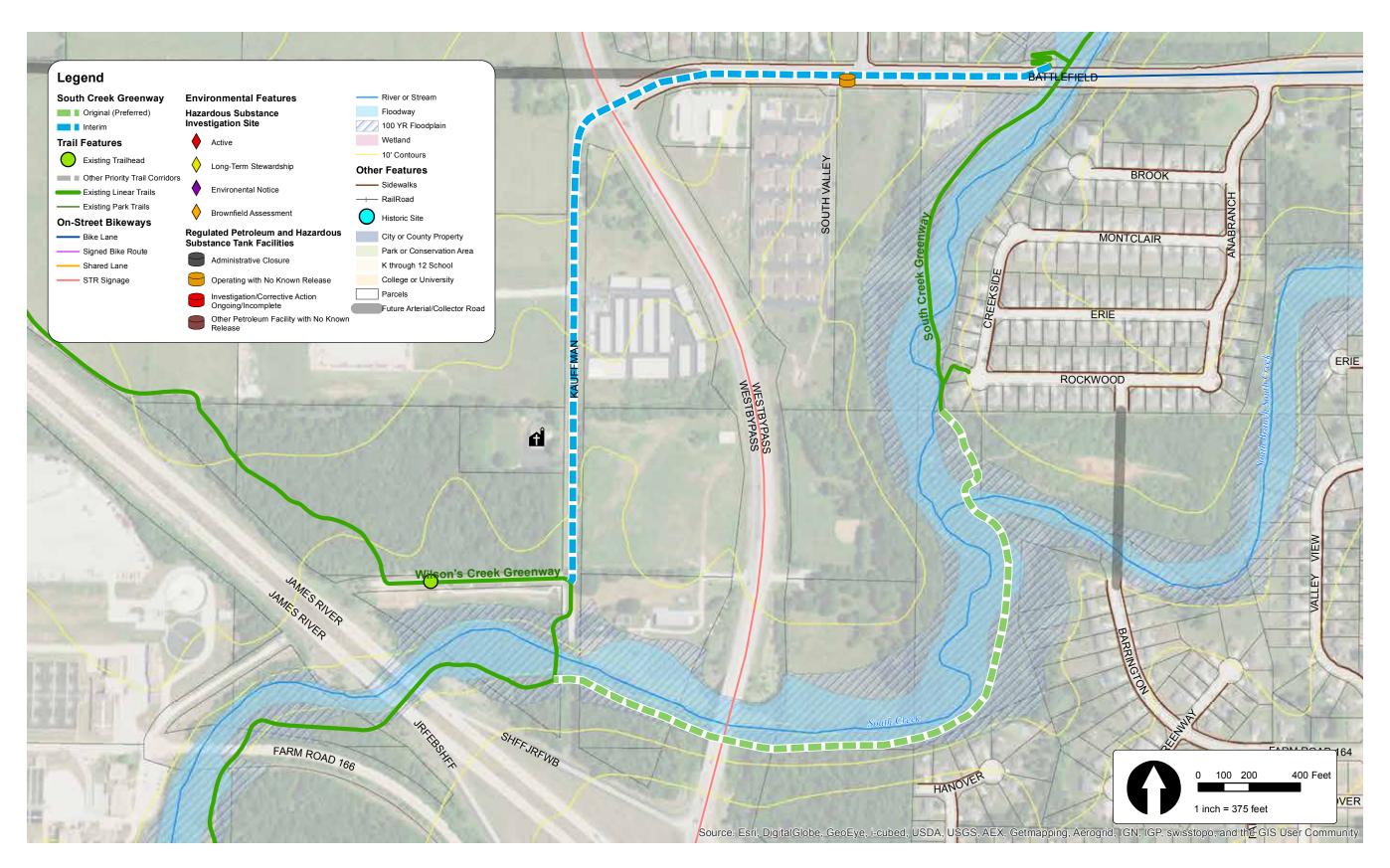


A view of South Creek looking west from the West Bypass (Hwy FF) Bridge toward Wilson's Creek Greenway.



South Creek Greenway priority trail segment location.

## **South Creek Greenway**



## **South Jordan Creek Greenway**

#### **Corridor Description**

The South Branch of Jordan Creek extends eastward from Jordan Valley and offers a natural connection between Cooper Park and Jordan Valley Park. However, heavy industrial development, multiple railroad tracks, and major roadways restrict the riparian corridor's ability to serve as a direct alignment for trail development. The South Jordan Creek Greenway alignments presented below navigate the wandering creek, the street network, and myriad of land uses to offer unique paths to connect Downtown Springfield to Cooper Park and adjacent residential neighborhoods.

#### **Refined Original Alignment**

The original alignment begins at Phelps Street and Sherman Avenue and travels northeast through numerous industrial properties before crossing the capped South Branch of Jordan Creek near National Avenue. The alignment crosses National Avenue at-grade with a new signalized pedestrian crossing and continues east along the north side of the capped South Branch, turns south along the winding creek west of Fremont Avenue, and crosses Fremont Avenue atgrade with a new crosswalk and rectangular rapid flashing beacon north of the creek and adjacent railroad line. The alignment then continues east along the railroad tracks and adjacent industrial properties, crosses under the Glenstone Avenue Viaduct, then crosses the railroad tracks and travels south to Trafficway Street. The alignment continues along the north side of Trafficway Street until reaching the South Branch of Jordan Creek again, at which point it travels alongside the creek and under Chestnut Expressway via the existing box culverts. Improvements may be necessary to meet shared-use path clearance standards.

The alignment continues along the South Branch of Jordan Creek and follows the east fork through the southern end of Eastlawn Cemetery and Lake Country Soccer South Fields, crosses Patterson Avenue at-grade, and travels east along Rockhurst Street. An alignment along Rockhurst Street will be dependent upon stormwater and roadway improvements that can accommodate a sidepath. At Burton Avenue, the alignment continues east through Glenwood Park, then continues north along Cedarbrook Avenue and connects to the Division Street - Cooper Park Connector.

#### **Alternative Alignment #1**

The first alternative alignment begins at the existing Jordan Creek Greenway in Jordan Valley Park, travels south to Trafficway Street, then continues east along the north side of Trafficway as a sidepath facility until reaching the original alignment at the South Branch of Jordan Creek and crossing under Chestnut Expressway through the existing creek box culverts. The alignment continues alongside the creek, traverses the southern edge of Eastlawn Cemetery, and enters the Lake Country Soccer South Fields property from the southeast corner. The alignment travels along the perimeter of the property to the east and north before crossing Pythian Street at-grade at Patterson Avenue into Cooper Park

#### **Alternative Alignment #2 (Preferred)**

The second alternative alignment follows the same path as the first alternative alignment from its origin at Jordan Valley Park to just west of Chestnut Expressway, at which point the second alternative alignment veers north and travels northwest along the south side of Chestnut Expressway to Pythian Street. The alignment then crosses Chestnut

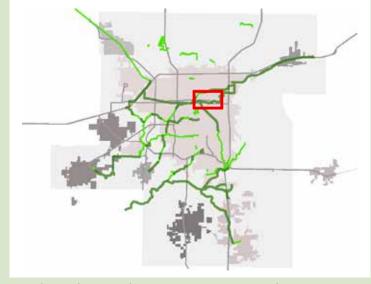


Two of the three trail alignments utilize the ephemeral South Jordan Creek box culverts to travel under Chestnut Expy.

Expressway at the southeast leg of the intersection and continues north along the east side of Pythian Street. The alignment then crosses to the north side of Pythian Street near the western-most parking lots for Cooper Park, travels along the southern edge of Cooper Park, and terminates at the existing park trail system immediately west of the baseball fields parking lot.

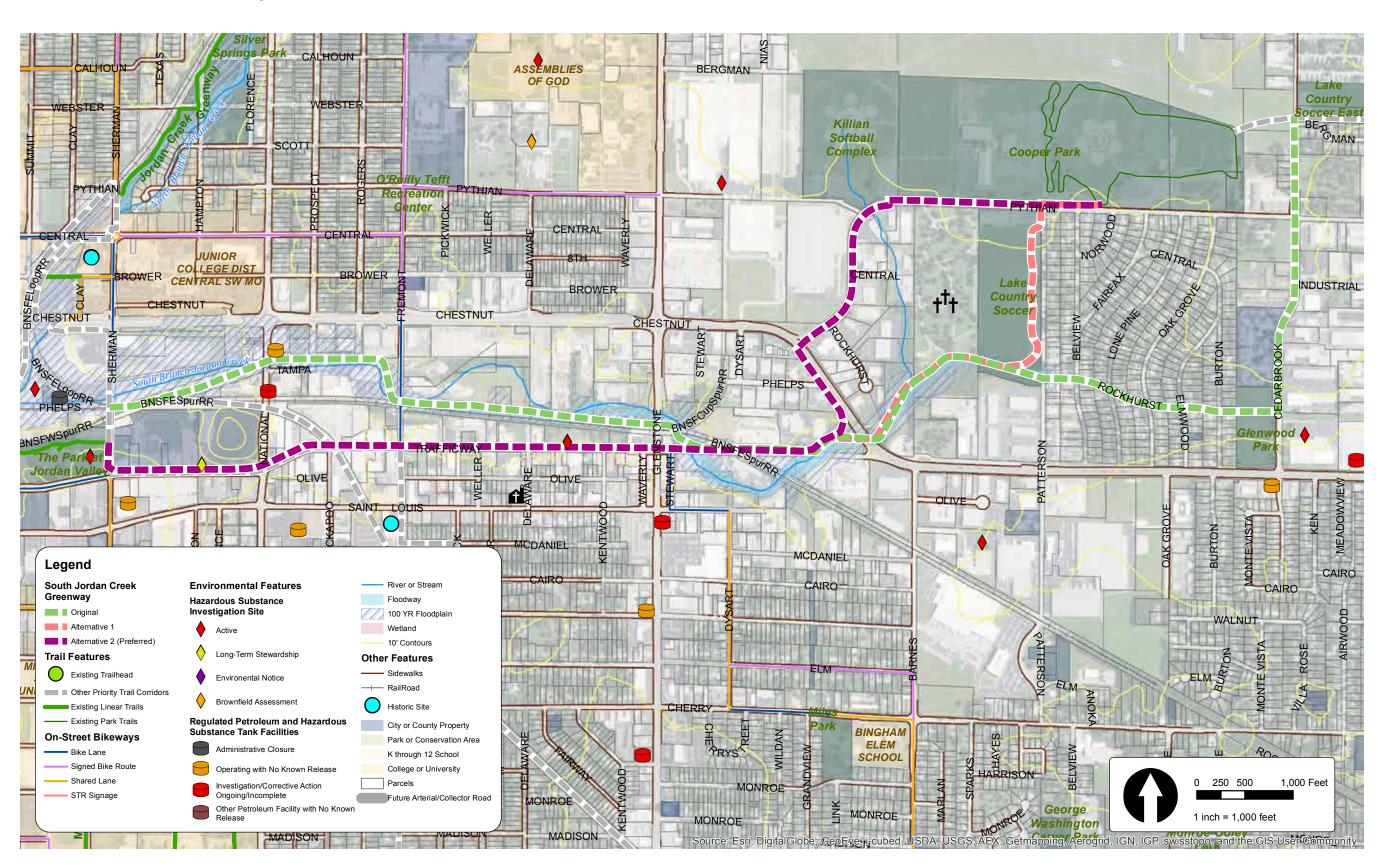
Alignment Scoring				
Score	Priority	Orig	Alt 1	Alt 2
Network Connections	High	•	•	
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	•	•	•
Cultural & Natural Resources	Med.	•	•	•
Environmental Conditions	Med.	$\circ$	•	•
Cost	Low	$\bigcirc$	•	•
Route Directness	Low	$\circ$	•	•
Ownership / Right-of-Way	Low	$\bigcirc$	•	•

# Planning level cost for preferred alignment: \$4,007,075.



South Jordan Creek Greenway priority trail segment location.

## **South Jordan Creek Greenway**



# **Division Street - Cooper Park Connector**

#### **Corridor Description**

Located in northeast Springfield, the Division Street - Cooper Park Connector planned priority trail is a short connecting trail linking Cooper Park to the intersection of Division Street and Packer Road and other planned priority trails to the north and east. While the internal Cooper Park trail system is already in place, there are no existing trails to the north or east to which this planned priority trail connects.

#### **Refined Original Alignment**

The alignment begins at the northeast corner of the existing internal loop trail in Cooper Park and crosses the southeast corner of the Downtown Airport to reach Cedarbrook Avenue. The alignment crosses Cedarbrook Avenue north of Bergman Street and travels along the south side of the Lake Country Soccer East Fields to the eastern edge of the property, then turns north along the eastern edge of the property and continues in that direction until reaching its terminus at Division Street. North of the Lake Country Soccer East Fields site, the alignment should travel along the edge of the

property line following the procurement of easements for shared-use path development from one of the two adjoining property owners.

#### **Alternative Alignment (Preferred)**

The alternative alignment follows the same path as the refined original alignment through Cooper Park, across Cedarbrook Avenue, and through the Lake Country Soccer East Field site. The alternative alignment then exits the site through the north east and traverses the southern edge of the EDCO Health Information Solutions parcel to reach Belcrest Avenue, at which point it continues north along the west edge of the Belcrest right-of-way to reach Division Street. The alignment then turns west to reach the intersection of Division Street and Packer Road and crosses north to the north side of Division Street to connect to other planned priority trails. This refined alignment requires less easement acquisition than the original alignment and does not interfere with internal site circulation and parking on utilized industrial properties.

Score	Priority	Original	Alt
Network Connections	High	•	
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	
Ownership / Right-of-Way	Low	•	

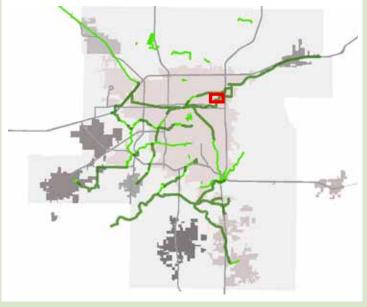
# Planning level cost for preferred alignment: \$1,030,374.



Lake Country Soccer East Fields located cross Cedarbrook Avenue from Cooper Park.

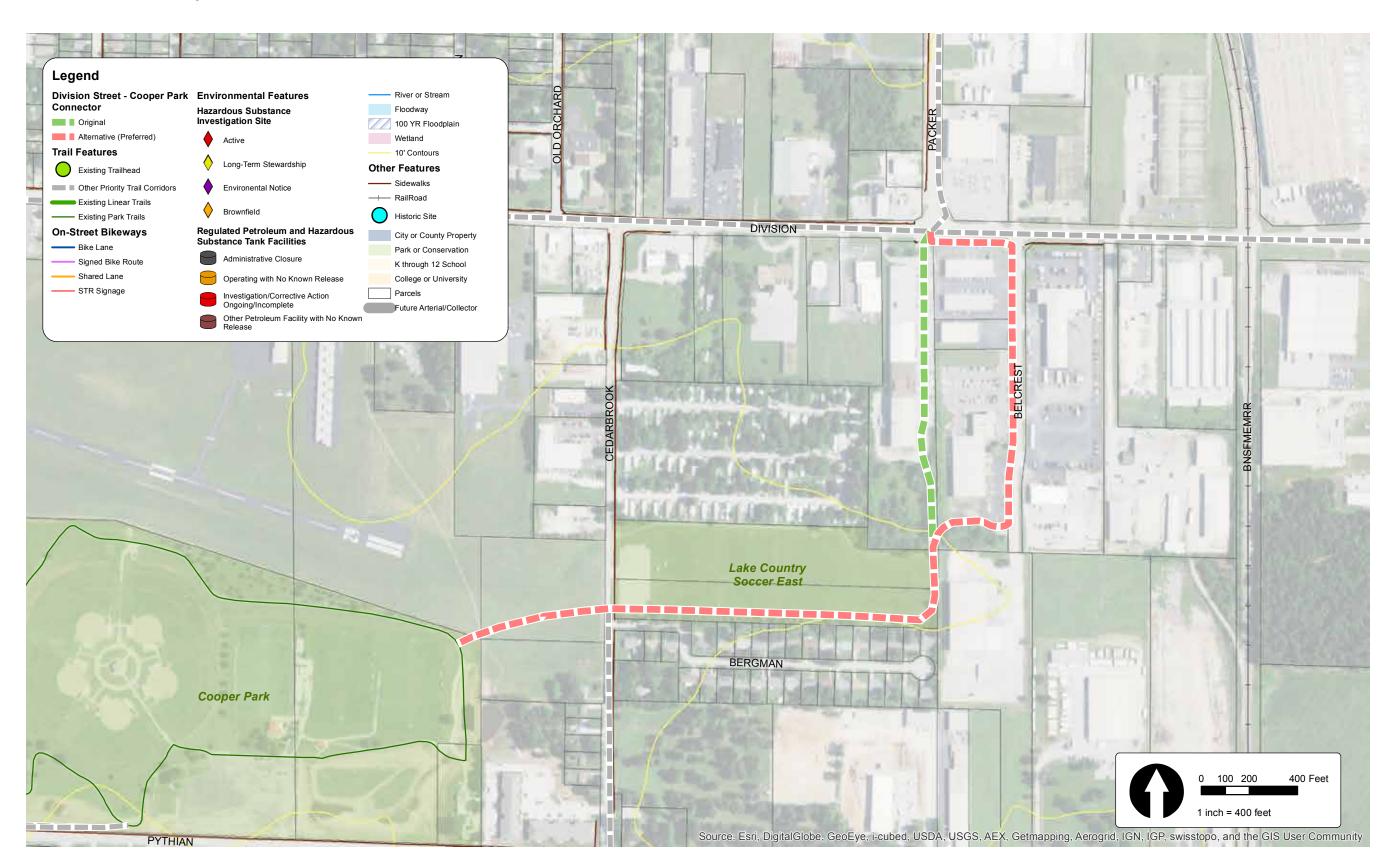


View of Belcrest Avenue looking south from Division Street (Source: Google Street View).



Division Street - Cooper Park Connector priority trail segment location.

## **Division Street - Cooper Park Connector**



## **Division Street**

#### **Corridor Description**

Connecting to planned priority trails at Le Compte Road and Packer Road, the Division Street priority trail segment provides an important link over US Highway 65, a major north-south divided highway. The Division Street trail is one of only five planned priority trail crossing US Highway 65.

### **Refined Original Alignment**

The original alignment traveling along Division Street has been refined to address corridor conditions and delineate placement of the shared-use path along the corridor for future project development. Path placement on the south side of the road within available right-of-way is preferred. The Division Street Bridge over US Highway 65 has 10' shoulders on each side; however, pavement quality is poor,

and additional improvements may be required to provide separation from adjacent motor vehicle traffic. In addition, enhancements at the northbound exit ramp and southbound entrance ramp will be necessary to facilitate safe trail user crossing.

Given the short length of this segment and the lack of opportunities for shared-use path development near this priority trail corridor, no additional trail alignments have been identified for consideration.

Alignment Scoring		
Score	Priority	Original
Network Connections	High	$\bigcirc$
User Experience	High	0
Enhances Bicycling & Walking	High	•
Logical Segments	Medium	0
Cultural & Natural Resources	Medium	$\circ$
Environmental Conditions	Medium	•
Cost	Low	•
Route Directness	Low	•
Ownership / Right-of-Way	Low	•

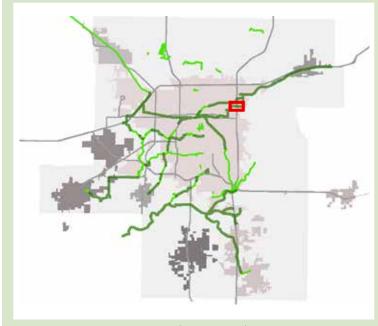
# Planning level cost for preferred alignment: \$810,933.



View of Division Road looking east from Packer Road (source: Google Street View).

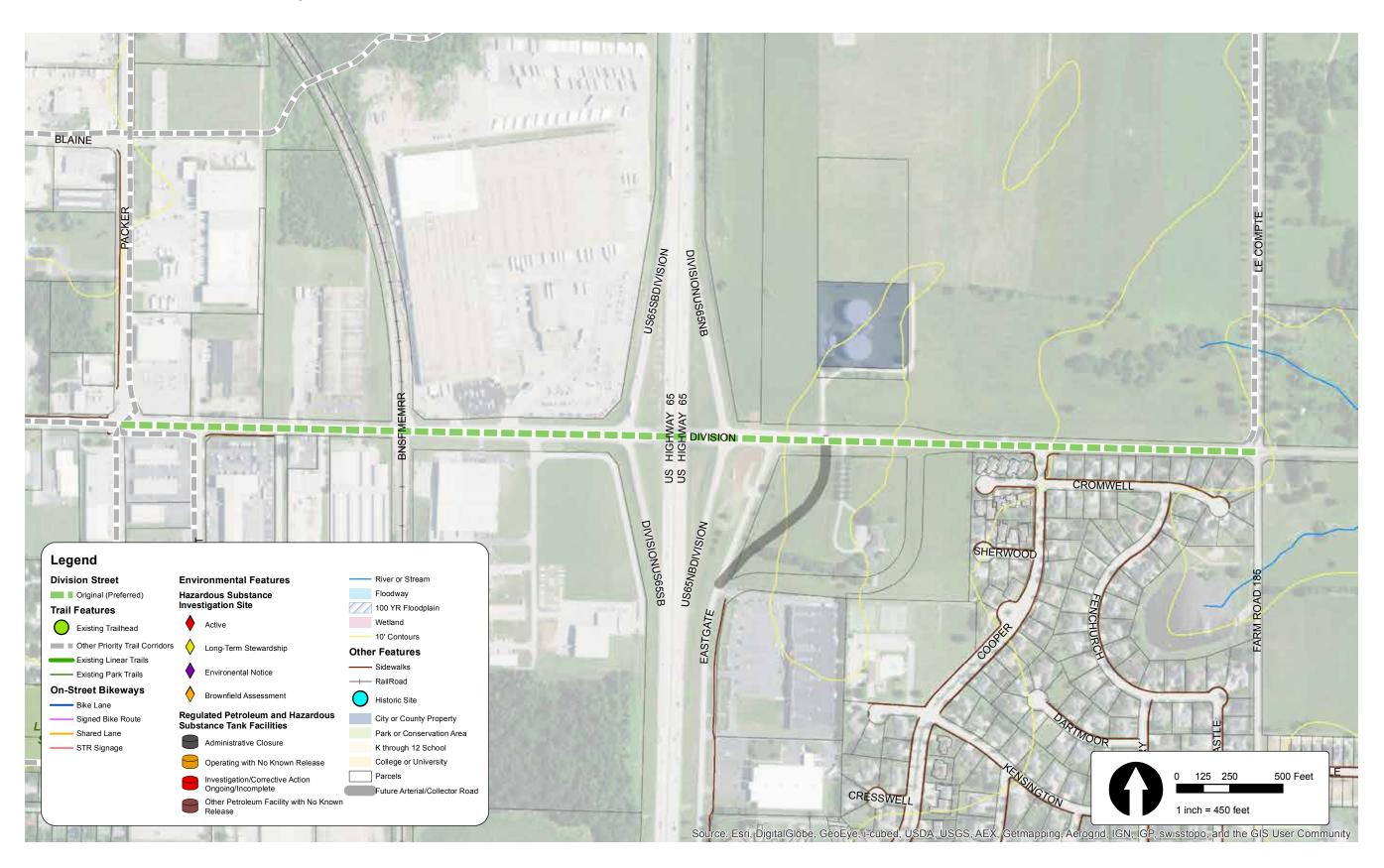


View of Division Road looking west from Le Compte Road (source: Google Street View).



Division Street priority trail segment location.

## **Division Street (Packer to Le Compte)**



# **Le Compte Road**

#### **Corridor Description**

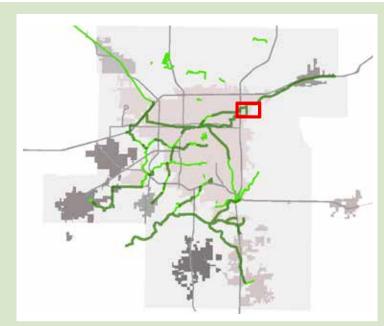
Le Compte Road functions as a north-south link in a series of trail segments connecting the City of Springfield to the planned Route 66 Trail leading to Strafford. This planned priority trail segment, which stretches from Division Street north to Kearney Street, does not connect to any existing trail facilities.

## **Refined Original Alignment**

The Le Compte Road trail begins at the southwest corner of the Division Street / Le Compte Road intersection, connecting to the planned priority trail segment on the south side of Division Street. The alignment continues north across Division Street and along the west side of Le Compte Road within the existing right-of-way and maintains this position for the entire length of the trail segment.

Alignment Scoring		
Score	Priority	Original
Network Connections	High	•
User Experience	High	•
Enhances Bicycling & Walking	High	•
Logical Segments	Medium	0
Cultural & Natural Resources	Medium	$\bigcirc$
Environmental Conditions	Medium	•
Cost	Low	•
Route Directness	Low	•
Ownership / Right-of-Way	Low	•

Planning level cost for preferred alignment: \$796,838.



Le Compte Road priority trail segment location.



View of Le Compte Road looking north from Division Street (Source: Google Street View).

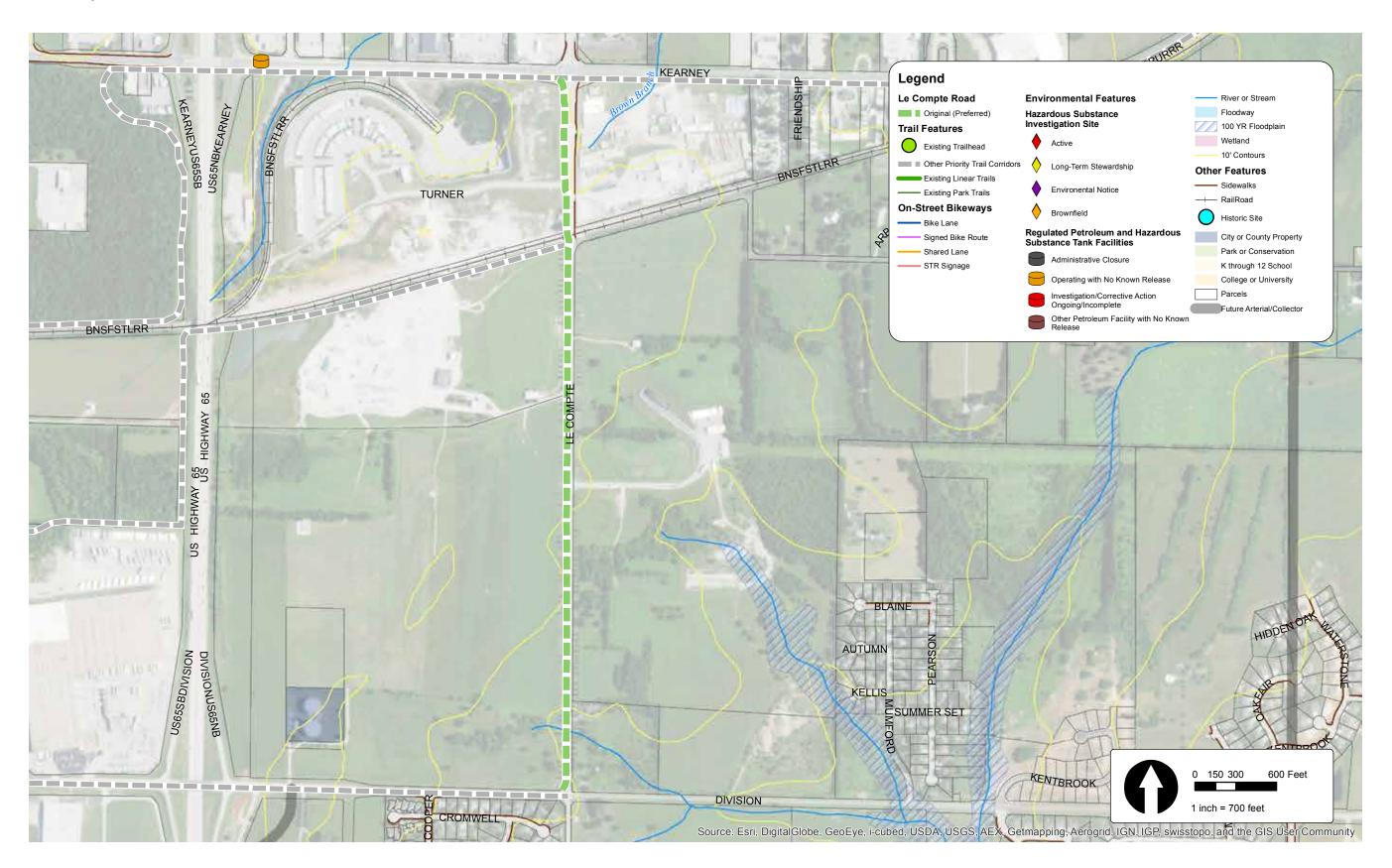


View of Le Compte Road looking south from the BNSF railroad crossing (Source: Google Street View).



View of Le Compte Road looking south from Kearney Street (Source: Google Street View).

## Le Compte Road



## **Trail of Tears - Battlefield**

#### **Corridor Description**

The Trail of Tears is unique among planned and existing trails in the Springfield region for its historical and cultural significance at both the local and national scale. As a segment of the cross-country Trail of Tears Historical Trail, the corridor documents the forced migration of thousands of Cherokee people from their homelands in Georgia, Alabama, and Tennessee to Indian Territory in present day Oklahoma. Existing segments of the trail in the region elaborate on this history through interpretive signage and use a natural woodchipped surface to preserve the natural character the Cherokee likely encountered nearly 180 years ago.

The Trail of Tears segment in Battlefield utilizes the abandoned Missouri and Northern Arkansas (MNA) Railroad corridor, which was collinear with the Trail of Tears Northern Route between Springfield and Bell Tavern, a stop on the route near the present day Wilson's Creek National Battlefield. The trail is part of the Trail of Tears National Historic Trail, and markers and interpretive signs have been installed to showcase the corridor's history and significance. In addition, Ozark Greenways has placed historic marker signs at many intersections along the entire Trail of Tears Corridor.



The trail corridor traveling north from West Weaver Road.

The priority trail segment is located in both unincorporated Greene County and in the City of Battlefield. The northern terminus of this priority trail segment connects to the existing segment of the Cherokee Trail of Tears from West Village Terrace to West Marcella Drive. The southern end of the priority trail segments ends at Cloverdale, where future onstreet connections will connect the trail to Battlefield City Hall and City Park.

#### **Refined Original Alignment (Preferred)**

The proposed alignment travels across a combination of existing publicly owned rights-of-way and private property deeded back to original landowners following the abandonment of the MNA Railroad. Coordination with these property owners will be critical to the success of the trail north of Weaver Road. Unlike other priority trail corridors, the Trail of Tears is intended to remain a natural surface trail rather than paved with asphalt or concrete.

## **On-Street Interim Alignment**

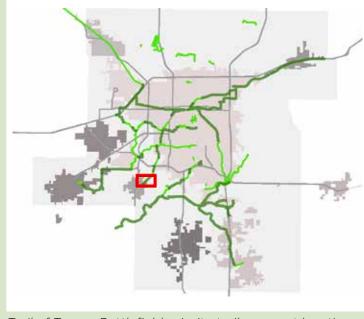
In the case of potential challenges to property or easement acquisition, a short on-street route along Farm Road 131 and Ridgecrest Drive offers an interim routing solution. While this may address the easement acquisition difficulties, it does represent a disruption in the otherwise continuous off-street trail environment.



The trail corridor traveling south from West Weaver Road towards Cloverdale.

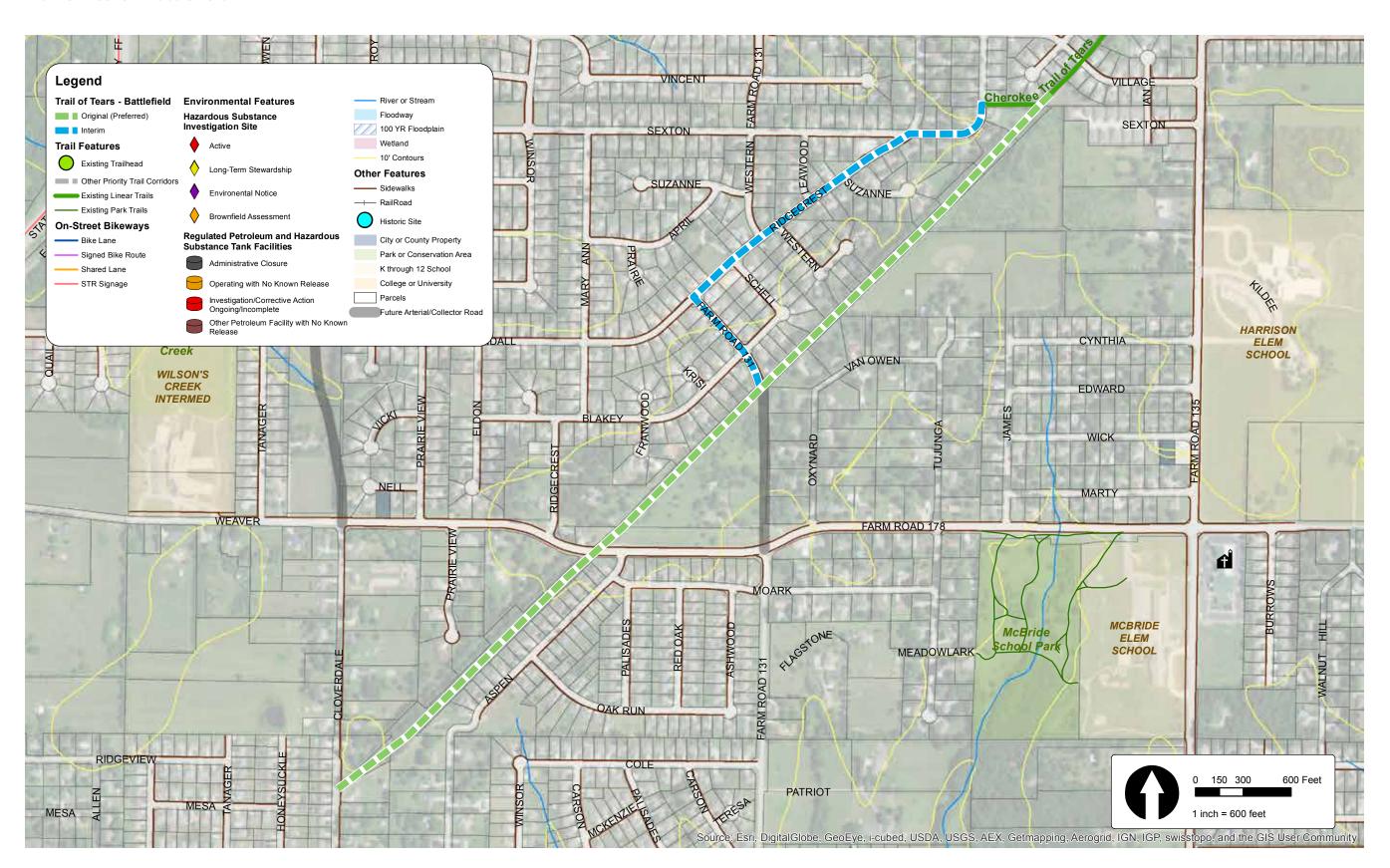
Alignment Scoring			
Score	Priority	Original	Interim
Network Connections	High	•	•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

# Planning level cost for preferred alignment: \$1,538,723.



Trail of Tears - Battlefield priority trail segment location.

#### **Trail of Tears - Battlefield**



## **Trail of Tears - Golden Ave**

#### **Corridor Description**

This short half-mile segment of the Trail of Tears links two existing segments of this natural surface trail. Following the abandoned Missouri and Northern Arkansas (MNA) Railroad, this priority trail segment extends from Golden Avenue just north of the James River Freeway to the existing trail segment at Marcella Drive.

#### **Refined Original Alignment**

The refined alignment utilizes existing public rights-of-way along Golden Avenue to provide a continuous trail facility connecting these two existing Trail of Tears segments. Like these existing segments, Ozark Greenways intended for this priority trail segment to be constructed with a natural surface as well; however, given this segment's context within a suburban environment and with direct connections to adjacent retail land uses, the trail should serve both transportation and recreation trips and should therefore be designed as a hard surface sidepath that can accommodate all nonmotorized users.

The refined alignment along Golden Avenue avoids additional easement acquisition associated with the original MNA Railroad alignment and increases the trail's visibility as a valuable community asset.



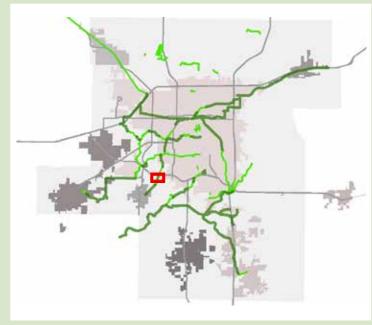
View of Golden Avenue looking north from Marcella Drive near the northern terminus of an existing section of the Trail of Tears.



Golden Avenue traveling underneath the James River Expressway (Highway 60).

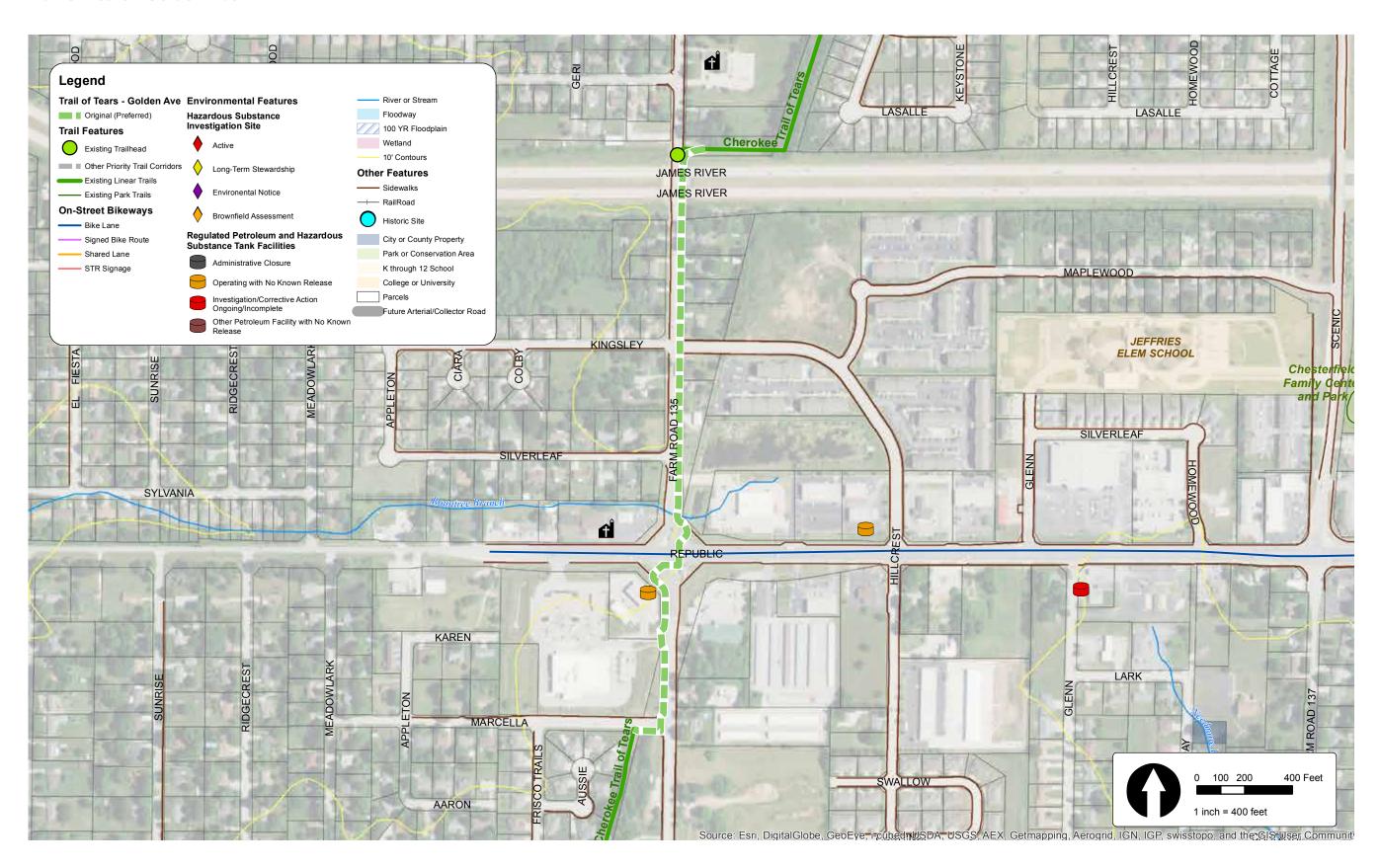
Alignment Scoring		
Score	Priority	Original
Network Connections	High	
User Experience	High	•
Enhances Bicycling & Walking	High	•
Logical Segments	Medium	•
Cultural & Natural Resources	Medium	•
Environmental Conditions	Medium	•
Cost	Low	
Route Directness	Low	•
Ownership / Right-of-Way	Low	•

# Planning level cost for preferred alignment: \$681,290.



Trail of Tears - Golden Ave priority trail segment location.

#### **Trail of Tears - Golden Ave**



## **Trail of Tears - South Creek Greenway Connection**

#### **Corridor Description**

The Cherokee Trail of Tears is unique among planned and existing trails in the Springfield region for its historical and cultural significance at both the local and national scale. As a segment of the cross-country Trail of Tears Historical Trail, the corridor documents the forced migration of thousands of Cherokee people from their homelands in Georgia, Alabama, and Tennessee to Indian Territory in present day Oklahoma. Existing segments of the trail in region elaborate on this history through interpretive signage and use a natural woodchipped surface to preserve the natural character the Cherokee likely encountered nearly 180 years ago. This planned priority trail segment connects the South Creek Greenway to the existing Cherokee Trail of Tears trail segment that extends from Golden Avenue at the James River Expressway northeast to Inman Road.

#### **Refined Original Alignment**

The original alignment identified for this Trail Investment Study begins at Inman Road at the northern terminus of the existing Trail of Tears trail segment along the abandoned

The Missouri & Northern Arkansas south of Battlefield Road has become heavily overgrown since its abandonment.

Missouri and Northern Arkansas Railroad and crosses Inman Road at-grade with an improved crosswalk and rectangular rapid flashing beacon. It continues north along the abandoned railroad line to Battlefield Road, crossing at-grade with a HAWK signal. For this southern portion of the trail, the trail surface will be mulch or woodchips, providing a similar surface to that of the existing segments of the Trail of Tears in the region. North of Battlefield Road, the trail transitions to a concrete surface, and travels west adjacent to Battlefield Road and across Forest Village Drive. The alignment then turns north along the west edge of the Burrell Behavioral Health property adjacent to the City Utilities parcels, through the forest, and connects with the South Creek Greenway between Sherwood Elementary School and the Horton Smith Golf Course.

#### **Alternative Alignment**

The alternative alignment crosses Inman Road at-grade with an improved crosswalk and rectangular rapid flashing beacon, then travels west on Inman Road roughly 600 feet before turning north east of Glenn Avenue along the

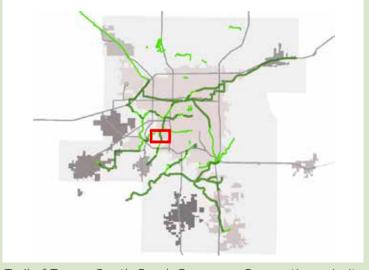


Thick woods at the north end of the trail segment near South Creek Greenway.

transmission corridor. The alignment continues north along the transmission corridor to Battlefield Road. At Battlefield Road, the alignment crosses to the west of Glenn Avenue and then crosses Battlefield Road at-grade with a new HAWK signal. It then follows the original alignment as previously described and connects to the South Creek Greenway.

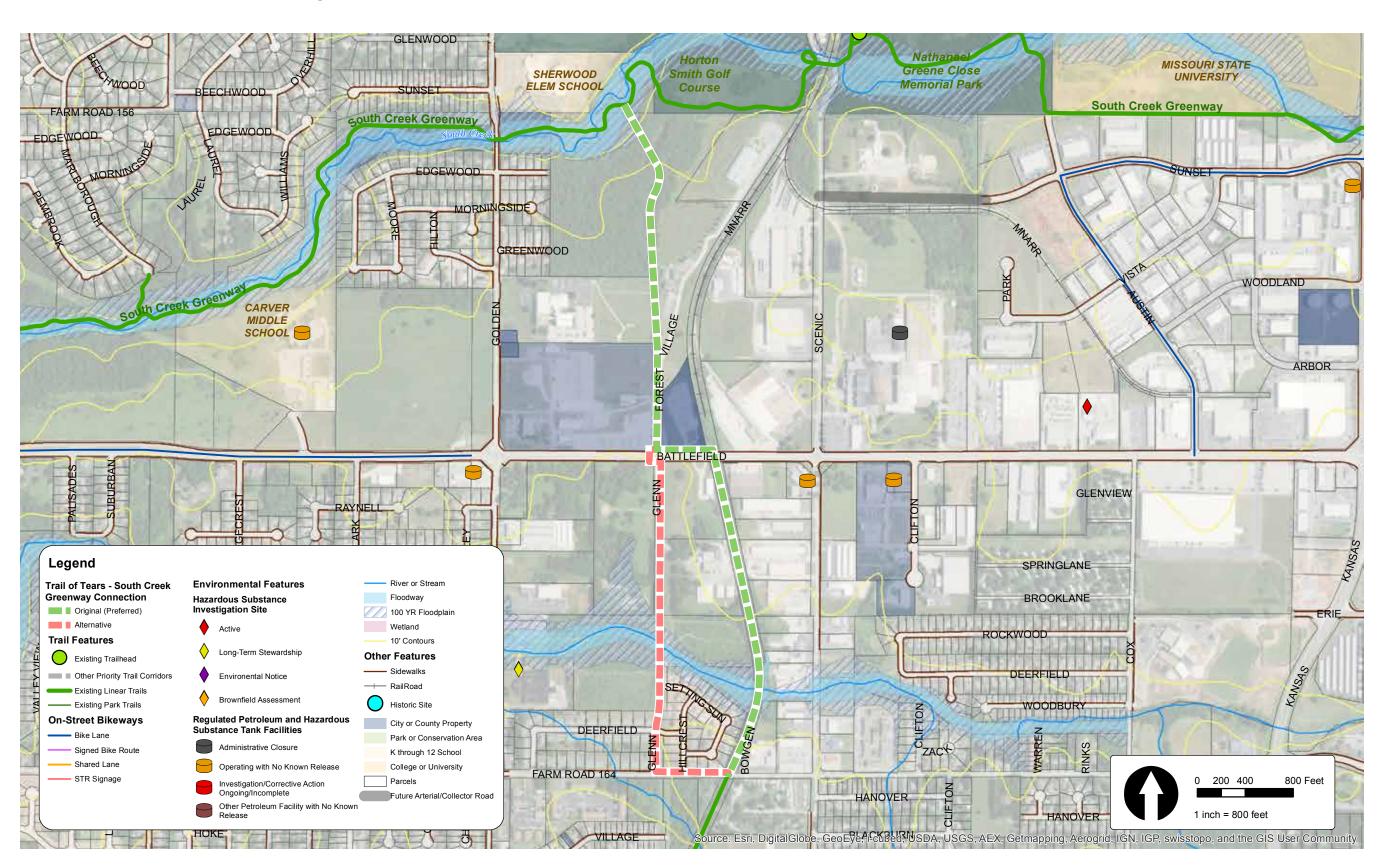
Score	Priority	Original	Alt
Network Connections	High	•	•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

# Planning level cost for preferred alignment: \$681,290.



Trail of Tears - South Creek Greenway Connection priority trail segment location.

**Trail of Tears - South Creek Greenway Connection** 



## **Trail of Tears - Nathanael Greene Park to Ewing Sports Complex**

#### **Corridor Description**

The Cherokee Trail of Tears is unique among planned and existing trails in the Springfield region for its historical and cultural significance at both the local and national scale. As a segment of the cross-country Trail of Tears Historical Trail, the corridor documents the forced migration of thousands of Cherokee people from their homelands in Georgia, Alabama, and Tennessee to Indian Territory in present day Oklahoma. Existing segments of the trail in region elaborate on this history through interpretive signage and use a natural woodchipped surface to preserve the natural character the Cherokee likely encountered nearly 180 years ago. This planned priority trail segment connects Nathanael Greene Park to the Ewing Sports Complex.

#### **Refined Original Alignment**

The original alignment begins at the South Creek Greenway trailhead immediately east of the Missouri and Northern Arkansas Railroad in Nathanael Green Park. The alignment travels north along the east side of the railroad tracks and will require an easement from the United States Medical

Center for Federal Prisoners (MCFP) to traverse the western-most edge of the property. This will also require relocation of the MCFP west fence to accommodate the trail. The alignment travels under the Sunshine Street Bridge that crosses the railroad tracks and continues north until reaching the planned Fassnight Creek Greenway (West), which connects to the Jordan Creek Greenway and Wilson's Creek Greenway via a new bridge over Wilson's Creek and under the railroad tracks.

#### **Alternative Alignment**

The alternative alignment begins at the South Creek Greenway trailhead and travels east along the north side of the Nathanael Greene Park drive to Scenic Avenue, where it turns north and parallels the road as a shared-use path (sidepath). The path continues north along the east side of Scenic Avenue and will require a new bridge over Wilson's Creek. Once across Wilson's Creek, the path circles back to connect to the Wilson's Creek Greenway on the north side of the creek.

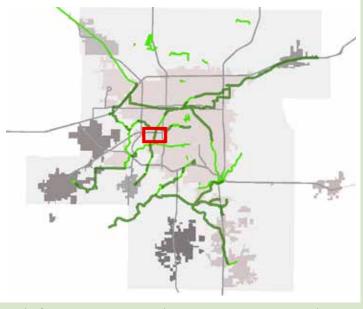
A view of the original alignment looking north from Nathanael Greene Park between the MNA Railroad and the MCFP property.



A view of the original alignment looking north from the Sunshine Street Bridge.

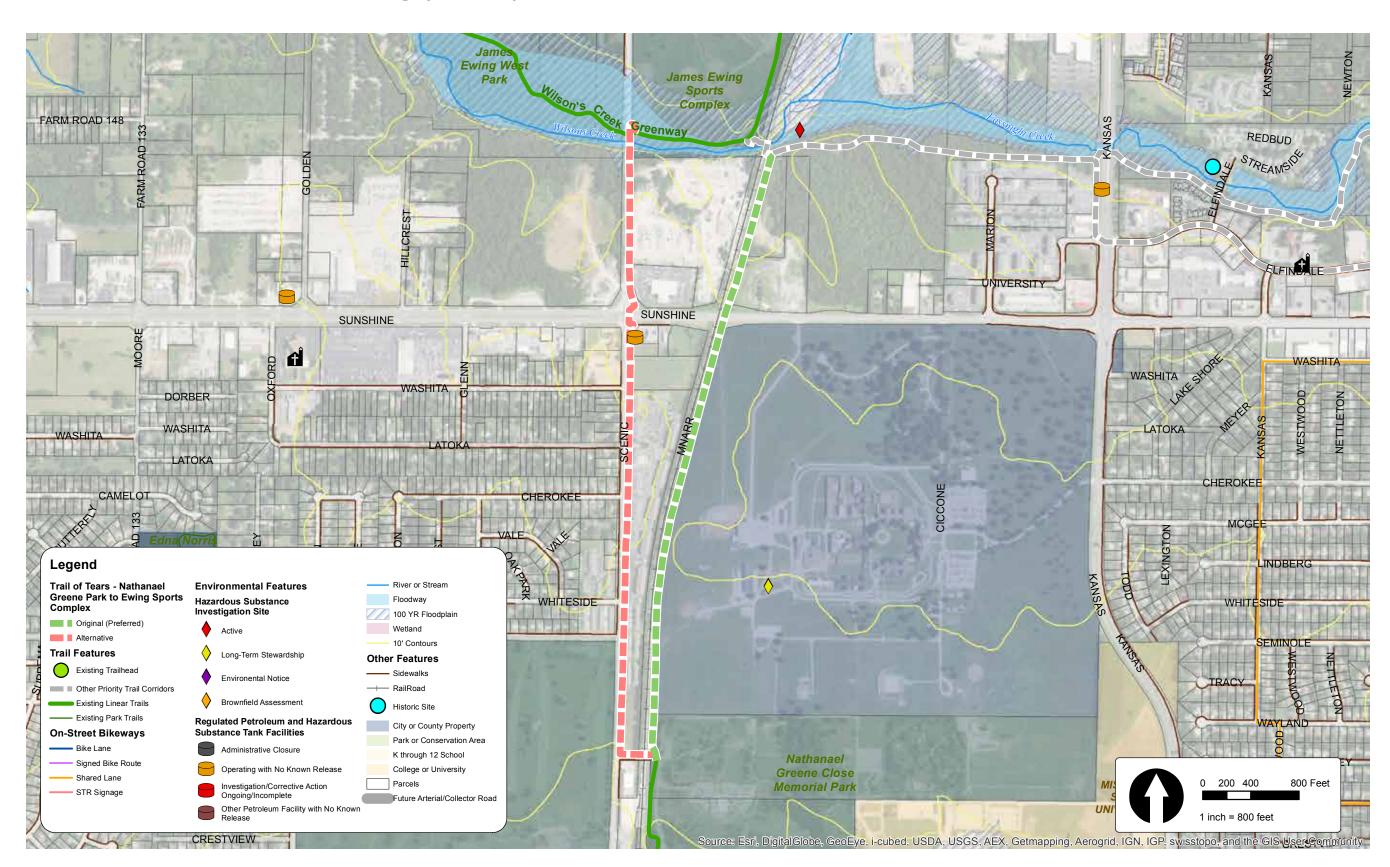
Alignment Scoring			
Score	Priority	Original	Alt
Network Connections	High	•	
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

# Planning level cost for preferred alignment: \$1,536,942.



Trail of Tears - Greene Park to Ewing Sports Complex priority trail segment location.

**Trail of Tears - Nathanael Greene Park to Ewing Sports Complex** 



## **Ward Branch Greenway (North)**

#### **Corridor Description**

The Ward Branch Greenway is growing into a regional trail amenity, but its value is limited by its lack of continuity and connections to other trail facilities. Four planned priority trails address these two limitations and aim to create 4.5-mile greenway corridor stretching from Cox Medical Center south to Rivercut Park on the James River. This northern segment extends the greenway's reach to the north, increasing access to nearby businesses and residences.

#### **Refined Original Alignment (Preferred)**

The refined original alignment begins at the intersection of Independence Street and Bradford Parkway and travels east along the south side of the Burrell Behavioral Center lake and walking trail and over the boxed Ward Branch to Fremont Avenue. Preliminary contacts have been made to discuss the development of this trail segment. The alignment then crosses the north leg of the intersection of Fremont Avenue and Independence Street, loops south to the creek bed and detention basin, and continues east to the boxed channel of the creek west of Weller Avenue. The

alignment crosses Weller Avenue to the south of the channelized creek, continues to southeastern corner of the Ozark Highlands Mobile Home Community, then travels north along the parcel line to its terminus at Bradford Parkway.

#### **Alternative Alignment**

The alternative alignment consists of a sidepath along Bradford Parkway from Independence Street to its eastern terminus at the west edge of the Ozark Highlands Mobile Home Community.

Score	Priority	Orig	Alt 1
Network Connections	High	•	•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Med.	•	•
Cultural & Natural Resources	Med.	•	•
Environmental Conditions	Med.	•	•
Cost	Low	0	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

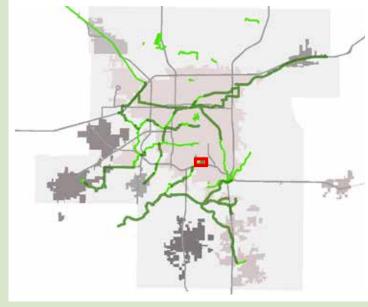
Planning level cost for preferred alignment: \$1,451,964.



The original alignment parallels Independence Street to the north (left) west of Fremont Avenue.

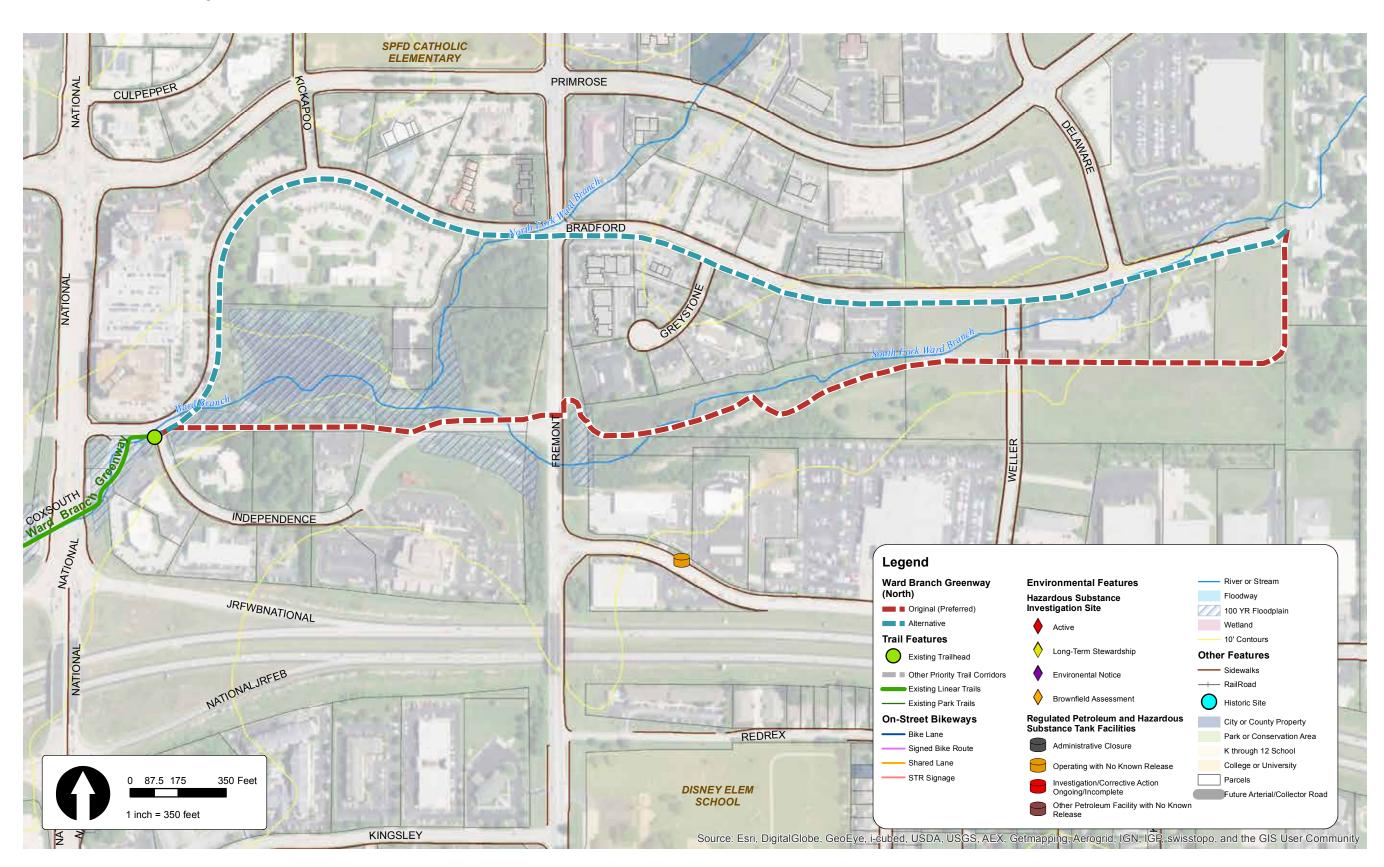


The original alignment travels along the south side of this retention pond east of Fremont Avenue.



Ward Branch Greenway (north) priority trail segment location.

#### Ward Branch Greenway (North)



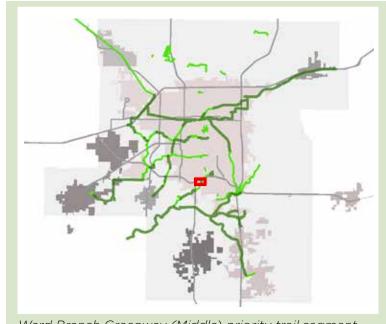
## **Ward Branch Greenway (Middle)**

#### **Corridor Description**

The Ward Branch Greenway is growing into a regional trail amenity, but its value is limited by its lack of continuity and connections to other trail facilities. Four planned priority trails address these two limitations and aim to create 4.5-mile greenway corridor stretching from Cox Medical Center south to Rivercut Park on the James River. This short, planned priority trail segment just south of the James River Freeway will connect two existing segments of the greenway, providing a continuous, easily navigable greenway experience for all trail users. The segment is scheduled for construction in summer 2017, therefore no alternative alignments have been developed.

#### **Original Alignment (Finalized)**

The alignment begins at the northern end of the short trail segment connecting Holland Avenue and Cardinal Street to the Twin Oaks Substation Park, travels north along the east and north sides of the fenced substation, then north along the east side of the park and substation drive to the to the recently constructed extension of the Ward Branch Greenway along the south side of Monastery Street. This alignment is located entirely within a single parcel owned by City Utilities.



Ward Branch Greenway (Middle) priority trail segment location.



The existing trail segment from Holland Avenue and Cardinal Street ends abruptly at the edge of the City Utilities parcel.

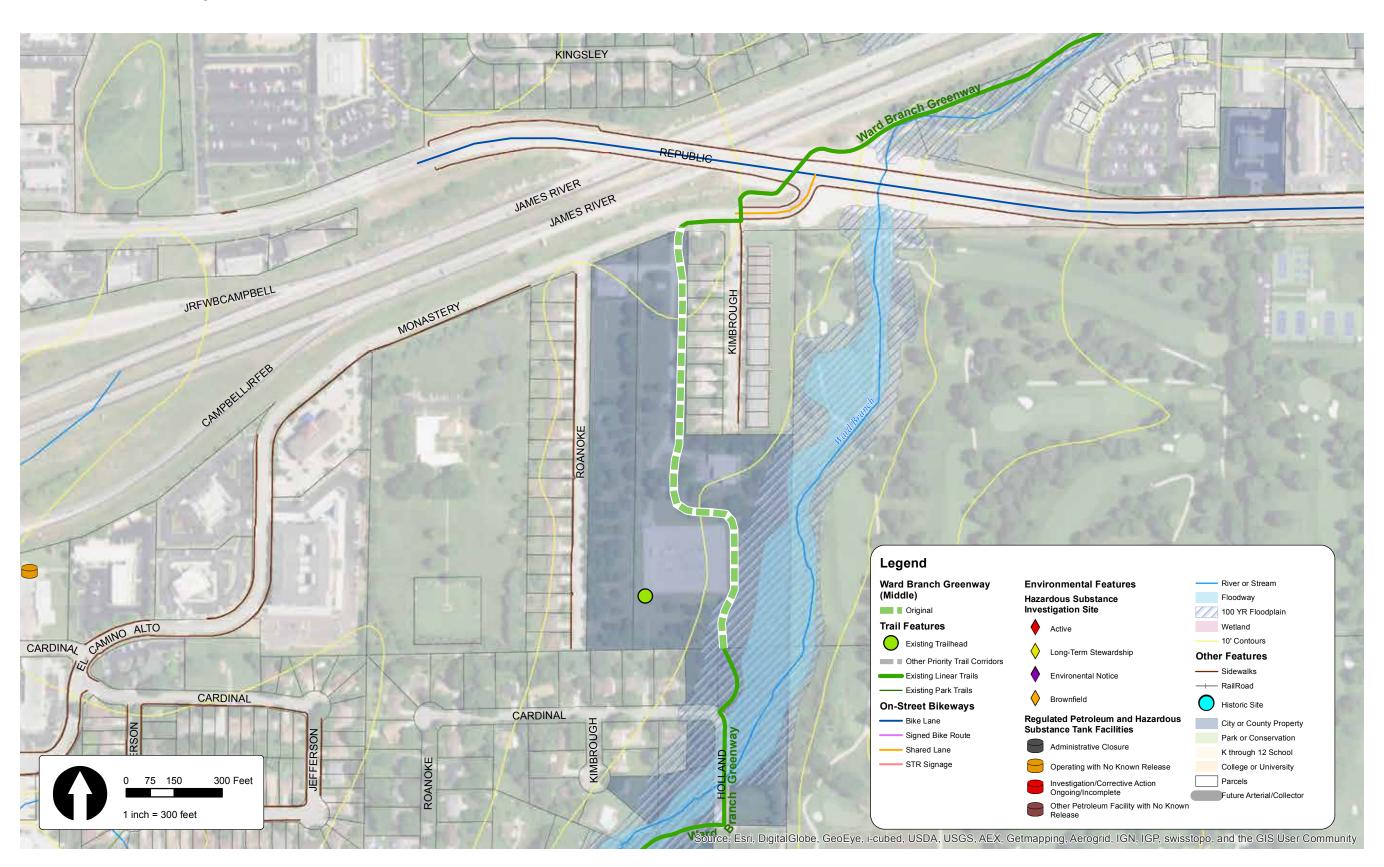


Twin Oaks Substation Parks' walking trails and a playground will benefit from increased access once the segment is completed.



The future greenway segment will be located between the park drive and the adjacent townhomes on Kimbrough Avenue (left).

#### Ward Branch Greenway (Middle)



### **Ward Branch Greenway (South)**

#### **Corridor Description**

The Ward Branch Greenway is growing into a regional trail amenity, but its value is limited by its lack of continuity and connections to other trail facilities. Four planned priority trails address these two limitations and aim to create 4.5-mile greenway corridor stretching from Cox Medical Center south to Rivercut Park on the James River. The Ward Branch Greenway (South) segment, which connects two existing greenway segments and spans from Campbell Avenue north of Weaver Road southwest to Plainview Road just east of Gray Elementary, will be integral to the greenway's success as a regional trail amenity. While its original alignment parallels the Ward Branch, alternatives have been developed to address constraints along the original alignment and take advantage of opportunities along adjacent corridors.

#### **Refined Original Alignment**

The original alignment begins at the Ward Branch Greenway undercrossing of Campbell Avenue just north of Weaver Road and travels along the north and west side of the Ward Branch, crossing under Weaver Road through the westernmost box culvert. The alignment continues on the north side of the branch as it enters the Stone Meadow Subdivision and travels through subdivision association common ground and alongside the subdivision's many recreational amenities. Once south of these amenities and back into the wooded common ground, the alignment crosses to the south side of the branch and remains there as continues southwest to just north of Plainview Road, at which point it crosses the branch again before moving under Plainview Road and connecting to the existing Ward Branch Greenway. Major constraints along this corridor include the large portion of the alignment within the private subdivision common ground, as well as the future Kansas Extension

#### **Alternative 1 (Preferred)**

The first alternative also begins at the Ward Branch Greenway undercrossing of Campbell Avenue, travels along the north and west side of the Ward Branch, and crosses under Weaver Road through the western-most box culvert. The alignment then travels up to Weaver Road and along the south side of Weaver Road as a shared-use path. The alignment continues west on Weaver Road until reaching the future Kansas Extension, at which point it travels south along the future extension and connects to the existing Ward Branch Greenway south of Planview Road. The exact alignment and connection with the greenway at this south end will likely be determined during the design phase of the future Kansas Extension. This alternative alignment is largely dependent on timing and coordination with these programmed capital projects.

#### Alternative 2

The second alternative begins at the Ward Branch Greenway undercrossing of Campbell Avenue and travels north along the existing path to West Outer 160 / Lyon Avenue, continuing further north as a sidepath adjacent to the roadway until reaching the planned future collector between Lakewood Street and Buena Vista Street. The alignment continues west along the future collector roadway, and upon reaching Buena Vista Street, will require widening of the existing south sidewalk to meet shared-use path standards. At the west end of Buena Vista, the path continues west along the planned future collector to Farm Road 145, then south

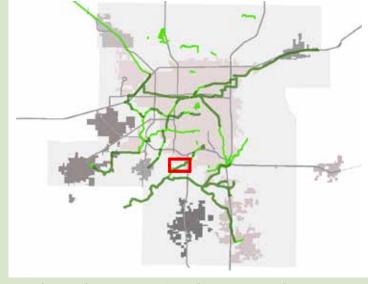


Existing paved trail through the Ward Branch valley in the Stone Meadow Subdivision.

along Farm Road 145 until reaching the alignment for the future Kansas Extension. The path follows the east side of the Kansas Extension and connects with the West Branch Greenway south of Plainview Road. Like Alternative 1, Alternative 2 is also largely dependent on the timing and design of planned and/or programmed capital improvements.

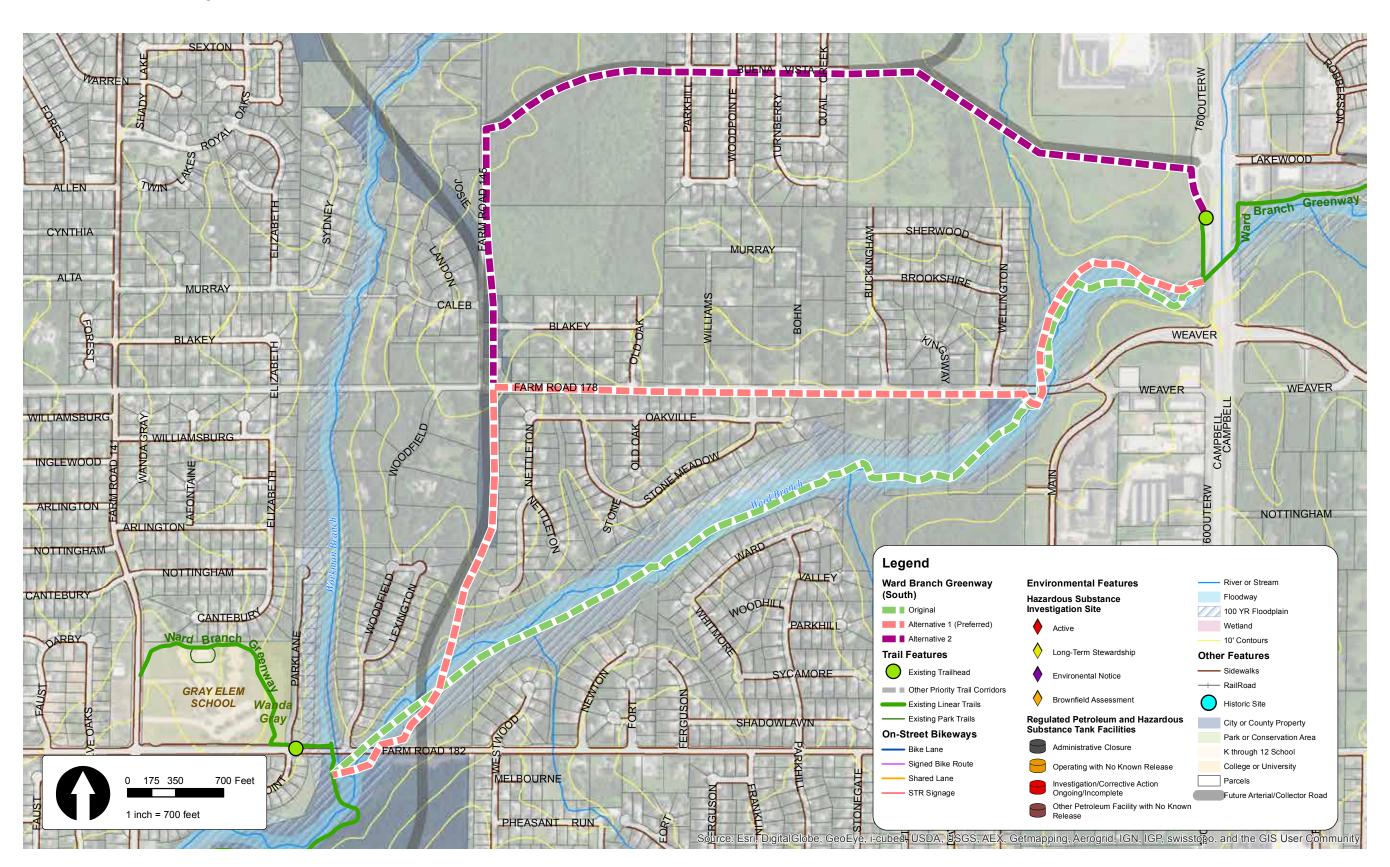
Alignment Scoring				
Score	Priority	Orig	Alt 1	Alt 2
Network Connections	High	•	•	•
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	•
Logical Segments	Med.	•	•	•
Cultural & Natural Resources	Med.	•	•	•
Environmental Conditions	Med.	•	•	•
Cost	Low	•	•	•
Route Directness	Low	•	•	0
Ownership / Right-of-Way	Low	0	•	•

# Planning level cost for preferred alignment: \$2,311,446.



Ward Branch Greenway (South) priority trail segment location.

#### **Ward Branch Greenway (South)**



## **Ward Branch - James River Greenway Connector**

#### **Corridor Description**

The Ward Branch Greenway is growing into a regional trail amenity, but its value is limited by its lack of continuity and connections to other trail facilities. Four planned priority trails address these two limitations and aim to create 4.5-mile greenway corridor stretching from Cox Medical Center south to Rivercut Park on the James River. The Ward Branch – James River Connector, located at southern trailhead of the Ward Branch Greenway near the intersection of Rivercut Parkway and Farm Road 139, is the shortest of these four planned priority trail segments, and its development is largely dependent on the future development of the James River Greenway, one of the longest planned trail corridors in the region.

#### **Refined Original Alignment (Preferred)**

The original alignment extends south from the existing Ward Branch Greenway trailhead and travels along the west side of the Ward Branch and under the Rivercut Parkway bridge over the branch, at which point it connects with the future James River Greenway. Unlike the alternative alignment described below, the refined original alignment continues alongside the Ward Branch and provides a grade-separated crossing that maintains riparian greenway experience that defines this recreational corridor.

#### **Alternative Alignment**

The alternative alignment extends east from the Ward Branch Greenway trailhead and travels across the Ward Branch on the old Farm Road 139 bridge, which will likely need structural repairs to support trail use. The alignment parallels the drive of the Missouri Institute of Natural Science south to Rivercut Parkway, which it will cross with an atgrade, improved crossing and connect to the future James River Greenway.

Alignment Scoring			
Score	Priority	Original	Alt
Network Connections	High		•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

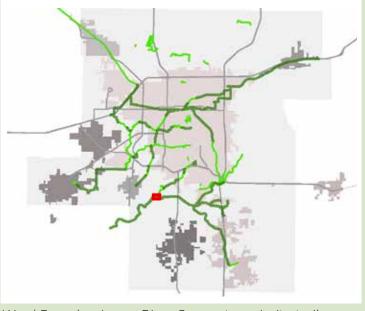
# Planning level cost for preferred alignment: \$132,419.



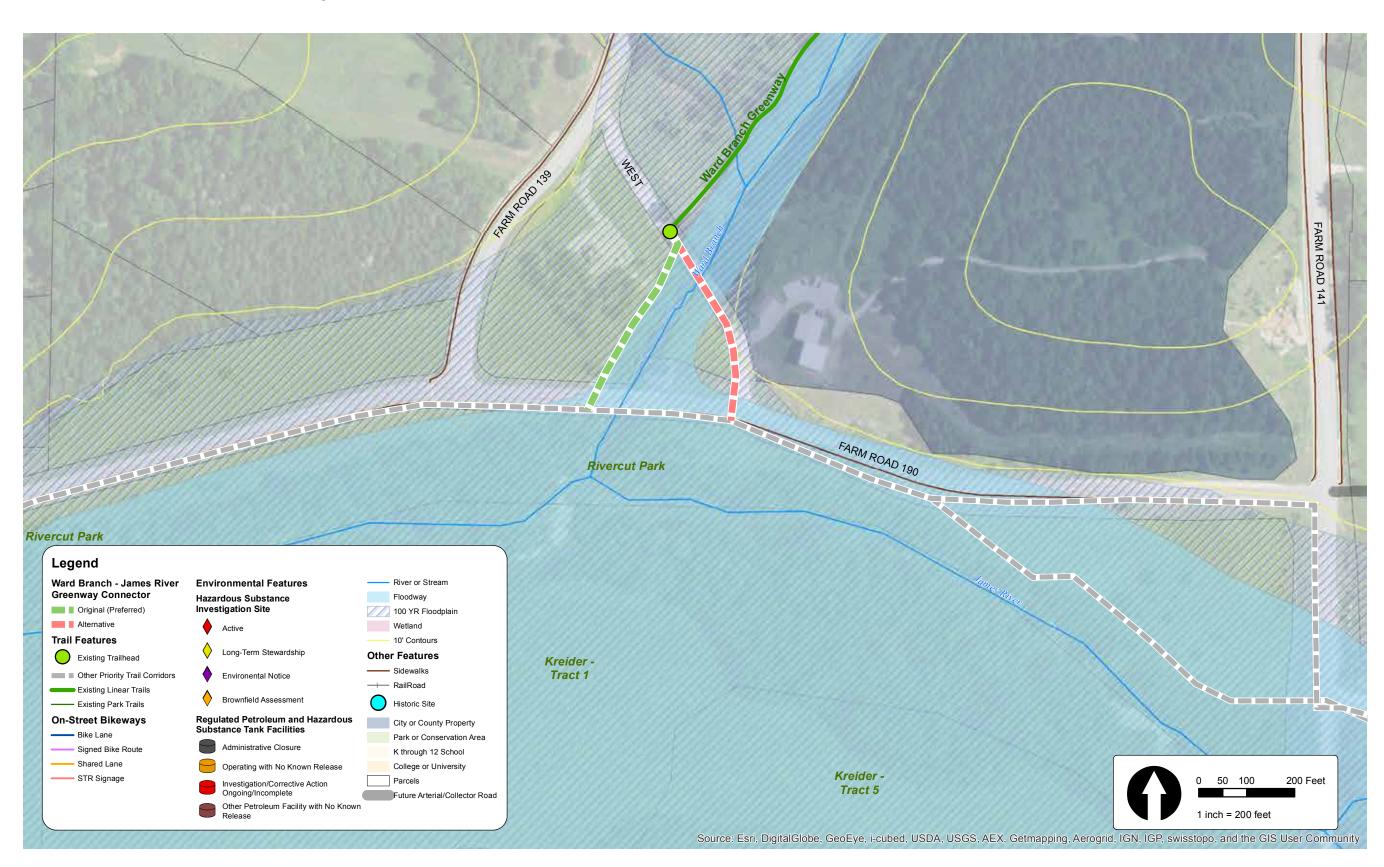
The Ward Branch Greenway at the southern Trailhead near Riverbluff Cave (Source: Google Street View).



The Ward Branch north of Rivercut Parkway (Source: Google Street View).



Ward Branch - James River Connector priority trail segment location.



#### I-44 Trail

#### **Corridor Description**

The I-44 Trail has been identified by the City of Springfield as part of a circumferential trail loop linking to various destinations and greenways around the perimeter of the city. While the entire I-44 trail is roughly 7.4 miles in length, the priority trail segment under consideration for this Trail Investment Study is 3.9 miles in length and provides a vital link between the West Wilson's Creek Greenway and the Frisco Highline Trail.

#### **Refined Original Alignment**

The alignment begins in unincorporated Greene County at the northwestern terminus of the planned West Wilson's Creek Greenway on the south side of Interstate 44 near the Deer Lake Golf Course. The alignment briefly travels west to the golf course undercrossing of Interstate 44 and uses this crossing to the north side of the interstate. The alignment then travels northeast along the interstate within existing interstate right-of-way. After crossing the West Branch of Wilson's Creek (the Haseltine Branch) and before reaching

Trail View Road, the path turns north through the Jenkins parcels and reaches the intersection of Haseltine Road and Trail View Road. The path continues north along the east side of Haseltine Road, crosses Chestnut Expressway at-grade, and remains on the southeast side of Haseltine Road for roughly 1,500 feet, at which point the trail aligns to the north side of the Interstate 44 off-ramp to Chestnut Expressway and travels northeast within the interstate rightof-way. The alignment will require a new bridge over the BNSF railroad, roughly 3,000 feet south of Division Street. The trail crosses Division Street at-grade and continues along the northwest side of the north outer access road of Interstate 44 (County Road 123) for roughly 1,100 feet, then crosses to the southeast side of the Access road opposite the Executive Coach Builders building and parallels the interstate until reaching Kearney Street. The alignment crosses Kearney Street at-grade at Eldon Avenue to connect to the southern trailhead of the Frisco Highline Trail.

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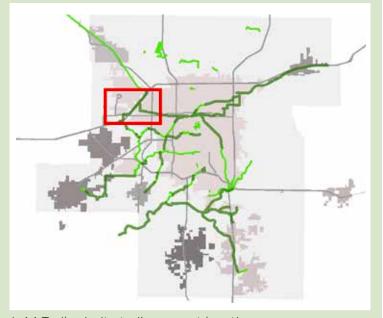
A view from the southbound Chestnut Expressway off ramp of Interstate 44 and the proposed alignment to the northwest (left) of the off ramp and interstate (Source: Google Street View).



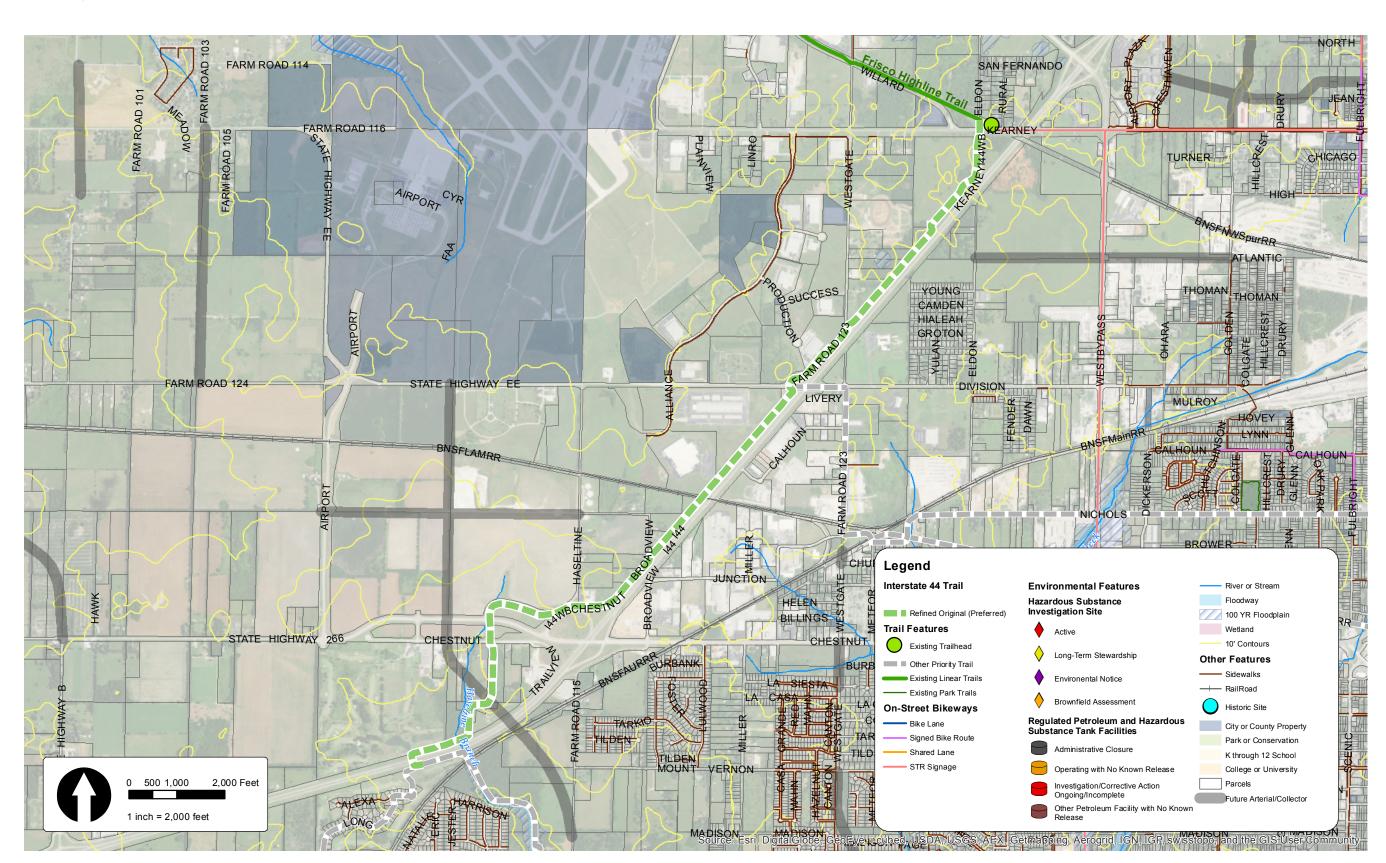
A view from Division Street of Interstate 44 and the proposed trail alignment to the northwest (right) of the interstate (Source: Google Street View).

Alignment Scoring		
Score	Priority	Original
Network Connections	High	•
User Experience	High	•
Enhances Bicycling & Walking	High	•
Logical Segments	Medium	•
Cultural & Natural Resources	Medium	•
Environmental Conditions	Medium	•
Cost	Low	•
Route Directness	Low	•
Ownership / Right-of-Way	Low	•

# Planning level cost for preferred alignment: \$3,100,898.



1-44 Trail priority trail segment location.



## **West Wilson's Creek Greenway (South)**

#### **Corridor Description**

West Wilson's Creek, also known as the Haseltine Branch, enters into Wilson's Creek at Farm Road 146, roughly one quarter mile southwest of Rutledge Wilson Park. West Wilson's Creek offers residents in northwest Springfield and unincorporated Greene County greater access to recreational opportunities through enhanced trail connections. The corridor also connects to the planned I-44 Corridor Trail, eventually linking to the popular Frisco Highline Trail.

The southern segment of the West Wilson's Creek Greenway provides a direct connection between two existing trails, the Tom & Inge Cutter Section of the Wilson's Creek Greenway on to the south and the Vintage Hills walking trail to the north. While the Vintage Hills walking trail is currently private, the 8' to 10' asphalt path could accommodate greenway activity if opened to the public. Negotiations with the homeowners association to obtain recreational easements and use of this path will be critical to the development of the West Wilson's Creek Greenway.

#### Original Alignment

The original alignment crosses Farm Road 146 at the existing dirt parking area for Wilson's Creek Greenway where Farm Road 146 winds to the northeast, parallel to Wilson's Creek. Rapid flashing beacons and other enhancements will be necessary to increase pedestrian safety at this at-grade crossing. The trail then turns west and crosses the Haseltine Branch before running parallel to the branch and connecting with the existing walking path.

#### **Alternative Alignment (Preferred)**

The refined alignment also begins at the existing dirt parking area, but travels west along the south side of Farm Road 146 before crossing the road closer to Canton Avenue. Rapid flashing beacons and other enhancements will be necessary to increase pedestrian safety at this at-grade crossing. Once across Farm Road 146, the trail continues north along the same path as the original alignment and connects to the existing walking path. This crossing further to the west

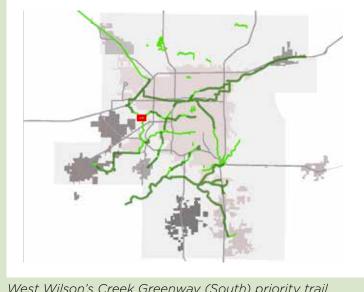


View of the Alternative Alignment north of Farm Road 146 traveling northwest towards the Vintage Hills walking path.

eliminates the need for a bridge over the Haseltine Branch as required in the original alignment. This alternative alignment also reduces the number of parcels traversed and may reduce property acquisition and/or easement costs.

Priority	Original	Alt
High		
High	•	•
High	•	•
Medium	•	•
Medium	•	•
Medium	•	•
Low	•	•
Low	•	•
Low	•	•
	High High Medium Medium Medium Low Low	High High High Medium Medium  Medium Low Low

# Planning level cost for preferred alignment: \$634,188.

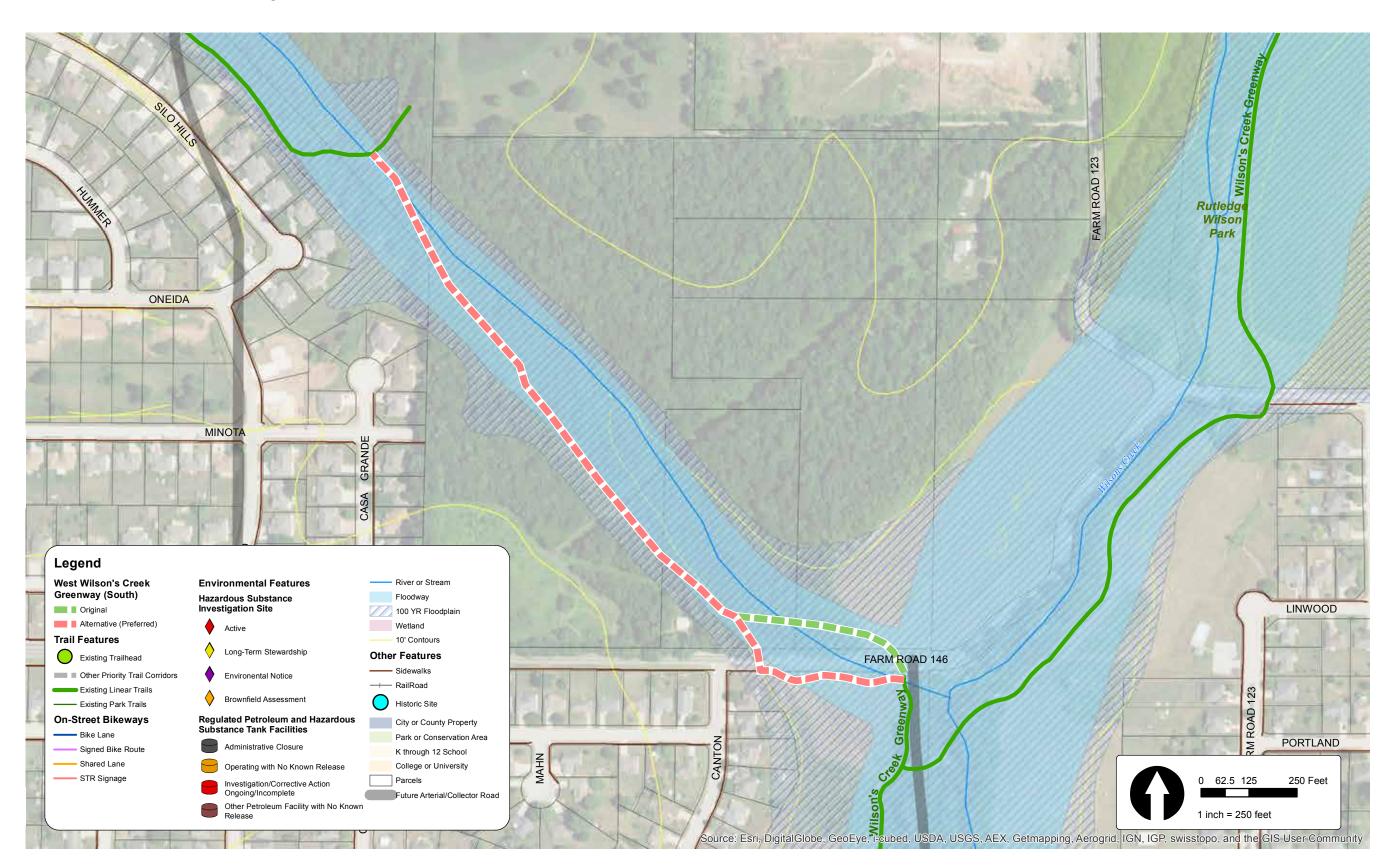


West Wilson's Creek Greenway (South) priority trail segment location.



Northern terminus of the Tom & Inge Cutter Section of Wilson's Creek Greenway at Farm Road 146.

#### West Wilson's Creek Greenway (South)



## West Wilson's Creek Greenway (North)

#### **Corridor Description**

West Wilson's Creek, also known as the Haseltine Branch of Wilson's Creek, enters into Wilson's Creek at Farm Road 146, roughly one quarter mile southwest of Rutledge Wilson Park. The West Wilson's Creek Greenway offers residents in northwest Springfield and unincorporated Greene County greater access to recreational opportunities through enhanced trail connections. The corridor also connects to the planned I-44 Corridor Trail, eventually linking to the popular Frisco Highline Trail.

The northern segment of the West Wilson's Creek Greenway beings at the northwest terminus of the Vintage Hills walking trail, located 375' south of the intersection of Haseltine Road and Farm Road 140, and extends northwest along West Wilson's Creek to the south access road alongside Interstate 44. While the Vintage Hills walking trail is currently private, the 8' to 10' asphalt path could accommodate greenway activity if opened to the public. Negotiations with the homeowners association to obtain recreational easements and use of this path will be critical to the development of the West Wilson's Creek Branch Greenway.

#### **Original Alignment**

The original alignment crosses Haseltine Road parallel to West Wilson's Creek. The path maintains its position on the



View of Haseltine Road south of Farm Road 140. The preferred alignment travels along the east (left) side of Haseltine Road as approaches Farm Road 140. (Source: Google)

northeast side of the branch until reaching the BNSF rail-road. The alignment will require a grade-separated crossing at the BNSF Railroad to reach the Interstate 44 south access road. The alignment follows the access road to the west before connecting to the planned Interstate 44 Trail immediately east of the Deer Lake Golf Club underpass.

#### **Alternative Alignment 1 (Preferred)**

The alternative alignment begins at the northwest terminus of the Vintage Hills walking trail and continues north to Farm Road 140 on the east side of Haseltine Road. The path crosses the intersection of these roads and continues northwest along the east side of West Wilson's Creek. The alternative alignment is located outside the floodway to reduce stormwater impacts. The alternative alignment will also require a grade separated crossing at the BNSF Railroad to reach the Interstate 44 south access road. The alternative alignment follows the access road to the west before connecting to the planned Interstate 44 Trail (also a planned priority trail corridor), and crossing under the interstate using the Deer Lake Golf Club underpass.

#### **Alternative Alignment 2**

The second alignment alternative travels north along the east side of Haseltine Road to Farm Road 140. The path crosses the intersection and travels west on the north side of

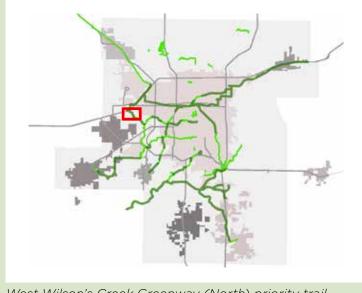


View of the Vintage Hills walking path looking northwest from the community's clubhouse.

Farm Road 140, crosses over the at-grade BNSF rail line and turns north on Long Road. The path continues as a sidepath along Long Road through the subdivision, then traverses the golf course along existing access paths to reach the Interstate 44 Trail at the underpass.

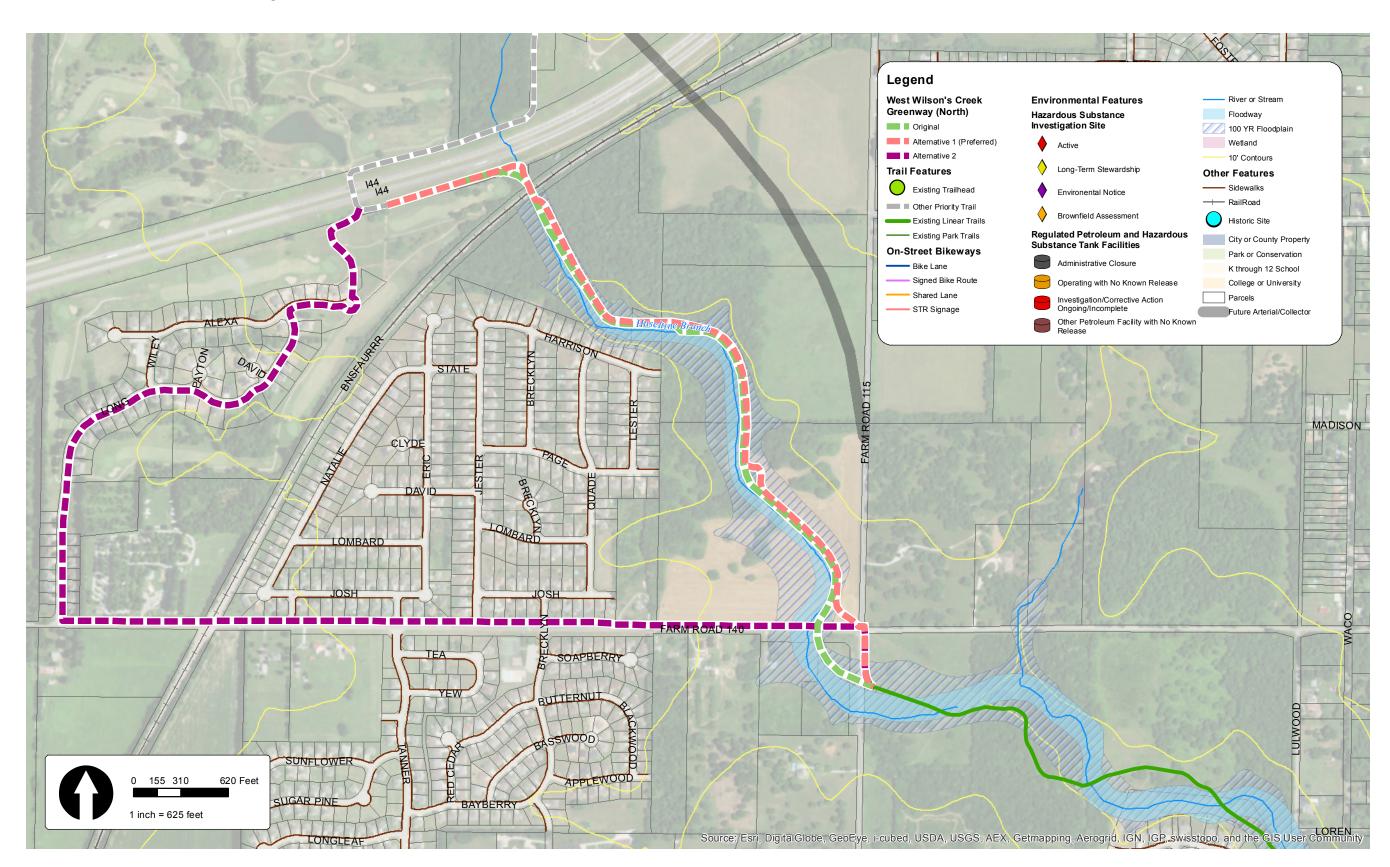
Alignment Scoring				
Score	Priority	Orig	Alt 1	Alt 2
Network Connections	High	•	•	•
User Experience	High	•	•	•
Enhances Bicycling & Walking	High	•	•	
Logical Segments	Med.	•	•	•
Cultural & Natural Resources	Med.	•	•	
Environmental Conditions	Med.	•	•	•
Cost	Low	•	•	•
Route Directness	Low	•	•	$\circ$
Ownership / Right-of-Way	Low	•	•	•

# Planning level cost for preferred alignment: \$1,364,497.



West Wilson's Creek Greenway (North) priority trail segment location.

#### West Wilson's Creek Greenway (North)



## Wilson's Creek Greenway

#### **Corridor Description**

Wilson's Creek Greenway is a vital north south corridor for active transportation and recreation in west Springfield and unincorporated Greene County. With connections to the South Creek Greenway, the Lower Jordan Creek Greenway, Fassnight Creek Greenway, and numerous on-street bikeways, the completion of this planned priority segment of the greenway will further expand opportunities for bicycle and pedestrian travel and link Springfield residents to many destinations across the community.

#### **Refined Original Alignment**

The refined original alignment begins at the northeast end of the existing Wilson's Creek Greenway in Rutledge Wilson Park and travels east for 800 feet, crosses to the north side of Wilson's Creek. It continues east on the north side of the creek under West Bypass and remains on the north side of the creek until connecting with the Wilson's Creek Greenway segment that ends at the abandoned Hillcrest Avenue in James Ewing West Park.

#### **Alternative Alignment (Preferred)**

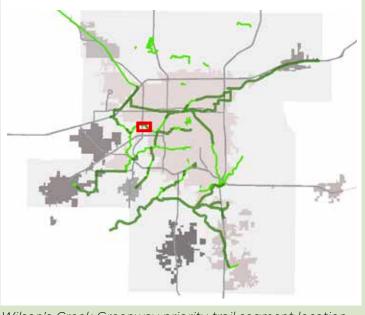
The alternative alignment begins in the same location and travels along the south side of Wilson's Creek. The alignment passes under West Bypass and travels southeast towards the abandoned Spurling Drive, then east along city-owned property. The trail alignment then crosses Wilson's Creek east of the transmission corridor and follows the same path as the original alignment to connect to the existing segment of the greenway at the abandoned Hillcrest Avenue.

#### **Interim Connections**

Interim on-street routes are in progress from Wilson's Creek Greenway in James Ewing West Park to Overhill Park via Hillcrest Avenue, Meadowmere Street, Golden Avenue, Catalpa Street, and Overhill Avenue. An additional interim route has been identified along the east side of West Bypass Road south from Wilson's Creek to West Spurling Drive, which would eventually connect to the alternative alignment identified above.

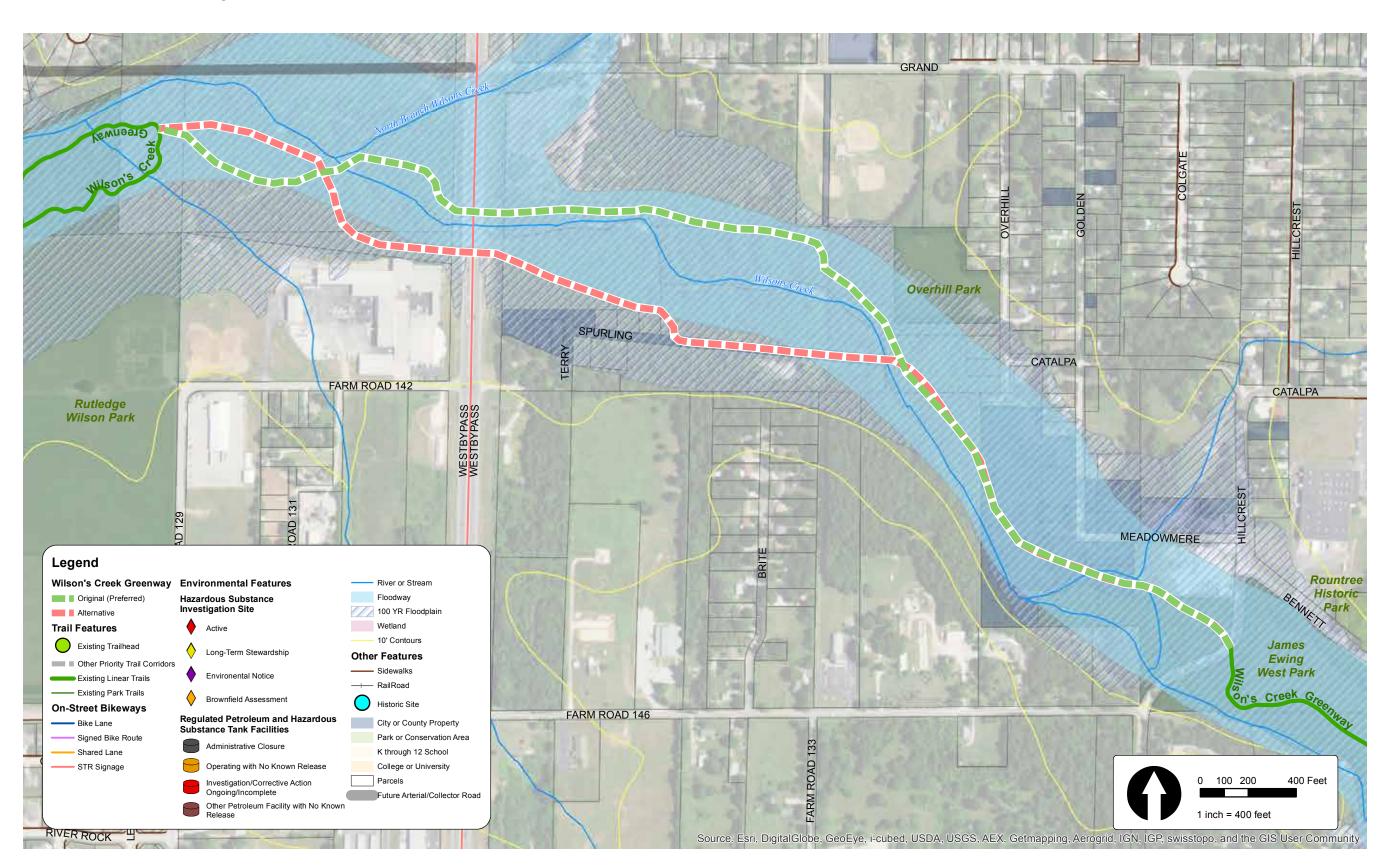
Alignment Scoring			
Score	Priority	Original	Alt
Network Connections	High		•
User Experience	High	•	•
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	•	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

Planning level cost for preferred alignment: \$1,665,850.



Wilson's Creek Greenway priority trail segment location.

#### Wilson's Creek Greenway



## West Republic Road (Highway M)

#### **Corridor Description**

West Republic Road is a critical segment of the corridor linking the City of Republic to the City of Springfield. This planned priority trail segment begins at the intersection of West Republic Road (State Highway M) and Wilson's Creek Boulevard (State Highway ZZ) and extends eastward to Wilson Creek and the existing Wilson's Creek Greenway. While Transportation Plan 2040, the OTO's long-range transportation plan, does include a future southern extension to the Greenway extending from West Republic Road to Wilson's Creek National Battlefield (and further south to the James River Greenway), the West Republic Road and Wilson's Creek Boulevard corridors present a more immediate opportunity to enhance regional connectivity for active transportation.

#### **Refined Original Alignment (Preferred)**

The refined alignment takes advantage of adjacent parcels owned by the Republic School District and City Utilities to provide a shared-use path facility for bicycle and pedestrian use. The path alignment begins on the south side of West Republic Road with a connection to the Wilson's Creek Boulevard planned priority trail, and continues east along the south side of the roadway until reaching Farm Road 107,



West Republic Road bridge over Wilson's Creek, facing west.

at which point the path crosses to the north side of West Republic Road. Easement acquisition from Republic School District and adjacent parcels west of Farm Road 107 may be necessary to provide adequate separation from adjacent motor vehicle travel lanes.

East of Farm Road 107, the path is positioned along the northern edge of the right-of-way. Parcels owned by City Utilities and the City of Springfield account for roughly 55 percent of parcel frontage between Farm Road 107 and the Wilson's Creek Greenway. Easement acquisition from City Utilities and the City of Springfield should be considered to increase separation from motor vehicle traffic and to lessen potential slope and drainage challenges within the 60' right-of-way. A new bicycle and pedestrian bridge will be required to cross Wilson's Creek and connect to the existing greenway. The corridor concept can also allow for inclusion of wayfinding, information kiosks and stormwater best management practices (BMP's) that are part of an overall corridor concept that supports the historic destination this corridor connects.

#### Interim Alignment

Should the preferred alignment be identified as a medium- or long-term project through subsequent corridor

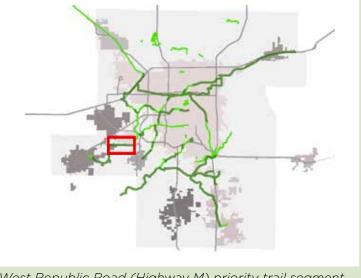


West Republic Road at Farm Road 115, facing east.

prioritization and phasing, interim improvements should be considered to increase bicycle and pedestrian visibility and safety along the corridor. Short-term improvements may include widening shoulders to create buffered and/or protected bicycle lanes, as well as adding wayfinding signage, to help establish West Republic Road as an active transportation and recreation corridor.

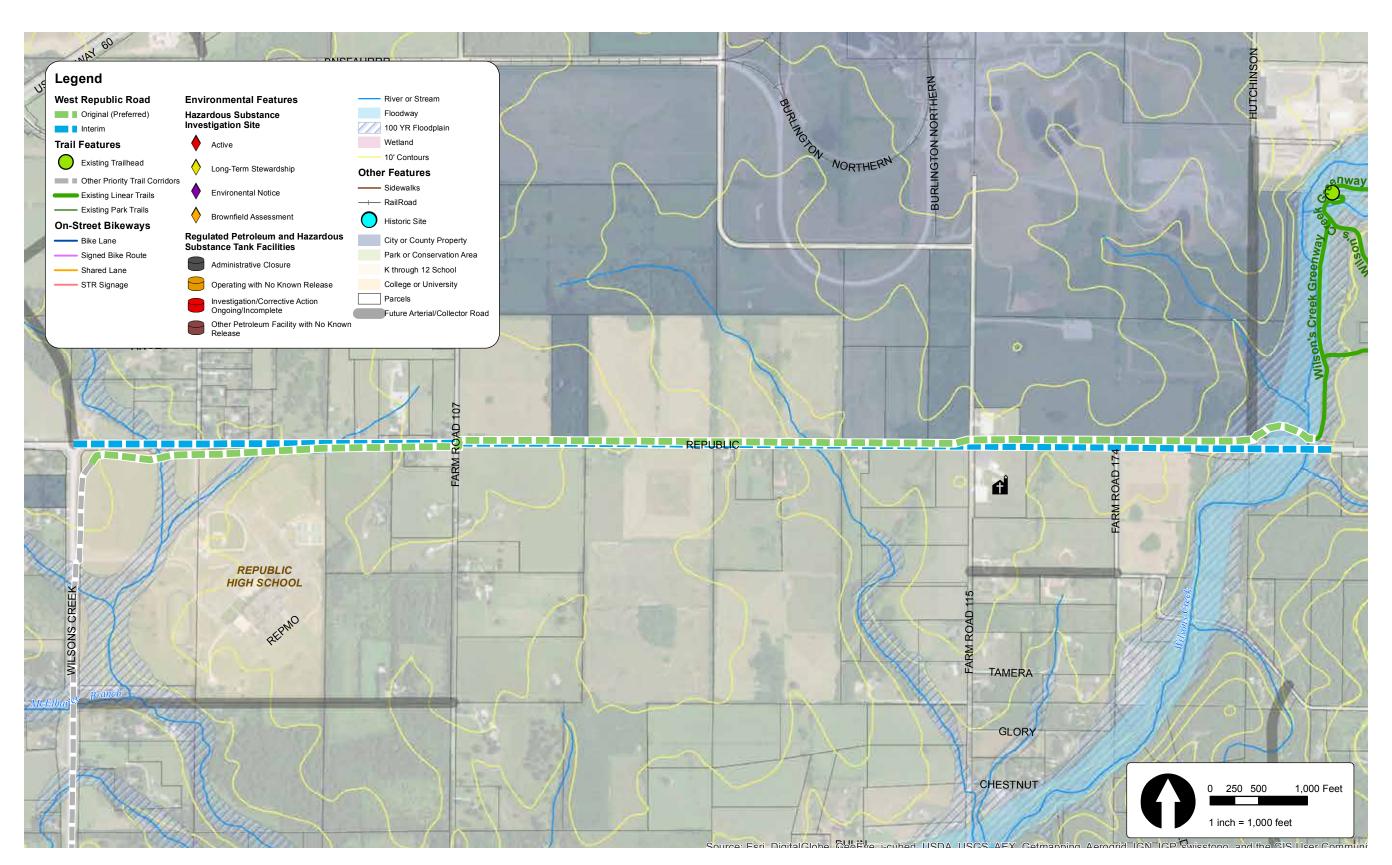
Alignment Scoring			
Score	Priority	Original	Interim
Network Connections	High	•	
User Experience	High	•	$\circ$
Enhances Bicycling & Walking	High	•	
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	•
Environmental Conditions	Medium	•	•
Cost	Low	$\bigcirc$	
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•
Cost Route Directness	Low	• •	0

# Planning level cost for preferred alignment: \$ 3,153,352.



West Republic Road (Highway M) priority trail segment location.

#### West Republic Road (Highway M)



## Wilson's Creek Boulevard (Highway ZZ)

#### **Corridor Description**

The Wilson's Creek Boulevard (State Highway ZZ) priority trail segment stretches from Republic Road (State Highway M) south to Farm Road 182 at Wilson's Creek National Battlefield. A vital regional connection linking the City of Republic to the regional trail system, this priority trail segment also serves local trips as well, increasing bicycle and pedestrian access to Republic High School.

#### Refined Original Alignment (Preferred)

The refined alignment utilizes available right-of-way east of the existing pavement on Highway ZZ to provide a shared-use path separated from motor vehicle traffic. Right-of-way widths vary from 100' to almost 250' feet in some sections, and average pavement width for the two travel lanes and two shoulders is roughly 44'. Should additional easements be necessary, there are fewer individual parcels on the east side of Highway ZZ, and roughly 46 percent of property fronting the highway is publicly owned by either the National Park Service or the Republic School District.

Given the corridor's short length, route directness, and lack of nearby opportunities for adjacent trail development, no additional alignments were created for the Wilson's Creek Boulevard priority trail segment. The corridor concept can also allow for inclusion of wayfinding, information kiosks and stormwater BMP's that are part of an overall corridor concept that supports the historic destination this corridor connects.

#### Interim Alignment

Should the preferred alignment by identified as a mediumor long-term project through subsequent corridor prioritization and phasing, interim improvements should be considered to increase bicycle and pedestrian visibility and safety along the corridor. Short-term improvements may include



Wilson's Creek Boulevard at the entrance to Republic High School.

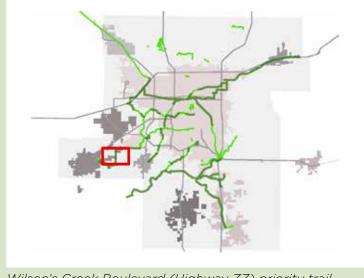


Rendering of Wilson's Creek Boulevard Trail, incorporating lighting, seating, and other amenities, as well as character elements that mirror Wilson's Creek National Battlefield.

conversion of shoulders to buffered and/or protected bicycle lanes and the addition of wayfinding signage and intersection enhancements. In addition to safety and visibility enhancements, these improvements will also help to establish Wilson's Creek Boulevard as an active transportation and recreation corridor.

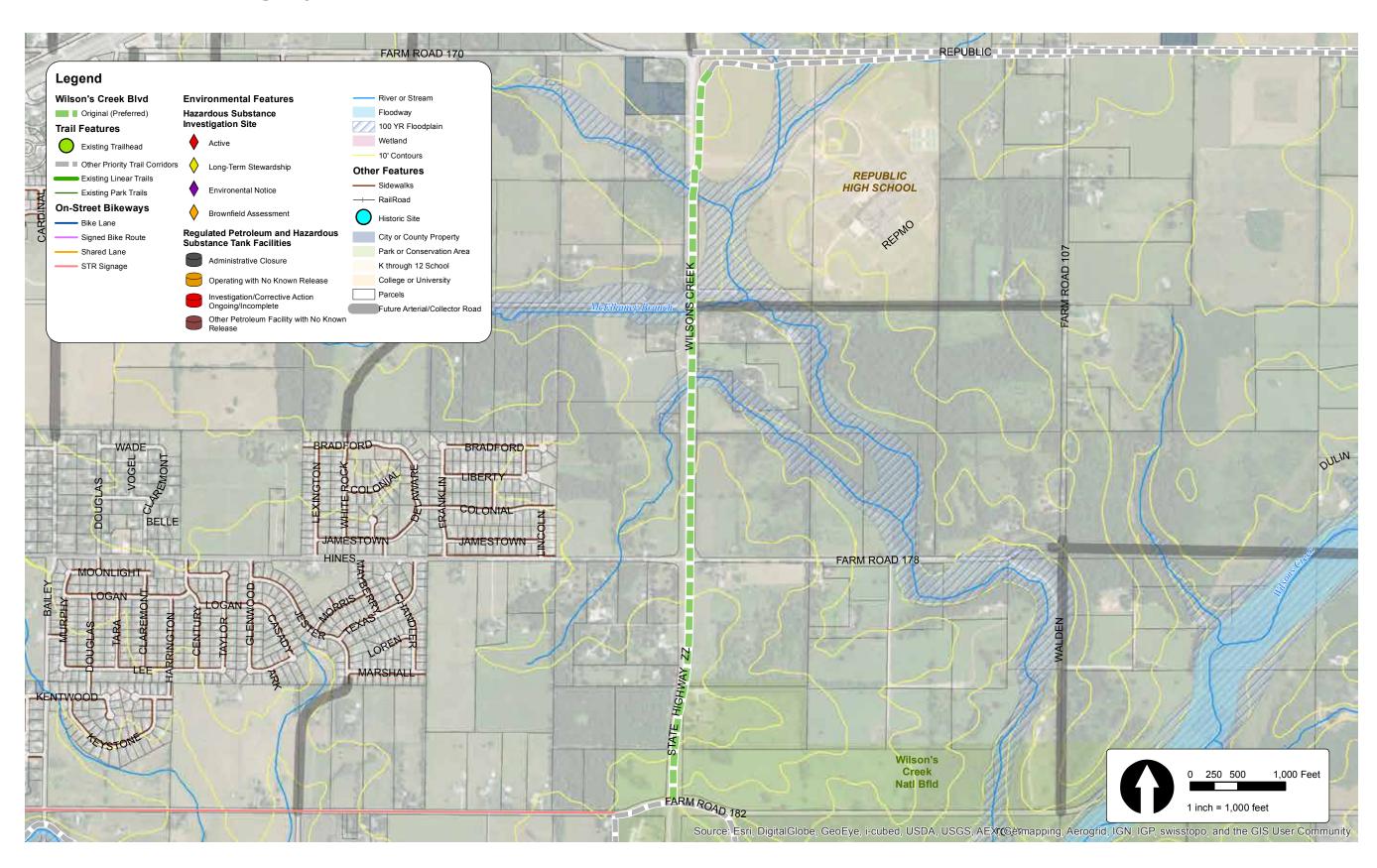
Score	Priority	Original	Interim
Network Connections	High	•	•
User Experience	High	•	0
Enhances Bicycling & Walking	High	•	•
Logical Segments	Medium	•	•
Cultural & Natural Resources	Medium	•	
Environmental Conditions	Medium	•	•
Cost	Low	$\circ$	•
Route Directness	Low	•	•
Ownership / Right-of-Way	Low	•	•

# Planning level cost for preferred alignment: \$1,908,565.



Wilson's Creek Boulevard (Highway ZZ) priority trail segment location.

#### Wilson's Creek Boulevard (Highway ZZ)



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# **CHAPTER 4: COST ESTIMATES**

## Introduction

Cost estimates for trail development are a valuable resource for local and regional agencies. Detailed cost estimates like those presented in this chapter can support capital improvement planning, project development and phasing, and securing external funding sources to assist with project financing.

The detailed estimates developed for each preferred alignment described in the previous chapter of the study incorporate an extensive list of cost factors to provide accurate estimates, including clearing, grading, base, surface, structures, culverts, signage, lighting, signalization, pavement markings, seeding, mulching, and temporary traffic control.

## **Cost Estimates**

Table 4.1 below shows the cost estimates for each trail corridor in gray, and the trail segments that comprise each corridor in white. More detailed cost estimates for each trail segment are shown on the following pages.

**Table 4.1: Corridor and Trail Segment Cost Estimates** 

Trail Corridor and Segments	Length	Cost
Chadwick Flyer Rail Trail (North) Corridor	3.66	\$7,653,584.38
Chadwick Flyer Rail Trail (South) Corridor	6.38	\$7,666,504.69
Farmer Branch Greenway Corridor	5.7	\$5,061,623.50
Farmer Branch Greenway	4.71	\$3,960,755.54
River Bluff Blvd - Farmer Branch Greenway Connector	0.99	\$1,100,867.97
Fassnight Creek Greenway Corridor	2.49	\$3,236,325.31
Fassnight Creek Greenway (East)	0.8	\$1,307,645.00
Fassnight Creek Greenway (West)	1.69	\$1,928,680.31
Fort Scott Rail Trail Corridor	4.86	\$8,258,578.61
Fort Scott Line Rail Trail	4.09	\$5,776,919.69
Westgate - Fort Scott Line Rail Trail Connector	0.59	\$1,126,299.25
Division Street - I-44 Trail Connector	0.18	\$1,355,359.67
James River Greenway Corridor	13.46	\$15,428,369.97
Lower Jordan Creek Greenway Corridor	1.29	\$4,269,047.62
North Jordan Creek Greenway Corridor	4.04	\$6,333,912.10
North Jordan Creek Greenway - Jordan Valley Connector	0.81	\$1,488,025.06
North Jordan Creek Greenway Trail	3.23	\$4,845,887.04
Republic - Battlefield Corridor	2.6	\$3,146,310.97
Shuyler Creek Greenway Extension	1.38	\$1,343,413.84
Etheridge Trail	0.83	\$773,154.24
Wilson's Creek National Battlefield Connector	0.39	\$1,029,742.88
Route 66 / Strafford Trail Corridor	8.21	\$7,012,049.69
South Creek Greenway Corridor	0.56	\$758,946.28

Trail Corridor and Segments	Length	Cost
South Jordan Creek Greenway Corridor	5.78	\$8,445,466.18
South Jordan Creek Greenway Trail	3.09	\$3,312,261.81
Division Street - Cooper Park Connector	0.68	\$909,251.31
Division Street	1.01	\$2,822,076.88
Le Compte Road	1	\$1,401,876.19
Trail of Tears Corridor	3.87	\$3,588,490.94
Battlefield Section	1.18	\$597,949.06
Golden Avenue Section	0.53	\$879,157.50
South Creek Greenway Connector	1.18	\$1,118,762.50
Greene Park to Ewing Sports Complex	0.98	\$992,621.88
Ward Branch Greenway Corridor	2.57	\$5,210,293.66
Ward Branch Greenway - North	0.58	\$1,276,433.68
Ward Branch Greenway - Middle	0.37	\$542,586.38
Ward Branch Greenway - South	1.54	\$3,113,072.70
Ward Branch - James River Greenway Connector	0.08	\$278,200.90
I-44 Trail Corridor	3.82	\$4,145,719.55
West Wilson's Creek Greenway Corridor	1.33	\$2,230,754.80
West Wilson's Creek Greenway (South)	0.39	\$549,583.75
West Wilson's Creek Greenway (North)	0.94	\$1,681,171.05
Wilson's Creek Greenway Corridor	1.01	\$1,681,171.05
Wilson's Creek - Battlefield Corridor	3.95	\$6,074,570.00
West Republic Road	2.46	\$2,999,896.97
Wilson's Creek Boulevard	1.49	\$3,074,673.03

## Ozarks Transportation Organization

# **Chadwick Flyer Rail Trail (North) Corridor**

Chadwick Flyer Rail Trail (North) 10ft Paved Path OPINION OF PROBABLE COSTS				
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
		LOUNA	<b>#450,000,00</b>	<b>#450,000,00</b>
Removal of Improvements		L SUM	\$150,000.00	\$150,000.00
Clearing & Grubbing		AC	\$7,500.00	\$0.00
Linear Grading Class 1		STA	\$1,500.00	·
Landscaping	15,000		\$10.00	\$150,000.00
4" Aggregate Base	30,000		\$8.50	\$255,000.00
4" Concrete Pavement	21,500		\$60.00	\$1,290,000.00
Benches, Trash Receptacles, etc.		LSUM	\$37,000.00	\$37,000.00
Driveway Repairs & Reconstruction		SY	\$75.00	\$0.00
Curb Ramps		SY	\$85.00	\$28,050.00
Wayfinding Signage		EA	\$500.00	\$18,500.00
Pipe Culverts		LF	\$60.00	\$6,000.00
Rock Lining		CY	\$85.00	\$4,250.00
6" Preformed Marking Tape, Grooved, White	900		\$6.00	\$5,400.00
24" White Stop Bars	300		\$20.00	\$6,000.00
Trail Signage & Posts		EA	\$800.00	\$27,200.00
Lighting		EA	\$5,400.00	\$162,000.00
Hawk Signals		EA	\$100,000.00	\$600,000.00
RRFB	5	EA	\$25,000.00	\$125,000.00
Fully Signalized Intersection	1	LSUM	\$325,000.00	\$325,000.00
Pedestrian Bridge 120' x 12'	1,440		\$120.00	\$172,800.00
Embankment	5,200	CY	\$20.00	\$104,000.00
MSE Walls	18,500	sf	\$55.00	\$1,017,500.00
Seed, mulch, etc	4	ACRE	\$5,000.00	\$20,000.00
Temporary Silt Fence	20,000	LF	\$3.00	\$60,000.00
Ditch Checks	50	EA	\$225.00	\$11,250.00
Temporary Traffic Control	1	LSUM	\$175,000.00	\$175,000.00
			subtotal	\$4,864,450.00
Contractor Construction Staking	1	LSUM	\$85,000.00	\$85,000.00
Mobilization		LSUM	\$180,000.00	\$180,000.00
WIODIIIZation	'	LOOW	Ψ100,000.00	Ψ100,000.00
Subtotal				\$5,129,450.00
Contingency 15%				\$769,417.50
Total				\$5,898,867.50
		4.50/		
	ring & Surveying Co			\$884,830.13
Construction Administra		\$589,886.75		
		\$55,000.00		
Ease	y Costs		\$200,000.00	
	Utility Adju	stments I		\$25,000.00
	Ī	Ī	Ī	

# **Chadwick Flyer Rail Trail (South) Corridor**

Chadwick Flyer Rail Trail (South)  10ft Paved Path  OPINION OF PROBABLE COSTS				
TMPM	ОШУ	IINITE	INTE COCE	COCT (\$)
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$20,000.00	\$90,000.00
Clearing & Grubbing	10.0		\$7,500.00	\$75,000.00
Linear Grading Class 1		STA	\$1,500.00	\$505,500.00
Landscaping	26,950		\$10.00	\$269,500.00
4" Aggregate Base	52,400		\$9.00	\$471,600.00
4" Concrete Pavement	37,470		\$60.00	\$2,248,200.00
Pedestrian Bridge (250'x12')	3,000	SF	\$150.00	\$450,000.00
Benches, Trash Receptacles, etc.	6	LSUM	\$12,000.00	\$72,000.00
Driveway Repairs & Reconstruction	500	SY	\$75.00	\$37,500.00
Curb Ramps		SY	\$85.00	\$5,950.00
Wayfinding Signage		EA	\$500.00	\$10,000.00
18" Pipe Culverts	420		\$60.00	\$25,200.00
Concrete Box Culvert		LSUM	\$15,000.00	\$15,000.00
Rock Lining		CY	\$85.00	\$4,335.00
6" Preformed Marking Tape, Grooved, White	352		\$6.00	
24" White Stop Bars		LF	\$20.00	\$1,920.00
Trail Signage & Posts		EA	\$800.00	\$16,000.00
Lighting		EA	\$5,400.00	\$54,000.00
RRFB		EA	\$25,000.00	\$50,000.00
Hawk Signals		EA	\$100,000.00	\$200,000.00
Full Signal Upgrade		LSUM	\$150,000.00	\$150,000.00
Seed, mulch, etc		ACRE	\$5,000.00	\$7,500.00
Temporary Silt Fence	22,000		\$3.00	
Ditch Checks		EA	\$225.00	\$14,175.00
Temporary Traffic Control	1	LSUM	\$75,000.00	\$75,000.00
			subtotal	\$4,916,492.00
Contractor Construction Staking 2%	1	LSUM	\$98,329.84	\$98,329.84
Mobilization 4%			\$196,659.68	
Subtotal				\$5,211,481.52
Contingency 15%				\$781,722.23
Total				\$5,993,203.75
Engineering 9	Survoving Cos	to 15%		\$898,980.56
Engineering & Surveying Costs 15%  Construction Administration & Inspection Costs 10%				\$599,320.37
Easement & Right-of-Way Costs 10 Acres				\$125,000.00
Utility Adjustments				\$50,000.00
				,
	Gran	d Total		\$7,666,504.69

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

**Trail Investment Study** •

# **Farmer Branch Greenway Corridor**

Farmer Branch Greenway Trail  10ft Paved Path w/ 12ft Bridge  OPINION OF PROBABLE COSTS				
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$20,000.00	\$20,000.00
Clearing & Grubbing		AC	\$7,500.00	
Linear Grading Class 1		STA	\$1,500.00	
Landscaping	13,750		\$10.00	
4" Aggregate Base	26,770		\$9.00	
4" Concrete Pavement	19,120		\$60.00	
Benches, Trash Receptacles, etc.		LSUM	\$12,000.00	
Driveway Repairs & Reconstruction		SY	\$75.00	\$0.00
Curb Ramps		SY	\$85.00	
Wayfinding Signage		EΑ	\$500.00	
18" Pipe Culverts	630		\$60.00	
Rock Lining		CY	\$85.00	·
6" Preformed Marking Tape, Grooved, White	352		\$6.00	·
24" White Stop Bars		LF	\$20.00	·
Trail Signage & Posts	18	EA	\$800.00	·
Retaining Walls	500		\$50.00	·
Signalization		LSUM	\$100,000.00	
Seed, mulch, etc		ACRE	\$5,000.00	
Temporary Silt Fence	29,100	LF	\$3.00	·
Ditch Checks		EA	\$225.00	
Temporary Traffic Control	1	LSUM	\$10,000.00	
150' x 12' bridge	1,800	SF	\$150.00	·
Class B-1 Concrete Abutments		CY	\$800.00	
			subtotal	\$2,492,472.00
Contractor Construction Staking	1	LSUM	\$49,849.44	\$15,000.00
Mobilization		LSUM	\$99,698.88	\$13,000.00
Subtotal				\$2,607,170.88
Contingency 15%				\$391,075.63
Total				\$2,998,246.5
Engineering &	Surveying Cos	ts 18%		\$539,684.3
Construction Administration &	\$299,824.6			
Easement	\$118,000.00			
	Utility Adjus			\$5,000.00
	0	d Total		<b>#2 000 755</b> 5
Costs Based on 2017 – 2018 prices. Should inclu		d Total	L	\$3,960,755.54

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

River Bluff Blvd - Farmer Branch Greenway Connector Trail  10ft Paved Path OPINION OF PROBABLE COSTS					
TMINA		OTIV		INITE COCE	COCH (¢)
ITEM		QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements		1	L SUM	\$30,000.00	\$30,000.00
Clearing & Grubbing			AC	\$7,500.00	\$9,000.00
Linear Grading Class 1		37	STA	\$1,500.00	\$55,500.00
Landscaping		4,200	LF	\$10.00	\$42,000.00
4" Aggregate Base		8,080	SY	\$9.00	\$72,720.00
4" Concrete Pavement		5,770		\$60.00	\$346,200.00
Benches, Trash Receptacles, etc.		2	LSUM	\$12,000.00	\$24,000.00
Driveway Repairs & Reconstruction		0	SY	\$75.00	\$0.00
Curb Ramps		25	SY	\$85.00	\$2,125.00
Wayfinding Signage		2	EA	\$500.00	\$1,000.00
18" Pipe Culverts		140	LF	\$60.00	\$8,400.00
Rock Lining			CY	\$85.00	\$680.00
6" Preformed Marking Tape, Grooved, White	)	44	LF	\$6.00	\$264.00
24" White Stop Bars		24	LF	\$20.00	\$480.00
Trail Signage & Posts			EA	\$800.00	\$6,400.00
Signalization		1	LSUM	\$25,000.00	\$25,000.00
Seed, mulch, etc			ACRE	\$5,000.00	\$5,000.00
Temporary Silt Fence		8,000	LF	\$3.00	\$24,000.00
Ditch Checks			EA	\$225.00	\$2,250.00
Temporary Traffic Control		1	LSUM	\$5,000.00	\$5,000.00
				subtotal	\$660,019.00
Contractor Construction Staking			LSUM	\$15,000.00	\$15,000.00
Mobilization		1	LSUM	\$45,000.00	\$45,000.00
Subtotal					\$720,019.00
Contingency 15%					\$108,002.85
Total					\$828,021.85
i otai					ΨυΖυ,υΖ 1.05
Engineering	a & Survevi	ng Cos	ts 18%		\$149,043.93
Construction Administration & Inspection Costs 10%					\$82,802.19
Easement & Right-of-Way Costs					\$36,000.00
Utility Adjustments					\$5,000.00
	Ī				
		Gran	d Total		\$1,100,867.97

# **Fassnight Creek Greenway Corridor**

Fassnight Creek Greenway (East) Trail 10ft Paved Path OPINION OF PROBABLE COSTS				
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$5,000.00	\$5,000.00
Clearing & Grubbing	0.2		\$7,500.00	\$1,500.00
Linear Grading Class 1		STA	\$1,500.00	\$40,500.00
Landscaping	3,250		\$10.00	\$32,500.00
4" Aggregate Base	4,270		\$8.50	\$36,295.00
4" Concrete Pavement	3,060		\$60.00	\$183,600.00
Benches, Trash Receptacles, etc.		LSUM	\$7,850.00	\$7,850.00
Driveway Repairs & Reconstruction	200	SY	\$75.00	\$15,000.00
Curb Ramps	135	SY	\$85.00	\$11,475.00
Wayfinding Signage	8	EA	\$500.00	\$4,000.00
18" Pipe Culverts	50	LF	\$60.00	\$3,000.00
Rock Lining	10	CY	\$85.00	\$850.00
6" Preformed Marking Tape, Grooved, White	570	LF	\$6.00	\$3,420.00
24" White Stop Bars	125	LF	\$20.00	\$2,500.00
Trail Signage & Posts	22	EA	\$800.00	\$17,600.00
Lighting	5	EA	\$5,400.00	\$27,000.00
RRFB	3	EA	\$25,000.00	\$75,000.00
Seed, mulch, etc	1	ACRE	\$5,000.00	\$5,000.00
Temporary Silt Fence	2,500	LF	\$3.00	\$7,500.00
Ditch Checks	10	EA	\$225.00	\$2,250.00
Temporary Traffic Control	1	LSUM	\$20,000.00	\$20,000.00
			subtotal	\$501,840.00
Contractor Construction Staking	1	LSUM	\$25,000.00	\$25,000.00
Mobilization		LSUM	\$55,000.00	\$55,000.00
		_		<b>A=0</b> / <b>C</b> / <b>C</b> / <b>C</b>
Subtotal 2 and the subtotal 2 an				\$581,840.00
Contingency 15%				\$87,276.00
Total				\$669,116.00
Engineerin	l g & Surveying Co	sts 15%		\$100,367.40
Construction Administration & Inspection Costs 10%				\$66,911.60
Easement & Right-of-Way Costs				\$15,000.00
Utility Adjustments				\$25,000.00
				A000 000 000
	Grai	nd Total		\$876,395.00

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Fassnight Creek Greenway (West) Trail  10ft Paved Path  OPINION OF PROBABLE COSTS					
ITEM	QTY.	UNIT	UNIT COST	COST(\$)	
Removal of Improvements	1	L SUM	\$5,000.00	\$15,000.00	
Clearing & Grubbing		AC	\$7,500.00	\$1,500.00	
Linear Grading Class 1		STA	\$1,500.00	\$61,500.00	
Landscaping	3,250		\$10.00	\$32,500.00	
4" Aggregate Base	6,350		\$8.50	\$53,975.00	
4" Concrete Pavement	4,550		\$60.00	\$273,000.00	
Benches, Trash Receptacles, etc.		LSUM	\$7,850.00	\$7,850.00	
•	200		·	·	
Driveway Repairs & Reconstruction Curb Ramps	135		\$75.00 \$85.00	\$15,000.00 \$11,475.00	
Wayfinding Signage		EA	\$500.00	\$7,000.00	
Pipe Culverts	300		\$60.00	\$18,000.00	
Retaining Wall	600		\$45.00	\$18,000.00	
Rock Lining		CY	\$85.00	\$2,550.00	
6" Preformed Marking Tape, Grooved, White	570		\$6.00	\$3,420.00	
	125		\$20.00		
24" White Stop Bars		EA		\$2,500.00	
Trail Signage & Posts		EA	\$800.00	\$17,600.00	
Lighting RRFB		EA	\$5,400.00	\$216,000.00	
		ACRE	\$25,000.00	\$25,000.00	
Seed, mulch, etc			\$6,000.00	\$12,000.00	
Temporary Silt Fence	6,500		\$3.00	\$19,500.00	
Ditch Checks		EA	\$225.00	\$5,625.00	
Temporary Traffic Control	1	LSUM	\$25,000.00 subtotal	\$25,000.00 \$852,995.00	
			Subtotal	ψ032,993.00	
Contractor Construction Staking	1	LSUM	\$35,000.00	\$15,000.00	
Mobilization	1	LSUM	\$75,000.00	\$75,000.00	
Subtotal				\$942,995.00	
Contingency 15%				\$141,449.25	
Total				\$1,084,444.25	
Engineering	& Surveying Co	ete 15%		\$162,666.64	
Construction Administration	\$108,444.43				
Easeme	\$45,000.00				
Lasenie	\$25,000.00				
	Utility Adjus	201161112		Ψ20,000.00	
	Gran	nd Total		\$1,425,555.31	

## Ozarks Transportation Organization

## Fort Scott Line Rail Trail Corridor

Fort Scott Line Rail Trail 10ft Paved Path OPINION OF PROBABLE COSTS					
ITEM		QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements			L SUM	\$150,000.00	\$150,000.00
Clearing & Grubbing			AC	\$7,500.00	\$15,000.00
Linear Grading Class 1			STA	\$1,500.00	\$345,000.0
Landscaping		18,000		\$10.00	\$180,000.0
4" Aggregate Base		35,730		\$8.50	\$303,705.0
4" Concrete Pavement		25,520	SY	\$60.00	\$1,531,200.00
Benches, Trash Receptacles, etc.		1	LSUM	\$45,000.00	\$45,000.00
Driveway Repairs & Reconstruction		200	SY	\$75.00	\$15,000.00
Curb Ramps		250	SY	\$85.00	\$21,250.00
Wayfinding Signage		45	EA	\$500.00	\$22,500.00
18" Pipe Culverts		100	LF	\$60.00	\$6,000.00
Rock Lining		90	CY	\$85.00	\$7,650.00
6" Preformed Marking Tape, Grooved, White		950	LF	\$6.00	\$5,700.00
24" White Stop Bars		475	LF	\$20.00	\$9,500.00
Trail Signage & Posts		24	EA	\$800.00	\$19,200.00
Lighting		35	EA	\$5,400.00	\$189,000.00
Signal Crossing		1	LSUM	\$200,000.00	\$200,000.00
Hawk Signal		2	EA	\$100,000.00	\$200,000.00
RRFB			EA	\$25,000.00	\$125,000.0
Seed, mulch, etc		4	ACRE	\$5,000.00	\$20,000.0
Temporary Silt Fence		23,000	LF	\$3.00	\$69,000.0
Ditch Checks		100		\$225.00	\$22,500.0
Temporary Traffic Control		1	LSUM	\$175,000.00	\$175,000.0
				subtotal	\$3,677,205.0
Contractor Construction Staking		1	LSUM	\$65,000.00	\$65,000.0
Mobilization		1	LSUM	\$120,000.00	\$120,000.0
Subtotal					\$3,862,205.0
Contingency 15%					\$579,330.7
Total					\$4,441,535.7
l Engii	neering & Surve	ying Co	sts 15%		\$666,230.30
Construction Administration & Inspection Costs 10%				\$444,153.58	
Easement & Right-of-Way Costs				\$200,000.00	
	Util	ity Adju	stments		\$25,000.00
		Grai	nd Total		\$5,776,919.69

Costs Based on 2017 – 2018 prices. Shou	ld include Inflation for each year beyond 2018
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Westgate - BNSF Spur Trail (West Connector)  10ft Paved Path OPINION OF PROBABLE COSTS							
ITEM	QTY.	UNIT	UNIT COST	COST(\$)			
Removal of Improvements	1	L SUM	\$15,000.00	\$15,000.00			
Clearing & Grubbing	0.4	AC	\$7,500.00	\$3,000.00			
Linear Grading Class 1	30	STA	\$1,500.00	\$45,000.00			
Landscaping	2,500	LF	\$10.00	\$25,000.00			
4" Aggregate Base	4,750	SY	\$8.50	\$40,375.00			
4" Concrete Pavement	3,400	SY	\$60.00	\$204,000.00			
Benches, Trash Receptacles, etc.	1	LSUM	\$6,000.00	\$6,000.00			
Driveway Repairs & Reconstruction	500	SY	\$75.00	\$37,500.00			
Curb Ramps	85	SY	\$85.00	\$7,225.00			
Wayfinding Signage	6	EA	\$500.00	\$3,000.00			
Pipe Culverts	30	LF	\$60.00	\$1,800.00			
Rock Lining	20	CY	\$85.00	\$1,700.00			
6" Preformed Marking Tape, Grooved, White	300	LF	\$6.00	\$1,800.00			
24" White Stop Bars	0	LF	\$20.00	\$0.00			
Trail Signage & Posts	4	EA	\$800.00	\$3,200.00			
Lighting	2	EA	\$5,400.00	\$10,800.00			
Signalization & Signage, Gates, etc	1	Lsum	\$250,000.00	\$250,000.00			
Seed, mulch, etc	1	ACRE	\$5,000.00	\$5,000.00			
Temporary Silt Fence	2,800	LF	\$3.00	\$8,400.00			
Ditch Checks	7	EA	\$225.00	\$1,575.00			
Temporary Traffic Control	1	LSUM	\$10,000.00	\$10,000.00			
			subtotal	\$680,375.00			
Contractor Construction Staking	1	LSUM	\$10,000.00	\$10,000.00			
Mobilization		LSUM	\$45,000.00				
Subtotal	+ +			\$735,375.00			
Contingency 15%				\$110,306.25			
Total				\$845,681.25			
Engine	 ering & Surveying Co	ete 20%		¢160 126 25			
Construction Administra		\$169,136.25 \$101,481.75					
Construction Administra		\$5,000.00					
Eas		\$5,000.00 \$5,000.00					
	Utility Adju	ວແກ <b>ບ</b> ກເຮັ		φ5,000.00			
Grand Total							

# Division Street - I-44 Trail Connector 10ft Paved Path OPINION OF PROBABLE COSTS

Clearing & Grubbing						
Clearing & Grubbing		1	<u> </u>			, -,
Clearing & Grubbing			\$5,000.00			
Clearing & Grubbing	Easei		\$0.00			
Clearing & Grubbing	Construction Administration		\$122,759.97			
Clearing & Grubbing	Engineeri		\$204,599.95			
Clearing & Grubbing			寸			•
Clearing & Grubbing			$\neg$			\$1,022,999.75
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,629           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$60           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$150,000.00         \$15,000 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>\$133,434.75</td>						\$133,434.75
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$60           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$3           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$15,000.00         \$522,000 </td <td>Subtotal</td> <td></td> <td>寸</td> <td></td> <td></td> <td>\$889,565.00</td>	Subtotal		寸			\$889,565.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$60           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$3           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$15,000.00         \$522,000 </td <td></td> <td></td> <td>T</td> <td></td> <td>, ,=== 22</td> <td>,</td>			T		, ,=== 22	,
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$6           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$3,000           Rock Lining         0 CY         \$85.00         \$5           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$150,000.00         \$522,000						\$65,000.00
Clearing & Grubbing         0.1         AC         \$7,500.00         \$756           Linear Grading Class 1         8         STA         \$1,500.00         \$12,000           Landscaping         800         LF         \$10.00         \$8,000           4" Aggregate Base         1,250         SY         \$8.50         \$10,625           4" Concrete Pavement         900         SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1         LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0         SY         \$75.00         \$6           Curb Ramps         3         SY         \$85.00         \$255           Wayfinding Signage         3         EA         \$500.00         \$1,500           Pipe Culverts         1         LF         \$60.00         \$66           Rock Lining         0         CY         \$85.00         \$66           Rock Lining         0         CY         \$85.00         \$66           6" Preformed Marking Tape, Grooved, White         500         LF         \$6.00         \$3,000           24" White Stop Bars         25         LF         \$20.00         \$500           Tr	Contractor Construction Staking		1	LSUM	\$15,000.00	\$15,000.00
Clearing & Grubbing         0.1         AC         \$7,500.00         \$756           Linear Grading Class 1         8         STA         \$1,500.00         \$12,000           Landscaping         800         LF         \$10.00         \$8,000           4" Aggregate Base         1,250         SY         \$8.50         \$10,625           4" Concrete Pavement         900         SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1         LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0         SY         \$75.00         \$6           Curb Ramps         3         SY         \$85.00         \$255           Wayfinding Signage         3         EA         \$500.00         \$1,500           Pipe Culverts         1         LF         \$60.00         \$66           Rock Lining         0         CY         \$85.00         \$66           Rock Lining         0         CY         \$85.00         \$66           6" Preformed Marking Tape, Grooved, White         500         LF         \$6.00         \$3,000           24" White Stop Bars         25         LF         \$20.00         \$500           Tr			$\dashv$			, ,
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$6           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$6           Rock Lining         0 CY         \$85.00         \$6           Rock Lining         0 CY         \$85.00         \$6           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000			T			\$809,565.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$0           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$150,000         \$522,000						\$15,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$0           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$125,000.00         \$522,000 </td <td></td> <td> </td> <td></td> <td></td> <td></td> <td>\$675.00</td>						\$675.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$60           Rock Lining         0 CY         \$85.00         \$60           EV White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$125,000.00         \$522,000           Walls, et					· ·	\$2,400.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$6           Rock Lining         0 CY         \$85.00         \$3           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$150.00         \$522,000					· ·	\$2,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$756           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$6           Rock Lining         0 CY         \$85.00         \$3,000           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000           Signalization         0 LSUM         \$125,000.00         \$0						\$150,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$0           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800           Lighting         1 L SUM         \$15,000.00         \$15,000	-	3.4				\$522,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$3,000           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500           Trail Signage & Posts         6 EA         \$800.00         \$4,800			_			\$0.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,629           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$250           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$0           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000           24" White Stop Bars         25 LF         \$20.00         \$500					•	\$15,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$0           6" Preformed Marking Tape, Grooved, White         500 LF         \$6.00         \$3,000	·					\$4,800.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60           Rock Lining         0 CY         \$85.00         \$0					\$20.00	\$500.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,629           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$258           Wayfinding Signage         3 EA         \$500.00         \$1,500           Pipe Culverts         1 LF         \$60.00         \$60		5	500	LF	\$6.00	\$3,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0           Curb Ramps         3 SY         \$85.00         \$255           Wayfinding Signage         3 EA         \$500.00         \$1,500		1	0	CY		\$0.00
Clearing & Grubbing       0.1 AC       \$7,500.00       \$750         Linear Grading Class 1       8 STA       \$1,500.00       \$12,000         Landscaping       800 LF       \$10.00       \$8,000         4" Aggregate Base       1,250 SY       \$8.50       \$10,625         4" Concrete Pavement       900 SY       \$60.00       \$54,000         Benches, Trash Receptacles, etc.       1 LSUM       \$2,000.00       \$2,000         Driveway Repairs & Reconstruction       0 SY       \$75.00       \$0         Curb Ramps       3 SY       \$85.00       \$255			_		·	\$60.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000           4" Aggregate Base         1,250 SY         \$8.50         \$10,625           4" Concrete Pavement         900 SY         \$60.00         \$54,000           Benches, Trash Receptacles, etc.         1 LSUM         \$2,000.00         \$2,000           Driveway Repairs & Reconstruction         0 SY         \$75.00         \$0	·		_			\$1,500.00
Clearing & Grubbing       0.1 AC       \$7,500.00       \$750         Linear Grading Class 1       8 STA       \$1,500.00       \$12,000         Landscaping       800 LF       \$10.00       \$8,000         4" Aggregate Base       1,250 SY       \$8.50       \$10,625         4" Concrete Pavement       900 SY       \$60.00       \$54,000         Benches, Trash Receptacles, etc.       1 LSUM       \$2,000.00       \$2,000						\$255.00
Clearing & Grubbing       0.1 AC       \$7,500.00       \$750         Linear Grading Class 1       8 STA       \$1,500.00       \$12,000         Landscaping       800 LF       \$10.00       \$8,000         4" Aggregate Base       1,250 SY       \$8.50       \$10,625         4" Concrete Pavement       900 SY       \$60.00       \$54,000			_			\$0.00
Clearing & Grubbing       0.1 AC       \$7,500.00       \$750         Linear Grading Class 1       8 STA       \$1,500.00       \$12,000         Landscaping       800 LF       \$10.00       \$8,000         4" Aggregate Base       1,250 SY       \$8.50       \$10,625			_			\$2,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000           Landscaping         800 LF         \$10.00         \$8,000						\$54,000.00
Clearing & Grubbing         0.1 AC         \$7,500.00         \$750           Linear Grading Class 1         8 STA         \$1,500.00         \$12,000						\$10,625.00
Clearing & Grubbing 0.1 AC \$7,500.00 \$750	Ţ.	8			-	\$8,000.00
	· ·					\$12,000.00
Removal of Improvements 11 SUM \$5,000,00 \$5,000		1 1			. ,	\$750.00
	Removal of Improvements		1	LSUM	\$5,000,00	\$5,000.00
			+			
	TIEM	21	<u> </u>	ONII	UNII COSI	COST (\$)
ITEM QTY. UNIT UNIT COST COST(\$)	TITEM	ОП	v	TINITT	IINITE COSE	COST(\$)

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

**Trail Investment Study** •

4-7

## Ozarks Transportation Organization

# **James River Greenway Corridor**

	enway (East and d Path w/ 12ft Bridg OF PROBABLE COS	es	) Trail	
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$75,000.00	\$75,000.00
Clearing & Grubbing	18.7		\$7,500.00	\$140,250.00
Linear Grading Class 1	582		\$1,500.00	\$140,250.00
4" Aggregate Base	30,909		\$8.50	\$262,726.5
4" Concrete Pavement	90,460		\$60.00	\$5,427,600.00
Driveway Repairs & Reconstruction	300		\$75.00	\$22,500.00
Curb Ramps	250	SY	\$85.00	\$21,250.00
250' x 12' bridge	3,000	SF	\$150.00	\$450,000.00
300' x 12' bridge	3,600	SF	\$150.00	\$540,000.00
150' x 12' bridge	1,800	SF	\$150.00	\$270,000.00
250' x 12' bridge	3,000	SF	\$150.00	\$450,000.00
250' x 12' bridge	3,000	SF	\$150.00	\$450,000.00
Class B-1 Concrete Abutments	250	CV	\$800.00	\$200,000.00
		EA	\$100,000.00	
Hawk Signals				\$200,000.00
Signalized Crossing	1	LSUM	\$250,000.00	\$250,000.00
Pipe Culverts	2,500	LF	\$75.00	\$187,500.00
6" Preformed Marking Tape, Grooved, White	500	LF	\$6.00	\$3,000.00
24" White Stop Bars	96	LF	\$20.00	\$1,920.00
Trail Signage	30	EA	\$600.00	\$18,000.00
Wood Posts	30	EA	\$200.00	\$6,000.00
RRFB	3	EA	\$25,000.00	\$75,000.00
Lighting	0	EA	\$5,400.00	\$0.00
Seed, mulch, etc	5	ACRE	\$5,000.00	\$25,000.00
Temporary Sediment Control	1	LSUM	\$100,000.00	\$100,000.00
Temporary Traffic Control	1	LSUM	\$50,000.00	\$50,000.00
			subtotal	\$10,097,996.50
Contractor Construction Staking	1	LSUM	\$200,000.00	\$200,000.00
Mobilization		LSUM	\$400,000.00	\$400,000.00
Mobilization	'	LSUM	\$400,000.00	\$400,000.00
Subtotal				\$10,697,996.50
Contingency 15%				\$1,604,699.4
Total				\$12,302,695.98
Engine	ering & Surveying Cos	sts 15%		\$1,845,404.40
Construction Administra				\$1,230,269.6
	sement & Right-of-Way			\$25,000.0
	Utility Adjus			\$25,000.00
				A45 400 000 0
	Gran	d Total		\$15,428,369.97

# **Lower Jordan Creek Greenway Corridor**

Lower Jordan Creek Greenway Trail									
	10ft Paved Path w/ 12ft Bridge OPINION OF PROBABLE COSTS								
THEM		ОШУ	TINT III	INITE COCE	COCT (\$)				
ITEM		QTY.	UNIT	UNIT COST	COST(\$)				
Removal of	f Improvements	1	L SUM	\$200,000.00	\$200,000.0				
Clearing &			AC	\$10,000.00	\$20,000.0				
	ding Class 1		STA	\$1,500.00	\$99,000.0				
Landscapir	2	3,024		\$10.00	\$30,240.0				
4" Aggrega	Ţ	10,345		\$9.00	\$93,105.0				
	e Pavement	7,390		\$60.00	\$443,400.0				
	rash Receptacles, etc.		LSUM	\$12,000.00	\$24,000.0				
	Repairs & Reconstruction		SY	\$75.00	\$0.0				
Curb Ramp		115		\$85.00	\$9,775.0				
Wayfinding			EA	\$500.00	\$1,000.0				
18" Pipe Cı	žž	595		\$60.00	\$35,700.0				
Rock Lining			CY	\$85.00	\$2,550.0				
	ed Marking Tape, Grooved,	320		\$6.00	\$1,920.0				
24" White S		240		\$20.00	\$4,800.0				
Trail Signa	•		EA	\$800.00	\$22,400.0				
Lighting	90 011 0010		LSUM	\$25,000.00	\$50,000.0				
Hawk Signa	als		LSUM	\$100,000.00	\$200,000.0				
Seed, mulc			ACRE	\$5,000.00	\$10,000.0				
Temporary	-	7,000		\$3.00	\$21,000.0				
Ditch Chec			EA	\$225.00	\$5,625.0				
	Traffic Control		LSUM	\$50,000.00	\$50,000.0				
Retaining V		2,000		\$60.00	\$120,000.0				
Railroad Cr			L SUM	\$175,000.00	\$350,000.0				
	ab for ped/bike		L SUM	\$150,000.00	\$150,000.0				
200' x 12' br	•	2,400		\$150.00	\$360,000.0				
	oncrete Abutments		CY	\$800.00	\$40,000.0				
				subtotal	\$2,344,515.0				
Contractor		1	LSUM	\$40,000.00	\$40,000.0				
Mobilizatio			LSUM	\$110,000.00	\$110,000.0				
Subtotal					\$2,494,515.0				
Contingen	cv 15%				\$374,177.2				
Total					\$2,868,692.2				
	Engineering & S	Surveyina	Costs 22%		\$631,112.3				
Construction Administration & Inspection Costs 12%			\$344,243.0						
Geotechnical				\$50,000.0					
Easement & Right-of-Way Costs					\$75,000.0				
			ljustments		\$300,000.00				
		G	rand Total		\$4,269,047.62				

# **North Jordan Creek Greenway Corridor**

North Jordan Creek Greenway - Connector Trail  10ft Paved Path  OPINION OF PROBABLE COSTS							
ITEM	QTY.	UNIT	UNIT COST	COST(\$)			
Removal of Improvements	1	L SUM	\$50,000.00	\$50,000.0			
Clearing & Grubbing		AC	\$7,500.00				
Linear Grading Class 1		STA	\$1,500.00				
Landscaping	2,500		\$10.00	. ,			
4" Aggregate Base	3,200		\$9.00				
4" Concrete Pavement	2,400		\$60.00				
Benches, Trash Receptacles, etc.		LSUM	\$12,000.00				
Driveway Repairs & Reconstruction	350	SY	\$75.00				
Curb Ramps	120		\$85.00				
Wayfinding Signage		EA	\$500.00				
18" Pipe Culverts	120		\$60.00	·			
Rock Lining		CY	\$85.00	·			
6" Preformed Marking Tape, Grooved, White	400	LF	\$6.00				
24" White Stop Bars	48	LF	\$20.00				
Trail Signage & Posts	24	EA	\$800.00	\$19,200.0			
Lighting		EA	\$5,400.00	·			
RCB Extensions	80	CY	\$800.00				
Railroad Crossings	2	L SUM	\$175,000.00				
Seed, mulch, etc		ACRE	\$5,000.00				
Temporary Silt Fence	4,650	LF	\$3.00				
Ditch Checks	18	EΑ	\$225.00				
Temporary Traffic Control	1	LSUM	\$10,000.00				
			subtotal	\$843,610.0			
Contractor Construction Staking	1	LSUM	\$20,000.00	\$20,000.0			
Mobilization		LSUM	\$65,000.00				
			400,000.00	<del>+++++++++++++++++++++++++++++++++++++</del>			
Subtotal				\$928,610.0			
Contingency 15%				\$139,291.5			
Total				\$1,067,901.5			
Engineering & S	urvevina Cos	 sts 25%		\$266,975.3			
Construction Administration & In		\$128,148.1					
	\$25,000.0						
Easement &		\$0.0					
		\$0.0					
	Utility Adjus						
•	Gran	d Total		\$1,488,025.0			

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

North Jordan Creek Greenway Trail 10ft Paved Path OPINION OF PROBABLE COSTS							
ITEM		QTY.	UNIT	UNIT COST	COST(\$)		
TIM		QII.	ONII	ONII CODI	CODI (4)		
Removal of Improvements		1	L SUM	\$250,000.00	\$250,000.00		
Clearing & Grubbing			AC	\$7,500.00	\$15,000.00		
Linear Grading Class 1			STA	\$1,500.00	\$129,000.00		
Landscaping		14,450		\$10.00	\$144,500.00		
4" Aggregate Base		28,055		\$9.00	\$252,495.00		
4" Concrete Pavement		20,040		\$60.00	\$1,202,400.00		
Benches, Trash Receptacles, etc.			LSUM	\$12,000.00	\$36,000.00		
Driveway Repairs & Reconstruction		3,000		\$75.00	\$225,000.00		
Curb Ramps		150		\$85.00	\$12,750.00		
Wayfinding Signage			EA	\$500.00	\$4,000.00		
Pipe Culverts		500		\$60.00	\$30,000.00		
Rock Lining			CY	\$85.00	\$4,250.00		
6" Preformed Marking Tape, Grooved, White	9	800		\$6.00	\$4,800.00		
24" White Stop Bars		240		\$20.00	\$4,800.00		
Trail Signage & Posts		34	EA	\$800.00	\$27,200.00		
Lighting			EA	\$5,400.00	\$0.00		
Signalization			LSUM	\$650,000.00	\$650,000.00		
Seed, mulch, etc			ACRE	\$5,000.00	\$5,000.00		
Temporary Silt Fence		11,700		\$3.00	\$35,100.00		
Ditch Checks			EA	\$225.00	\$5,400.00		
Temporary Traffic Control		1	LSUM	\$20,000.00	\$20,000.00		
. ,				subtotal			
Contractor Construction Staking		1	LSUM	\$60,000.00	\$60,000.00		
Mobilization		1	LSUM	\$120,000.00	\$120,000.00		
Subtotal					\$3,237,695.00		
Contingency 15%					\$485,654.25		
Total					\$3,723,349.25		
Engineerin		\$670,202.87					
Construction Administratio	\$372,334.93						
	\$50,000.00						
Easem		\$15,000.00					
	\$15,000.00						
Grand Total \$4,845,887.							

# Republic - Wilson's Creek Battlefield Corridor

SHUYL	10 foot	REENWAY EXT paved paths ROBABLE COSTS			
ITEM		QTY.	UNIT	UNIT COST	COST(\$)
		<b>2</b>	V	0	332 (47
Removal of Improvements		1	L SUM	\$15,000.00	\$15,000.00
Clearing & Grubbing			ACRE	\$7,500.00	\$1,500.00
Linear Grading Class 1			STA	\$1,500.00	\$76,500.00
Landscaping		5,000		\$10.00	\$50,000.00
4" Aggregate Base		7,850		\$9.00	\$70,650.00
4" Concrete Pavement		5,700		\$65.00	\$370,500.00
Benches, Trash Receptacles, Etc.		,	LS	\$12,000.00	\$12,000.00
Curb Ramps		89	SY	\$85.00	\$7,555.56
Asphalt Pavement			TON	\$150.00	\$0.00
Wayfinding signage			EA	\$200.00	\$1,600.00
Rock Lining			CY	\$85.00	\$2,975.00
18" Pipe Culverts (Group B)		300		\$60.00	\$18,000.00
Box Culvert Extension			L SUM	\$20,000.00	\$20,000.00
6" Preformed Thermoplastic, White		144		\$6.00	\$864.00
24" White Stop Bars			LF	\$20.00	\$0.00
Signage			EA	\$600.00	\$8,400.00
Posts			EA	\$250.00	\$3,500.00
RRFB Signal			EA	\$25,000.00	\$75,000.00
Seed, mulch, etc			ACRE	\$5,000.00	\$10,000.00
Temporary Silt Fence		5,300		\$3.00	\$15,900.00
Ditch Checks			EA	\$225.00	\$13,900.00
Temporary Traffic Control			LSUM	\$20,000.00	\$2,700.00
Temporary Trainic Control			LSOW	subtotal	\$782,644.56
Contractor Construction Staking	2.00%	1	LSUM	\$15,652.89	\$15,652.89
Mobilization	2.0070		LSUM	\$60,000.00	
WODIIIZAUOTI			LSUIVI	φου,υυυ.υυ	\$60,000.00
Subtotal					\$858,297.45
Contingency 15%					\$128,744.62
Total					\$987,042.06
	 Engin	neering & Surveying	Costs 18%		\$177,667.57
			eotechnical		\$25,000.00
Con	struction Adminis	tration & Inspection	Costs 10%		\$98,704.21
Residential Easements		<u> </u>		\$30,000.00	\$30,000.00
Undeveloped/Aggricultural Easement		0		. ,	\$0.00
, gg	<u></u>	Utility A	djustments	,	\$25,000.00
					04.040.440.04
Costs Based on 2017 prices. Should include	da Inflation for		Grand Total		\$1,343,413.84
Ousis Daseu on Zo H prices. Should includ	ae iiiiiauoii ioi eacii	ı yeai beyülü 2010	I	1	

ETHERIDGE TRAIL  10 foot paved paths  OPINION OF PROBABLE COSTS					
ITEM	QTY.	UNIT	UNIT COST	COST(\$)	
Removal of Improvements	1	L SUM	\$5,000.00	\$5,000.00	
Clearing & Grubbing		ACRE	\$7,500.00	\$2,250.00	
Linear Grading Class 1		STA	\$1,500.00	\$49,500.00	
Landscaping	3,400		\$10.00	\$34,000.00	
4" Aggregate Base	5,300		\$9.00	\$47,700.00	
4" Concrete Pavement	3,800		\$65.00	\$247,000.00	
Benches, Trash Receptacles, Etc.		LS	\$8,000.00	\$8,000.00	
Curb Ramps		SY	\$85.00	\$0.00	
Asphalt Pavement		TON	\$150.00	\$0.00	
Wayfinding signage		EA	\$200.00	\$1,200.00	
Rock Lining		CY	\$85.00	\$680.00	
18" Pipe Culverts (Group B)	150		\$60.00	\$9,000.00	
6" Preformed Thermoplastic, White		LF	\$6.00	\$0.00	
24" White Stop Bars		LF	\$20.00	\$0.00	
Signage		EA	\$600.00	\$600.00	
Posts	·	EA	\$250.00	\$250.00	
1 0515	<u>'</u>		Ψ230.00	Ψ230.00	
Seed, mulch, etc	1	ACRE	\$5,000.00	\$5,000.00	
Temporary Silt Fence	3,400	LF	\$3.00	\$10,200.00	
Ditch Checks	8	EA	\$225.00	\$1,800.00	
Temporary Traffic Control	1	LSUM	\$7,500.00	\$7,500.00	
Lighting		LS	\$45,000.00		
			subtotal	\$429,680.00	
Contractor Construction Staking	1	LSUM	\$10,000.00	\$10,000.00	
Mobilization		LSUM	\$40,000.00	\$40,000.00	
WODINZATION	<u>'</u>	LOOW	ψ40,000.00	ψ40,000.00	
Subtotal				\$479,680.00	
Contingency 15%				\$71,952.00	
Total				\$551,632.00	
	Engineering & Surveying	Costs 20%		\$110,326.40	
		eotechnical		\$20,000.00	
Con	struction Administration & Inspection			\$66.195.84	
Residential Easements	0		\$30,000.00	\$0.00	
Undeveloped/Aggricultural Easement	0.00		\$10,000.00	\$0.00	
. 33	Utility A	djustments		\$25,000.00	
		Grand Total		\$773,154.24	
Costs Based on 2017 prices. Should include	de Inflation for each year beyond 2018				

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# Ozarks Transportation Organization

10 foot pay	National Battlefield ( red paths & Paved shou N OF PROBABLE COST	lder	or	
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$7,500.00	\$7,500.0
Clearing & Grubbing		ACRE	\$7,500.00	\$248.2
Linear Grading Class 1		STA	\$1,500.00	\$16,337.5
Landscaping	5,000		\$10.00	\$50,000.0
4" Aggregate Base	2,265		\$9.00	\$20,381.0
4" Concrete Pavement	1,245		\$65.00	\$80,910.5
Benches, Trash Recepticals, Etc.		LS	\$12,000.00	\$12,000.0
Curb Ramps	33	SY	\$85.00	\$2,833.3
Asphalt Pavement		TON	\$150.00	\$21,744.4
Wayfinding signage	12	EA	\$200.00	\$2,400.0
Rock Lining	6	CY	\$85.00	\$510.0
18" Pipe Culverts (Group B)	102	LF	\$60.00	\$6,120.0
6" Preformed Thermoplastic, White	200	LF	\$6.00	\$1,200.0
24" White Stop Bars	40	LF	\$20.00	\$800.0
Hawk Signal	1	EA	\$100,000.00	\$100,000.0
Signage	5	EA	\$600.00	\$3,000.0
Posts	5	EA	\$250.00	\$1,250.0
Lighting	1	L SUM	\$45,000.00	\$45,000.0
Seed, mulch, etc	0.5	ACRE	\$5,000.00	\$2,500.0
Temporary Silt Fence	450	LF	\$3.00	\$1,350.0
Ditch Checks	3	EA	\$225.00	\$675.0
Temporary Traffic Control	1	LSUM	\$10,000.00	\$10,000.0
Traffic Signals or Crossing Signals	1	LS	\$250,000.00	\$250,000.0
			subtotal	\$636,760.1
Contractor Construction Staking	1	LSUM	\$6,000.00	\$6,000.0
Mobilization	1	LSUM	\$50,000.00	\$50,000.0
Subtotal				\$692,760.1
Contingency 15%				\$103,914.0
Total				\$796,674.1
	Engineering & Surveying	Costs 18%		\$143,401.3
		eotechnical		\$10,000.0
	dministration & Inspection			\$79,667.4
Residential Easements	0	71011	\$30,000.00	\$0.0
Undeveloped/Aggricultural Easement	0.00		\$10,000.00	\$0.0
	Utility A	djustments		\$0.0
		One and Title		64 000 740 0
Costs Based on 2017 prices. Should include Inflation f		Grand Total		\$1,029,742.8

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# **Route 66 / Strafford Trail Corridor**

Route 66 (Strafford) Trail  10ft Paved Path  OPINION OF PROBABLE COSTS					
ITEM		QTY.	UNIT	UNIT COST	COST(\$)
		2	01122	0.1.2.2	0002 (4)
Removal of Improvements		1	L SUM	\$75,000.00	\$75,000.00
Select Tree Removal		0	EA	\$2,000.00	\$0.00
Clearing & Grubbing		8.5	AC	\$7,500.00	\$63,750.00
Linear Grading Class 1		428	STA	\$1,500.00	\$642,570.00
-					
4" Aggregate Base		66,640	SY	\$8.50	\$566,440.00
4" Concrete Pavement		47,600	SY	\$60.00	\$2,856,000.00
Driveway Repairs & Reconstruction		155	SY	\$75.00	\$11,625.00
Curb Ramps		156	SY	\$85.00	\$13,260.00
Hawk Signal at Rte O			LSUM	\$100,000.00	\$100,000.00
Signal Modification Upgrades			LSUM	\$200,000.00	\$200,000.00
RRFB			EA	\$25,000.00	\$25,000.00
15" Pipe Culverts		350		\$60.00	\$21,000.00
6" Preformed Marking Tape, Grooved, White		760		\$6.00	\$4,560.00
24" White Stop Bars		168		\$20.00	\$3,360.00
Trail Signage			EA	\$600.00	\$19,200.00
Wood Posts			EA	\$200.00	\$6,400.00
Lighting			EA	\$5,400.00	\$0.00
Seed, mulch, etc			ACRE	\$5,000.00	\$10,000.00
Temporary Sediment Control			LSUM	\$40,000.00	\$40,000.00
Temporary Traffic Control		1	LSUM	\$50,000.00	
				subtotal	\$4,708,165.00
Contractor Construction Staking			LSUM	\$35,000.00	\$15,000.00
Mobilization		1	LSUM	\$120,000.00	\$120,000.00
Subtotal					\$4,843,165.00
Contingency 15%					\$726,474.75
Total					\$5,569,639.75
			:		\$835,445.96
	Engineering & Surveying Costs 15%  Construction Administration & Inspection Costs 10%				
Construction Admir	•				\$556,963.98
	Easement & Righ		-		\$25,000.00
	Utili	ty Adju	stments		\$25,000.00
			nd Total		<b>67.040.040.00</b>
		\$7,012,049.69			

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Trail Investment Study (

# Ozarks Transportation Organization

# **South Creek Greenway Corridor**

South Creek Greenway Trail 10ft Paved Path OPINION OF PROBABLE COSTS					
ITEM	QTY.	UNIT	UNIT COST	COST(\$)	
Removal of Improvements	1	L SUM	\$2,000.00	\$2,000.00	
Clearing & Grubbing		AC	\$7,500.00	\$7,500.00	
Linear Grading Class 1	30	STA	\$1,500.00	\$45,000.00	
4" Aggregate Base	4,570	SY	\$8.50	\$38,845.00	
4" Concrete Pavement	3,265	SY	\$60.00	\$195,900.00	
RCB	1	LSUM	\$15,000.00	\$15,000.00	
Pipe Culverts	200	LF	\$60.00	\$12,000.00	
Trail Signage	8	EA	\$600.00	\$4,800.00	
Wood Posts	16	EA	\$200.00	\$3,200.00	
Retaining Wall	1,000	SF	\$50.00	\$50,000.00	
Seed, mulch, etc		ACRE	\$5,000.00	\$5,000.00	
Temporary Sediment Control	1	LSUM	\$40,000.00	\$40,000.00	
Temporary Traffic Control	1	LSUM	\$5,000.00	\$5,000.00	
			subtotal	\$424,245.00	
Contractor Construction Staking	1	LSUM	\$15,000.00	\$15,000.00	
Mobilization	1	LSUM	\$45,000.00	\$45,000.00	
Subtotal				\$484,245.00	
Contingency 15%				\$72,636.75	
Total				\$556,881.75	
<b>I</b>	 Engineering & Surveying	Costs 20%		\$111,376.35	
Constru	uction Administration & Inspection			\$55,688.18	
	Easement & Right-of	-Way Costs	;	\$25,000.00	
	Utility A	djustments	3	\$10,000.00	
		Grand Tota		\$758,946.28	

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

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	South Jordan Creek Greenway Trail  10ft Paved Path  OPINION OF PROBABLE COSTS						
ITEM		QTY.	UNIT	UNIT COST	COST(\$)		
		~ :					
Removal of	f Improvements	1	L SUM	\$20,000.00	\$20,000.00		
Clearing &	Grubbing	1.2	AC	\$7,500.00	\$9,000.00		
	ding Class 1	36	STA	\$1,500.00	\$54,000.00		
Landscapir	ng	10,450	LF	\$10.00	\$104,500.00		
4" Aggrega	te Base	20,237	SY	\$9.00	\$182,133.00		
	e Pavement	14,455	SY	\$60.00	\$867,300.00		
Benches, T	rash Receptacles, etc.	3	LSUM	\$12,000.00	\$36,000.00		
	Repairs & Reconstruction	2,045	SY	\$75.00	\$153,375.00		
Curb Ramp	os	180	SY	\$85.00	\$15,300.00		
Wayfinding	Signage	3	EA	\$500.00	\$1,500.00		
18" Pipe Cı	ulverts	35	LF	\$60.00	\$2,100.00		
Rock Lining	g	19	CY	\$85.00	\$1,615.00		
6" Preforme	ed Marking Tape, Grooved,	680	LF	\$6.00	\$4,080.00		
24" White S	Stop Bars	192	LF	\$20.00	\$3,840.00		
Trail Signa	ge & Posts	34	EA	\$800.00	\$27,200.00		
Lighting		0	EA	\$5,400.00	\$0.00		
Signalization	on	1	LSUM	\$600,000.00	\$600,000.00		
Seed, mulc	h, etc	1	ACRE	\$5,000.00	\$5,000.00		
Temporary	Silt Fence	11,700	LF	\$3.00	\$35,100.00		
Ditch Chec	ks	24	EA	\$225.00	\$5,400.00		
Temporary	Traffic Control	1	LSUM	\$20,000.00	\$20,000.00		
				subtotal	\$2,147,443.00		
					, ,		
Contractor		1	LSUM	\$40,000.00	\$40,000.00		
Mobilization		1	LSUM	\$75,000.00	\$75,000.00		
					,		
Subtotal					\$2,262,443.00		
Contingen	cy 15%				\$339,366.45		
Total					\$2,601,809.45		
					•		
	Engineerin	g & Surveyin	g Costs 15%		\$390,271.42		
С	Construction Administration & Inspection Costs 10%				\$260,180.95		
	Geotechnical				\$50,000.00		
	Easem	ent & Right-o	f-Way Costs		\$5,000.00		
			Adjustments		\$5,000.00		
					,		
			<b>Grand Total</b>		\$3,312,261.81		

Grand Total \$3,31

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Division Street - Cooper Park Connector Trail  10ft Paved Path  OPINION OF PROBABLE COSTS						
OPINION OF	PROBAB	LE CO	313			
ITEM		QTY.	UNIT	UNIT COST	COST(\$)	
Removal of Improvements			L SUM		\$20,000.00	
Clearing & Grubbing		1.0		\$7,500.00	\$7,500.00	
Linear Grading Class 1			STA	\$1,500.00	\$30,000.00	
Landscaping		2,750		\$10.00	\$27,500.00	
4" Aggregate Base		5,280		\$9.00	\$47,520.00	
4" Concrete Pavement		3,770	SY	\$60.00	\$226,200.00	
Benches, Trash Receptacles, etc.		2	LSUM	\$12,000.00	\$24,000.00	
Driveway Repairs & Reconstruction		400	SY	\$75.00	\$30,000.00	
Curb Ramps		150	SY	\$85.00	\$12,750.00	
Wayfinding Signage		8	EA	\$500.00	\$4,000.00	
Pipe Culverts		315	LF	\$60.00	\$18,900.00	
Rock Lining		5	CY	\$85.00	\$425.00	
6" Preformed Marking Tape, Grooved, White		44	LF	\$6.00	\$264.00	
24" White Stop Bars		24	LF	\$20.00	\$480.00	
Trail Signage & Posts		8	EA	\$800.00	\$6,400.00	
Lighting			L SUM		\$15,000.00	
FRBB			LSUM	\$25,000.00	\$25,000.00	
Seed, mulch, etc		1	ACRE	\$5,000.00	\$5,000.00	
Temporary Silt Fence		3,050		\$3.00	\$9,150.00	
Ditch Checks			EA	\$225.00	\$1,350.00	
Temporary Traffic Control			LSUM	\$10,000.00	\$10,000.00	
				subtotal	\$521,439.00	
Contractor Construction Staking		1	LSUM	\$22,000.00	\$15,000.00	
Mobilization		1	LSUM	\$45,000.00	\$45,000.00	
Subtotal					\$581,439.00	
Contingency 15%					\$87,215.85	
Total					\$668,654.85	
Engineering &					\$133,730.97	
Construction Administration 8		\$66,865.49				
Easemen	t & Right-	of-Way	Costs		\$5,000.00	
I			tments		\$35,000.00	
		Grand	d Total		\$909,251.31	

**Division Street Trail** 

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

#### Le Compte Trail 10ft Paved Path **OPINION OF PROBABLE COSTS** ITEM UNIT UNIT COST QTY. COST(\$) Removal of Improvements 1 L SUM \$25,000.00 \$25,000.00 Clearing & Grubbing 0 AC \$7,500.00 \$0.00 Linear Grading Class 1 52 STA \$78,000.00 \$1,500.00 \$10.00 Landscaping 0 LF \$0.00 4" Aggregate Base 8,200 SY \$8.50 \$69,700.00 4" Concrete Pavement 5,800 SY \$60.00 \$348,000.00 \$10,000.00 Benches, Trash Receptacles, etc. 1 LSUM \$10,000.00 **Driveway Repairs & Reconstruction** \$75.00 \$12,000,00 160 SY Curb Ramps 65 SY \$85.00 \$5,525.00 Wayfinding Signage 5 EA \$500.00 \$2,500.00 Pipe Culverts 80 LF \$60.00 \$4,800.00 Rock Lining 36 CY \$85.00 \$3,060.00 180 LF \$1.080.00 6" Preformed Marking Tape, Grooved, White \$6.00 24" White Stop Bars 90 LF \$20.00 \$1.800.00 \$6.400.00 Trail Signage & Posts 8 EA \$800.00 Lighting 1 L SUM \$35,000.00 \$35,000.00 Railroad Crossing 1 L SUM \$175,000.00 \$175,000.00 Signalization 1 LSUM \$75,000.00 \$75,000.00 Seed, mulch, etc 2 ACRE \$5.000.00 \$10.000.00 Temporary Silt Fence \$15.000.00 5.000 LF \$3.00 Ditch Checks \$225.00 \$3,375.00 15 EA Temporary Traffic Control 1 LSUM \$5,000.00 \$5,000.00 subtotal \$886,240.00 Contractor Construction Staking 1 LSUM \$17,724.80 \$17.724.80 1 LSUM \$45,000.00 \$45,000.00 Mobilization \$948,964.80 Subtotal Contingency 15% \$142,344.72 Total \$1,091,309.52 **Engineering & Surveying Costs 18%** \$196,435.71 Construction Administration & Inspection Costs 10% \$109,130.95

Easement & Right-of-Way Costs

**Utility Adjustments** 

**Grand Total** 

\$2,500.00

\$2,500.00

\$1,401,876.19

# **Trail of Tears Corridor**

Trail of Tears - Battlefield  10 foot Aggregate Path  OPINION OF PROBABLE COSTS						
ITEM		QTY.	UNIT	UNIT COST	COST(\$)	
11111		211.	ONII	ONII CODI	CODI (4)	
Removal of Improvements		1	L SUM	\$20,000.00	\$20,000.00	
Clearing & Grubbing			AC	\$7,500.00	\$16,500.00	
Linear Grading Class 1			STA	\$1,500.00	\$94,500.00	
Landscaping		5,000		\$10.00	\$50,000.00	
4" Aggregate Base		6,950		\$9.00	\$62,550.00	
4" Concrete Pavement			SY	\$60.00	\$0.00	
Benches, Trash Receptacles, etc.			LSUM	\$12,000.00	\$12,000.00	
Driveway Repairs & Reconstruction			SY	\$75.00	\$0.00	
Curb Ramps			SY	\$85.00	\$2,125.00	
Wayfinding Signage			EA	\$500.00	\$6,000.00	
18" Pipe Culverts			LF	\$60.00	\$3,600.00	
Rock Lining			CY	\$85.00	\$1,700.00	
6" Preformed Marking Tape, Grooved, Wh	ite		LF	\$6.00	\$480.00	
24" White Stop Bars			LF	\$20.00	\$800.00	
Trail Signage & Posts			EA	\$800.00	\$6,400.00	
Lighting		4		\$5,400.00	\$21,600.00	
RRFB		1	EA	\$25,000.00	\$25,000.00	
Seed, mulch, etc		1	ACRE	\$5,000.00	\$5,000.00	
Temporary Silt Fence		6,230	LF	\$3.00	\$18,690.00	
Ditch Checks			EA	\$225.00	\$3,150.00	
Temporary Traffic Control		1	LSUM	\$5,000.00	\$5,000.00	
, ,				subtotal	\$355,095.00	
Contractor Construction Staking		1	LSUM	\$15,000.00	\$15,000.00	
Mobilization		1	LSUM	\$25,000.00	\$25,000.00	
Subtotal					\$395,095.00	
Contingency 15%					\$59,264.25	
Total					\$454,359.25	
	ng & Survey				\$68,153.89	
Construction Administration		\$45,435.93				
Easem		\$25,000.00				
Utility Adjustments					\$5,000.00	
Costs Board on 2017 2019 prices. Sho			d Total		\$597,949.06	

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Trail of Tears - Golden (East Side of Road) 10 foot Concrete Path OPINION OF PROBABLE COSTS						
ITEM	QTY.	UNIT	UNIT COST	COST(\$)		
	211.	ONIT	0.11 0001	0001 (4)		
Removal of Improvements		L SUM		\$75,000.00		
Clearing and Grubbing		AC	\$7,500.00	\$7,500.00		
Linear Grading Class 1		STA	\$1,500.00	\$40,500.00		
Landscaping	2,200	LF	\$10.00	\$22,000.00		
4" Aggregate Base	4,310		\$8.50	\$36,635.00		
4" Concrete Pavement	3,100	SY	\$60.00	\$186,000.00		
Benches, Trash Receptacles, etc.	1	LSUM	\$6,000.00	\$6,000.00		
Driveway Repairs & Reconstruction	400	SY	\$75.00	\$30,000.00		
Curb Ramps	115	SY	\$85.00	\$9,775.00		
Wayfinding Signage	6	EA	\$500.00	\$3,000.00		
18" Pipe Culverts	0	LF	\$60.00	\$0.00		
Rock Lining	0		\$85.00	\$0.00		
6" Preformed Marking Tape, Grooved, White	380		\$6.00	\$2,280.00		
24" White Stop Bars		LF	\$20.00	\$1,600.00		
Trail Signage & Posts		EA	\$800.00	\$14,400.00		
Lighting		EA	\$5,400.00	\$16,200.00		
Signalization		LSUM	\$75,000.00	\$75,000.00		
Seed, mulch, etc		AC	\$5,000.00	\$5,000.00		
Temporary Silt Fence	2,500		\$3.00	\$7,500.00		
Ditch Checks		EA	\$225.00	\$1,350.00		
Temporary Traffic Control		LSUM	\$7,500.00	\$7,500.00		
Temperary Traine Control	·	LOOW	subtotal	\$547,240.00		
Contractor Construction Staking	1	LSUM	\$15,000.00	\$15,000.00		
Mobilization	1	LSUM	\$25,000.00	\$25,000.00		
Subtotal				\$587,240.00		
Contingency 15%				\$88,086.00		
Total				\$675,326.00		
Engineering & Sur	 veying Cos	ts 15%		\$101,298.90		
Construction Administration & Insp				\$67,532.60		
Easement & R				\$10,000.00		
	tility Adjus			\$25,000.00		
	<u> </u>					
	Gran	d Total		\$879,157.50		

Trail of Tears South Creek Greenway Connector Trail  10 foot Aggregate Path  OPINION OF PROBABLE COSTS						
ITEM	QTY.	UNIT	UNIT COST	COST(\$)		
Removal of Improvements	1	L SUM	\$25,000.00	\$25,000.0		
Clearing & Grubbing		AC	\$7,500.00			
Linear Grading Class 1		STA	\$1,500.00			
Landscaping	5,000		\$10.00			
4" Aggregate Base	8,500		\$8.50	\$72,250.0		
4" Concrete Pavement	3,900		\$60.00	\$234,000.0		
Benches, Trash Receptacles, etc.		LSUM	\$12,000.00	\$12,000.0		
Driveway Repairs & Reconstruction	200		\$75.00			
Curb Ramps		SY	\$85.00			
Wayfinding Signage		EA	\$500.00			
18" Pipe Culverts		LF	\$60.00			
Rock Lining		CY	\$85.00	\$1,700.0		
6" Preformed Marking Tape, Grooved, White	260		\$6.00			
24" White Stop Bars	130		\$20.00			
Trail Signage & Posts		EA	\$800.00			
Lighting		EA	\$5,400.00			
RRFB		EA	\$25,000.00	\$25,000.0		
Signalization		LSUM	\$100,000.00			
Seed, mulch, etc		AC	\$5,000.00			
Temporary Silt Fence	6,230		\$3.00			
Ditch Checks		EA	\$225.00	\$3,150.0		
Temporary Traffic Control		LSUM	\$3,000.00	\$3,000.0		
			subtotal	\$717,400.0		
Contractor Construction Staking	1	LSUM	\$15,000.00	\$15,000.0		
Mobilization		LSUM	\$25,000.00	\$25,000.0		
			,			
Subtotal				\$757,400.0		
Contingency 15%				\$113,610.0		
Total				\$871,010.0		
Engineering & Sur	veying Cos	ts 15%		\$130,651.5		
Construction Administration & Insp				\$87,101.0		
Easement & R	ight-of-Way	Costs		\$25,000.0		
U	Itility Adjus	tments		\$5,000.00		
	Gran	d Total		\$1,118,762.50		
Costs Rased on 2017 – 2018 prices. Should inclu						

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

	Aggregate Path PROBABLE CO	· -	,	
			UNIT COST	COCH (¢)
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$25,000.00	\$25,000.00
Clearing & Grubbing		AC	\$7,500.00	\$7,500.00
Linear Grading Class 1		STA	\$1,500.00	\$78,000.00
Landscaping	4,150		\$10.00	\$41,500.00
4" Aggregate Base	8,100		\$8.50	\$68,850.00
4" Concrete Pavement	5,800		\$60.00	\$348,000.00
Benches, Trash Receptacles, etc.		LSUM	\$9,000.00	\$9,000.00
Driveway Repairs & Reconstruction		SY	\$75.00	\$0.00
Curb Ramps		SY	\$85.00	\$0.00
Wayfinding Signage		EA	\$500.00	\$5,000.00
18" Pipe Culverts		LF	\$60.00	\$0.00
Rock Lining	0	CY	\$85.00	\$0.00
6" Preformed Marking Tape, Grooved, White	0	LF	\$6.00	\$0.00
24" White Stop Bars	0	LF	\$20.00	\$0.00
Trail Signage & Posts	6	EA	\$800.00	\$4,800.00
Lighting	3	EA	\$5,400.00	\$16,200.00
Signalization	0	LSUM	\$125,000.00	\$0.00
Seed, mulch, etc	1	ACRE	\$5,000.00	\$5,000.00
Temporary Silt Fence	5,200	LF	\$3.00	\$15,600.00
Ditch Checks	12	EA	\$225.00	\$2,700.00
Temporary Traffic Control	1	LSUM	\$2,500.00	\$2,500.00
			subtotal	\$629,650.00
Contractor Construction Staking	1	LSUM	\$15,000.00	\$15,000.00
Mobilization	1	LSUM	\$25,000.00	\$25,000.00
Subtotal				\$669,650.00
Contingency 15%				\$100,447.50
Total				\$770,097.50
 Engineering	& Surveying Co	sts 15%		\$115,514.63
Construction Administration	& Inspection Co	sts 10%		\$77,009.75
Easeme	nt & Right-of-Wa	y Costs		\$25,000.00
	Utility Adju	stments		\$5,000.00

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

**Grand Total** 

\$992,621.88

# **Ward Branch Greenway Corridor**

Ward Branch Greenway (North) Trail 10ft Paved Path OPINION OF PROBABLE COSTS						
ITEM	QTY.	UNIT	UNIT COST	COST(\$)		
IIEM	QII.	UNIT	UNIT COST	COST (\$)		
Removal of Improvements	1	L SUM	\$75,000.00	\$75,000.00		
Select Tree Removal	0	EA	\$2,000.00	\$0.00		
Clearing & Grubbing	0.7	AC	\$7,500.00	\$5,250.00		
Linear Grading Class 1	45	STA	\$1,500.00	\$67,500.00		
4" Aggregate Base	7,320	SY	\$8.50	\$62,220.00		
4" Concrete Pavement	5,230	SY	\$60.00	\$313,800.00		
Driveway Repairs & Reconstruction		SY	\$75.00	\$0.00		
Curb Ramps	135	SY	\$85.00	\$11,475.00		
Hawk Signal		L SUM	\$100,000.00	\$100,000.00		
RRFB	1	L SUM	\$25,000.00	\$25,000.00		
15" Pipe Culverts	210		\$60.00	\$12,600.00		
Box Culvert	1	LSUM	\$25,000.00	\$25,000.00		
6" Preformed Marking Tape, Grooved, White	200	LF	\$6.00	\$1,200.00		
24" White Stop Bars	36	LF	\$20.00	\$720.00		
Trail Signage	14	EA	\$600.00	\$8,400.00		
Wood Posts	14	EA	\$200.00	\$2,800.00		
Lighting	0	EA	\$5,400.00	\$0.00		
Seed, mulch, etc	1	ACRE	\$5,000.00	\$5,000.00		
Temporary Sediment Control	1	LSUM	\$40,000.00	\$40,000.00		
Temporary Traffic Control	1	LSUM	\$50,000.00	\$50,000.00		
			subtotal	\$805,965.00		
Contractor Construction Staking	1	LCLIM	¢46 440 20	¢16 110 20		
Contractor Construction Staking  Mobilization		LSUM LSUM	\$16,119.30	\$16,119.30		
Modifization	1	LSUM	\$45,000.00	\$45,000.00		
Subtotal				\$867,084.30		
Contingency 15%				\$130,062.65		
Total				\$997,146.95		
Engineering &	Survovina Co	ete 150/		\$140 E72 04		
Construction Administration &				\$149,572.04 \$99,714.69		
	& Right-of-Wa			\$25,000.00		
Lasement	Utility Adju			\$5,000.00		
I	July Auju			ψυ,υυυ.υυ		
	I Grai	nd Total		\$1,276,433.68		
Costs Pased on 2017 2019 prices. Should include				+ .,=. 5, .00.00		

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Ward Branch Greenway (Middle) Trail  10ft Paved Path  OPINION OF PROBABLE COSTS				
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$5,000.00	\$5,000.00
Clearing & Grubbing		AC	\$7,500.00	\$15,000.00
Linear Grading Class 1		STA	\$1,500.00	\$30,000.00
Landscaping	1,600		\$10.00	\$16,000.00
4" Aggregate Base	3,050		\$9.00	\$27,450.00
4" Concrete Pavement	2,180		\$60.00	\$130,800.00
Benches, Trash Receptacles, etc.		LSUM	\$12,000.00	\$24,000.00
Driveway Repairs & Reconstruction		SY	\$75.00	\$0.00
Curb Ramps		SY	\$85.00	\$0.00
Wayfinding Signage			\$500.00	\$1,000.00
18" Pipe Culverts		LF	\$60.00	\$2,100.00
Rock Lining		CY	\$85.00	\$255.00
6" Preformed Marking Tape, Grooved, White	200		\$6.00	\$1,200.00
24" White Stop Bars		LF	\$20.00	\$1,000.00
Trail Signage & Posts	4	EA	\$800.00	\$3,200.00
Lighting	1	LSUM	\$20,000.00	\$20,000.00
Seed, mulch, etc	1	ACRE	\$5,000.00	\$5,000.00
Temporary Silt Fence	1,765	LF	\$3.00	\$5,295.00
Ditch Checks	13	EA	\$225.00	\$2,925.00
Temporary Traffic Control	1	LSUM	\$5,000.00	\$5,000.00
			subtotal	\$295,225.00
Contractor Construction Staking	1	LSUM	\$15,000.00	\$15,000.00
Mobilization	1	LSUM	\$40,000.00	\$40,000.00
Subtotal				\$350,225.00
Contingency 15%				\$52,533.75
Total				\$402,758.75
Engineering & Sur	\$80,551.75			
Construction Administration & Inspection Costs 10%				\$40,275.88
Easement & Right-of-Way Costs				\$14,000.00
U	tility Adjus	tments		\$5,000.00
		A.T. 4 - *		<b>AF 40 F00 C0</b>
	Gran	d Total		\$542,586.38

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Ward Branch - James River Connector Trail					
	10ft Paved Path				
OPINION OF PRO	BABLE CO	STS			
ITEM	QTY.	UNIT	UNIT COST	COST(\$)	
Removal of Improvements		L SUM			
Clearing & Grubbing		AC	\$7,500.00	\$3,750.00	
Linear Grading Class 1		STA	\$1,500.00	\$7,500.00	
Landscaping	350		\$10.00	\$3,500.00	
4" Aggregate Base		SY	\$9.00	\$6,120.00	
4" Concrete Pavement		SY	\$60.00	\$29,400.00	
Benches, Trash Receptacles, etc.		LSUM	\$12,000.00	\$24,000.00	
Driveway Repairs & Reconstruction		SY	\$75.00	\$0.00	
Retaining Wall Under FR190 Bridge	450	SF	\$55.00	\$24,750.00	
Curb Ramps		SY	\$85.00	\$0.00	
Wayfinding Signage		EA	\$500.00	\$1,000.00	
Pipe Culverts		LF	\$60.00	\$4,200.00	
Rock Lining	2	CY	\$85.00	\$170.00	
6" Preformed Marking Tape, Grooved, White	0	LF	\$6.00	\$0.00	
24" White Stop Bars	0	LF	\$20.00	\$0.00	
Trail Signage & Posts	4	EA	\$800.00	\$3,200.00	
Seed, mulch, etc	1	ACRE	\$5,000.00	\$5,000.00	
Temporary Silt Fence	400	LF	\$3.00	\$1,200.00	
Ditch Checks	4	EA	\$225.00	\$900.00	
Temporary Traffic Control	1	LSUM	\$5,000.00	\$5,000.00	
			subtotal	\$124,690.00	
				,	
Contractor Construction Staking	1	LSUM	\$15,000.00	\$15,000.00	
Mobilization	1	LSUM	\$30,000.00	\$30,000.00	
			+ ,	* /	
Subtotal				\$169,690.00	
Contingency 15%				\$25,453.50	
Total				\$195,143.50	
				,,	
Engineering & Surveying Costs 25%				\$48,785.88	
Construction Administration & Inspection Costs 15%				\$29,271.53	
Easement & Right-of-Way Costs				\$5,000.00	
Utility Adjustments				\$0.00	
	1			,	
	Gran	d Total		\$278,200.90	
				, , , , , , , , , , , , , , , , , , , ,	

# **I-44 Trail Corridor**

I-44 Trail 10ft Paved Path OPINION OF PROBABLE COSTS				
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
	2			333 (17
		1.01.18.4	<b>#45.000.00</b>	<b>#45.000.00</b>
Removal of Improvements		LSUM	\$15,000.00	\$15,000.00
Clearing & Grubbing		AC	\$7,500.00	\$9,750.00
Linear Grading Class 1		STA	\$1,500.00	\$298,500.00
Landscaping	15,900		\$10.00	\$159,000.00
4" Aggregate Base	30,909		\$9.00	\$278,181.00
4" Concrete Pavement	2,428		\$60.00	\$145,680.00
Benches, Trash Receptacles, etc.		LSUM SY	\$12,000.00	\$48,000.00
Driveway Repairs & Reconstruction			\$75.00	\$0.00
Curb Ramps	115		\$85.00	\$9,775.00
Wayfinding Signage		EA	\$500.00	\$2,000.00
18" Pipe Culverts	700		\$60.00	\$42,000.00
Rock Lining		CY	\$85.00	\$2,550.00
6" Preformed Marking Tape, Grooved, White	630		\$6.00	\$3,780.00
24" White Stop Bars	120		\$20.00	\$2,400.00
Trail Signage & Posts		EA	\$800.00	\$16,000.00
Lighting		LSUM	\$35,000.00	\$35,000.00
100' Grade Separation over Railroad	1,200		\$120.00	\$144,000.00
Class B-1 Concrete Abutments		CY	\$800.00	\$40,000.00
Embankment for Overpass	48,000		\$16.50	\$792,000.00
Mechanically Stabilized Earth Wall System	5,300		\$60.00	\$318,000.00
Hawk Signal			\$100,000.00	\$100,000.00
RRFB		LSUM	\$25,000.00	\$25,000.00
Seed, mulch, etc		ACRE	\$5,000.00	\$10,000.00
Temporary Silt Fence	17,900		\$3.00	\$53,700.00
Ditch Checks		EA	\$225.00	\$8,325.00
Temporary Traffic Control	1	LSUM	\$75,000.00	\$75,000.00
			subtotal	\$2,633,641.00
Contractor Construction Staking	1	LSUM	\$52,672.82	\$15,000.00
Mobilization	1	LSUM	\$110,000.00	\$110,000.00
Subtotal				\$2,758,641.00
Contingency 15%				\$413,796.15
Total				\$3,172,437.15
Engineering :	 & Surveying Cos	ts 18%		\$571,038.69
Construction Administration 8				\$317,243.72
Construction Administration of		chnical		\$40,000.00
Easement & Right-of-Way Costs				\$40,000.00
Utility Adjustments				\$5,000.00
				Ψ5,500.00
•	Gran	d Total		\$4,145,719.55

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Trail Investment Study (

4-21

# Ozarks Transportation Organization

# West Wilson's Creek Greenway Corridor

West Wilson's Creek Greenway (South)  10ft Paved Path  OPINION OF PROBABLE COSTS					
OPINIC	N OF PROBABL	E COS	15		
					202= (A)
ITEM		QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements		1	L SUM	\$5,000.00	\$5,000.00
Clearing & Grubbing			AC	\$7,500.00	\$9,000.00
Linear Grading Class 1			STA	\$1,500.00	\$30,000.00
Landscaping		1,700		\$10.00	\$17,000.00
4" Aggregate Base		3,200		\$8.50	\$27,200.00
4" Concrete Pavement		2,300		\$60.00	\$138,000.00
Benches, Trash Receptacles, etc.			LSUM	\$4,000.00	\$4,000.00
Driveway Repairs & Reconstruction			SY	\$75.00	\$0.00
Curb Ramps			SY	\$85.00	\$1,870.00
Wayfinding Signage			EA	\$500.00	\$2,000.00
Pipe Culverts			LF	\$60.00	\$3,600.00
Rock Lining		18	CY	\$85.00	\$1,530.00
6" Preformed Marking Tape, Grooved, White		50	LF	\$6.00	\$300.00
24" White Stop Bars		25	LF	\$20.00	\$500.00
Trail Signage & Posts		5	EA	\$800.00	\$4,000.00
Lighting		1	L SUM	\$30,000.00	\$30,000.00
Signalization		1	LSUM	\$25,000.00	\$25,000.00
Seed, mulch, etc		1	ACRE	\$5,000.00	\$5,000.00
Temporary Silt Fence		2,000	LF	\$3.00	\$6,000.00
Ditch Checks		10	EA	\$225.00	\$2,250.00
Temporary Traffic Control		1	LSUM	\$5,000.00	\$5,000.00
				subtotal	\$317,250.00
Contractor Construction Staking		1	LSUM	\$6,000.00	\$6,000.00
Mobilization		1	LSUM	\$35,000.00	\$35,000.00
Subtotal					\$358,250.00
Contingency 15%					\$53,737.50
Total					\$411,987.50
	ngineering & Surve				\$82,397.50
Construction Admi					\$41,198.75
Easement & Right-of-Way Costs				\$11,500.00	
	Util	ity Adju	stments		\$2,500.00
		Grai	nd Total		\$549,583.75

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Daga 1

West Wilson's Creek Greenway (North)  10ft Paved Path  OPINION OF PROBABLE COSTS				
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
Removal of Improvements	1	L SUM	\$2,500.00	\$2,500.00
Clearing & Grubbing	1.9	AC	\$7,500.00	\$14,250.00
Linear Grading Class 1	55	STA	\$1,500.00	\$82,500.00
Landscaping	4,500	LF	\$10.00	\$45,000.00
4" Aggregate Base	8,500		\$8.50	\$72,250.00
4" Concrete Pavement	6,100		\$60.00	\$366,000.00
Benches, Trash Receptacles, etc.		LSUM	\$10,500.00	\$10,500.00
Driveway Repairs & Reconstruction	0	SY	\$75.00	\$0.00
Curb Ramps	22	SY	\$85.00	\$1,870.00
Wayfinding Signage	10	EA	\$500.00	\$5,000.00
18" Pipe Culverts	40		\$60.00	\$2,400.00
Rock Lining	36	CY	\$85.00	\$3,060.00
6" Preformed Marking Tape, Grooved, White	160		\$6.00	\$960.00
24" White Stop Bars	25		\$20.00	\$500.00
Trail Signage & Posts		EA	\$800.00	\$4,800.00
Lighting	5	EA	\$5,400.00	\$27,000.00
Railroad Crossing	1	L SUM	\$200,000.00	\$200,000.00
Signalization		LSUM	\$150,000.00	\$150,000.00
Seed, mulch, etc	3.8	ACRE	\$5,000.00	\$19,000.00
Temporary Silt Fence	5,000		\$3.00	\$15,000.00
Ditch Checks	· ·	EA	\$225.00	\$2,700.00
Temporary Traffic Control	1		\$7,500.00	\$7,500.00
			subtotal	\$1,032,790.00
Contractor Construction Staking	1	LSUM	\$20,000.00	\$20,000.00
Mobilization	1	LSUM	\$50,000.00	\$50,000.00
Subtotal				\$1,102,790.00
Contingency 15%				\$165,418.50
Total				\$1,268,208.50
Engineering	& Surveying Co	ete 20%		\$253,641.70
Construction Administration	\$126,820.85			
Easeme	\$30,000.00			
Laseme	\$2,500.00			
T	Utility Adjus			ΨΞ,000.00
-	Gran	nd Total		\$1,681,171.05

<sup>\*</sup>Railroad crossing near I-44

# Wilson'S Creek Greenway Corridor

Wilson's Creek Greenway  10ft Paved Path  OPINION OF PROBABLE COSTS					
ITEM	QTY.	UNIT	UNIT COST	COST(\$)	
11111	211.	ONII	ONII CODI	COD1 (4)	
Removal of Improvements	0	L SUM	\$5,000.00	\$0.00	
Clearing & Grubbing		AC	\$7,500.00	\$12,750.00	
Linear Grading Class 1		STA	\$1,500.00	\$82,500.00	
Landscaping	4,400		\$10.00	\$44,000.00	
4" Aggregate Base	8,560		\$8.50	\$72,760.00	
4" Concrete Pavement	6,110		\$60.00	\$366,600.00	
Benches, Trash Receptacles, etc.		LSUM	\$4,000.00	\$8,000.00	
Driveway Repairs & Reconstruction	0	SY	\$75.00	\$0.00	
Curb Ramps	0	SY	\$85.00	\$0.00	
Wayfinding Signage	8	EA	\$500.00	\$4,000.00	
Pipe Culverts	400	LF	\$60.00	\$24,000.00	
Rock Lining	20	CY	\$85.00	\$1,700.00	
6" Preformed Marking Tape, Grooved, White	0	LF	\$6.00	\$0.00	
24" White Stop Bars	0	LF	\$20.00	\$0.00	
Trail Signage & Posts	10	EA	\$800.00	\$8,000.00	
Lighting	1	L SUM	\$30,000.00	\$30,000.00	
Seed, mulch, etc	2	ACRE	\$5,000.00	\$10,000.00	
Temporary Silt Fence	6,000	LF	\$3.00	\$18,000.00	
Ditch Checks		EA	\$225.00	\$6,750.00	
Temporary Traffic Control		LSUM	\$5,000.00	\$0.00	
150' x 12' bridge	1,800		\$150.00	\$270,000.00	
Class B-1 Concrete Abutments	50	CY	\$800.00	\$40,000.00	
			subtotal	\$999,060.00	
Contractor Construction Staking		LSUM	\$20,000.00	\$20,000.00	
Mobilization	1	LSUM	\$45,000.00	\$45,000.00	
Subtotal				\$1,064,060.00	
Contingency 15%				\$159,609.00	
Total				\$1,223,669.00	
Engineering & Surveying Costs 20%				\$244,733.80	
Construction Administration & Inspection Costs 10%				\$122,366.90	
Easement & Right-of-Way Costs Utility Adjustments				\$11,100.00	
1	\$2,500.00				
		171		M4 00 ( 000 = 0	
	Gran	nd Total		\$1,604,369.70	

Costs Based on 2017 – 2018 prices. Should include Inflation for each year beyond 2018

Trail Investment Study (

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# Wilson's Creek Greenway- Wilson's Creek Battlefield Corridor

West Republic Road (Route M) Trail 10ft Paved Path w/ 12ft Bridge OPINION OF PROBABLE COSTS				
ITEM	QTY.	UNIT	UNIT COST	COST(\$)
				,,,,
Removal of Improvements		L SUM	. ,	
Clearing & Grubbing	5.0		\$7,500.00	\$37,500.00
Linear Grading Class 1		STA	\$1,500.00	
Landscaping	10,300		\$10.00	•
4" Aggregate Base	20,000		\$9.00	
4" Concrete Pavement	14,260	SY	\$60.00	\$855,600.00
Benches, Trash Receptacles, etc.		LSUM	\$12,000.00	
Driveway Repairs & Reconstruction		SY	\$75.00	\$4,875.00
Curb Ramps	70	SY	\$85.00	\$5,950.00
Wayfinding Signage	3	EA	\$500.00	\$1,500.00
18" Pipe Culverts	350	LF	\$60.00	\$21,000.00
Rock Lining	19	CY	\$85.00	\$1,615.00
6" Preformed Marking Tape, Grooved, White	120	LF	\$6.00	
24" White Stop Bars	40	LF	\$20.00	\$800.00
Trail Signage & Posts	16	EA	\$800.00	\$12,800.00
RRFB		LSUM	\$25,000.00	\$25,000.00
Seed, mulch, etc		ACRE	\$5,000.00	\$5,000.00
Temporary Silt Fence	11,550		\$3.00	
Ditch Checks		EA	\$225.00	\$5,400.00
Temporary Traffic Control		LSUM	\$10,000.00	\$10,000.00
200' x 12' bridge	2,400		\$150.00	
Class B-1 Concrete Abutments		CY	\$800.00	
				\$1,943,410.00
				<b>+</b> 1,0 10,11010
Contractor Construction Staking	1	LSUM	\$15,000.00	\$15,000.00
Mobilization		LSUM	\$97,170.50	\$97,170.50
Subtotal				\$2,055,580.50
Contingency 15%				\$308,337.08
Total				\$2,363,917.58
Empire	P Cumovina Coa	to 150/		\$254 507 C
Engineering & Surveying Costs 15%				\$354,587.64
Construction Administration & Inspection Costs 10%				\$236,391.76
Easement & Right-of-Way Costs Utility Adjustments				\$30,000.00
T	Utility Adjus	ıments		\$15,000.00
	Gran	d Total		\$2,999,896.97
	Gran	u roldi		<b>Ψ2,333,030.9</b> 7

		eek Boulev aved paths ON OF PRO	(Route M to	FR182)	
ITEM		QTY.	UNIT	UNIT COST	COST(\$)
TIEM		211.	ONII	ONII CODI	COS1 (4)
		†			
Removal of	Improvements	1	L SUM	\$15,000.00	\$7,500.00
Clearing & 0	<u>'</u>		ACRE	\$10,000.00	\$500.00
Linear Grad		-	STA	\$1,500.00	\$111,975.00
Landscaping	•	50,000		\$10.00	\$500,000.00
4" Aggregat		11,608		\$9.00	\$104,468.00
4" Concrete		8,291		\$65.00	\$538,922.22
Benches, Tr	ash Recepticals, Etc.		LS	\$24,000.00	\$24,000.00
Curb Ramps	•		SY	\$85.00	\$5,666.67
	RCB Extension		CY	\$800.00	\$9,600.00
Rock Lining			CY	\$85.00	\$1,020.00
18" Pipe Cu	lverts (Group B)	144		\$60.00	\$8,640.00
	d Thrmoplastic, White	244		\$6.00	\$1,464.00
24" White S		56	LF	\$20.00	\$1,120.00
Hawk Signa	 	1	EA	\$100,000.00	\$100,000.00
Signage		7	EA	\$600.00	\$4,200.00
Posts		7	EA	\$250.00	\$1,750.00
Wayfinding	signage	12	EA	\$200.00	\$2,400.00
Seed, mulch	_ · · · ·	2	ACRE	\$5,000.00	\$10,000.00
Temporary	Silt Fence	5,142	LF	\$3.00	\$15,426.00
Ditch Check		13	EA	\$225.00	\$2,925.00
Temporary <sup>-</sup>	Traffic Control	1	LSUM	\$7,500.00	\$7,500.00
Lighting		1	LS	\$200,000.00	\$200,000.00
Crossing Sig	gnals or Traffic Signals	1	LS	\$400,000.00	\$400,000.00
				subtotal	\$2,059,076.89
Contractor (		1	LSUM	\$7,000.00	\$7,000.00
Mobilization		1	LSUM	\$45,000.00	\$45,000.00
Subtotal					\$2,111,076.89
Contingend	y 15%				\$316,661.53
Total					\$2,427,738.42
	Engineerine	   & Surveying	Cooto 45%		\$204.400.7C
	Engineering		eotechnical		\$364,160.76
C-	nstruction Administration				\$30,000.00 \$242,773,84
	Residential Easement C				\$242,773.84 \$0.00
المطم	eveloped Agg Easement C	•	<u> </u>		\$0.00 \$0.00
Unde	velopeu Ayy Easement C		<u>ه ه ۱۵,۵۵۵)</u> Adjustments		\$0.00 \$10,000.00
			าน <u>า</u> นอนเทยเหร		φ ι υ,υυυ.υυ
	<u> </u>	<u> </u>	<u> </u> Grand Total		\$3,074,673.03
Costs Rase	d on 2017 prices. Should in			ar hevond 2018	Ψο,στ 4,στ 5.03
55565 Dason	. 5., 20 11 pilooo. Olloulu III	Siddo il lilidadol		a. 2010114 2010	

# CHAPTER 5: PLANNING & ENVIRONMENT LINKAGES DOCUMENTATION

# Introduction

Developing a strong understanding of environmental factors related to transportation projects during early planning stages can streamline coordination, analysis, and evaluation efforts during project development. The Planning and Environmental Linkages (PEL) documentation provides an account of environmental and community conditions related to the trail corridors examined in this study in accordance with the Federal Highway Administration's (FHWA) PEL guidance. FHWA introduced PEL as one of ten initiatives to shorten project delivery time by anticipating and planning for project-level decisions that will result from corridor or sub-area plans like this Trail Investment Study. The PEL documents provided in this chapter of the study are intended for use in support of future National Environmental Policy Act (NEPA) documentation for phased implementation of the identified trail projects.

There are two critical components to this PEL documentation. The first is the PEL Report, which provides a comprehensive overview of environmental and social conditions in the study area. Included in this overview are demographic characteristics, cultural and historical resources, environmentally sensitive areas, contaminated sites, and archaeologically significant sites. The second critical component is the PEL questionnaire and accompanying responses. This questionnaire is a standard FHWA document intended to bridge the gap between planning processes and NEPA analysis by providing a record of conditions examined and work completed, and by reducing the duplication of work at different stages of project development. The PEL REport and the PEL questionnaire are included in this chapter. The PEL Report exhibits are included in the appendix at the end of this study.

# Benefits of Planning and Environment Linkages



State and local agencies can achieve significant benefits by incorporating environmental and community values into transportation decisions early in planning and carrying these considerations through project development and delivery. Benefits include:

- Relationship-building benefits: The PEL approach enables agencies to be more effective players in the transportation decision-making process through its focus on building interagency relationships. By encouraging resource and regulatory agencies to get involved in the early stages of planning, agencies have an opportunity to help shape transportation projects.
- Improved project delivery timeframes: The PEL approach improves process efficiencies by minimizing potential duplication of
  planning and NEPA processes, creating one cohesive flow of information. In addition, improvements to inter-agency
  relationships may help to resolve differences on key issues as transportation programs and projects move from planning to
  design and implementation.
- On-the-ground outcome benefits: When transportation agencies conduct planning activities equipped with information about
  resource considerations and in coordination with resource agencies and the public, they are better able to design transportation
  programs and projects that serve the community's transportation needs more effectively. The PEL approach provides agencies
  with tools to design better projects while avoiding and minimizing impacts on natural resources.

Source: https://www.environment.fhwa.dot.gov/integ/index.asp

OTO Regional Bicycle and Pedestrian Trail Investment Study – PEL Report Springfield, Missouri Metropolitan Project No. 00-2017-076

# **OZARK TRANSPORTATION ORGANIZATION (OTO)**

# TRAIL INVESTMENT STUDY PLANNING AND ENVIRONMENTAL LINKAGES (PEL) REPORT

OTO Jurisdiction in Christian and Greene Counties, Missouri

Project No. 00-2017-076

# **Prepared for:**

Ozark Transportation Organization

2208 W. Chesterfield Boulevard, Suite 101

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# Prepared by:

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September 3, 2017

OTO Regional Bicycle and Pedestrian Trail Investment Study – PEL Report Springfield, Missouri Metropolitan Project No. 00-2017-076

# Trail Investment Study (

OTO Regional Bicycle and Pedestrian Trail Investment Study – PEL Report Springfield, Missouri Metropolitan Project No. 00-2017-076

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# Ozarks Transportation Organization

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# **List of Exhibits**

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OTO Regional Bicycle and Pedestrian Trail Investment Study – PEL Report Springfield, Missouri Metropolitan Project No. 00-2017-076

# Abbreviations and Acronyms

APE - Area of Potential Effect

CAA - Clean Air Act

CFR - Code of Federal Regulations

COA - Class of Action

CWA - Clean Water Act

DOT - Department of Transportation

EA - Environmental Assessment

EFH - Essential Fish Habitat

EIS - Environmental Impact Statement

ESA - Endangered Species Act

FEMA - Federal Emergency Management Agency

FHWA - Federal Highway Administration

FIRM - Flood Insurance Rate Map

FONSI - Finding of No Significant Impact

FTA - Federal Transit Administration

IC - Institutional Controls

LRTP - Long Range Transportation Plans

LWCF - Land and Water Conservation Fund

mph - miles per hour

MODOT - Missouri Department of Transporation

MPO - Metropolitan Planning Organizations

NEPA - National Environmental Policy Act

NHL - National Historic Landmark

NPDES - National Pollutant Discharge Elimination System

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NRHP - National Register of Historic Places

OTO - Ozark Transportation Organization

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PEL - Planning and Environmental Linkages

ROW - Right-of-Way

SFHA - Special Flood Hazard Area

SHPO - State Historic Preservation Office

STP - Surface Transportation Program

TA - Transportation Alternatives

TCM - Transportation Control Measure

**USACE** - United States Army Corps of Engineers

USEPA - United States Environmental Protection Agency

USFWS - United States Fish and Wildlife Service

Introduction

Springfield, Missouri Metropolitan

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OTO Regional Bicycle and Pedestrian Trail Investment Study

The Ozarks Transportation Organization (OTO) is the federally designated metropolitan planning organization (MPO) that serves as a forum for cooperative transportation decision-making by state and local governments, as well as regional transportation and planning agencies for the Springfield urbanized area. The MPO includes local elected and appointed officials from Christian and Greene Counties, as well as the Cities of Battlefield, Nixa, Ozark, Republic, Springfield, Strafford, and Willard. It also includes technical staffs from the Missouri Department of Transportation, Federal Highway Administration, Federal Transit Administration, and the Federal Aviation Administration. Staff members from local governments and area transportation agencies serve on OTO's Technical Planning Committee. OTO seeks to identify and develop a plan for implementation and build-out of prioritized regional pedestrian and bicycle trail system within the OTO boundaries

This report documents the results of a PEL study conducted to evaluate proposed trail segments and corridors within the OTO Regional Bicycle and Pedestrian Trail system.

This study was conducted following FHWA PEL guidance regarding the integration of transportation planning and the NEPA process, which encourages the use of planning studies to provide information for incorporation into future NEPA documents (23 Code of Federal Regulations [CFR] 450). The goal of these early integrated planning efforts is to streamline subsequent coordination, analysis, and evaluation during the NEPA processes.

This PEL study is intended to provide the framework for the long-term implementation of transportation improvements as funding is available. The technical reports prepared for this PEL study are intended for use in support of future NEPA documentation for phased implementation of the identified transportation projects.

This PEL study report documents the identification of safety deficiencies, the development of potential improvements, the public and agency outreach efforts, and the evaluation of alternative concepts for the corridor.

The following NEPA process principles were followed for this PEL study:

- Preparation of a Purpose and Need
- Development and screening of alternatives
- Coordination with federal, state, and local agencies, including concurrence at key decision points to align with those of the NEPA process:
  - Purpose and Need
  - Range of alternatives
  - Screening evaluation criteria
  - Identification of recommended alternatives

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A project Purpose and Need was developed in accordance with Council on Environmental Quality NEPA regulations (40 CFR 1506.13). A thorough and inclusive technical and public process was applied to identify a reasonable range of alternatives, as described by the Council on Environmental Quality guidance (40 CFR 1502.14). Reasonable alternatives in NEPA include those that are practical or feasible from the technical and economic standpoint and use common sense, rather than being simply desirable from the standpoint of the applicant. The initial alternatives were screened to eliminate those that did not meet the project Purpose and Need and those that were deemed unreasonable based on an alternatives evaluation process that determined impacts and feasibility considering regional mobility and connectivity, safety, environmental impacts, community impacts, multimodal accommodations, engineering, and cost. Based on the alternatives evaluation, recommended transportation improvements were identified to carry forward into future NEPA processes.

This PEL study report summarizes the findings and recommendations for proposed segments and corridors in the OTO Regional Bicycle and Pedestrian Trail system. The final corridor conditions shown in the Preferred Alignment Mapping Document (available on the project website [www. ototrailstudy.com] and from project team members) was completed in July 2017 and provides additional information and details regarding the current and anticipated future conditions of the study area with regard to land use, the trail system, and environmental resources.

# Study Area

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The OTO Regional Bicycle and Pedestrian Trail is a trail system with numerous corridors and disconnected segments within the corridors (as shown in Figure 1). Several trail segments have been prioritized to either extend the corridor or provide a connection between trail segments, which would also extend a trail corridor. The trail corridors are designed to provide routes for bicycles and pedestrians to communities within the Springfield Metro. The corridors extend as far northeast as Strafford, as far southeast as Ozark, as far southwest as Republic, and as far northwest as the trailhead of the Frisco Highline Trail.

The OTO Regional Bicycle and Pedestrian Trail corridors contain trails that are designated part of Ozark Greenways. This provides citizens in greater Springfield an extensive network of linear parks, trails within parks, and on-street bike routes. In addition to the Ozark Greenways, the City of Republic trail network has the potential and ability to connect into the OTO trails. With the various communities providing trail systems for their citizens, there is a need to prioritize several segments within the study area. The PEL study addresses the proposed trail segments in the Springfield metropolitan area and includes communities in Greene and Christian County.

2

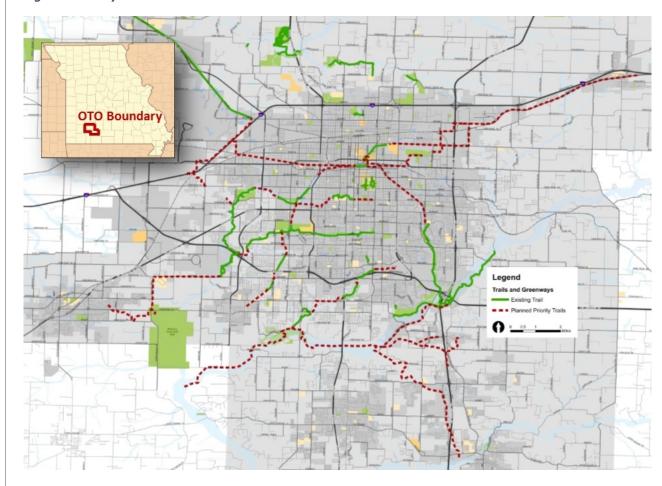
The prioritized routes within the OTO Study Area has:

- Rail-to-Trail Options
- Railroad Crossings
- Sidewalk Routes

Springfield, Missouri Metropolitan Project No. 00-2017-076

- Pedestrian Bridges
- Overhead and Underground Utilities
- Main Arterial Crossings and Underpasses

Figure 1: Study Area



# Purpose and Need Statement

The OTO has an active Bicycle and Pedestrian Planning program, with guidance from the OTO Bicycle and Pedestrian Advisory Committee. Corridors, including several trail segments, throughout the study area have been identified as high priority as a result of area-wide planning efforts. These corridors and trail segments are regionally significant and provide greater connectivity and alternative transportation access for the increased needs of bicyclists, pedestrians and hikers.

To make the most efficient use of public transportation funds for trail corridor improvements, the OTO conducted a Trail Investment Study, which included a PEL study to evaluate the segments of trails and determine how they should route through the Springfield regional area. A number of factors were used to determine the priority of trails, which are discussed in great detail within the *Ozarks Transportation Organization Bicycle and Pedestrian Investment Study Alignment Evaluation and Selection Study*. The criteria that were evaluated included: Network

Connection, User Experience, Enhances Bicycle and Walking, Logical Segments, Cultural and Natural Resources, Environmental Conditions, Cost, Route Directness and Ownership and Rightof-way.

Springfield, Missouri Metropolitan

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Throughout the trail system, each corridor was evaluated to find best alignments, prioritized order, and project costs. The PEL process was used to incorporate public and agency input and environmental resource information early in the transportation analysis to develop solutions that can be moved into implementation in a streamlined manner.

# **Purpose of the Project**

The purpose of the PEL study and its recommendations is to develop an investment study for proposed priority regional pedestrian and bicycle trails that improve mobility and safety in the corridor, promote efficient use of existing transportation facilities, and minimize impacts to the natural and built environment.

# **Need for the Proposed Action**

## Safety:

- Improve safety for pedestrian and bicycle traffic by providing alternate off-street routes and sufficient width on the path, consistent with the safety performance goals in the Long Range Transportation Plan (LRTP).
- Upgrade/Build transportation infrastructure to meet current trail and greenway design standards where practicable.

# Mobility/Access:

Reduce vehicular traffic, thus traffic delays and congestion to achieve improved levels of service (LOS) for current and projected traffic volumes.

#### **Environmental:**

Maintain or improve existing environment as much as possible through the ability to find alternate routes or mitigate.

### **Project Goals**

The objectives of this study were to:

- Review, update and share current ownership and easements, and document opportunities and constraints
- Identification and documentation of environmental concerns and effects, and fatal flaws
- Identification of preferred alignments for corridors prioritized by the BPAC
- Involve the public and agencies throughout the planning process
- Prepare cost estimates

OTO Regional Bicycle and Pedestrian Trail Investment Study – PEL Report

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## Streamline implementation of recommended prioritization

This PEL study evaluated existing and projected transportation and environmental conditions, defined corridor needs, identified conceptual engineering solutions to address corridor needs, and prepared a planning-level analysis of the environmental and engineering impacts of proposed trails. The study identified specific prioritized trails and line-item costs for implementation, and the recommendations from this study will be incorporated into the OTO Long Range Transportation Plan (LRTP). Agency and public involvement was integrated into the planning analysis with the intent of streamlining the environmental review processes for projects that move forward from this study.

# **Regional Context and Conditions**

# **Human Environment and Social Context Demographics**

Demographics are quantifiable characteristics of a given population, providing a general overview of a population at a given time. Demographic information is important in planning for future projects because it can indicate where population is growing or declining, economic drivers, and income trends. These characteristics are used to help project how traffic demand will change in the future.

# **Population Characteristics**

Within the OTO region, Christian County, experienced incredible growth between 1990 and 2000, with steady growth through 2010. Nixa grew the fastest between 2010 and 2014, with Republic following. The communities in OTO's southern region continue this trend, which follows the growth that has been seen over the past few decades.

Population projections redistribute the population of the region, reducing density in the Springfield core and adding population and density to northern Christian County. The City of Springfield can expect an increase between 16 and 22 percent in population over the next thirty years, while Greene County could grow from 22.5 percent to almost 28 percent. This is relatively minor, however, compared to the growth in Christian County, which could range from 71 percent to 79 percent.

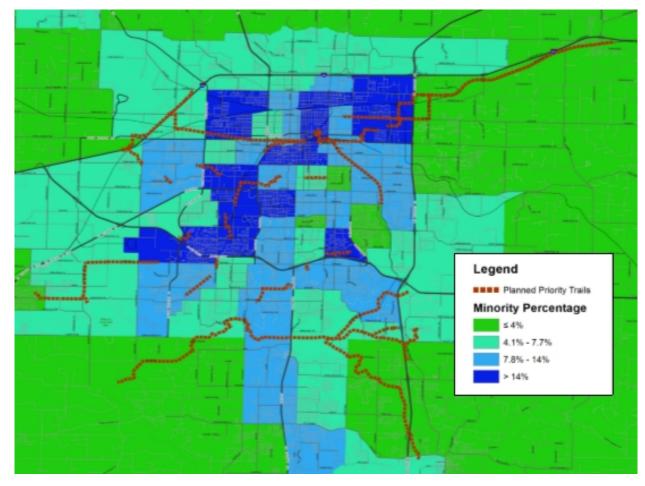
### Minority and Low-income Populations

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, signed by the President of the United States on February 11, 1994, directs federal agencies to take steps to identify and address disproportionately high and adverse effects of federal projects on minority and low-income populations to the greatest extent practicable.

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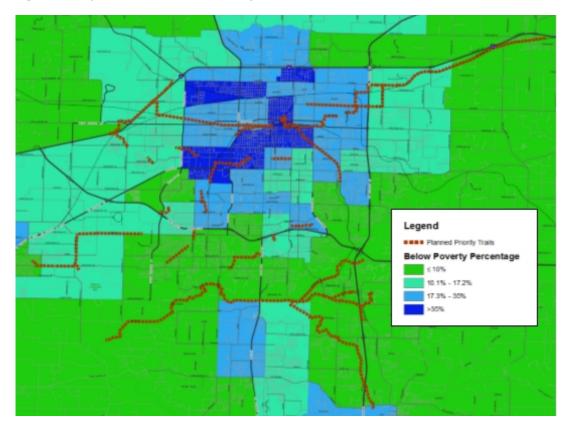
The United States Environmental Protection Agency (USEPA) Environmental Justice View was used to identify areas of minority and low-income populations within the study area. Minority populations are defined as persons who identify as Black, Hispanic or Latino, Asian American, American Indian and Alaskan Native, and Native Hawaiian or Other Pacific Islander. There is a larger minority and Hispanic presence in Springfield, though the Hispanic population does have a broader distribution among the surrounding communities. The minority percentage is shown in Figure 2.

Figure 2: Minority Percentage



The population below the poverty level is concentrated in Springfield and Republic, as well as there being sizable clusters in central Nixa and Ozark, as well as north of I-44 near Willard and along I-44 near Strafford. Population below the poverty level is shown in Figure 3.

Figure 3: Population Below the Poverty Level



#### **Economic Characteristics**

For the expected-growth scenario, Finance and Healthcare are predicted to be the fastest growing industries in the OTO region. Manufacturing and Agriculture are expected to see the largest declines.

Projected employment density remains strong in Springfield, with some growth seen in northern Christian County and the Republic area. Downtown Springfield, institutions of higher education, Sunshine and National around the Mercy Hospital campus, and National and U.S. 65 around the Cox Health Campus are all areas where there has been steady growth. A decrease in the manufacturing sector does have an impact on the future employment distribution of the OTO region, especially those in the northeast and northwest corners of Springfield. Employment is shown to decrease where the industrial parks are located, based on the existing industries.

# Land Ownership, Land Use, and Development

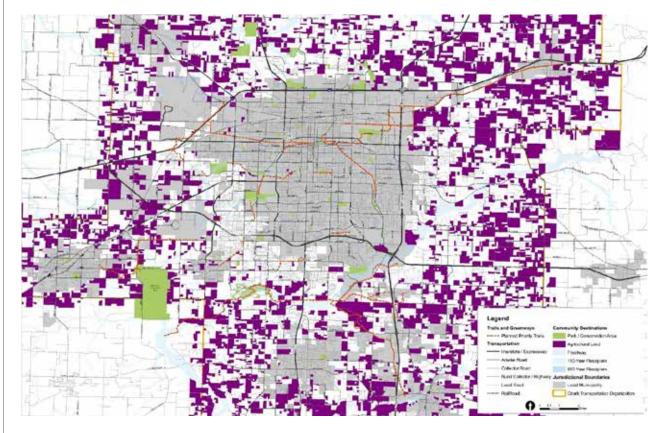
Land in the study area is under both private and public ownership. Land use can be characterized as a combination of urban, suburban, and rural development. The primary focus has been to evaluate whether any trails will convert any farmland to non-farming use, as illustrated in Figure 4.

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The majority of land use in the study area consists an area of general commercial and light industrial uses, mixed with single-family and multi-family housing.

Figure 4: Land Use (Agriculture) Map



## Cultural/Historic Resources

Significant historic resources are afforded special consideration by Section 106 of the National Historic Preservation Act of 1966, as amended. Historic resources may include archaeological artifacts or features, and historic standing structures more than 45 years old. Significant historic resources are those that are listed or may be eligible for inclusion on the National Register of Historic Places (NRHP). For the purposes of this study, only properties listed on the NRHP or officially eligible for the NRHP are listed as previously-identified historic sites. Additional properties on the State of Missouri historic register have been identified but are not listed.

If proposed improvement projects move forward for implementation, cultural resources will be surveyed in the projects' Areas of Potential Effects (APEs) and consultation with the State Historic Preservation Office (SHPO) would occur. Additional sites may be identified, and previously-identified sites may be evaluated for eligibility for the NRHP during that process. The FNSB CHP, established by ordinance in 1986, would be asked to provide input during the Section 106 cultural resource evaluation process.

The Missouri State Historic Preservation Office (SHPO) and Archaeology database identified the following NRHP-listed properties within the 500-foot buffer of the trail segments (see Figure 5).

### **Springfield Seed Company Building**

Springfield Seed Company Building (Reference No. 06000863) is a historic warehouse building located at 319 N. Main Street in Springfield, Missouri. It was built about 1936, and is a threestory, rectangular steel-reinforced concrete and brick commercial building. The Lower Jordan Creek Greenway bounds the northside of the historic property, while the Fort Scott Line Rail Trail is an additional block north of the historic property.

#### **Lincoln School**

Lincoln School (Reference No. 00000508) is a historic school building located at 815 N. Sherman Avenue in Springfield, Missouri. It was built in 1930, and is a two-story, Modern Movement style red brick building with a modified "U"-plan. The school was originally built for African-American students. The North Jordan Creek Greenway - Jordan Valley Connector trail will follow the sidewalk and ROW that boarders the northside of the historic property.

#### Wilson's Creek National Battlefield

Wilson's Creek National Battlefield (Reference No. 66000113) is a preservation of the site of the Battle of Wilson's Creek located at 6424 W Farm Rd 182, Republic, MO. Fought on August 10, 1861, it was the first major American Civil War engagement west of the Mississippi River. Key features include a 5-mile automobile tour loop and various length walking tails. The Wilson's Creek National Battlefield Trail Connector follows Farm Road 182 into the entrance of the national battlefield, and connects to the automobile tour loop. Wilson's Creek Boulevard Trail connects at the northwest of Wilson's Creek National Battlefield and heads north to Republic Road.

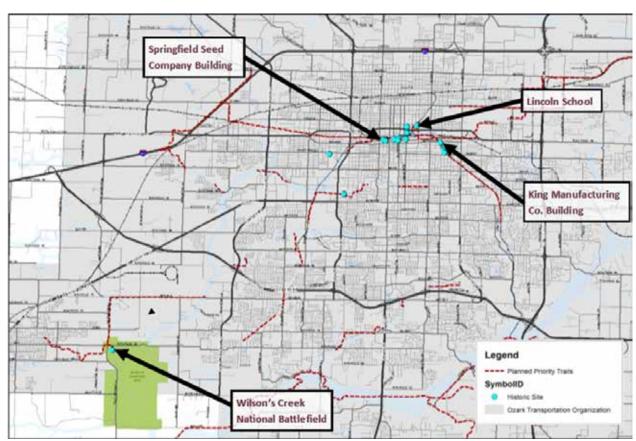
#### **King Manufacturing Company Building**

King Manufacturing Company Building (Reference No. 05000751) is a historic daylight factory building located at 1350 St. Louis Street in Springfield, Missouri. It was built in 1922, and expanded in the 1930s and 1940s. It is a two-story, "L"-shaped red brick building with a Streamline Moderne Style-influenced glass block storefront at first floor level. The Chadwick Flyer Rail Trail (North) is located on the west side of the historic property, and is within 20 feet of the building.

Exhibit 2 in the appendices provides a detailed list of trails and historic sites within their proximity.

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Figure 5: Cultural/Historic Resources



# Section 4(f) and Section 6(f)

Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 which established the requirement for consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development. The law, now codified in 49 United States Code (U.S.C.) §303 and 23 U.S.C. §138, is implemented by the NHL through the Code of Federal Regulations (CFR) at 23 CFR 774. Section 4(f) applies to projects that receive funding from or require approval by an agency of the U.S. Department of Transportation. Before approving a project that uses Section 4(f) property, FHWA must either (1) determine that the impacts are de minimis, or (2) undertake a Section 4(f) evaluation. If the Section 4(f) evaluation identifies a feasible and prudent alternative that completely avoids Section 4(f) properties, it must be selected. If there is no feasible and prudent alternative that avoids all Section 4(f) properties, FHWA has the discretion to select an alternative that causes the least overall harm. FHWA must also find that all possible planning to minimize harm to the Section 4(f) property has occurred.

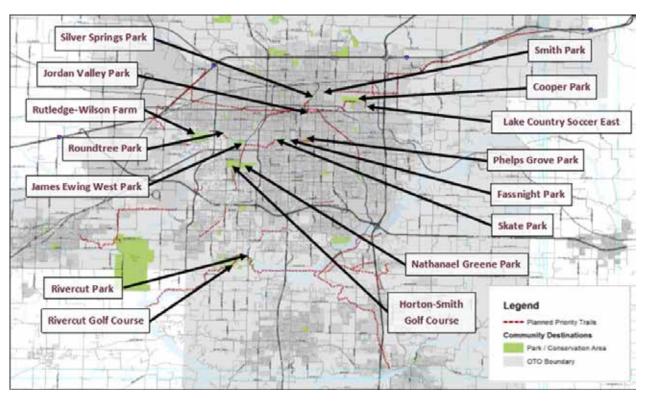
Section 4(f) properties include publicly-owned public parks, recreation areas, wildlife or waterfowl refuges, and any publicly- or privately-owned historic site listed or eligible for listing on the NRHP. Use of a Section 4(f) property occurs: (1) when land is permanently incorporated into a transportation facility; (2) when there is a temporary occupancy of land that is adverse in

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terms of the statute's preservation purpose; or (3) when there is a constructive use. A constructive use occurs when a project's proximity impacts are so severe that the protected activities, features, or attributes of a property are substantially impaired. The regulation lists various exceptions and limitations applicable to this general definition.

The OTO Communities' Parks and Recreation websites identify public parks, recreation areas, and wildlife refuges located within the study area shown in Figure 6.

Figure 6: Section 4(f) Resources



The National Land and Water Conservation Fund (LWCF) Act, or Section 6(f), was enacted to preserve, develop, and assure the quality and quantity of outdoor recreation resources. Section 6(f) protection applies to all projects that impact recreational lands purchased or improved with LWCF funds. The Secretary of the Interior must approve any conversion of LWCF property to a use other than public, outdoor recreation.

The Missouri State Parks official website was referenced to identify properties that have received LWCF funding. That website is - <a href="https://mostateparks.com/page/61224/land-and-water-conservation-fund-projects-county#Greene">https://mostateparks.com/page/61224/land-and-water-conservation-fund-projects-county#Greene</a>

The current listing of properties that have received LWCF funding, include 36 in Greene County total 36 and 4 Christian County. There are no priority trail segments that impact the LWCF 6(f) properties in Christian County. Within Greene County, there are seven LWCF 6(f) properties that are would be impacted by proposed priority trail improvements. The seven properties and associated trails are as follows:

Trail Investment Study (

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Cooper Park – Division Street – Cooper Park Connector & South Jordan Creek Greenway

Fassnight Park – Fassnight Creek Greenway (West)

Jim Ewing Sports Complex – Fassnight Creek Greenway & Wilson's Creek Greenway

Nathanael Greene Park – Trail of Tears Green Park to Ewing Sports Complex

Smith Park - North Jordan Creek Greenway

South Creek Greenway – South Creek Greenway

South Creek Wilson's Creek Trail – South Creek Greenway & West Republic Road Trail

The priority trail segments that connect to or cross through these lands will provide a public benefit and should include enhancements to the properties and will require approval from the U.S. Department of Interior. Exhibit 2 in the appendices provides a detailed list of 4(f) and 6(f) properties and trails that could have potential impacts.

# Natural Environment and Physical Context

The following sections outline information about the natural environmental and physical context of the corridor based on database reviews and published documentation. Site-specific field investigations may be needed for specific projects that move forward for implementation from this study.

#### **Water Bodies**

The U.S. Army Corps of Engineers (USACE) has regulatory authority over structures and work in navigable waters under 33 CFR parts 320, 322 and 325.

The Corps regulations broadly define two important terms, "waters of the United States" for the purpose of Section 404 of the Clean Water Act; and "navigable waters of the United States" for Section 10 of the Rivers and Harbors Act. Waters of the United States The definition of "waters of the United States" includes the following: a. Navigable waters of the United States. b. Wetlands. c. Tributaries to navigable waters of the United States, including adjacent wetlands and lakes and ponds. d. Interstate waters and their tributaries, including adjacent wetlands. e. All other waters of the United States not identified above, such as isolated wetlands, intermittent streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, where the use, degradation or destruction of these waters could affect interstate or foreign commerce.

Section 404 of the Clean Water Act defines the landward limit of jurisdiction as the high tide line in tidal waters and the ordinary high water mark as the limit in non-tidal waters. When adjacent wetlands are present, the limit of jurisdiction extends to the limit of the wetland.

The majority of the OTO is located in the upper-to-middle portion of the James River watershed. The headwaters of the James River begin north of Seymour, MO, and the river flows southwest

approximately 99 miles to its confluence with the White River to make up Table Rock Lake. The major tributaries to the James River include Pearson Creek, Wilson's Creek, Finley Creek, Crane Creek, and Flat Creek. The James River watershed totals 1,512 square miles. Streams of order 5 or greater are James River, Flat Creek, Wilson's Creek, Finley Creek, Crane Creek, and Rockhouse Creek. The total mileage of streams with permanent flow is 289 miles. Intermittent streams with permanent pools add another 74 miles. Several losing stream reaches and numerous springs are also located in the basin.

Any of the trails that are proposed to be near or run along will have runoff that has potential to end up in the James River.

### Fish and Wildlife

Multiple federal laws have been established to protect wildlife, including the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), the Bald and Golden Eagle Protection Act (BGPA), and the Magnuson- Stevens Fishery Conservation and Management Act (MFCMA). The United States Fish and Wildlife Service (USFWS) online information, planning, and consultation system (IPaC), and the Missouri Department of Conservation (DOC) endangered species and species of special concern list were consulted to determine the presence of protected species and habitat within Christian and Greene Counties. The boundary of the study area was submitted through the IPaC website and a reply from the agency provided the information contained in this report.

There are no identified critical habitats or national wildlife refuges located within the study area.

The endangered species have been identified for the Trail Study Area in Christian and Greene Counties. An endangered species is one that is likely to become extinct, and a threatened species is likely to become endangered in the foreseeable future. This is administered through the ESA by the USFWS. The Missouri DOC administers the code that lists endangered species only.

There are 7 federal or state threatened and/or endangered species as well as 24 migratory birds of concern occurring in, potentially occurring in, or potentially impacted by, activities occurring regionally (including areas outside the project Study Area). Threatened species include the Northern Long-eared Bat, the Niangua Darter, the Ozark Cave Fish, Virginia Sneezeweed and the Missouri Bladderpod . Endangered species include the Indiana Bat and the Grey Bat. Although a large percentage of the region is urban and suburban the Study Area includes woodlands, grasslands and waterways that have the potential for the existence of these species. Actual occurrence of these species or their habitats would be determined during future NEPA-level studies.

Exhibit 1 in the appendices provides details for threatened and endangered species within the study region.

# Ozarks Transportation Organization

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Wetlands

The U.S. Army Corps of Engineers (COE) and the U.S. Environmental Protection Agency (EPA) jointly define a wetland as follows:

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal conditions do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Wetlands are the primary habitat of 200 plant and animal species considered rare or endangered in Missouri. Millions of ducks and shorebirds that migrate through the state each year depend on wetlands for food and shelter. Missouri's 43 species of amphibians depend on wetlands for breeding and larval development.

Many people think of marshes when they hear the word "wetlands," but in Missouri we have nine different wetland natural communities (not counting man-made ponds and lakes). They include marshes, shrub swamps, bottomland prairies, bottomland forests, swamps, sinkhole ponds, oxbow lakes and sloughs, riparian areas and groundwater seeps.

Most natural wetlands change continually, and all have a high degree of biological productivity and diversity. They have soils that develop in saturated conditions and support water-tolerant plants. A wetland's seasonal pattern of water levels drives the establishment and maintenance of specific wetland plants.

From a river's edge to upland slopes, the floodplains of Missouri's rivers and streams contain most of our wetland acreage. Marshes, shrub swamps, bottomland prairies, swamps, oxbow lakes and sloughs, riparian areas and bottomland forests all depend on flowing water and periodic flooding.

Throughout the Ozarks, spring-fed streams flow through a network of gravel bars, pools and riffles. In a riparian zone extending from the main channel to about 50 feet on the land to either side of the stream, you'll find willows, sycamore, witch hazel and blue beech, along with water willow, mistflower, cardinal flower and, blue lobelia. Characteristic animals include belted kingfishers, river otters, Blanchard's cricket frogs and Fowler's toads.

Wetland resources are protected under CWA Section 404 and Executive Order 11990 Protection of Wetlands.

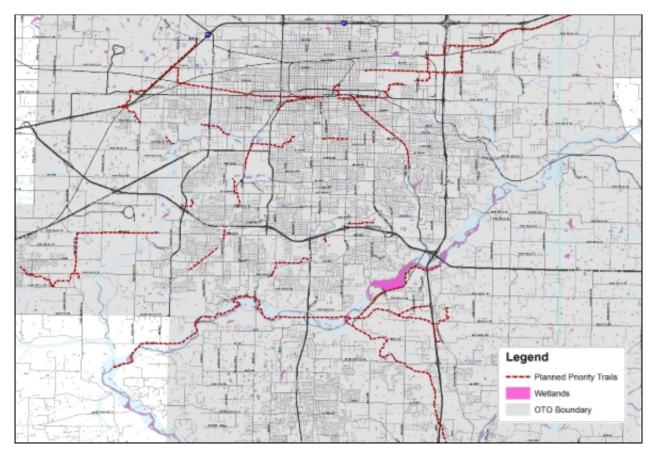
The USFWS National Wetlands Inventory (NWI) was consulted to determine the potential for wetland resources in the OTO Jurisdiction. Figure 7 illustrates wetlands identified in the OTO Boundary, the majority of which are Freshwater Pond, Freshwater Forested/Shrub, and Freshwater Emergent Wetlands mostly occurring alongside creeks, natural ponds, or roadside ditches. Review of aerial photography reveled that a number of the wetlands displayed in the

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NWI are no longer in existence due to commercial and residential redevelopment. For the purposes of this study, these previous wetland areas were not considered to be an issue of concern. Exhibit 7 in the appendices provides a detailed list of trails and wetlands within their proximity.

Figure 7: Wetlands



# **Floodplains**

Executive Order 11988 requires federal agencies to avoid adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. The 100-year floodplain (areas adjacent to waterbody subject to inundation by the 1 percent annual chance flood) of rivers is typically regulated, either through the Federal Emergency Management Agency (FEMA), or a local agency. The City of Springfield administers floodplain development through ordinance by requiring a permit for any development within flood hazard areas or floodways. The local FEMA office should be contacted for permitting and land disturbances within the flooplain.

FEMA maps special flood hazard areas (SFHAs) on flood insurance rate maps (FIRMs). SFHAs are those areas that would be inundated by the flood event that has a 1 percent change of

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occurring in any given year. FIRM maps for the area were consulted to determine the extent of floodplains located in the study area.

Trails along Jordan Creek, Fassnight Creek, Shuyler Creek, Farmer Branch, Wilson's Creek, South Creek, and Ward Branch either cross the creek or come up to the banks of the creek. This is the same situation for that of the James River Greenway that follows the James River. Measures to minimize the impact of transportation development within the floodplain and to restore and preserve the natural and beneficial values served by the floodplains would be fostered during project development and the NEPA process.

Exhibit 7 in the appendices provides a detailed list of trails and floodways and floodplains within their pathway.

### **Hazardous Waste and Contaminated Sites**

Part of the due diligence for any construction project is to identify potentially-contaminated sites in order to avoid excavating where soil disturbance is prohibited, or to avoid unknowingly subjecting a contractor to hazardous materials. To understand these risks, a search of the Missouri DNR contaminated sites database was conducted to determine the types of contamination documented within 500 feet of the trail segments. There are 26 active sites. Active sites and Long-Term Stewardship sites with institutional controls usually require coordination with Missouri DNR if construction is on or immediately adjacent to the site boundary.

Exhibit 3 in the appendices provides a detailed list of trails and hazardous waste sites and storage areas within their proximity.

Active sites are those where contamination is present and it being investigated and/or remediated. Institutional controls on a contaminated site are established to place conditions on site use and to protect people and the environment from exposure to hazardous substances during the cleanup process. Institutional controls may also be implemented when contaminants remain after cleanup is completed to the extent practical. Most institutional controls will have use restrictions and possible monitoring requirements, and these may include soil or groundwater monitoring, groundwater use restrictions, air quality monitoring, maintenance of engineering controls like fencing or asphalt caps, and soil and groundwater removal restrictions. Springfield, Missouri Metropolitan Project No. 00-2017-076

### Figure 8: Contaminated Sites

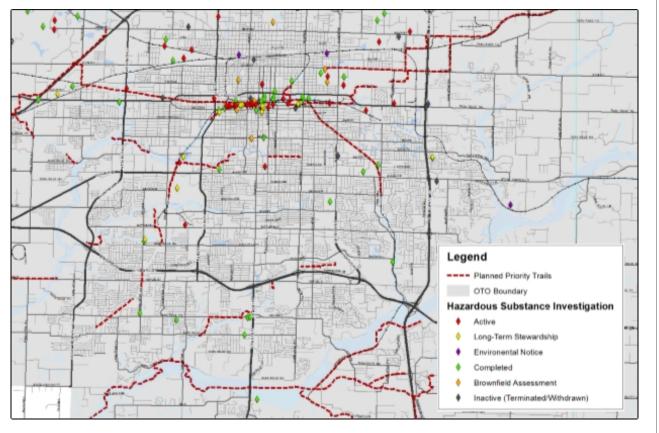


Figure 8 shows the location of Hazardous Substance Investigation sites in the study area.

# **Alternatives Development and Analysis**

The OTO provided the study team with the initial priority trail corridors that were to be analyzed by the investment study, which included the PEL process. Through the PEL process, trail corridors were screened for potential adverse affects to cultural and environmental resources, as well as their likelihood for being in close proximity to hazardous wastes.

Numerous federal, state and local agencies and resources were utilized to identify all potential issues within the study area. The US. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) on-line service provided a listing of threatened and endangered species and critical habitat within the boundary of the study area. Other resources that were contacted and researched for the study included:

- National Wetlands Inventory mapping
- National Flood Insurance Mapping
- MDNR listing of hazardous substance sites, waste disposal sites and underground storage tanks.
- EPA interactive mapping for Brownfields sites
- MDNR Historic Preservation Office (SHPO) for information and guidance regarding known and potential archaeological sites within the study area.

# Ozarks Transportation Organization

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- MDNR & City of Springfield for Historic Sites
- Missouri State Parks division of MDNR for 6(f) properties
- Greene County Parks & Recreation
- Christian County Parks and Recreation
- City of Springfield mapping for schools, cemeteries, churches, greenway trails and bike routes, sites on the National Historic Register, state and local parks and public properties
- Greene and Christian Counties Planning and Zoning for farmland

Information from all of these agencies was overlaid onto the proposed bike/ped trail routes within the study region. Where potential impacts were observed, trail alignments were adjusted to avoid or lessen the impacts or adverse effects to environmentally sensitive sites. Several trail segments were screened out, or received significant realignments because they were located within recorded environmentally protected or sensitive areas or were along a route that had potential for significant land disturbance, tree loss, stream impacts or other negative affects to the environment.

Several corridors within the study area were determined to be located within proximity of or in direct conflict with recorded cultural and environmentally sensitive sites. The initial James River Greenway corridor traveled though numerous recorded and highly potential archaeological sites, long stretches of floodway and floodplain, as well as wetlands and woodlands.

Other corridors with high probability of encountering archaeological sites were primarily along streams and floodplain areas. Where practical, trail segments were realigned to avoid archaeological sites. Additional archaeological surveys and investigations will be required with future NEPA phases along those corridors where a high potential exists. See Exhibit 1 in the appendices for mapping and further details regarding existing archaeological and culturally sensitive sites and the trails that should be investigated further.

Other alternative routes that were eliminated or rerouted included areas within recorded wetlands, pathways within the regulated flood-way, with significant tree clearing or those that had significant negative impacts to individual properties.

Environmental permitting will be required for any construction done within the wetlands, riparian woodlands, stream crossings or backwater crossings as well as anything within the floodway. Multiple agencies including MoDOT, FEMA, MoDNR, USACOE, US Fish & Wildlife and possibly FHWA will need to be involved in the permitting process.

Design of trail elements within the floodway will need to consider all of the issues with water levels rising and subsiding. This would include erosion and sediment, upheavals of pavement, wash outs of trail sections, periods when the trail is inaccessible and methods of providing access for maintenance.

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A Storm Water Pollution Prevention Plan (SWPPP) and all efforts to contain sediment and erosion during construction will be critical in highly sensitive environments.

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Trails in areas where backwaters and wetland conditions are present will require and elevated trail, which would be costly. The best option is to route the trail to avoid as much of these areas as possible.

Other issues that were considered during the analysis and alternate trail development included:

- Potential Impacts to residents and businesses
- Potential realignment to improve access for users
- Realignment to better facilitate achieving ADA compliant grades
- Realignment to minimize Impacts to the Environment
- Realignment as direct result of feedback through the public involvement process

Following the analysis phase of the PEL study, Realignment of several trails were recommended.

- 1) Shuyler Creek Greenway. The alternative alignment parallel to Farm Road 182 avoids a substantial portion of the Shuyler Creek flood-way and floodplain and provides a more direct route to the intended destination.
- 2) South Jordan Creek Greenway preferred alternative diverts course from the Jordan Creek South Branch to limit disturbance to the riparian corridor and adjacent industrial parcels.
- 3) North Jordan Creek Greenway preferred alternative diverts course from the Jordan Creek North Branch to limit disturbance to avoid environmentally sensitive areas along the creek corridor. Unless day-lighting and stream restoration activities occur in the future, the preferred alternative alignment can offer a similar level of connectivity and service to adjacent populations and destinations.
- 4) The original (and preferred) alignment for the Fassnight Creek Greenway (West) has been modified to minimize encroachment on the flood-way and floodplain, particularly between the alignment's western terminus at James Ewing Sports Complex and Fort Avenue.
- 5) The Fassnight Creek Greenway (East) preferred alignment takes advantage of floodplain buyouts and the planned daylighting and stream restoration project along Fassnight Creek between Jefferson Avenue and Kimbrough Avenue.
- 6) The Ward Branch Greenway (South) preferred alignment follows existing and planned roadway corridors, limiting disturbance to the Ward Branch between Weaver Road and Farm Road

In addition to these adjustments, minor revisions to alignments will be required along many corridors during future detailed design phases to establish elevations, grades and structures required to minimize environmental impacts.

# **Study Recommendations**

The recommendations for Final Alignment Alternative Concepts were presented to the OTO BPAC for the *Regional Bicycle and Pedestrian Trail Investment Study.* The total length of trails totals 75.6 miles and include the following corridor segments and surface material.

Trail Investment Study (

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- 1) Chadwick Flyer Rail Trail (North) concrete
- 2) South Creek Greenway concrete
- 3) *I-44 Trail concrete*
- 4) Route 66 Trail concrete
- 5) West Republic Road Trail concrete
- 6) Trail of Tears Greene Park to Ewing Sports Complex concrete

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- 7) Wilson's Creek Greenway concrete
- 8) Chadwick Flyer Rail Trail (South) concrete
- 9) Etheridge Trail concrete
- 10) Shuyler Creek Greenway Extension concrete
- 11) Fort Scott Line Rail Trail concrete
- 12) Wilson's Creek Blvd Trail concrete
- 13) Fassnight Creek Greenway (West) concrete
- 14) West Wilson's Creek Greenway (North) concrete
- 15) Trail of Tears South Creek Greenway Connector mixed
- 16) Lower Jordan Creek Greenway concrete
- 17) James River Greenway concrete
- 18) West Wilson's Creek Greenway (South) concrete
- 19) Ward Branch Greenway (Middle) concrete
- 20) Wilson's Creek National Battlefield Trail Connector concrete
- 21) Westgate Fort Scott Line Rail Trail Connector concrete
- 22) Ward Branch Greenway (North) concrete
- 23) Trail of Tears Battlefield natural
- 24) South Jordan Creek Greenway concrete
- 25) North Jordan Creek Greenway concrete
- 26) Ward Branch Greenway (South) concrete
- 27) Division Street I-44 Trail Connector concrete
- 28) Le Compte Road Trail concrete
- 29) River Bluff Blvd Farmer Branch Trail Connector concrete
- 30) Division Street Trail concrete
- 31) Ward Branch James River Greenway Connector concrete
- 32) Trail of Tears Golden Avenue natural
- 33) North Jordan Creek Greenway Jordan Valley Connector concrete
- 34) Fassnight Creek Greenway (East) concrete

- 35) Farmer Branch Greenway concrete
- 36) Division Street Cooper Park Connector concrete

For all trails recommended to the OTO for advancing as future projects, a thorough review of the PEL documents should be performed. Environmental permitting and following the NEPA process will be required for any projects that receive federal funding. Most of the trails that are located withing existing roadway corridors should be eligible for a Categorical Exclusion environmental classification. Projects eligible for federal funding will likely follow the LPA process and have oversight from MoDOT. The environmental procedures and guidelines that are outlined in the LPA Manual will provide the information and steps necessary for environmental clearance and permitting. For trail alignments that are known or presumed to be within archaeological or cultural sites, a licensed and pre-approved archaeologist we need to coordinate with SHPO to develop further studies and investigations of those locations.

# Ozarks Transportation Organization

# Planning & Environmental Linkages Questionnaire

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## Ozark Transportation Organization Bicycle and Pedestrian Trail PEL Questionnaire

### 1. Background:

### Who is the sponsor of the PEL study?

The PEL Study is sponsored by Ozark Transportation Organization (OTO) Metropolitan Planning Organization (MPO) which is the federally designated regional transportation planning organization that serves as a forum for cooperative transportation decision-making by local elected and appointed officials from Christian and Greene Counties, and the cities of Battlefield, Nixa, Ozark, Republic, Springfield, Strafford and Willard. Also included are technical staff from the Missouri Department of Transportation, Federal Highway Administration, Federal Transit Administration, and the Federal Aviation Administration and members from public transportation providers and citizen representatives.

### What is the name of the PEL study document and other identifying project information?

Ozarks Transportation Organization Bicycle & Pedestrian Trail Investment Study, Alignment Evaluation & Selection

#### Who was included on the study?

Ozark Transportation Organization, Missouri Department of Transportation, Alta Planning (Paul Wojciechowski, Kevin Neill), CJW Transportation Consultants, LLC (Dane Seiler, Jonathan Staats), and CFS Engineers (Charlie LePage, Dallas Joplin, Elliot Duenow).

Provide a description of the existing transportation facility within the corridor, including project limits, modes, functional classification, number of lanes, shoulder width, access control and type of surrounding environment.

There are various locations for the proposed trail segments within the OTO boundary. The proposed locations for each trail segment has a variety of existing terrain. Most of the trail segments follow corridors that are undeveloped that traverse across timberland, pastures, and streams. Some of the segments of trails, but not limited to Division Street Trail, North Jordan Creek Greenway, and Trail of Tears – Golden Ave follow the existing sidewalks. Fort Scott Line Rail Trail, Chadwick Flyer Rail Corridor, Trail of Tears Corridor, and James River Greenway are a combination of inactive and active railroad alignments. Each trail segment is designed to either extend or link existing trails within a corridor or provide alternate trail segments.

Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were completed.

Previous planning activities that have been completed within the OTO Boundary include the following:

• Long Range Transportation Plan – Transportation 2040 (Amended by Board of Directors: 6/2017)

Are there recent, current, or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?

Transportation Plan 2040 and the Bicycle/Pedestrian Implementation Report.

#### 2. Methodology used:

### What was the scope of the PEL study and the reason for completing it?

The Board of Directors of the OTO established a subcommittee to guide development and implementation of the region's Transportation Alternatives Program (TAP), or STP-Set Aside under the FAST Act. The region's TAP program has historically funded small trail and sidewalk projects proposed by

1

OTO's Bicycle and Pedestrian Advisory Committee (BPAC) identified several potential corridors for future trail development, and developed a list of priorities. These priority corridors are seen as candidates for the TAP-funded regional trail system. Battlefield, Ozark, Republic, Springfield, Strafford, and Willard would be served by the identified corridors.

The PEL Study is intend to provide linkages between the planning/prioritization phase and the project development/NEPA (National Environmental Policy Act) phase of implementing the regional trail network.

The PEL Study is a planning-level effort with the intent of providing a NEPA process that will inform and guide the OTO during future environmental phases for priority trail projects. This was accomplished through public participation, agency coordination, re-establishing the need and purpose for trail extensions and additions, and engaging in a new alternatives development and evaluation process. The decision-making process used in the PEL Study documents how alternatives were delivered to the subsequent NEPA phase. The PEL Study scope includes:

- Determining/defining need and purpose
- Describing the affected environment
- Developing and analyzing reasonable alternative concepts
- Seeking public and agency involvement
- Recommending alternatives for further study in NEPA

The reason the PEL was completed was to document the decision-making process used in the planning phase; thereby linking planning to NEPA and streamlining the overall project development process.

#### Did you use NEPA-like language? Why or why not?

Yes, NEPA terminology was used throughout the PEL Study to further establish the link between NEPA and Planning. For example, the terms "need and purpose", "affected environment", and "alternatives" were used throughout the PEL Study. These terms are consistent with those used in NEPA; however, alternatives in the PEL were "conceptual" and not project-level. More importantly, the planning-level process used in the PEL study was designed to inform NEPA and provide products that, to the extent possible, could be seamlessly incorporated into NEPA, such as the Need and Purpose Statement and the Affected Environment Report.

### What were the actual terms used and how did you define them?

- **Study Area** Approximately 75.6 miles of proposed trail in length and extends as far northeast as Strafford and as far southwest as Republic. The Study Area is that of the OTO Boundary, which include communities in the Springfield Metro, extending Greene County and Christian County.
- **Need and Purpose** The Need and Purpose was compiled through a process of problem identification and solution generation. Public participation was an important part of the process, as was the establishment of the technical basis.
- **Alternatives** Conceptual alternatives were compiled that include surface material, route and location of trail. The alternatives developed were conceptual and not project-level alternatives. Route locations were modified to avoid or minimize environmental and socioeconomic impacts that resulted in the preferred priority alternative alignments.

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- Affected Environment The Affected Environment included the existing cultural, social, economic, and environmental conditions for the PEL Study for the OTO Region. Inventory and evaluation of the affected environment provides the baseline information to be used in further project development.
- **Environmental Justice** The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.
- **Minority Population** Any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed / transient persons who will be similarly affected by a proposed program, policy, and activity. A minority is a person who is Black, Hispanic, Asian American/Pacific Islander, or American Indian/Alaskan Native.
- **Low-income population** Any readily identifiable groups of low-income persons who live in geographic proximity, and if circumstances warrant, geographically dispersed /transient persons who will be similarly affected by a proposed program, policy, and activity.
- Various other NEPA regulatory terms were used, including: Missouri Surface Water Quality Standards; National Flood Insurance Program (NFIP); National Wetland Inventory (NWI); Phase I Environmental Site Assessment (ESA); Threatened and Endangered Species; Section 4(f); Section 6(f); Historic Resources; Prime Farmland.

### How do you see these terms being used in NEPA documents?

The terms used in the PEL Study are consistent with NEPA terminology and therefore could be seamlessly incorporated into future NEPA studies. This is based on the fact the methodologies used to arrive at decisions such as, purpose and need statement, alternative evaluation methods and alternatives evaluation, etc. were based on similar compilations of public comment and technical support used in the NEPA process. The OTO Bicycle and Pedestrian Advisory Committee (BPAC), as well as the Missouri Department of Transportation were presented project updates at their regular meetings. These updates chronicled any interim decisions made in the intervening period and provided comment.

What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps? For example, for the corridor vision, the decision was made by state DOT and the local agency, with buy-in from FHWA, the USACE, and USFWS and other resource/regulatory agencies.

Meetings were held at key milestones with agencies and project stakeholders throughout the course of the PEL Study. Figure 1 shows the key steps and coordination points in the PEL decision-making process.

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### Ozark Transportation Organization Bicycle and Pedestrian Trail PEL Questionnaire

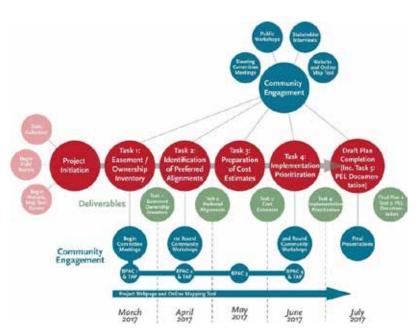


Figure 1 - Project and PEL Study Process Flow

Decisions at these key milestones were made by OTO BPAC using technical analyses as well as input from the agencies and stakeholders. In addition, Steering Committee Meetings, Public Workshops, and Stakeholder Interviews were contributors in the decision-making process.

#### How should the PEL information be presented in NEPA?

Technical reports produced in the PEL Study will be directly incorporated in the NEPA document as appendices, referenced in the text as warranted, and will be part of the project record and history of the decision-making process. Likewise, the Summary and Analysis Reports generated from the public and stakeholder outreach activities of the PEL Study will provide context for the public's role in the decision-making process.

The information produced and decisions made in the PEL Study will serve as a starting point for more detailed, project-specific analyses in NEPA. PEL Study products may be incorporated as appendices, referenced in text, and included in the project record of the NEPA Study, as warranted.

#### 3. Agency coordination:

Provide a synopsis of coordination with Federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.

A number of local, state and Federal Agency resources were used throughout the PEL study process. Several agencies were contacted directly while other sources were utilized through their on-line website databases. The following list of agencies and resources were involved in the study.

- Ozark Transportation Organization (OTO)
- Missouri Department of Transportation (MoDOT)
- United State Fish & Wildlife Service
- Federal Emergency Management Agency (FEMA)
- Missouri Department of Natural Resources (MDNR)
- United States Environmental Protection Agency (EPA)
- MDNR State Historic Preservation Office (SHPO)

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- Missouri State Parks Division of MDNR
- City of Springfield, MO
- Springfield Greene County Parks Board
- Green County Planning and Zoning
- Christian County Planning and Zoning

The OTO provided the 2040 Long Range Transportation which included information for determining potential adverse impacts to minorities, low-income, disabled, elderly or under age populations. The U.S. Fish and Wildlife Service was contacted through their Information for Planning and Consultation (Ipac) on-line service and they provided a listing of threatened and endangered species and critical habitat in Greene and Christian Counties in Missouri. The U.S. Fish and Wildlife Service was also accessed for National Wetlands Inventory mapping in the region. National Flood Insurance Maps were obtained from the Federal Emergency Management Agency's (FEMA) website. The Missouri Department of Natural Resources (MDNR) provided on-line resources for locating hazardous substance sites, waste disposal sites and underground storage tanks. The United States Environmental Protection Agency (EPA) provided interactive mapping for identifying Brownfields sites. The Missouri Department of Natural Resources State Historic Preservation Office (SHPO) was contacted to obtain information and guidance regarding known and potential archaeological sites within the study area. Amec, Foster& Wheeler Archaeologists visited with SHPO staff to review and identify areas of concern within the study boundary and provided this information to the study team. The Missouri State Parks division of MDNR was contacted to provide a record of properties in Greene and Christian Counties that were listed as 6(f) properties (having received funding from the Land and Conservation Fund).

The City of Springfield, Missouri provided mapping for existing greenway trails and bike routes, sites on the National Historic Register, state and local parks, schools, cemeteries, churches and public properties. The Springfield-Greene County Parks Board provided on-line interactive mapping for parks in the region. Greene and Christian Counties Planning and Zoning divisions provided land use mapping to assist with determining the location of farmland within the study boundaries.

Information from all of these agencies was incorporated into kmz mapping utilizing Google Earth and overlaid onto the proposed bike/ped trail routes within the study region. Where potential impacts were observed, trail alignments were adjusted to avoid or lessen the impacts or adverse effects to environmentally sensitive sites. The environmental and cultural resource information that was collected was added to map books that were presented at public meetings. This information is contained in more detail within the PEL Study Report.

What transportation agencies (e.g. for adjacent jurisdictions) did you coordinate with or were involved during the PEL study?

Ozark Transportation Organization (OTO) and the Missouri Department of Transportation (MoDOT).

#### What steps will need to be taken with each agency during NEPA scoping?

Agencies will be provided a copy of the PEL Study Report at the conclusion of the PEL Study. It is envisioned that the PEL Study report will be used in the determination of NEPA classification that precedes a future NEPA study. It is anticipated that agencies would be reengaged during the NEPA process in accordance with the regulatory jurisdiction of each agency. The PEL Study will provide a guide for additional steps to be taken during the NEPA process for future planning and design projects.

#### 4. Public coordination:

#### Provide a synopsis of your coordination efforts with the public and stakeholders.

At the initiation of the PEL Study, a Public Involvement Plan was prepared, which outlined various avenues for public involvement and distribution of study-related information. Information related to the PEL study and NEPA process was presented at the public meetings and BPAC meetings. The public involvement tools and strategies utilized for this effort included establishing project website, social media pages, mailing lists, email communications, news media, and coordination with elected officials, in addition to hosting public workshops. Primarily, coordination efforts with the public and stakeholders were facilitated through the project website, public workshops, and BPAC meetings. The BPAC is comprised of representatives from neighborhood associations, community organizations, businesses, chambers of commerce, and other stakeholders in the Study Area. Six BPAC meetings were held at the major Study milestones. Prior to each BPAC meeting, invitees were sent letters and email notifications of the upcoming meetings and topics to be discussed, and encouraging their participation. In addition to the BPAC, two rounds of public workshops (two workshops each round) were held at the major Study milestones. The public workshops were held at locations throughout the Study Area to provide a venue for public discussion and comment at various stages of the PEL Study. All public outreach was advertised in a manner consistent with NEPA public meetings. In addition, meetings were advertised through display ads, media releases, e-notifications, and the Project website and social media pages.

The project website served as a repository for study information, public meeting notices and summaries, project updates, and event information. As the plan documents began to take shape, the website was used to post documents for the general public to view and provide comment on. During the course of the planning process, there were 4,410 individual page views by 510 different visitors.

An interactive online mapping tool provided an opportunity to connect with a wider audience not traditionally engaged in planning processes through traditional face-to-face events like public meetings and open houses. The online mapping tool displayed the initial planned priority corridors based on the regional trail planning to date and allowed users to post comments on these planned priority trails. The online mapping tool also allowed users to identify destinations for trail users, challenging intersections and other barriers that limit bicycle and pedestrian activity and other areas or corridors in which they would like to see trails developed.

During the course of the study, 47 individual users provided 171 votes and comments through the online mapping tool.

On April 20th, 2017 the project team held an open house for area stakeholders, such as property owners, homeowner associations, neighborhood organizations, and other key groups impacted by or interested in trail development. Only one representative attended on behalf of a homeowner association to discuss development of the Ward Branch Greenway (South) through the Stone Meadow subdivision (300+ homes).

The OTO Bicycle and Pedestrian Advisory Committee served as the advisory group for the Trail Investment Study, providing feedback and direction at critical steps throughout the planning process. The six meetings held with the BPAC Advisory Group developed a shared understanding of study deliverables and facilitated the development of each subsequent deliverable. The meetings also served as opportunities to refine and distribute messaging and

The final PEL study will be published and available to the BPAC and to the public.

#### 5. Purpose and Need for the PEL study:

What was the scope of the PEL study and the reason for completing it?

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As discussed in Section 2, the scope of the PEL Study includes the establishment of a need and purpose for improvements, development and evaluation of alternatives concepts, and identification of reasonable alternatives to be carried into a subsequent NEPA study. The reason for the PEL Study is to link previous planning studies with the "OTO's Bicycle and Pedestrian Trails Investment Study" to identify potential environmental constraints within each trail segment and to make informed revisions to trail alignments that minimize adverse environmental impacts. The PEL Study will provide an updated planning record to inform public officials, planners and designers during subsequent NEPA phases.

# Provide the purpose and need statement, or the corridor vision and transportation goals and objectives to realize that vision.

The purpose of the PEL study is: To develop an investment study for proposed priority regional pedestrian and bicycle trails that improve mobility and safety in the corridor, promote efficient use of existing transportation facilities, and minimize impacts to the natural and built environment.

The PEL Study seeks to identify improvements to existing within the Study Area to address the following issues:

- Existing public easements/ land ownership patterns and abandoned rail beds
- Geographic and geologic obstacles to bicycle and pedestrian use
- Geographic and geologic obstacles to construction activities
- Fatal Flaws in each corridor
- Other criteria deemed important by the consultant

The PEL Study Need and Purpose Technical Report contains a detailed description of the conditions in the Study Area and provides data to support the need for the build of the proposed priority trails in the study area.

# What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?

The Need and Purpose Statement was developed in accordance with Appendix A, 23 CFR 450 – Linking the Transportation Planning and NEPA Processes (23 USC 139), which details how information, analyses and products from transportation planning can be incorporated seamlessly into the NEPA process at the project level. The PEL Need and Purpose Statement was a collaborative effort designed specifically to integrate public involvement and agency coordination in its development. In addition, detailed technical information was provided with regard to Cost, Directness of new connection, Scenic and Historical Value, Equity and Community Value, Gap Targeting, and Environmental impacts within each corridor in the Study Area. It is the intent to utilize this Need and Purpose Statement to validate project-level alternatives during the NEPA decision-making process.

#### 6. Range of alternatives:

Planning teams need to be cautious during the alternative screen process; alternative screening should focus on purpose and need/corridor vision, fatal flaw analysis, and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision will not be considered reasonable alternatives, even if they reduce impacts to a particular resource. Detail the range of alternatives considered, screening criteria, and screening process, including:

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# What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)

The following alternative concepts were considered in the PEL Study and described in detail in the PEL Study Alternative Concepts Development and Evaluation Technical Report:

- No Build –
- Reroute/Multiple trail path options to avoid adverse environmental effects
- Use alternate materials aggregate, paved (asphalt, concrete) or natural paths
- Bridge Across areas such as wetlands and flood-ways
- Meander trail alignments to minimize tree loss
- Environmental Mitigation
- Utilize existing roadway corridors and pathways where practical

### How did you select the screening criteria and screening process?

Screening criteria was developed with guidance from The AASHTO Practitioner's Handbook as well as MoDOT's Environmental/Cultural Resources Compliance Checklist.

# For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s).

The screening of the alternative trail alignment concepts for the PEL Study was a two-phased process. Phase I provided a high-level analysis of the original alignments developed in the OTO's priority trail corridors that were previously identified. Initial screening of these corridors included identifying known and potential environmental and cultural resource sites and habitat within or in close proximity to the corridor. Several trail segments were screened out, or altered because they were located within recorded environmentally protected or sensitive areas or were along a route that had potential for significant land disturbance, tree loss, stream impacts or other negative affects to the environment. For example, a majority of the trail segments along the James River Greenway corridor and Chadwick Branch Greenway were located within known archaeological sites or areas with high probability of sites. Lesser portions of the Farmers Branch Greenway, River bluff Boulevard – Farmers Branch Trail Connector and rails were located within known or high probability sites. Where practical, trail segments were realigned to avoid archaeological sites.

Other alternative routes that were eliminated or rerouted included areas within recorded wetlands, pathways within the regulated flood-way, with significant tree clearing or those that had significant negative impacts to individual properties.

In Phase II, alternative concepts were measured against more quantitative criteria developed in coordination with the PEL, BPAC, and the general public, and were specifically designed to identify alternative concepts that achieved the most mobility benefit for while minimizing impacts in the Study Area. The criteria and measures used to compare the alternative concepts included the following:

- Potential Impacts to residents and businesses
- Potential realignment to improve access for users
- Realignment to better facilitate achieving ADA compliant grades
- Realignment to minimize Impacts to the Environment
- Realignment as direct result of feedback through the public involvement process

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Examples of additional alternatives incorporated into the study include:

- 1) Shuyler Creek Greenway. The alternative alignment parallel to Farm Road 182 avoids a substantial portion of the Shuyler Creek flood-way and floodplain and provides a more direct route to the intended destination.
- 2) South Jordan Creek Greenway preferred alternative diverts course from the Jordan Creek South Branch to limit disturbance to the riparian corridor and adjacent industrial parcels.
- 3) North Jordan Creek Greenway preferred alternative diverts course from the Jordan Creek North Branch to limit disturbance to avoid environmentally sensitive areas along the creek corridor. Unless day-lighting and stream restoration activities occur in the future, the preferred alternative alignment can offer a similar level of connectivity and service to adjacent populations and destinations.
- 4) The original (and preferred) alignment for the Fassnight Creek Greenway (West) has been modified to minimize encroachment on the flood-way and floodplain, particularly between the alignment's western terminus at James Ewing Sports Complex and Fort Avenue.
- 5) The Fassnight Creek Greenway (East) preferred alignment takes advantage of floodplain buyouts and the planned daylighting and stream restoration project along Fassnight Creek between Jefferson Avenue and Kimbrough Avenue.
- 6) The Ward Branch Greenway (South) preferred alignment follows existing and planned roadway corridors, limiting disturbance to the Ward Branch between Weaver Road and Farm Road 182.

#### Which alternatives should be brought forward into NEPA and why?

Based on the results of the evaluation analysis, it is recommended to carry forward into the NEPA process the Final Alignment Alternative Concepts presented to the OTO BPAC for the *Regional Bicycle and Pedestrian Trail Investment Study*. The total length of trails totals 75.6 miles and include the following corridor segments and surface material.

- 1) Chadwick Flyer Rail Trail (North) concrete
- 2) South Creek Greenway concrete
- 3) I-44 Trail concrete
- 4) Route 66 Trail concrete
- 5) West Republic Road Trail concrete
- 6) Trail of Tears Greene Park to Ewing Sports Complex concrete
- 7) Wilson's Creek Greenway concrete
- 8) Chadwick Flyer Rail Trail (South) concrete
- 9) Etheridge Trail concrete
- 10) Shuyler Creek Greenway Extension concrete
- 11) Fort Scott Line Rail Trail concrete
- 12) Wilson's Creek Blvd Trail concrete
- 13) Fassnight Creek Greenway (West) concrete
- 14) West Wilson's Creek Greenway (North) concrete
- 15) Trail of Tears South Creek Greenway Connector mixed
- 16) Lower Jordan Creek Greenway concrete

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- 17) James River Greenway concrete
- 18) West Wilson's Creek Greenway (South) concrete
- 19) Ward Branch Greenway (Middle) concrete
- 20) Wilson's Creek National Battlefield Trail Connector concrete
- 21) Westgate Fort Scott Line Rail Trail Connector concrete
- 22) Ward Branch Greenway (North) concrete
- 23) Trail of Tears Battlefield natural
- 24) South Jordan Creek Greenway concrete
- 25) North Jordan Creek Greenway concrete
- 26) Ward Branch Greenway (South) concrete
- 27) Division Street I-44 Trail Connector concrete
- 28) Le Compte Road Trail concrete
- 29) River Bluff Blvd Farmer Branch Trail Connector concrete
- 30) Division Street Trail concrete
- 31) Ward Branch James River Greenway Connector concrete
- 32) Trail of Tears Golden Avenue natural
- 33) North Jordan Creek Greenway Jordan Valley Connector concrete
- 34) Fassnight Creek Greenway (East) concrete
- 35) Farmer Branch Greenway concrete
- 36) Division Street Cooper Park Connector concrete

Moving forward into the NEPA process a more in-depth investigation of trail segments that are located in the vicinity of potential archaeological or historic sites will need to be undertaken. A consultation with the SHPO is recommended to determine if certain areas may be subject to re-survey. Areas that have not been surveyed could contain archaeological sites and may need to be evaluated through additional archaeological surveys as projects moves forward. Future consultation with SHPO can clarify how to approach potential impacts to archaeological resources.

#### Did the public, stakeholders, and agencies have an opportunity to comment during this process?

The public, stakeholders, and agencies provided input at every decision node of the project including problem identification, evaluation factors and criteria, alternatives development and alternatives screening during the rounds of BPAC and TAP meetings and public workshops.

#### Were there unresolved issues with the public, stakeholders, and/or agencies?

Stakeholders were very receptive of the proposed trail corridors and provided additional comment for consideration of including trail networks and connections to other locations outside of the corridors that were presented. Mostly the unresolved issues were related to desires from the public for additional trails to be included in the long range plan and trail investment study. The planning team is incorporating these comments into the trail investment study narrative, however these areas were not incorporated into the PEL study.

### 7. Planning assumptions and analytical methods:

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#### What is the forecast year used in the PEL study?

2040 is the forecast year for the PEL Study which is consistent with the horizon-year forecasts produced by OTO in the currently adopted 2040 Long Range Transportation Plan (LRTP).

#### What method was used for forecasting traffic volumes?

Traffic modeling and forecasting was not part of the scope of this project. This project focused on bicycle and pedestrian mobility and facilities and no forecasting of likely number users was within the scope.

Are the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?

The PEL Study purpose and need statement is consistent with and in many cases directly supports the corridor vision and goals from the LRTP for improvements in alternate transportation infrastructure and mobility.

What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?

Future year policy and/or data assumptions used in the PEL Study are based on the assumptions and data used in the adopted LRTP. As presented in the LRTP, an important basis for assumptions related to future land use, economic development, transportation costs, and network expansion stems from the results of OTO Growth Scenario Planning. The LRTP assumes funding for future trail projects is limited, necessitating prioritization of trail projects.

8. Environmental resources (wetlands, cultural, etc.) reviewed. For each resource or group of resources reviewed, provide the following:

In the PEL study, at what level of detail was the resource reviewed and what was the method of review?

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) was contracted to perform a Cultural Resource Record/Literature Review for approximately 74 miles of trails within Greene and Christian Counties, Missouri. This desktop review was used to aid in planning and design of the trail system in order to avoid known archaeological sites or areas of high potential for archaeological sites. This review focused on archaeological sites as a review for historic properties that had already been completed. Background research involved examination of archaeological site files located on-line at the State Historic Preservation Office's (SHPO's) GIS database. The search resulted in the identification of 92 previously conducted surveys that intersect the project corridor. In the future, a consultation with the SHPO is recommended to evaluate these previously conducted surveys regarding their compliance with current standards. For instance, older surveys may not have used currently approved methods and may be subject to re-survey by the SHPO. Areas that have not been surveyed could contain archaeological sites and these areas may need to be evaluated through additional archaeological surveys as the project moves forward.

Figures were provided that showed areas of high probability for finding archaeological sites, shown in light yellow. While these areas have a higher probability for archaeological sites, sites are not limited to just these areas. The search also indicated 117 archaeological sites that are within or cross into the project corridor. Of those, nine are recommended as eligible for listing on the National Register of

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Historic Places (NRHP), 12 are recommended as not eligible, 83 are shown as not evaluated, and 13 have no information on eligibility. Those sites recommended as eligible for listing on the NRHP are shown on the figures in green, while the others are in red. Sites that are listed as eligible should either be avoided or will need to be mitigated through data recovery. Sites that are not eligible can be impacted without future archaeological investigations. Sites that have not been evaluated will need to be assessed to determine their eligibility. Future consultation with SHPO can clarify how to approach potential impacts to archaeological resources.

Existing resources present in the Study Area were been identified and documented in the PEL Study. Resources were identified based on review of existing databases, studies, and plans, information provided by various agencies, review of aerial imagery as well as windshield surveys. All resources were reviewed following the latest guidelines available at the time of research. A brief summary is provided below:

- Land Use and Planning 2012-2016 Greene and Christian County land use data was collected and examined to the parcel level. Recent aerial photographs of the Study Area were also examined. This data was used to identify farmland within the study region.
- Neighborhoods and Community Resources Schools, universities, and places of worship were identified through internet search and city Geographic Information Systems (GIS maps) for the Study Area.
- Existing Transportation Infrastructure Information on the existing road, transit, and rail
  systems and proposed system improvements was obtained from OTO and City of Springfield
  sources and current maps. Data for existing and planned PEL Study Area trails was presented.
- Surface Water Surface water resources (stream flood-ways, floodplains and wetlands) of the Study Area were listed and described, referencing Missouri Surface Water Quality Standards, National Flood Insurance Program (NFIP), National Wetland Inventory (NWI), Federal Emergency Management Agency (FEMA), and USFWS sources. Applicable federal and state surface water, floodplain, and water quality regulations were also described.
- Hazardous Materials A comprehensive list of Federal and State hazardous materials records
  databases with readily available data was presented, along with the results of a current search
  of these databases, showing hazardous materials sites occurrence in the Study Area. Field
  verification of database search results was not performed. The Missouri Department of Natural
  Resources (MDNR) provided on-line resources for locating hazardous substance sites, waste
  disposal sites and underground storage tanks. The United States Environmental Protection
  Agency (EPA) provided interactive mapping for identifying Brownfields sites.
- Threatened and Endangered Species Applicable federal and state regulations pertaining to listed species were presented. The most recent federal and state threatened and endangered species occurrence databases were searched and species occurring or with potential to occur in the Study Area were presented. The US. Fish & Wildlife Sevice was contacted to provide this information.
- Natural Areas and Preserves searches of the USFWS National Wildlife Refuges and Missouri Department of Conservation databases were conducted.
- Park lands and Recreation Areas The regulatory framework for impacts to park and recreational facilities was presented, including Section 4(f), Land and Water Conservation Fund (Section 6(f)). The Missouri State Parks division of MDNR was contacted to provide a record of properties in Greene and Christian Counties that were listed as 6(f) properties (having received funding from the Land and Conservation Fund). An assessment of park and recreation areas in the Study Area was also conducted.

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- Historic and Cultural Resources Database searches were conducted to identify historic age resources, cemeteries, and State Archaeological Landmarks (SALs) within 500-ft Area of Potential Effect of the Study Area. The identified resources and the historic context of the area were evaluated. A preliminary determination of likelihood of occurrence of undiscovered archaeological resources in the Study Area was made.
- Utilities / Transmissions Transmission Lines and other potentially buried utilities were identified for the Study Area.

#### Is this resource present in the area and what is the existing environmental condition for this resource?

The presence of each resource and the environmental condition along each priority trail corridor is described in the PEL Study Report. A brief summary is provided below:

- Land Use and Planning Most land use in the PEL Study Area is residential, followed by commercial land use and streets. Some agricultural land is present and is primarily pastureland in nature. A portion of the public lands are parkland, of which many contain existing trails that will be connected to.
- Socioeconomic Factors The OTO's regional boundary has an average minority population rate of 9.8% and an average of 16.8% of the population is below the poverty level. Improving bicycle and pedestrian access and connectivity to people within these areas provides a much needed mobility alternative, which is essential to the purpose and need of the study. The Springfield 2010 census data lists the minority population at 11.3%. Trail corridors within areas with minority populations greater than 15% include: West Republic Road Trail, Wilson's Creek Boulevard Trail, South Creek Greenway Trail, Trail of Tears Golden Avenue Trail, Ward Branch Greenway North, Trail of Tears Greene Park to Ewing Sports Complex, Fassnight Creek Greenway East, Lower Jordan Creek Greenway, Chadwick Flyer Rail Trail North, North Jordan Creek Greenway, Division Street Cooper Park Connector and South Jordan Creek Greenway. Low income population rates greater than 30% are mostly centralized within the region south of I-44, north of Battlefield, East of West Bypass and West of US. 65, which overlaps many of the same trails within the higher minority regions.
- Neighborhoods and Community Resources One elementary school, one middle school, one high school, one pre-school, and three colleges/universities are located in the 500 foot Buffer of the Study Area. Nine places of worship are also located in the 500 foot Buffer of the Study Area.
- Visual and Aesthetic Qualities The Study Area is mainly characterized by man-made visual features, which include single-family residential areas, and industrial and commercial areas; however, natural and undeveloped views also occur. The project area includes views of undeveloped land along the James River and Route 66, as well as views of South and Wilson's Creeks.
- Surface Water Streams within the project area are the James River, Finley Creek and Jordan, Wilson's, South, Ward Branch, Farmer Branch and Shuyler Creeks as well as Springfield Lake. These are regulated waterways are within FEMA-Insurance Rate Mapped flood-ways.

The headwaters of the James River begin north of Seymour, MO, and the river flows southwest approximately 99 miles to its confluence with the White River to make up Table Rock Lake. The major tributaries to the James River include Pearson Creek, Wilson Creek, Finley Creek, Crane Creek, and Flat Creek. The James River watershed totals 1,512 square miles. Streams of order 5 or greater are James River, Flat Creek, Wilson's Creek, Finley Creek, Crane Creek, and Rock house Creek. The total mileage of streams with permanent flow is 289 miles. Intermittent streams with permanent pools add another 74 miles. Several losing stream reaches and numerous springs are also located in the basin. The river forms Lake Springfield and supplies

drinking water for the city of Springfield. Major tributaries into the James River include: Pearson Creek, Wilson's Creek, Finley Creek, Crane Creek, and Flat Creek. Treated wastewater is discharged into Wilson's Creek in the southwestern part of Springfield. Wilson's Creek is a James River tributary. Part of the treated wastewater disappears into the subsurface a short distance downstream from the treatment plant, and it resurfaces at Rader Spring. a short distance downstream on Wilson's Creek. Water in the James River is a calcium-bicarbonate type, reflecting the limestone bedrock in the Springfield Plateau. Below its confluence with Wilson's Creek, the water contains elevated bacteria and nutrients.

- Hazardous Materials No obviously apparent sources of hazardous materials contamination currently occur in the PEL Study Area. According to database searches there are over 100 hazardous materials sites occurring within 500 foot distance from the trail center lines, including the following trails: Lower Jordan Creek Greenway, North Jordan Creek Greenway, South Jordan Creek Greenway, Ft. Scott Line Rail Trail, Chadwick Flyer Rail Trail North, Division Street Trails, Route 66 Trail, Fassnight Creek Greenway West and Trail of Tears Golden Avenue. The sites are primarily listed in the Industrial and Hazardous Waste Sites, Petroleum Storage Tanks, Leaking Petroleum Storage Tanks, and Tier II Chemical Reporting Program Facilities databases.
- Threatened and Endangered Species There are 7 federal- or state- threatened and/or endangered species as well as 24 migratory birds of concern occurring in, potentially occurring in, or potentially impacted by, activities occurring regionally (including areas outside the project Study Area). Threatened species include the Northern Long-eared Bat, the Niangua Darter, the Ozark Cave Fish, Virginia Sneezeweed and the Missouri Bladderpod. Endangered species include the Indiana Bat and the Grey Bat. No Critical Habitat has been identified for these species with in the study area. Although a large percentage of the region is urban and suburban the Study Area includes woodlands, grasslands and waterways that have the potential for the existence of these species. Actual occurrence of these species or their habitats would be determined during NEPA-level studies.
- Natural Areas and Preserves According to the Missouri Department of Conservation, there are no officially-designated natural areas or preserves are located within the Study Area.
- Park lands and Recreation Areas The Study Area encompasses 27 parks and recreation areas.
   Of those areas a total of 7 are classified as 6(f); Cooper Park, Fassnight Park, Jim Ewing Sports
   Complex, Nathanael Greene Park, Smith Park, South Creek Greenway and South Creek Wilson's Creek Trail.
- Historic and Cultural Resources Five National Register-listed properties occur in the 500 foot Buffer in the Study Area: Springfield Seed Co Building, Lincoln School, Wilson's Creek National Battlefield, King Manufacturing Co Building, and Elfindale. Four State Register-listed properties and landmarks occur within the Study Area 500 foot buffer: Frisco Passenger Depot, Finkbinder Buildings, Sease House, and Dogwood Tree. Three cemeteries were identified within the Study Area 500 foot buffer.
- Utilities / Transmissions Electric transmission lines of various kilo-volt capacities occur completely or partly within the Study Area, as well as various utilities, i.e. Sewer, Water, Gas, Telecommunications.
- Prime Farmland Prime farmland soils that are within roadway ROW or dedicated to urban development are not subject to the requirements of the FPPA. The last USDA soil survey for Christian County was prepared in 1985. The last soil survey for Greene County was completed in 1915. Greene and Christian County Land Use Maps show areas of agricultural land, of which only small portions of the study area encroach upon. None of the areas encroached upon appear to be prime farmland, but field investigations should be conducted with future NEPA

#### **Ozark Transportation Organization Bicycle and Pedestrian Trail PEL Questionnaire**

studies. The overwhelming majority of the study area is within urban, industrial or suburban lands.

What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?

The issues that may need to be further examined in NEPA, depending on project-level impacts are identified below. The following includes protocol for resource categories determined during NEPA to be potentially impacted by a proposed alternative. A brief summary is provided below:

- Land Use and Planning Any direct effects to businesses or residences (takes) and associated displacement assistance under the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 would need consideration during a NEPA-level study. Any indirect effects stemming from access alteration due to the project with associated land use and development effects (induced development; alteration of land development patterns) would also need consideration, to ensure the project is compatible with the prospective OTO regional growth scenario. The consistency of the proposed project with other local city planning would also need to be ensured throughout the NEPA process.
- Socioeconomic Factors Any impacts to low income and minority populations would need to be
  assessed in accordance with EO 12898 Federal Actions to Address Environmental Justice in
  Minority Populations and Low-Income Populations. The NEPA study would also include
  measures to ensure the opportunity for participation and input of LIP persons in the project
  development process. Future bicycle and pedestrian trail projects will be beneficial to minority
  and low-income populations and is directly related to the purpose and need for the projects.
- Neighborhoods and Community Resources Although direct impacts to these resources (taking)
  would not be anticipated, potential impacts stemming from indirect effects of the project such
  as access alteration would be assessed, if warranted.
- Visual and Aesthetic Qualities Guidelines for visual sensitivity rating and consistency of the
  proposed project design with local visual and aesthetic guidelines would need to be ensured.
  Regarding project design, the most detailed guidelines are offered by the City of Springfield
  Greenway Landscaping Plan. Mitigation of visual impacts would be considered during project
  planning. These measures could include incorporation of architectural features and aesthetic
  elements into the project design, landscaping/xeriscaping, screening, and earthwork.
- Surface Water A NEPA-level study would need to consider impacts to jurisdictional streams and wetlands, including permit and potential mitigation requirements. Design requirements to prevent floodplain impacts would also need to be considered, along with appropriate coordination requirements with local FEMA floodplain officials. Section 404 Permitting and 401 Certifications will likely be required for any construction within streams. Wetland identification should be revisited as several of the areas shown as part of the Nation Wetlands Inventory have been eliminated with residential and commercial development. If wetlands are impacted, the trails should cross the wetlands with bridges or elevated boardwalks, or they should be mitigated. There are several trails within the study area that encroach streams, wetlands and floodplains where these issues will need to be addressed.
- Hazardous Materials There do not appear to be any issues that would need to be addressed
  with future NEPA phases. If needed, Phase I assessment would be conducted on a preferred
  alternative during NEPA. Phase II site investigations could be required, depending on the results
  of the Phase I database search, project design, and locations of proposed ROW location. Any
  mitigation requirements for hazardous materials sites would be discussed.

#### Ozark Transportation Organization Bicycle and Pedestrian Trail PEL Questionnaire

- Threatened and Endangered Species If a federally-listed species or its habitat was determined to be affected by the preferred alternative, a biological assessment would be required with an effect determination (No Effect; May Affect, but is not likely to Adversely Affect; or May Affect, is likely to Adversely Affect) for submittal to the USFWS to initiate consultation. Consultation would be informal or formal depending on proposed impacts; the potentially extended time frame for this coordination should be considered. Although not anticipated, project impacts to federally listed species or their habitats would potentially be mitigated. Similarly, any impacts to State-listed species would be coordinated. Any required mitigation for impacts to habitat for federal Candidate species or rare vegetation species providing habitat for State-listed species would also need to be coordinated. In addition to listed species, any impacts to migratory bird nesting and associated USFWS coordination requirements would need to be considered.
- Natural Areas and Preserves Although no officially designated natural areas or preserves
  occur, any proposed impacts to native prairies, or riparian habitat would be quantified and
  reported in the NEPA document, and the potential for mitigation for impacts to these resources
  discussed.
- Park lands and Recreation Areas Any direct impacts (taking) and constructive use impacts to parks and recreation areas would be quantified and/or assessed for a proposed project-level alternative during the NEPA study. Section 4(f) coordination with the FHWA would be undertaken. Avoidance and minimization of impacts must occur per regulations. Any potential mitigation for impacts would be determined during the coordination effort. Any impacts to 6(f) properties will require coordination with the United States Department of Interior. A number of trails within the study area connect to parks and recreation areas. Most of these recreation areas are public parks and will require now right of way takings. Easements may be needed where the trails connect with privately owned facilities.
- Historic and Cultural Resources Any effects (direct and indirect) to historic resources identified
  and evaluated in the PEL Study and during the NEPA study (including any ROW proposed for
  acquisition) would be summarized in a Historic Resources Survey Report (HRSR). As warranted,
  project design would be modified to avoid adverse impacts to historic resources. Coordination
  with SHPO and submit Section 106 project information.
- Utilities / Transmissions Adjustment or relocation of transmission lines or underground pipelines, and associated costs, would be considered in the NEPA study.
- Prime Farmland Potential impacts to Study Area farmland subject to the Farmland Protection Policy Act would be considered in the NEPA study. No prime farmland appears to impacted, but future reviews should be considered.
- Moving forward into the NEPA process a more in-depth investigation of trail segments that are
  located in the vicinity of potential archaeological or historic sites will need to be undertaken. A
  consultation with the SHPO is recommended to determine if certain areas may be subject to resurvey. Areas that have not been surveyed could contain archaeological sites and may need to
  be evaluated through additional archaeological surveys as projects moves forward. Future
  consultation with SHPO can clarify how to approach potential impacts to archaeological
  resources.

#### How will the planning data provided need to be supplemented during NEPA?

The data collected at the corridor-level in the PEL will serve as starting point for NEPA analysis, but may need to be refined to a greater level of specificity for project-level alternatives. A brief summary of data that may need to be supplemented in NEPA includes:

#### Ozark Transportation Organization Bicycle and Pedestrian Trail PEL Questionnaire

- Land Use and Planning Greene and Christian Counties and the cities of Springfield, Strafford,
  Ozark, Republic and Nixa would be contacted to obtain any available land use data or planning
  information. Previously obtained data from current resources would be updated if necessary.
  The most recent versions of land use planning documents would be obtained, if available, to
  ensure inclusion of data compiled since the PEL Study.
- Neighborhoods and Community Resources The Study Area would be checked for changes in inventory of schools, universities, and places of worship since the PEL study. Data necessary to analyze potential visual/aesthetic effects to these resources from the project would need to be collected.
- Visual and Aesthetic Qualities The Study Area would be checked for changes in visual features since the PEL study. Any updates to Ozark Greenways or OTO visual/aesthetic guidelines would be taken into account. Any newly published guidance from any of the previously listed cities would also be considered.
- Surface Water Field Jurisdictional Determinations and delineations would be performed for streams and wetlands and impacts quantified for the preferred alternative. The most recent impairment status (updated annually) of affected stream segments would also be checked. Appropriate coordination with respect to permitting would be conducted. Regulated flood-way and flood zone mapping should be reviewed to determine if any revisions were made since the PEL Study.
- Hazardous Materials The Phase I database search would be updated to capture any hazmat
  issues occurring since the PEL Study. Additional Phase I ESA activities would include field
  verification of sites identified in the database searches; review of additional environmental
  record sources such as topographic maps; review of reasonably ascertainable historical land use
  research sources; landowner/government official interviews; and Phase I survey documentation.
- Threatened and Endangered Species State and federal lists would be re-checked to ensure that any listing changes occurring since the PEL study are captured. A site visit would be conducted by a qualified biologist to document any occurrence of listed species or their habitats. A karst survey would be conducted by a qualified geologist to determine occurrence of undocumented karst features. If karst features are discovered these would be examined by a qualified biologist for occurrence of suitable habitat for/occurrence of listed karst species.
- Natural Areas and Preserves It will be determined if any natural areas or preserves have been established since the PEL study, and field visits will occur to identify and quantify impacts to forestry, prairie, or riparian vegetation within existing and proposed ROW for a proposed project-level alternative.
- Park lands and Recreation Areas It will be determined if any parkland or recreational areas have been established since the PEL study.
- Historic and Cultural Resources A field historical-age resource and archaeological survey would be conducted and any additional ROW acquired for the proposed project. Field identification of cemetery locations and boundaries would be performed to determine potential impacts. The listing of historic resources compiled in the PEL study would be updated to include resources which had become NRHP or state-listed or eligible since the PEL study.
- Utilities / Transmissions Utility relocation needs and associated costs would be calculated for a proposed project-level alternative.
- Prime Farmland NRCS soils series mapping data for any areas not assessed during the PEL study would be obtained during coordination with NRCS.
- Socioeconomic Factors US. Department of Health and Human Services (HHS) poverty guidelines and American Community Survey data would be updated to the NEPA study year. Population and ethnicity data, and associated project impacts, would be updated as well.

#### Trail Investment Study (

#### Ozark Transportation Organization Bicycle and Pedestrian Trail PEL Questionnaire

## 9. List environmental resources you are aware of that were not reviewed in the PEL study and why. Indicate whether or not they will need to be reviewed in NEPA and explain why.

The list of resources reviewed in this PEL study is comprehensive, and is consistent with resources typically considered in a NEPA analysis. Although the level of analysis detail would be greater in a NEPA study for all resources, it is not anticipated that additional resources would need to be included. Resources that were not reviewed for the PEL Study are described below along with explanatory notes.

Impacts to Air Quality and Noise Levels were not reviewed due to the nature of the proposed improvements within the study area. Implementation of the proposed trail system will encourage more pedestrian and bicycle usage. Many of the pedestrian and bike trips will offset motor vehicle trips and reduce the rate of increase of motor vehicle travel, which will reduce the rate of increase in the degradation of air quality and noise levels.

## 10. Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where the analysis can be found.

Cumulative impacts were not specifically considered in the PEL Study. Schematic design and project details necessary to adequately assess cumulative impacts of proposed alternatives was not available at the PEL level of analysis and would be more appropriately studied in NEPA. In general, the cumulative benefits to the environment should significantly exceed the cumulative impacts.

## 11. Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.

The OTO LRTP presents environmental issues and mitigation strategies regarding impacts to water quality, floodplains, wildlife habitat, agricultural land, environmental justice, and threatened and endangered species. These strategies emphasize avoidance through project alignment and design, as well as a regional approach to land preservation, generally consisting of in-kind preservation of resources unavoidably impacted by a project. The PEL addresses many of the concerns to be addressed under NEPA, and the strategies discussed are consistent with those proposed in the LRTP. Planning-level decisions regarding mitigation strategies includes activities and concepts that may be adopted or incorporated into NEPA. Among the future mitigation efforts to consider should be reduction in storm water runoff by creating regional detention areas, expansion of wetlands areas and select vegetative plantings. Corridor preservation for future trails should also be considered where it is feasible.

# 12. What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?

The NEPA document will be informed by a full spectrum of planning decisions derived from the PEL process. The PEL Study Report and all supporting PEL decision documents will be incorporated into the NEPA process by reference and become part of the administrative record and history of the decision-making process. Further, the PEL Study Report, including associated technical reports, will be integrated into the NEPA process and made available to the public, as well as to BPAC members and the resource and regulatory agencies that were engaged during the initial stages of the PEL Study. Additionally, the PEL Study Report will be available on the project website.

#### 13. Are there any other issues a future project team should be aware of?

#### Ozark Transportation Organization Bicycle and Pedestrian Trail PEL Questionnaire

Examples: Controversy, utility problems, access or ROW issues, encroachments into ROW, problematic land owners and/or groups, contact information for stakeholders, special or unique resources in the area, etc.

Funding for the proposed action has yet to be determined. The current OTO plan has indicated that improvements for segments within the Study Area would be financed under a Comprehensive Development Agreement (CDA). Public comment on these issues would be sought in the NEPA process.

Design of the proposed action was not part of the PEL scope; therefore, public comment on specific project design features, including the need for additional ROW, is still an outstanding issue and would be addressed in the NEPA process.

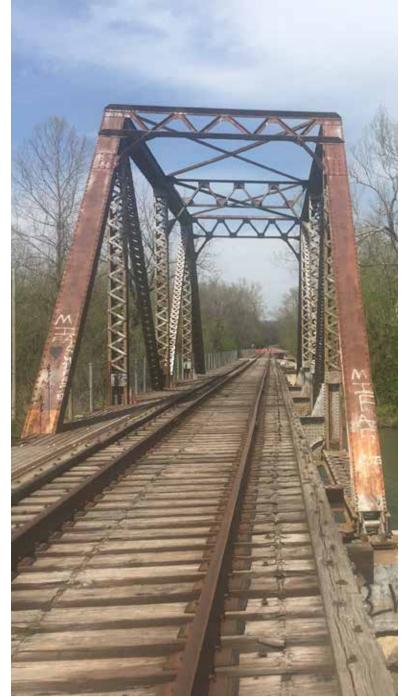
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Ozarks Transportation Organization
Bicycle & Pedestrian Trail Investment Study



**Appendix A: Property Ownership Information** 

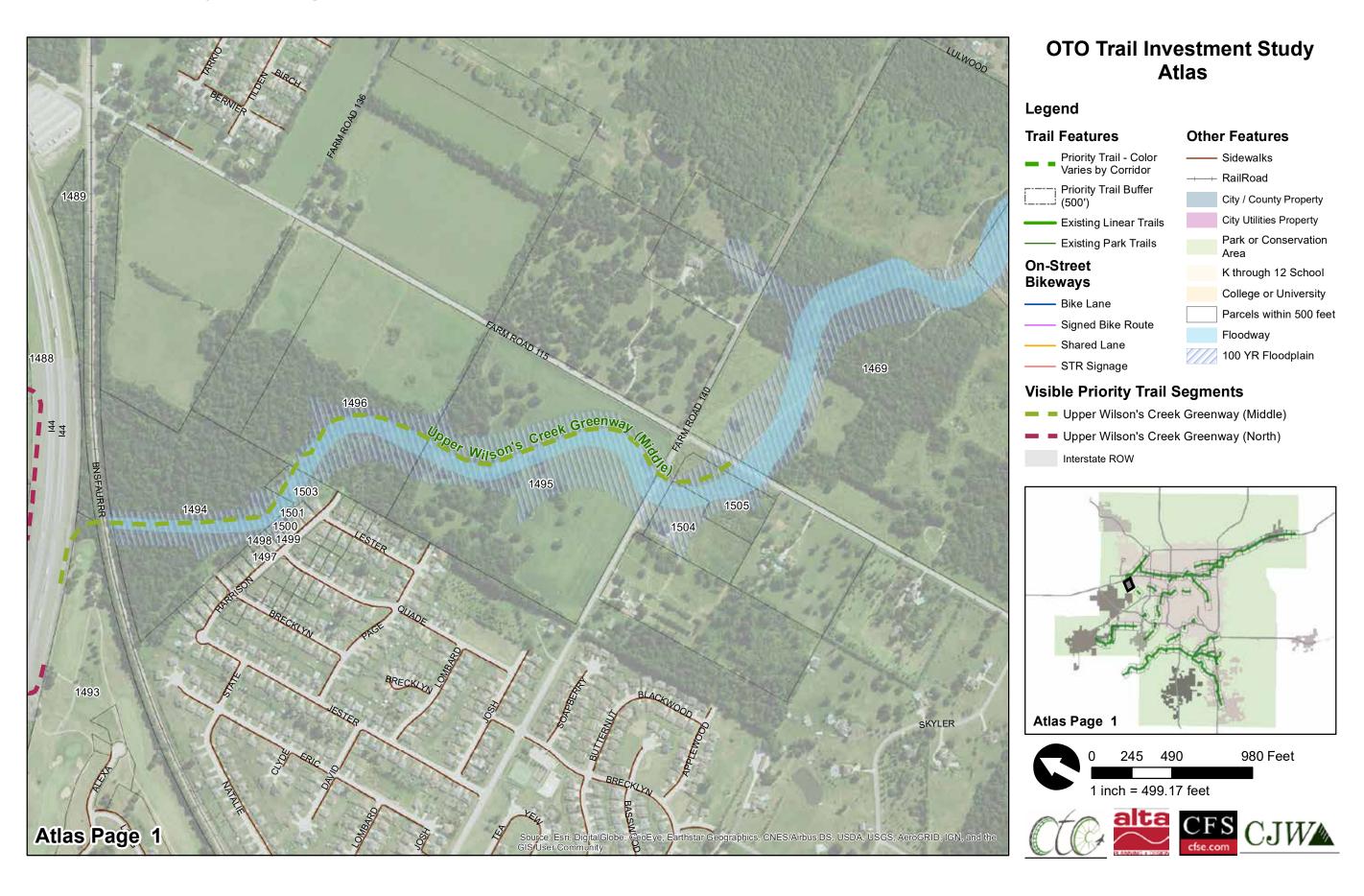


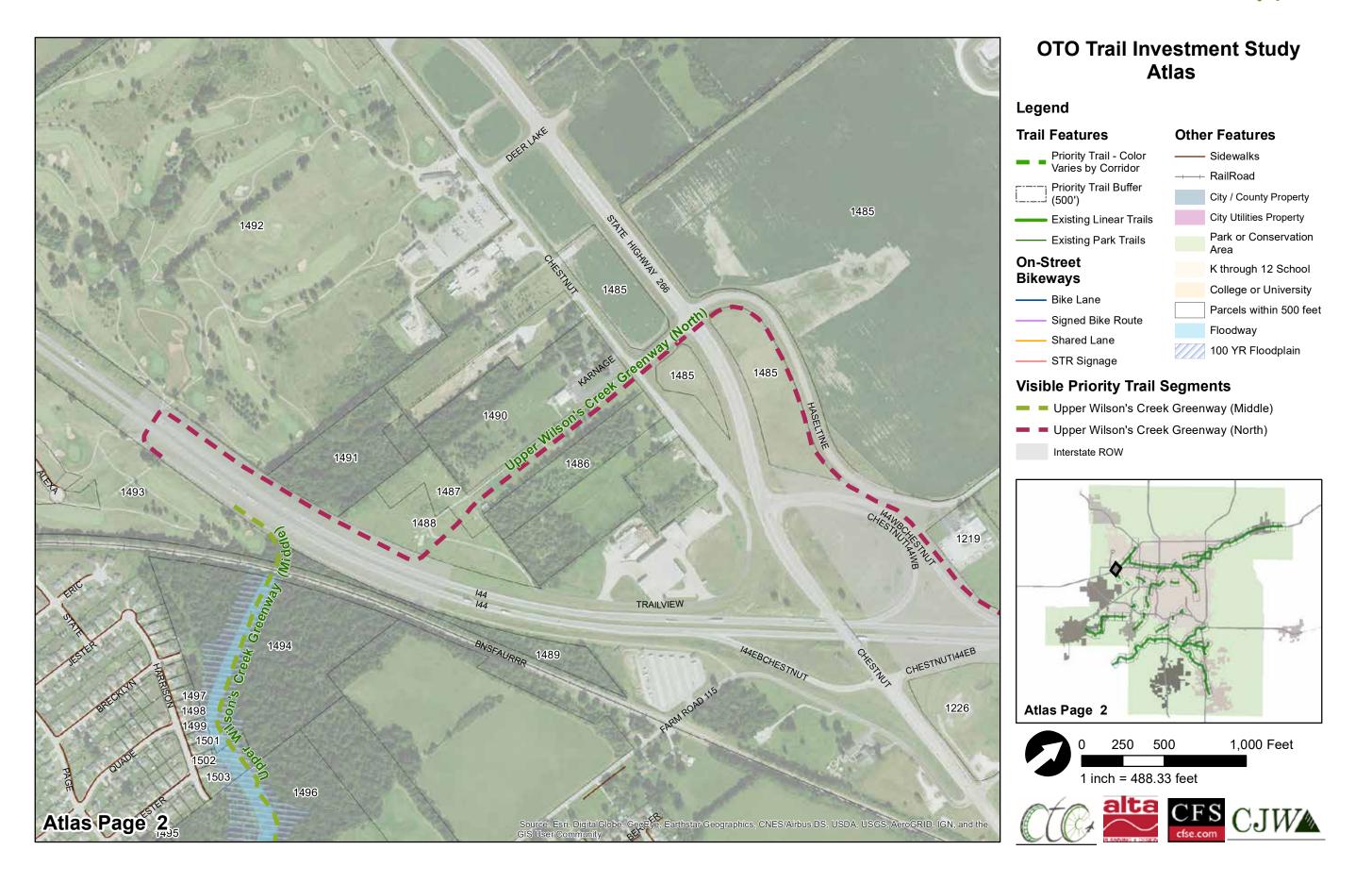


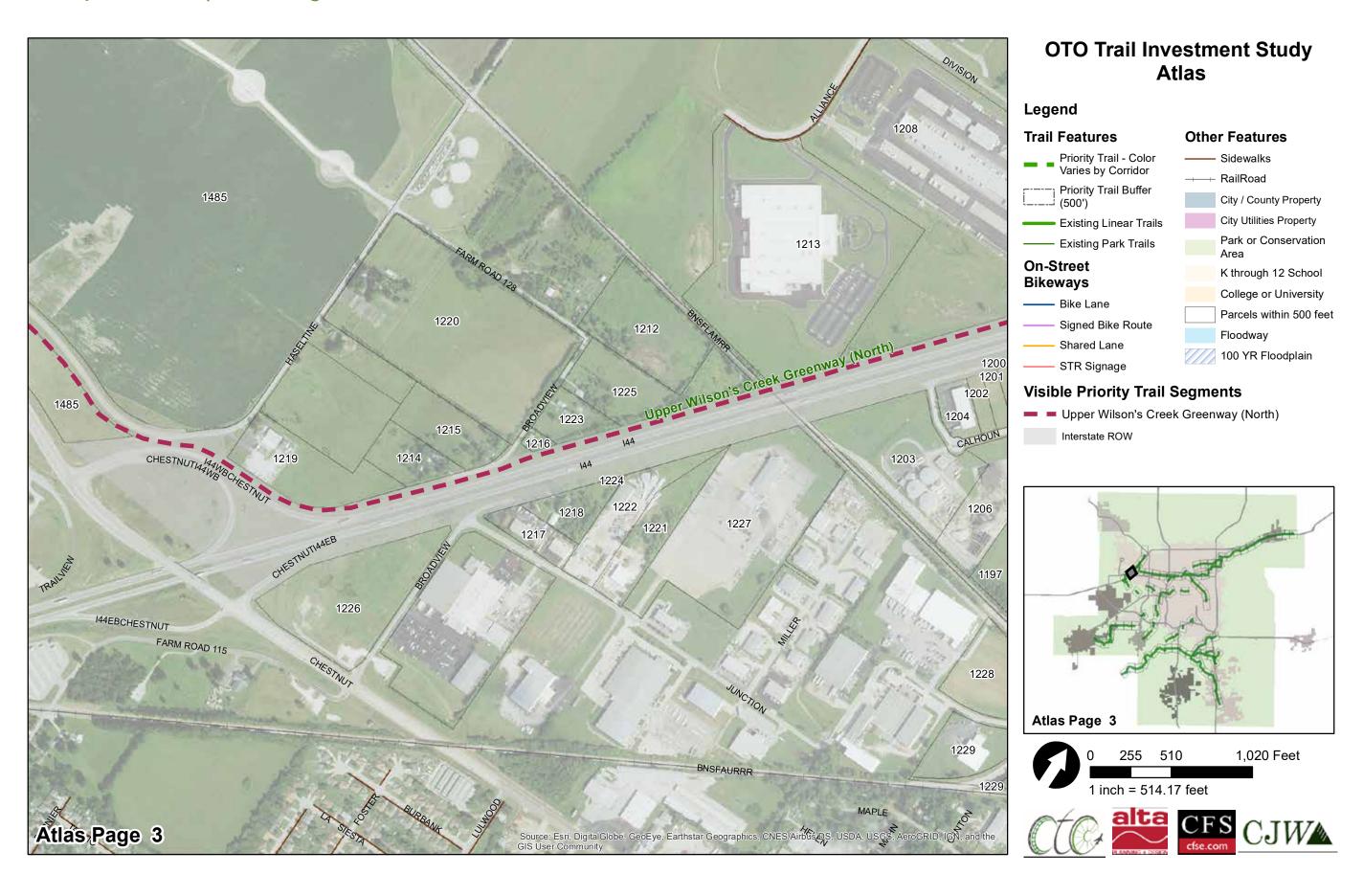
## **APPENDIX A: PROPERTY OWNERSHIP INFORMATION**

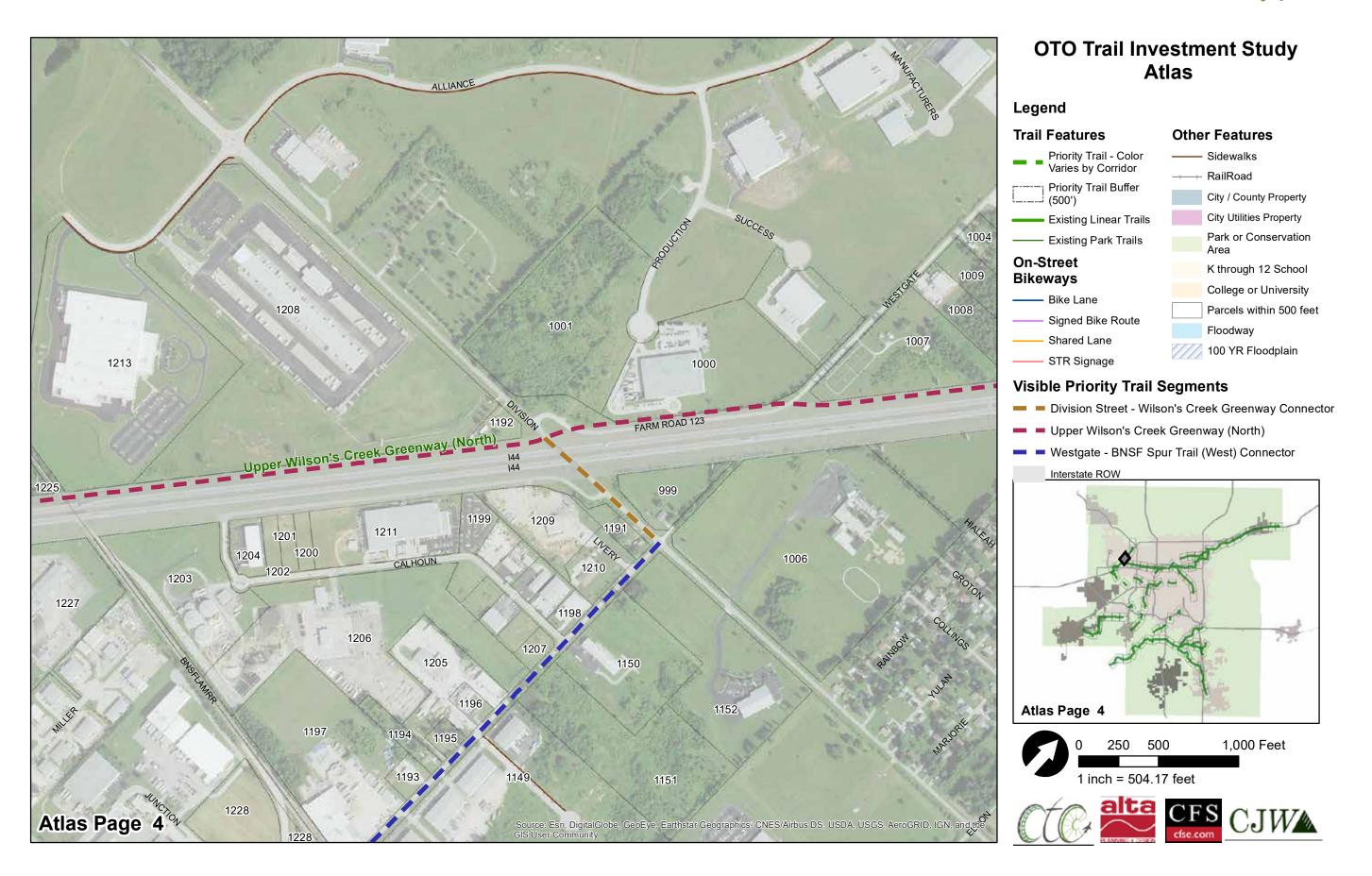
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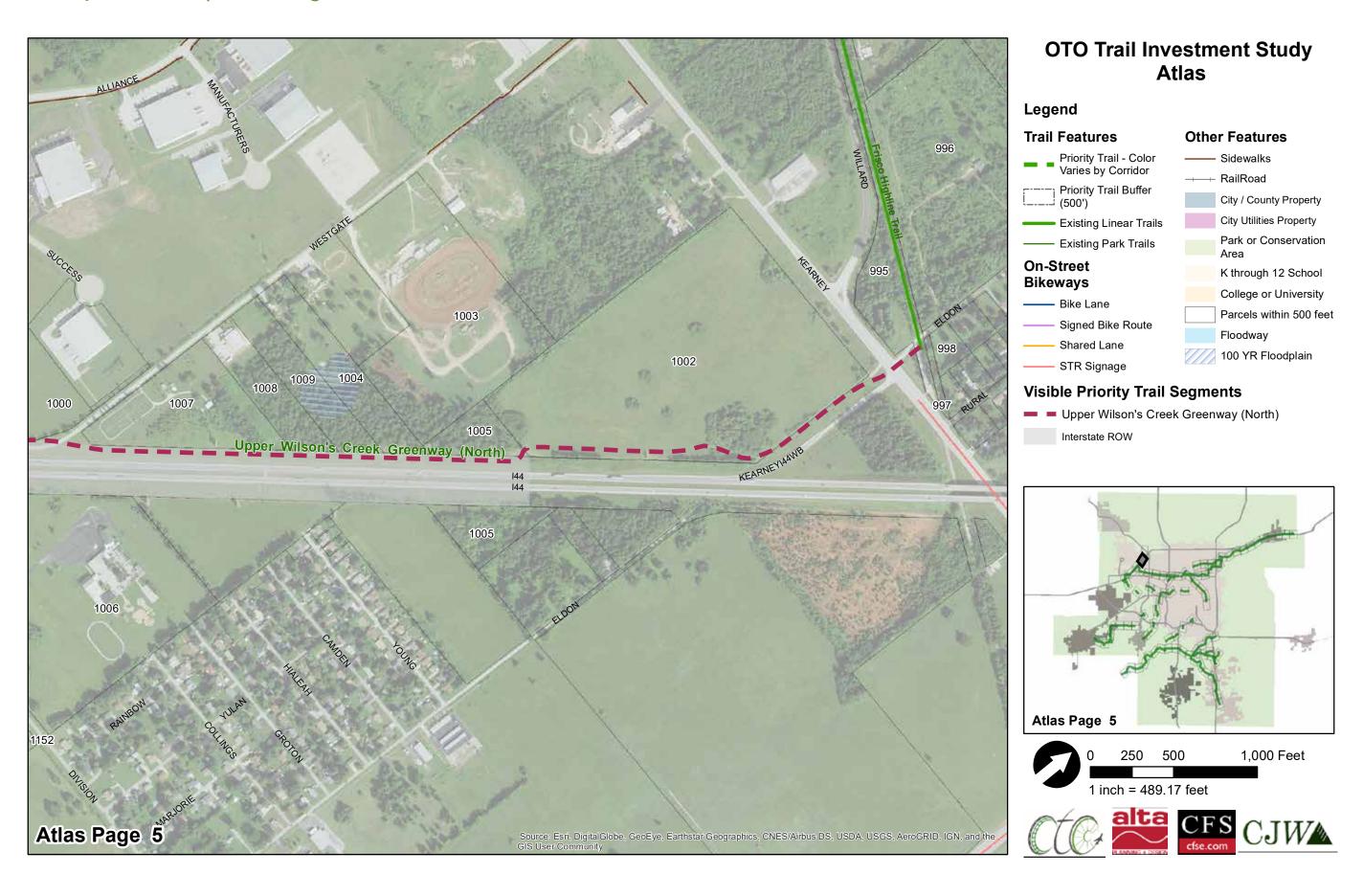
The maps on the following pages document property ownership, parcel information, and other key land use features and destinations along each of the original planned priority trail alignments. Following these maps is reference table of properties identified in the map series.



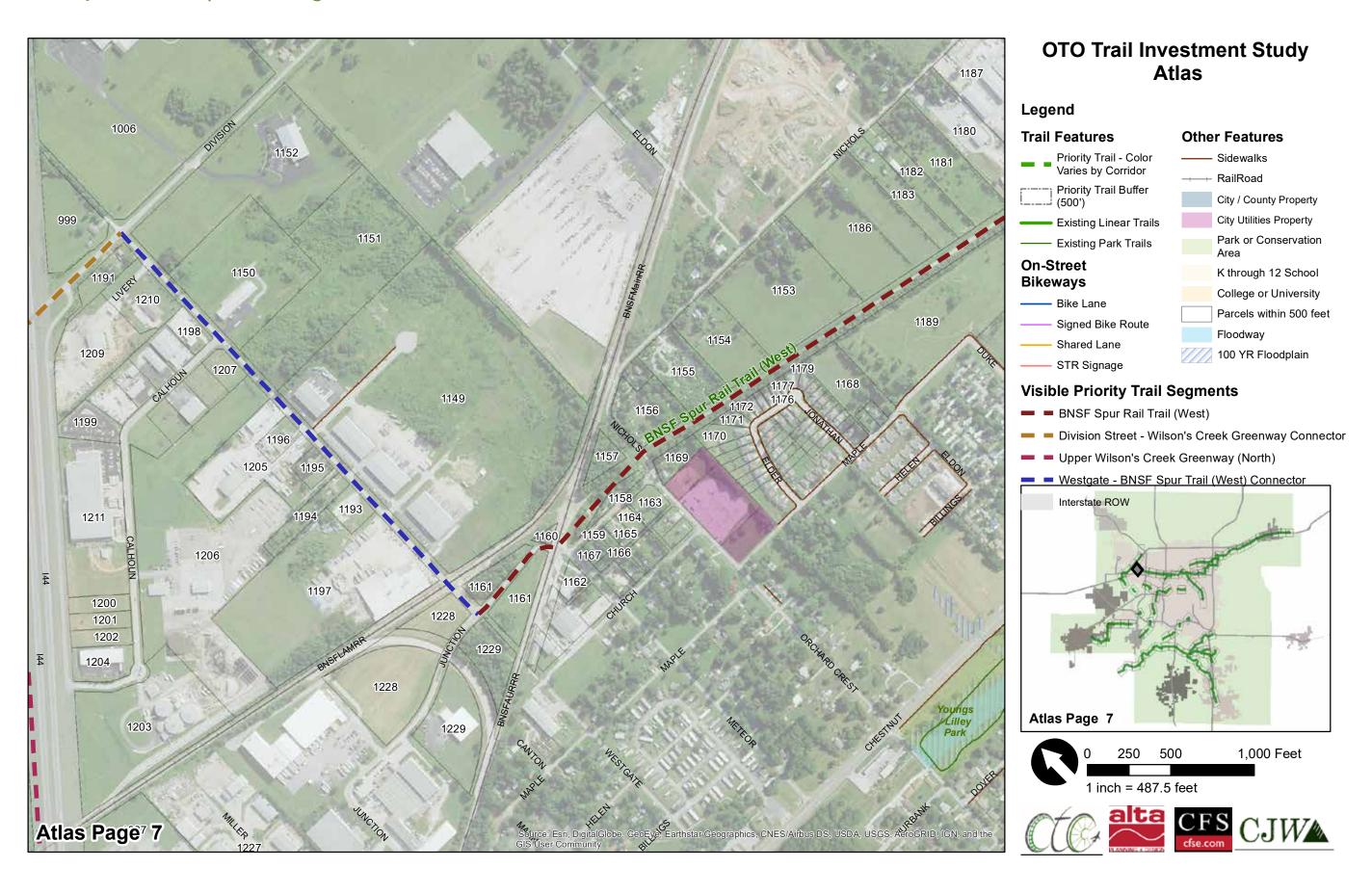


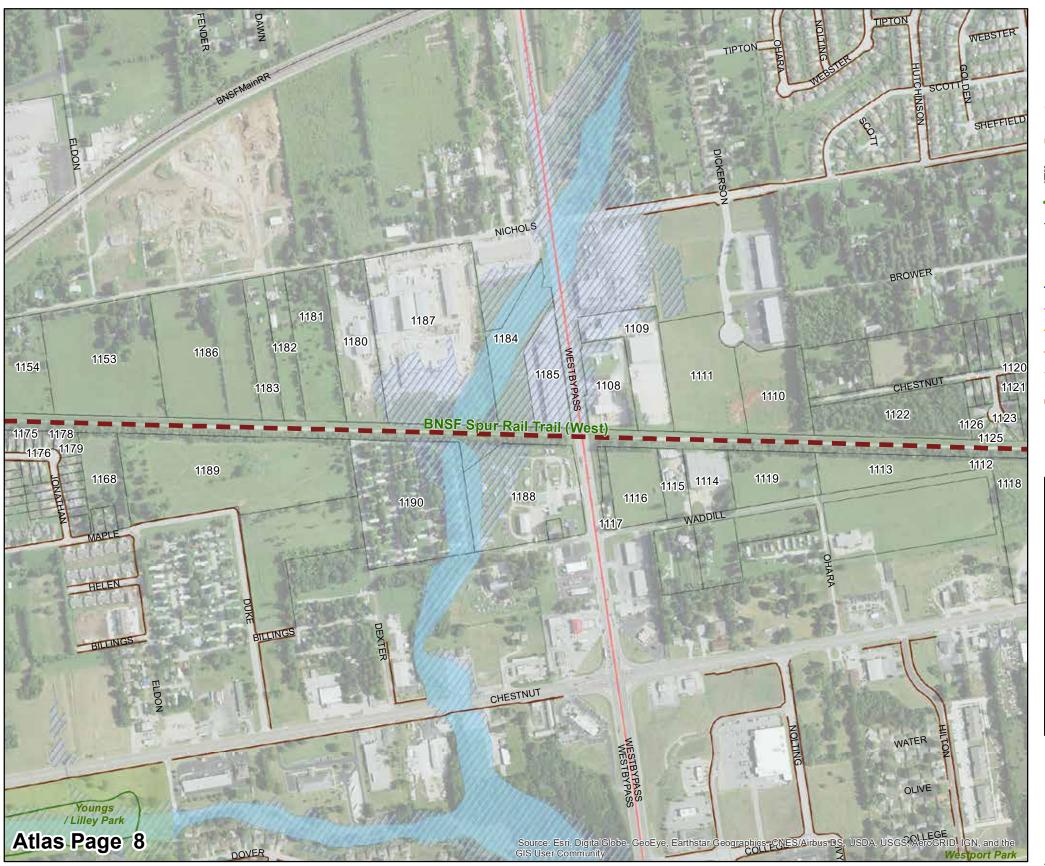




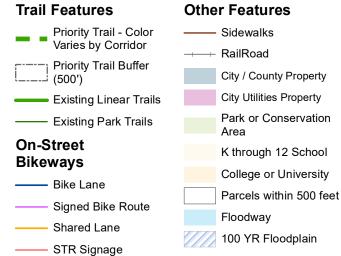






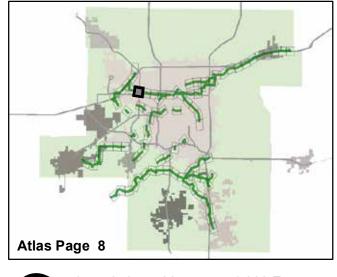


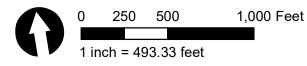
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#### **Visible Priority Trail Segments**

BNSF Spur Rail Trail (West)



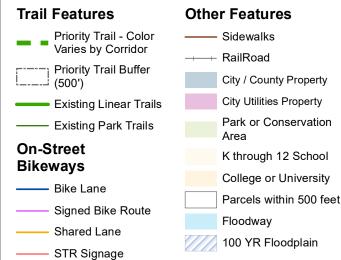






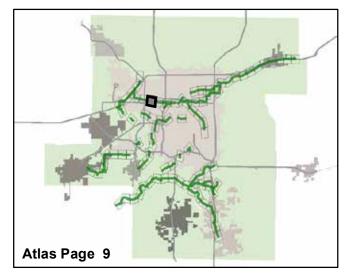


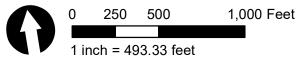
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#### **Visible Priority Trail Segments**

BNSF Spur Rail Trail (West)



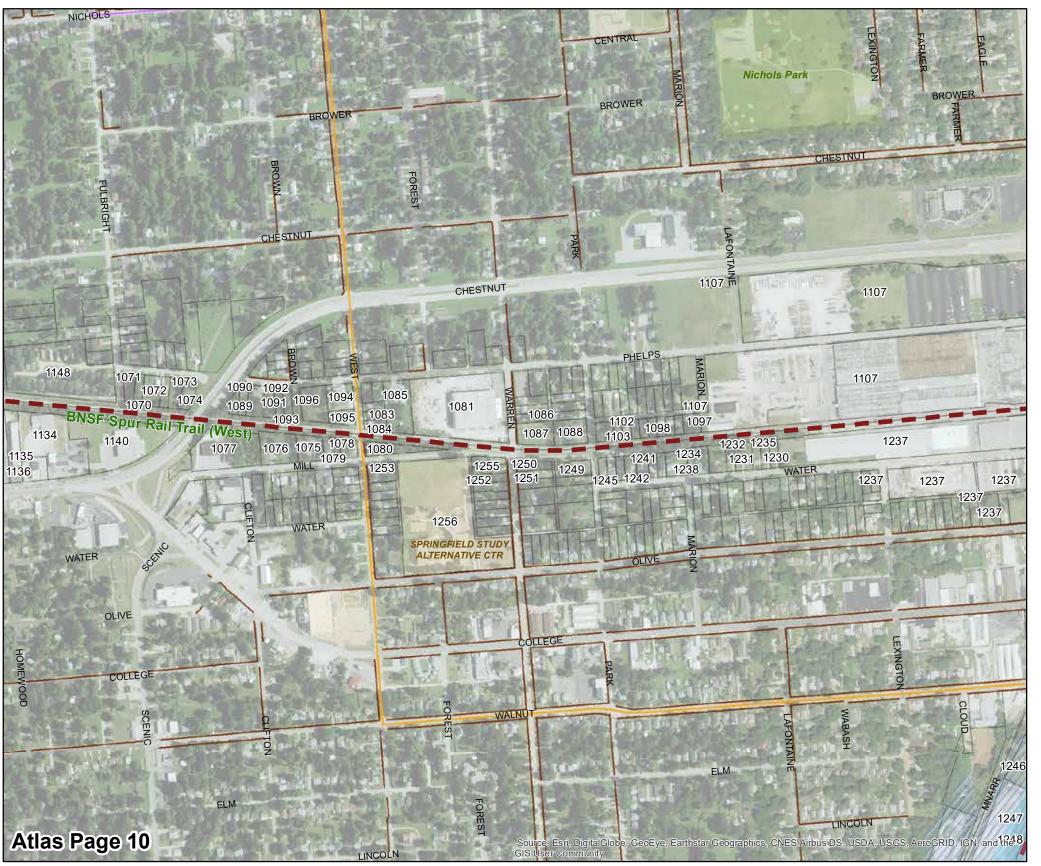




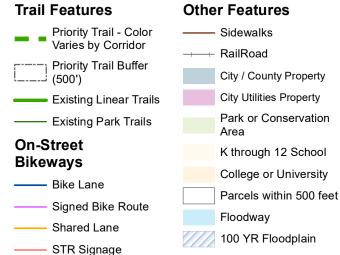




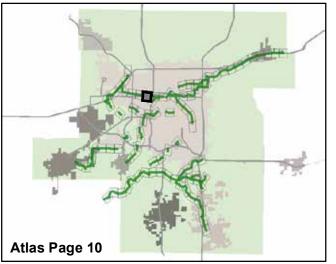


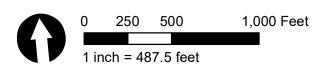


#### Legend



- BNSF Spur Rail Trail (West)
- Jordan Creek Greenway (West)

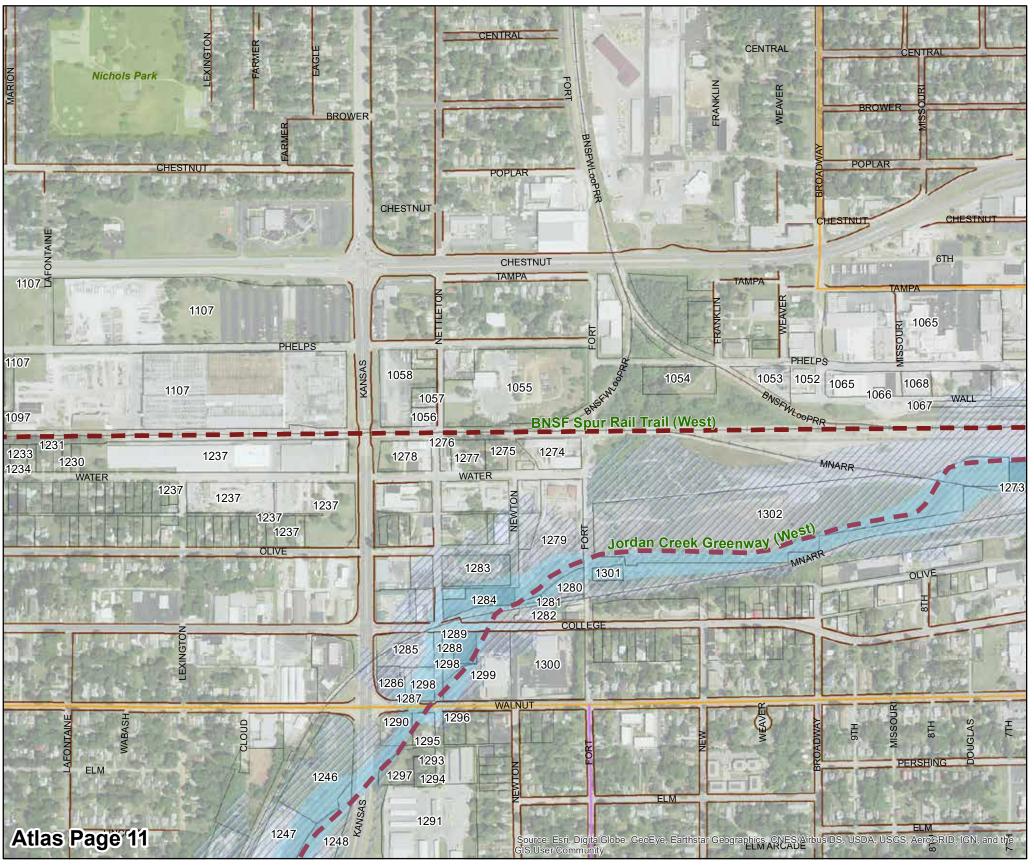








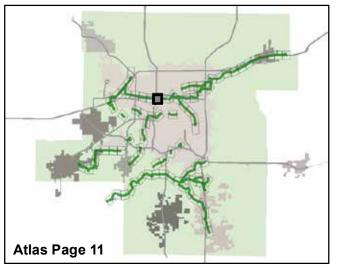


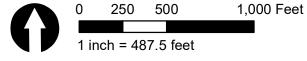


#### Legend



- BNSF Spur Rail Trail (West)
- Jordan Creek Greenway (West)



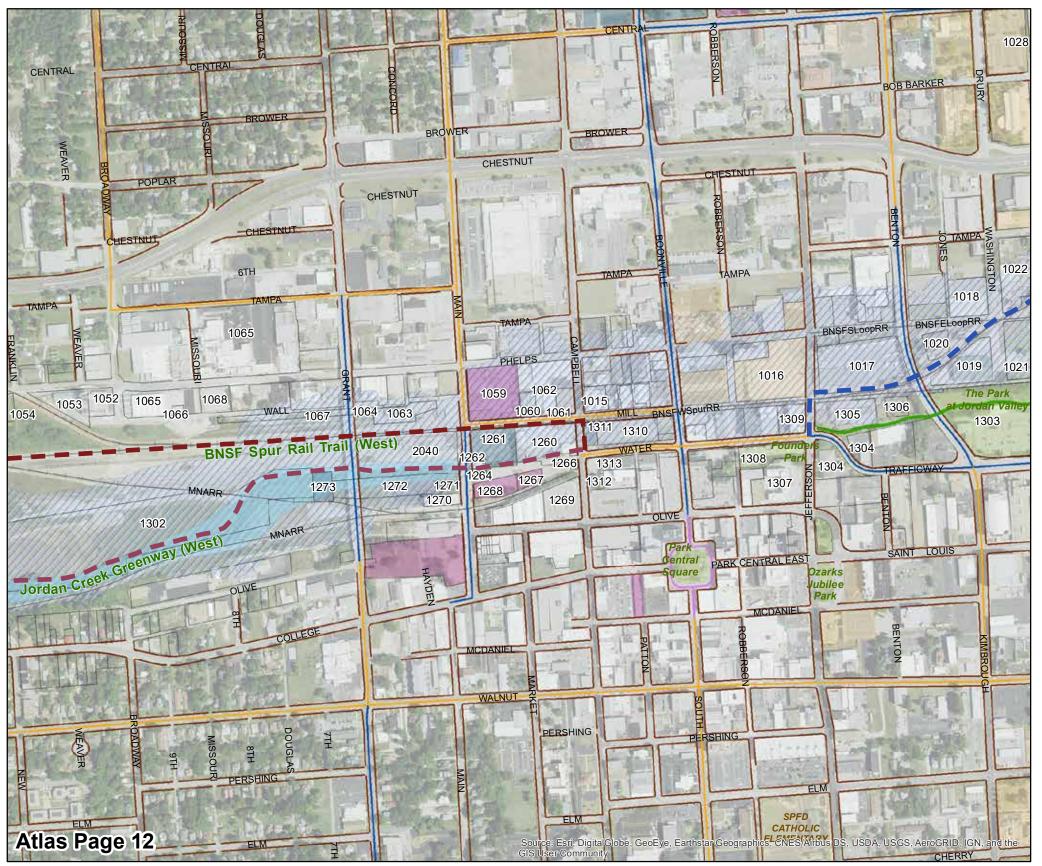




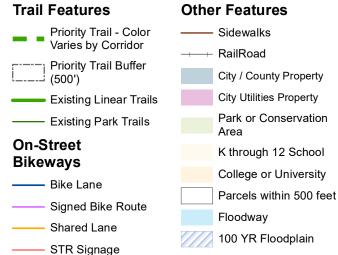




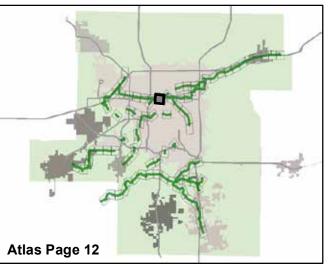


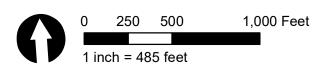


#### Legend



- BNSF Spur Rail Trail (West)
- Jordan Creek Greenway (Central)
- Jordan Creek Greenway (West)

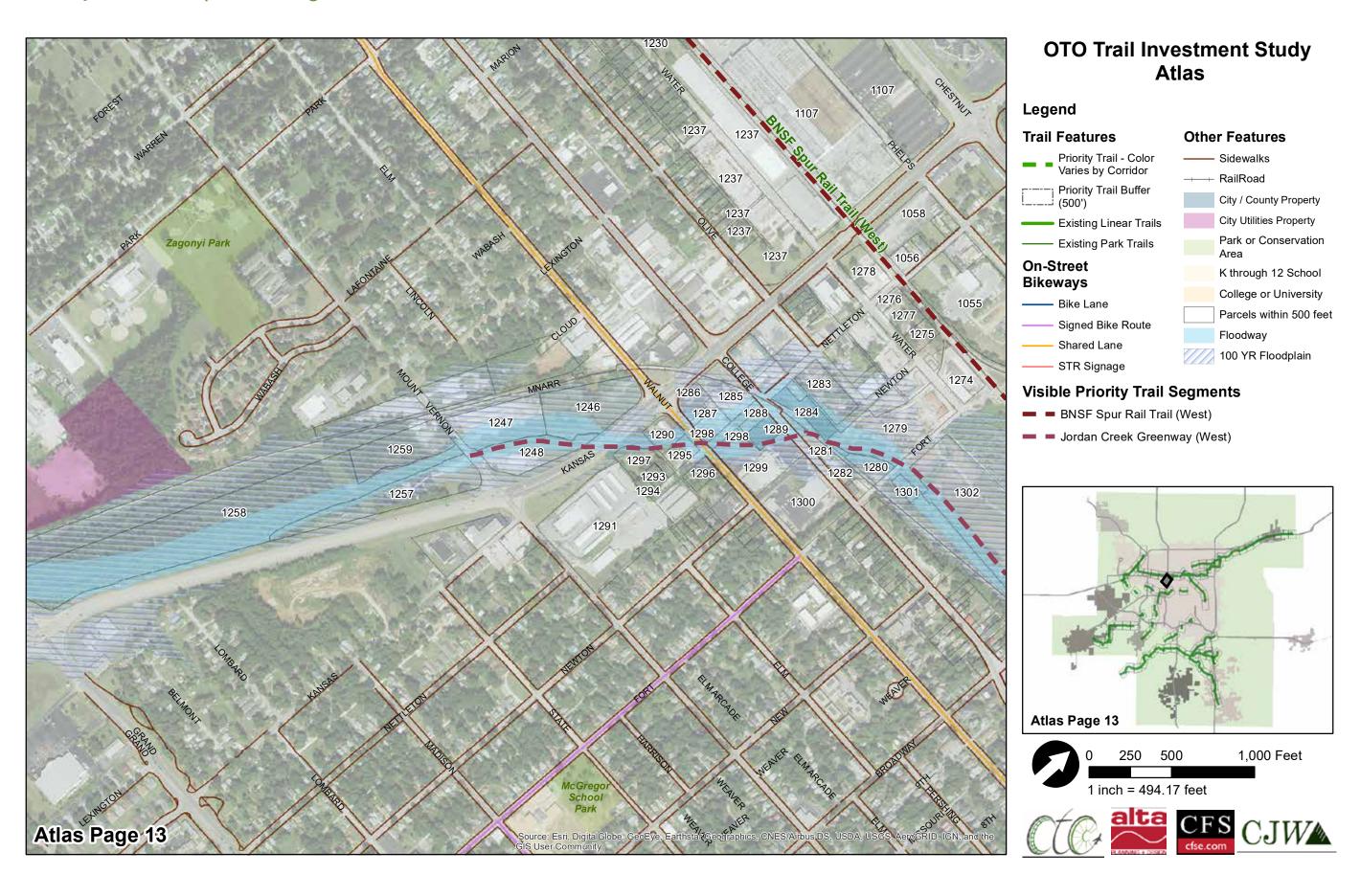


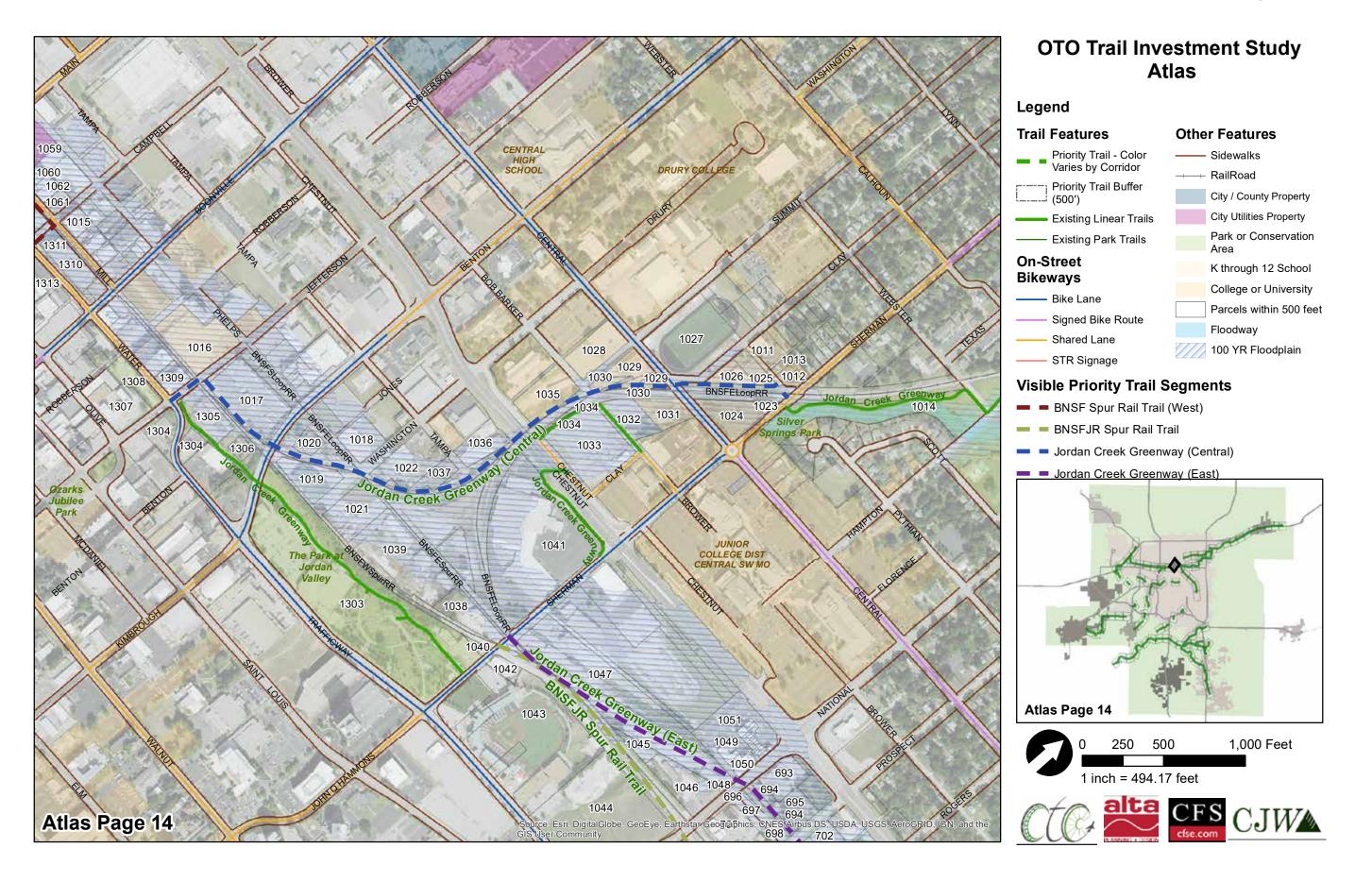


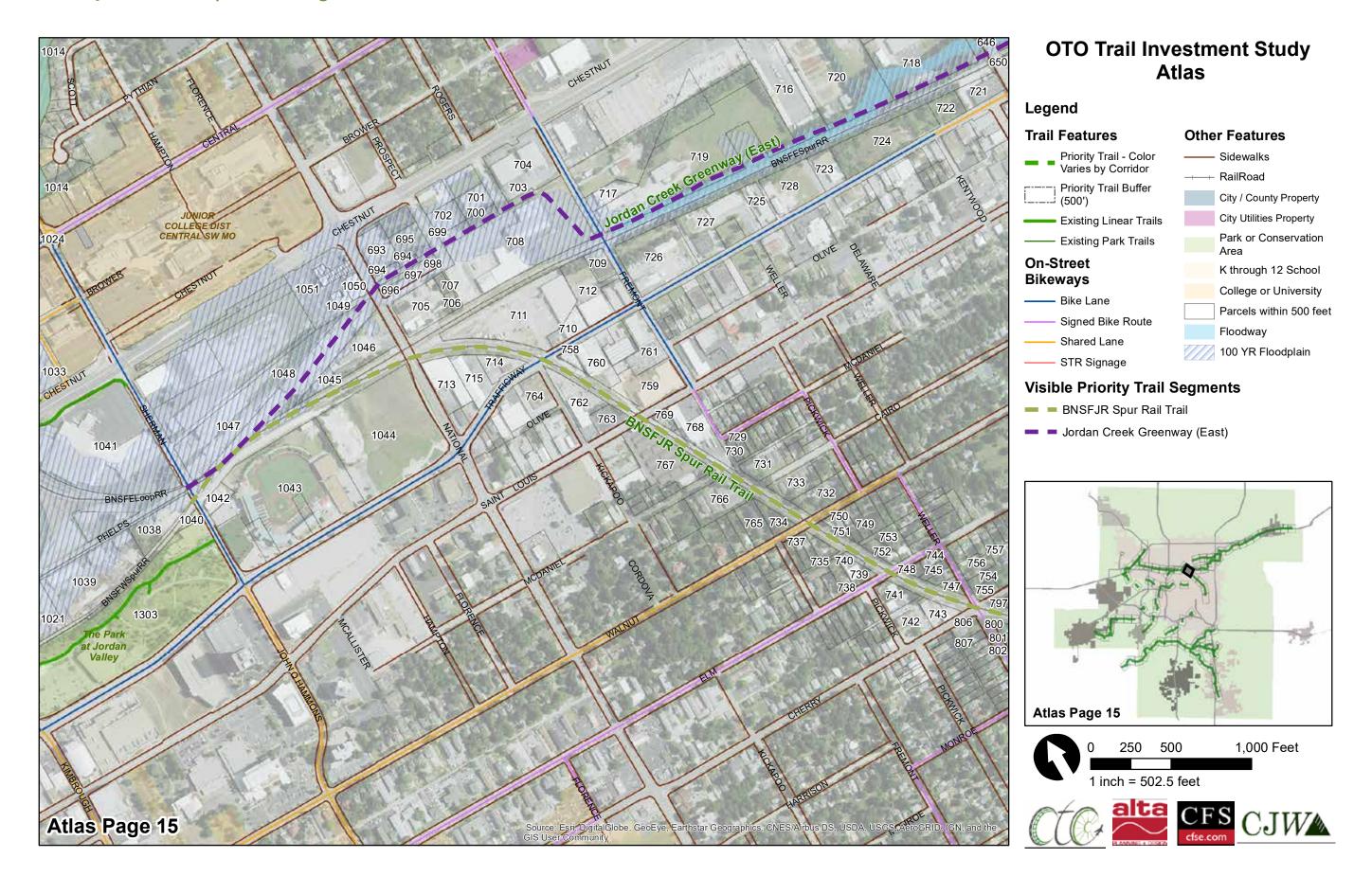


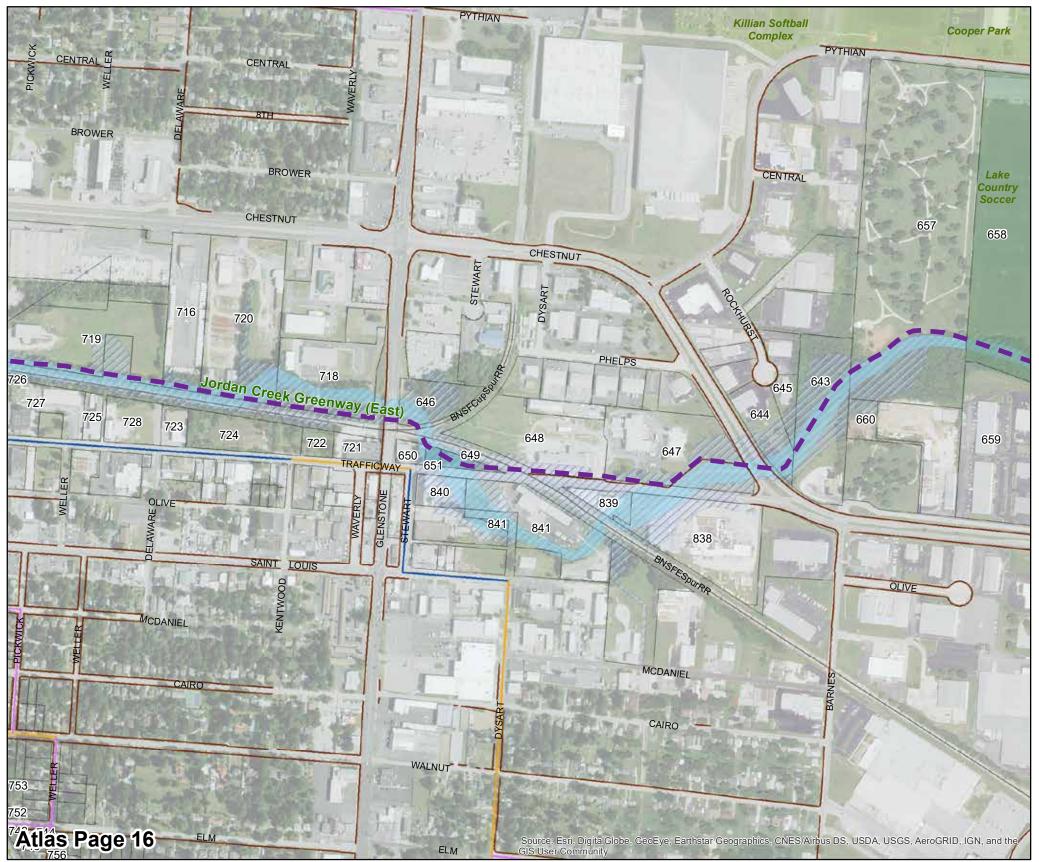








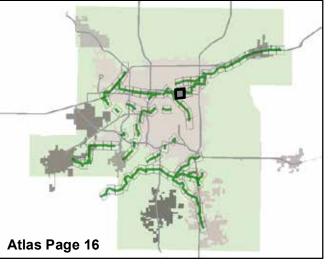


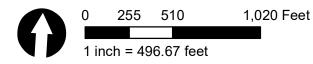


#### Legend



- BNSFJR Spur Rail Trail
- Jordan Creek Greenway (East)

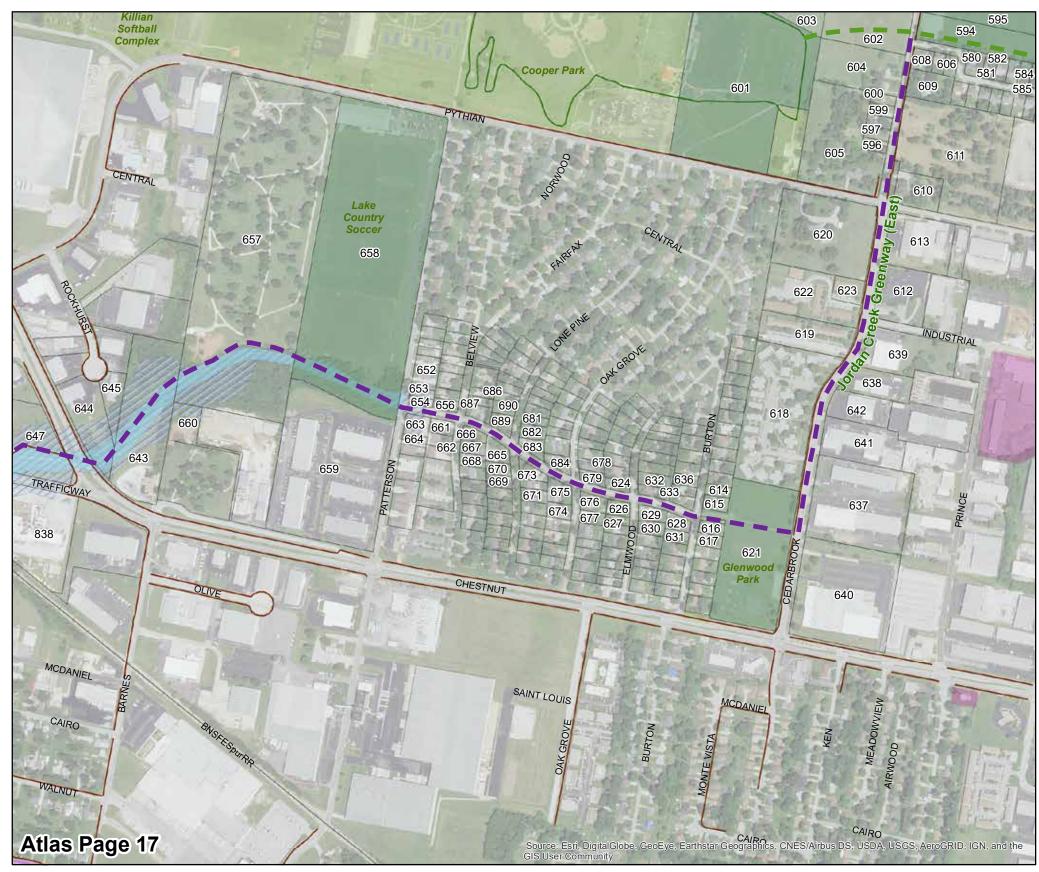




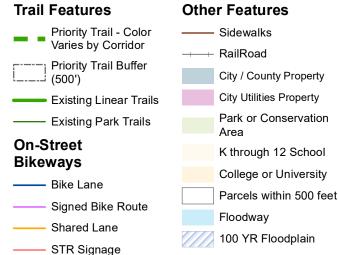




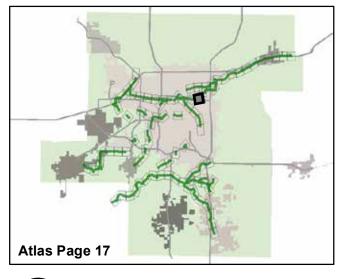


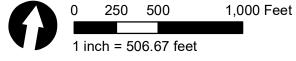


#### Legend



- Division Street Cooper Park Connector
- Jordan Creek Greenway (East)

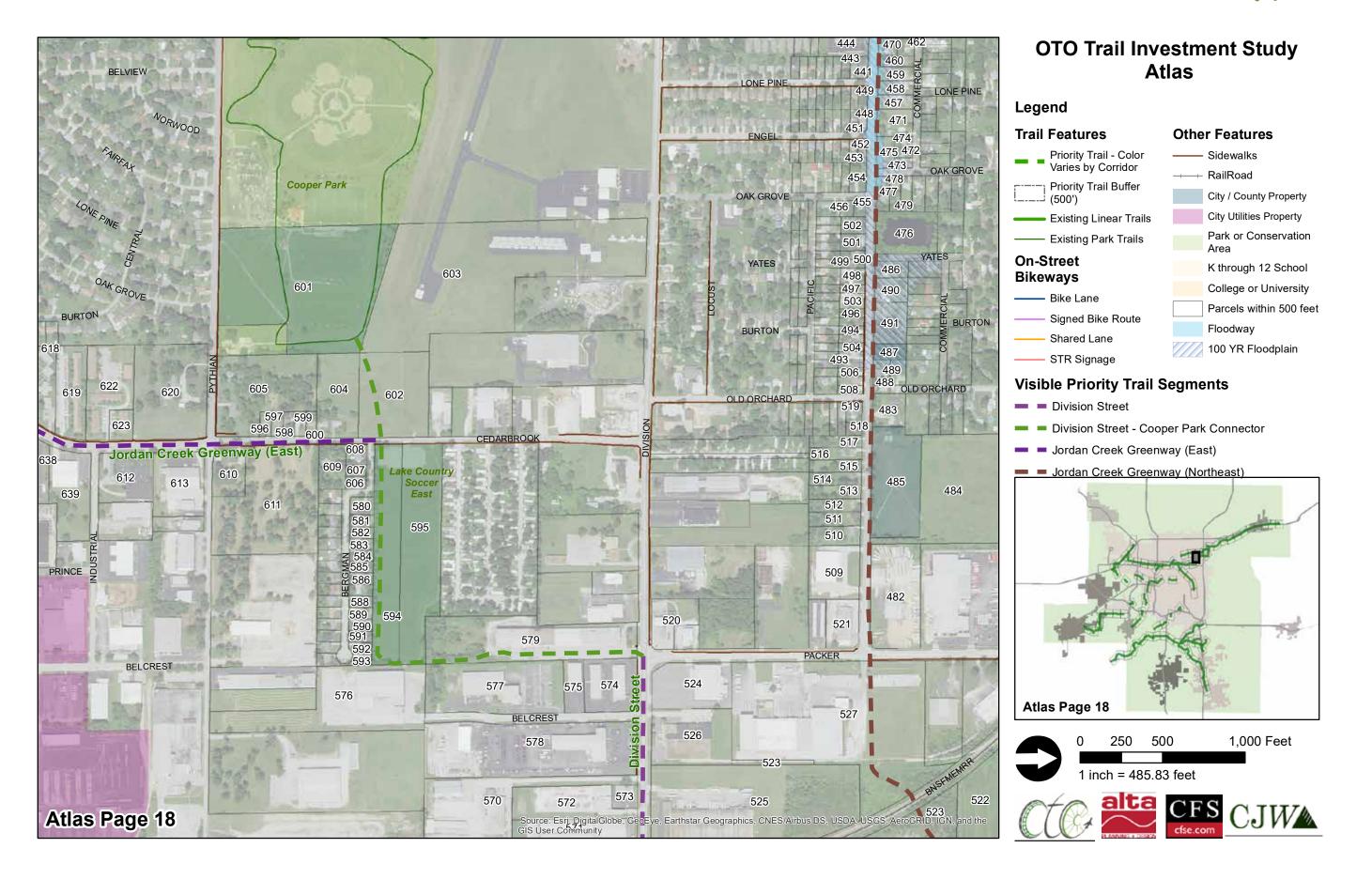


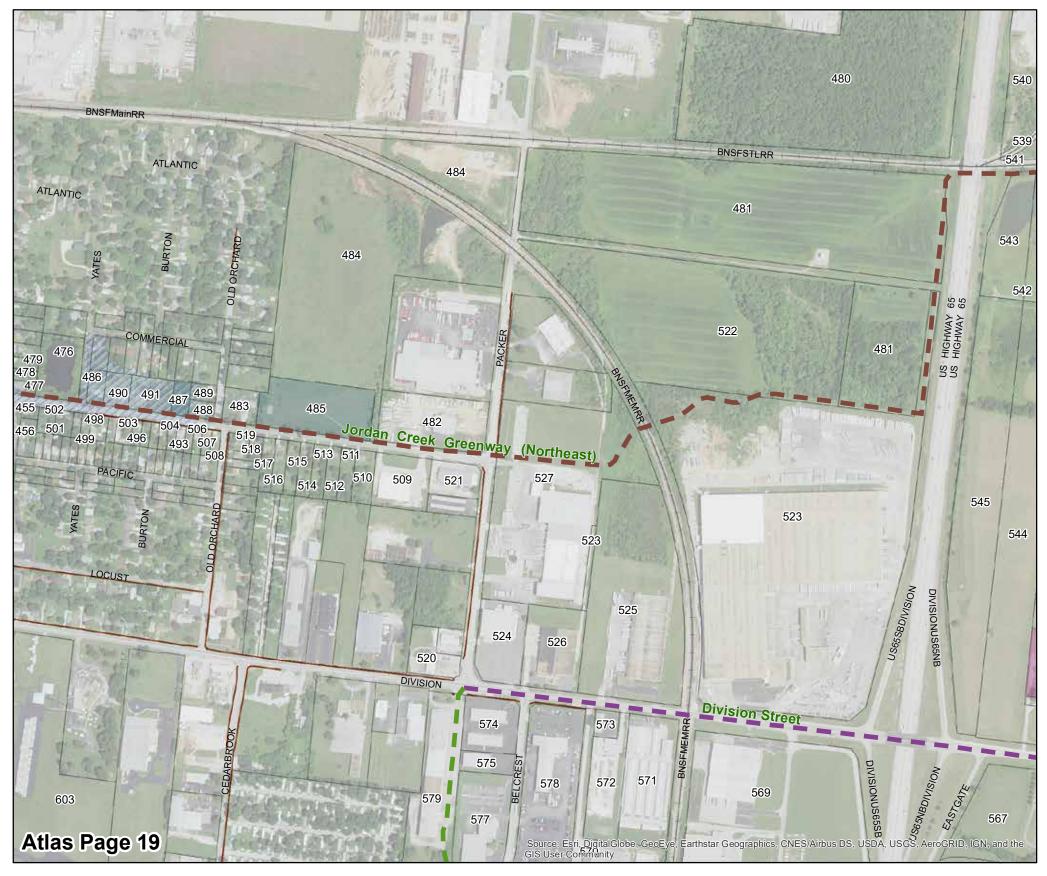




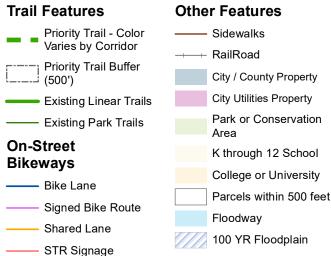




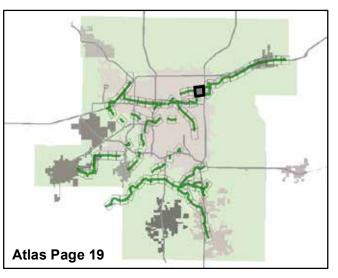


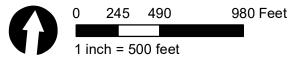


#### Legend



- Division Street
- Division Street Cooper Park Connector
- Jordan Creek Greenway (Northeast)





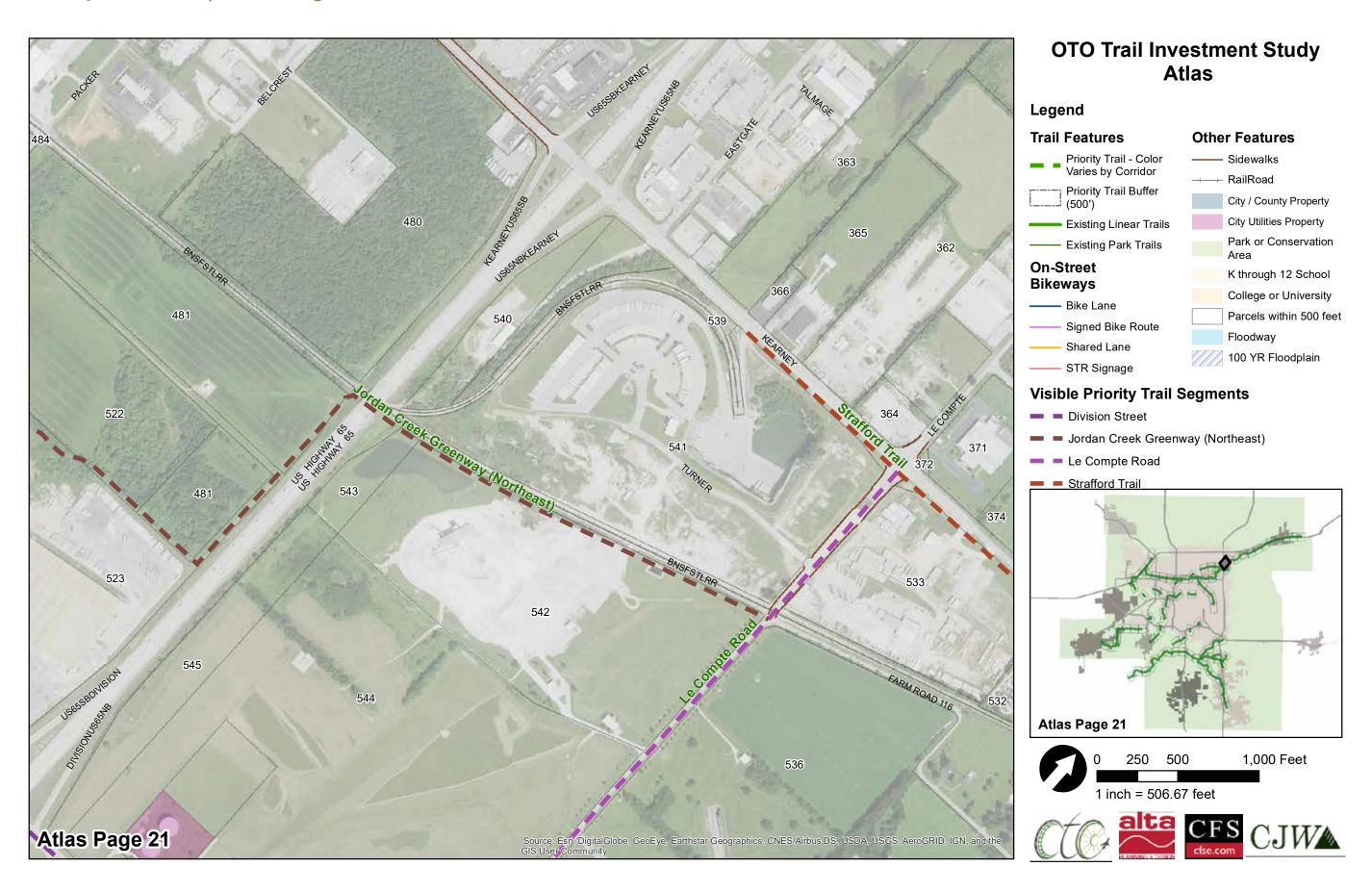




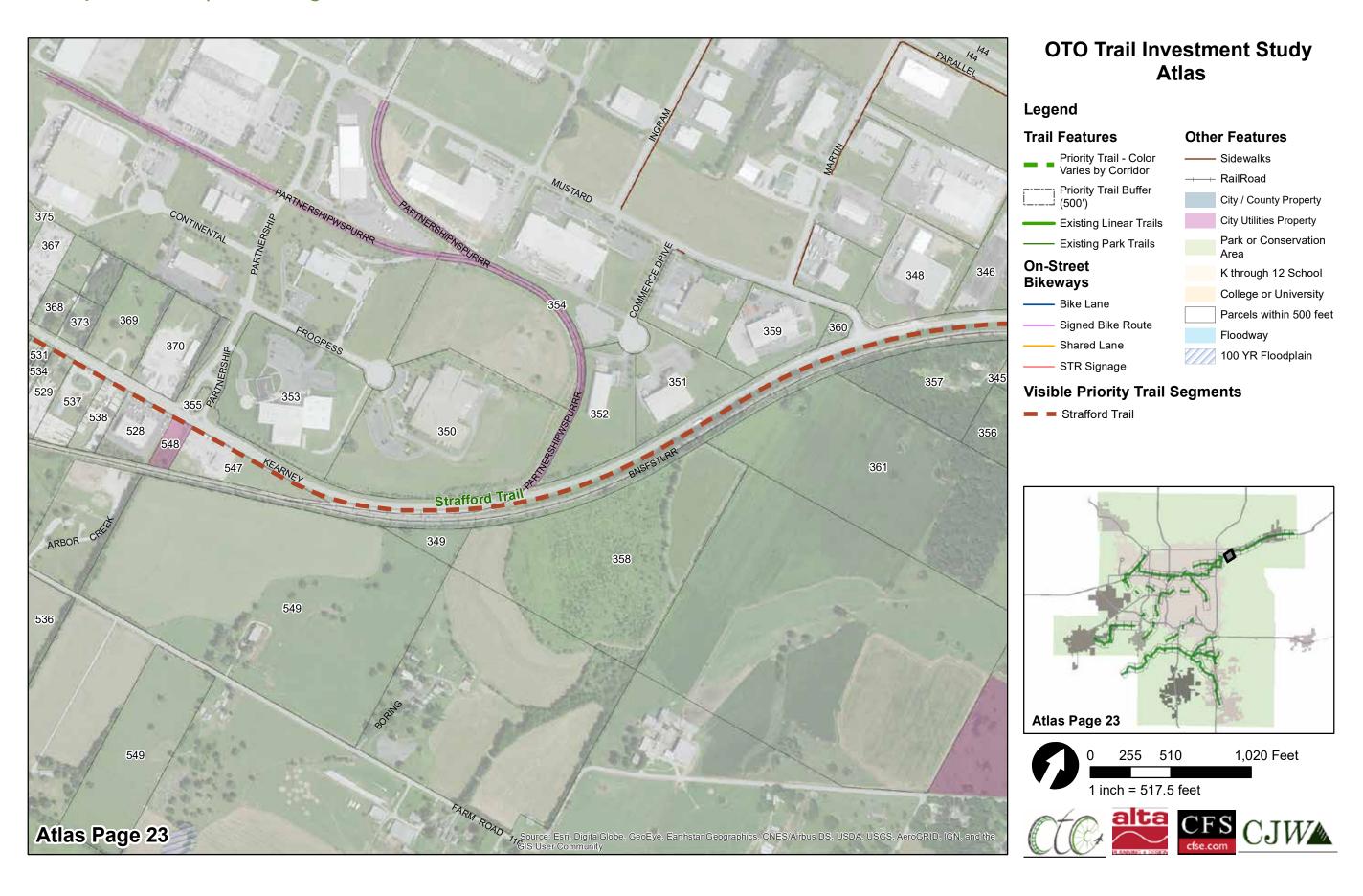


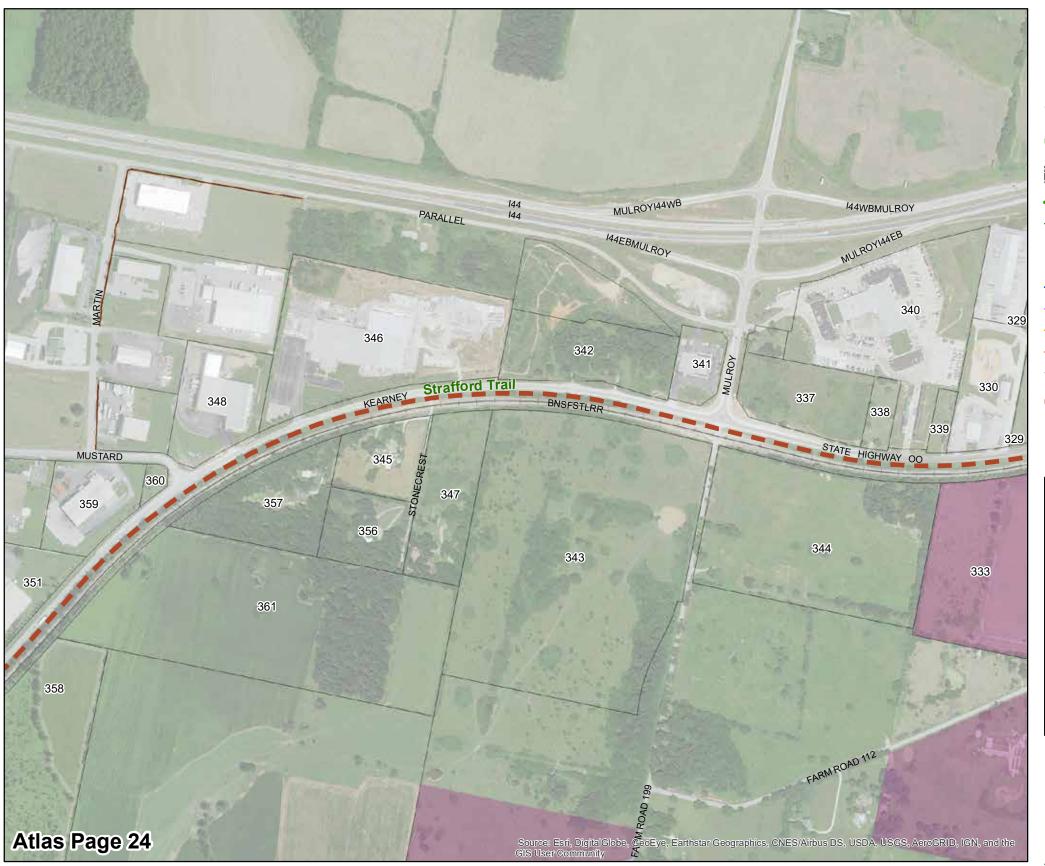




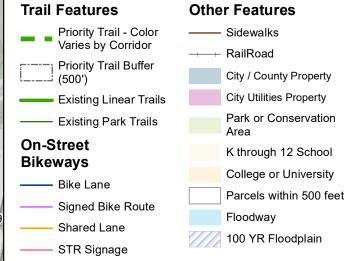






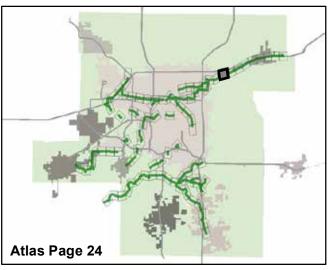


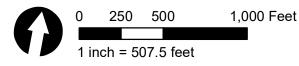
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#### **Visible Priority Trail Segments**

Strafford Trail

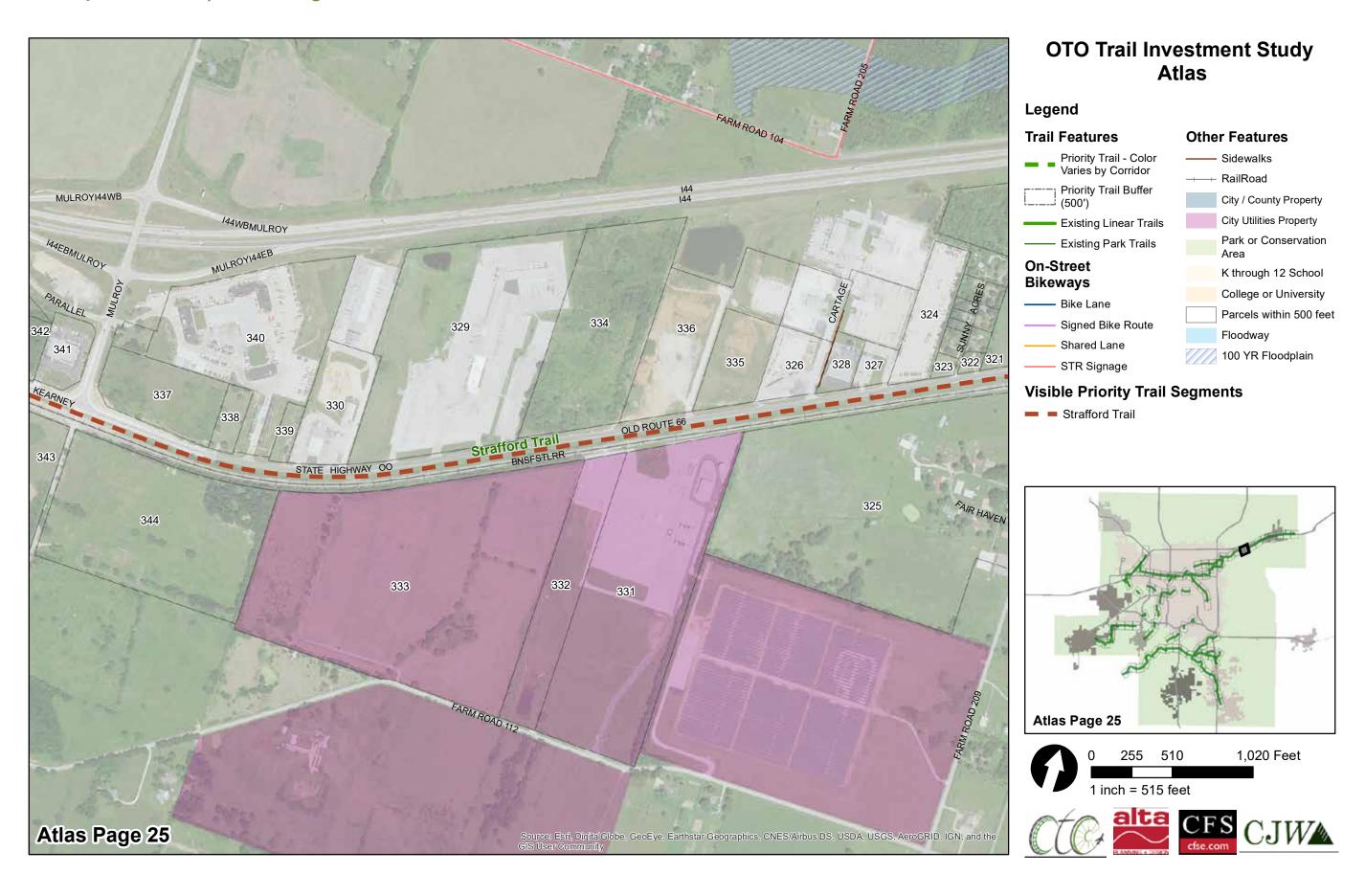


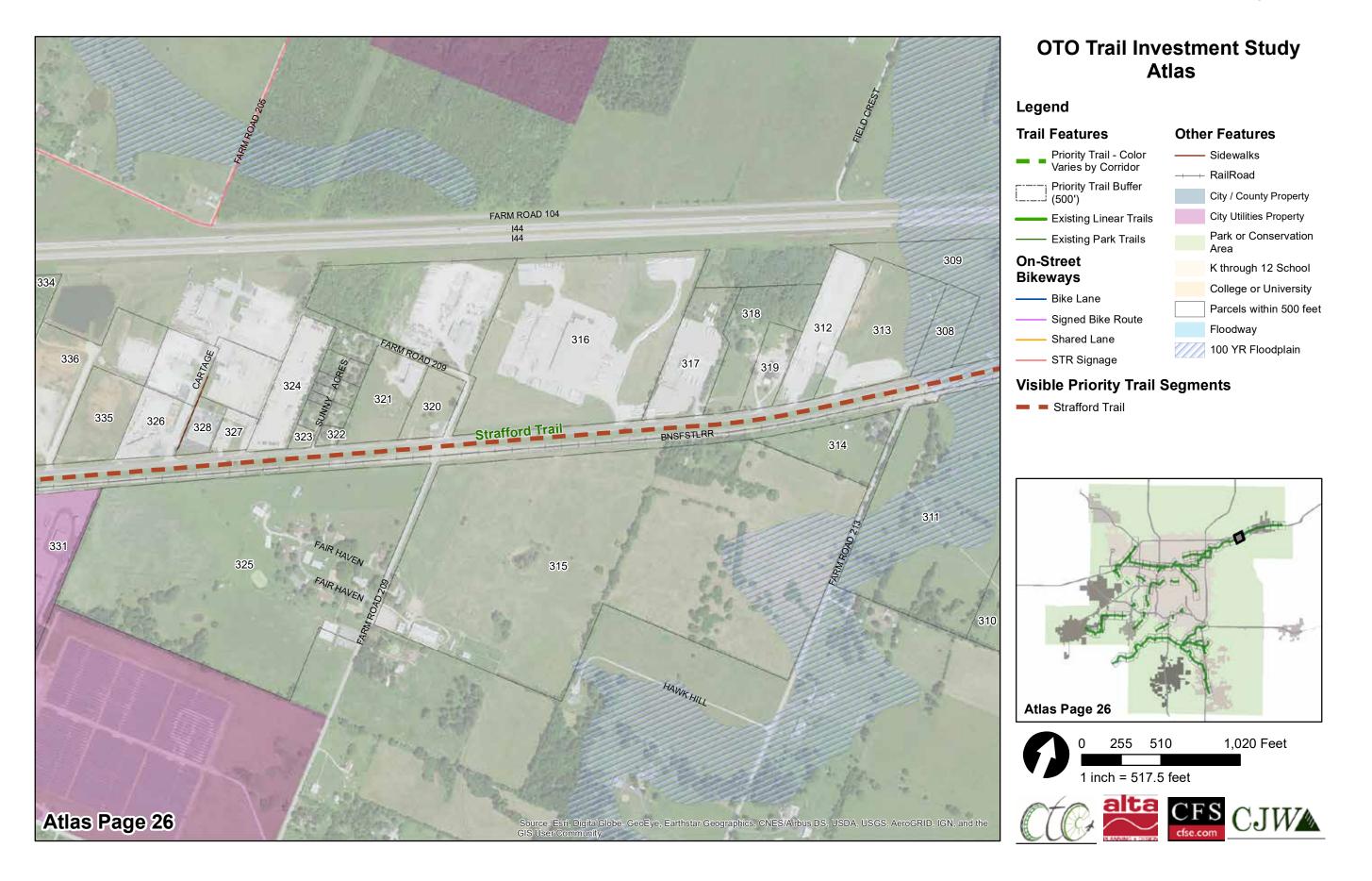


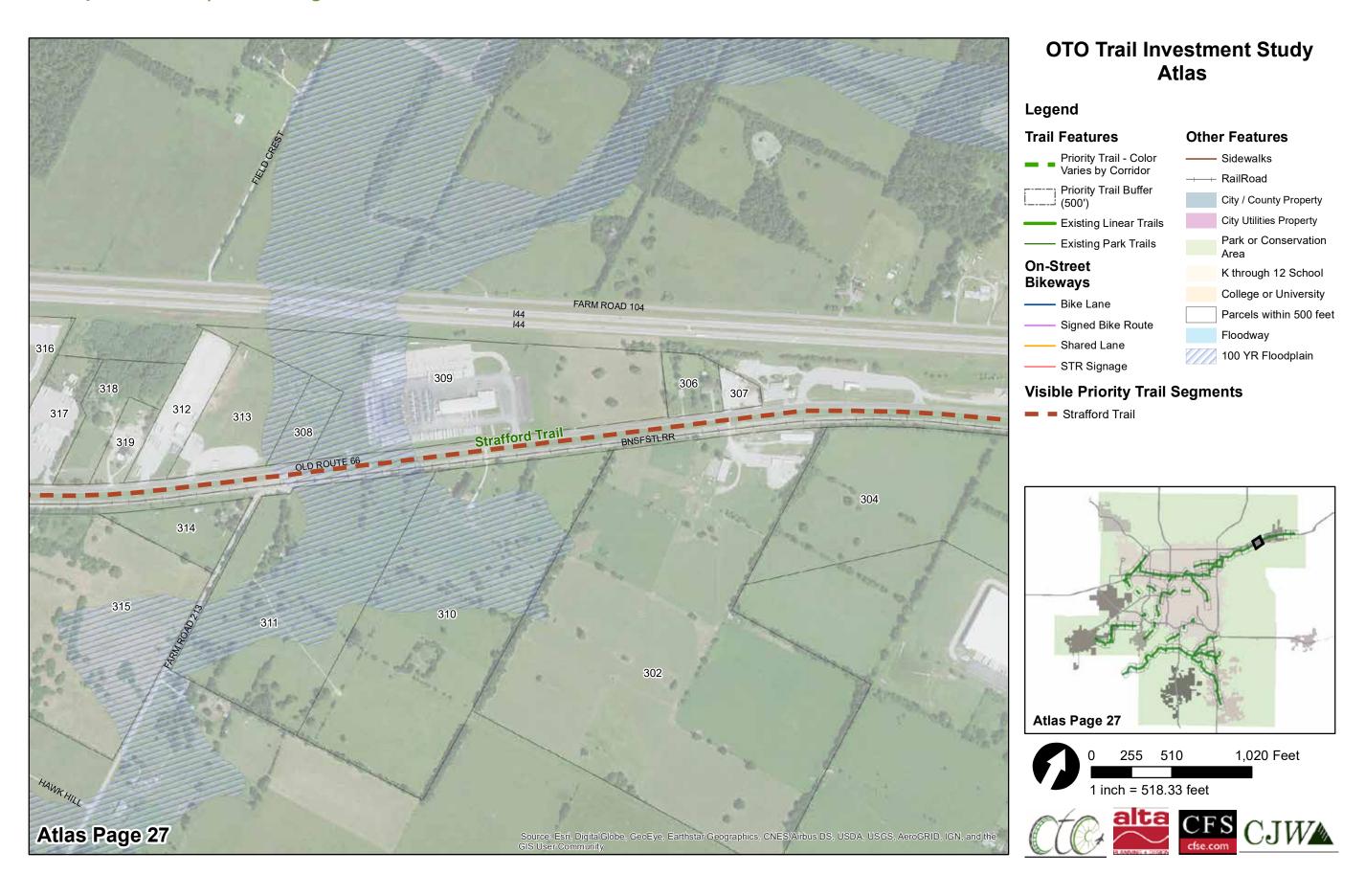


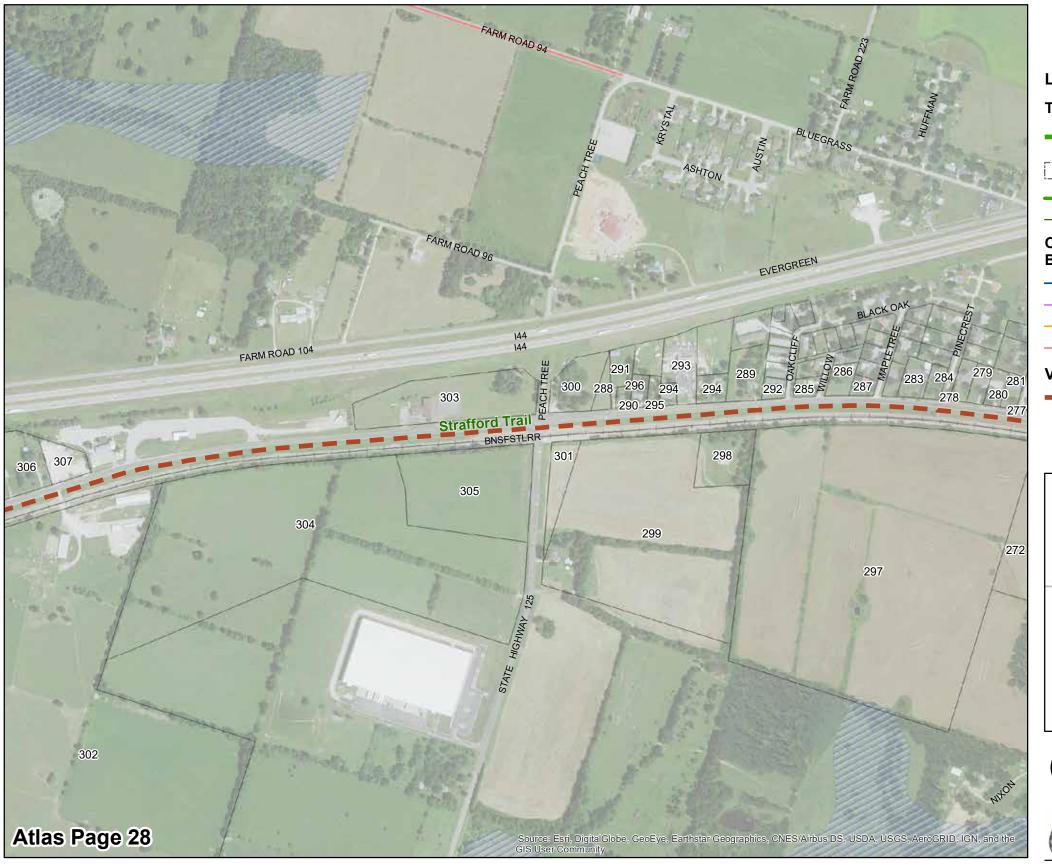




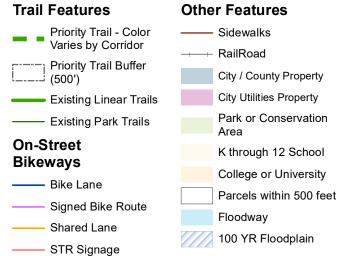






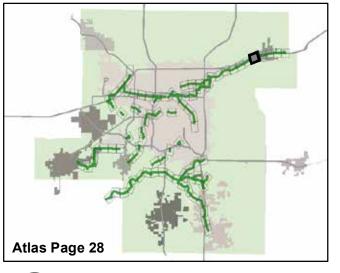


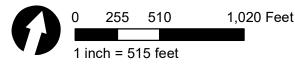
#### Legend



#### **Visible Priority Trail Segments**

Strafford Trail

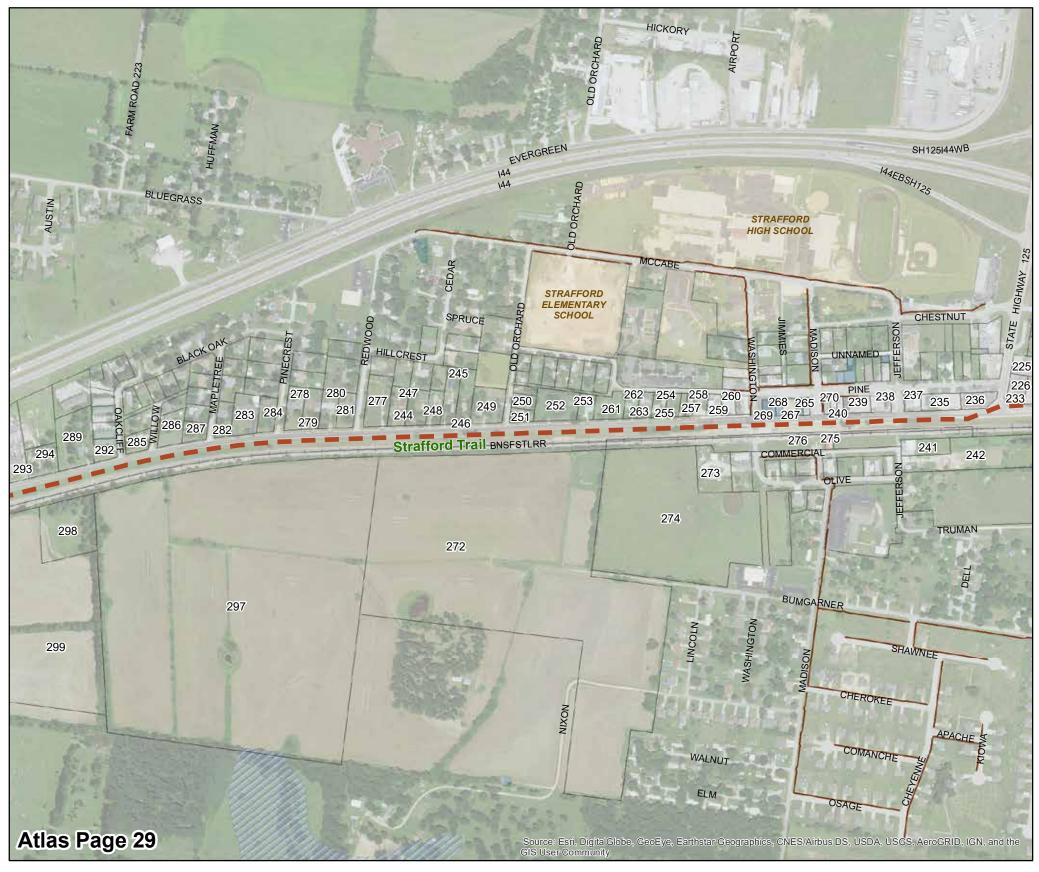










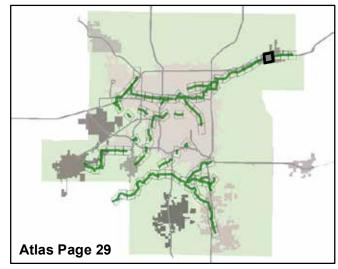


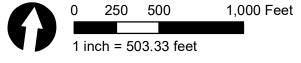
#### Legend



#### **Visible Priority Trail Segments**

Strafford Trail

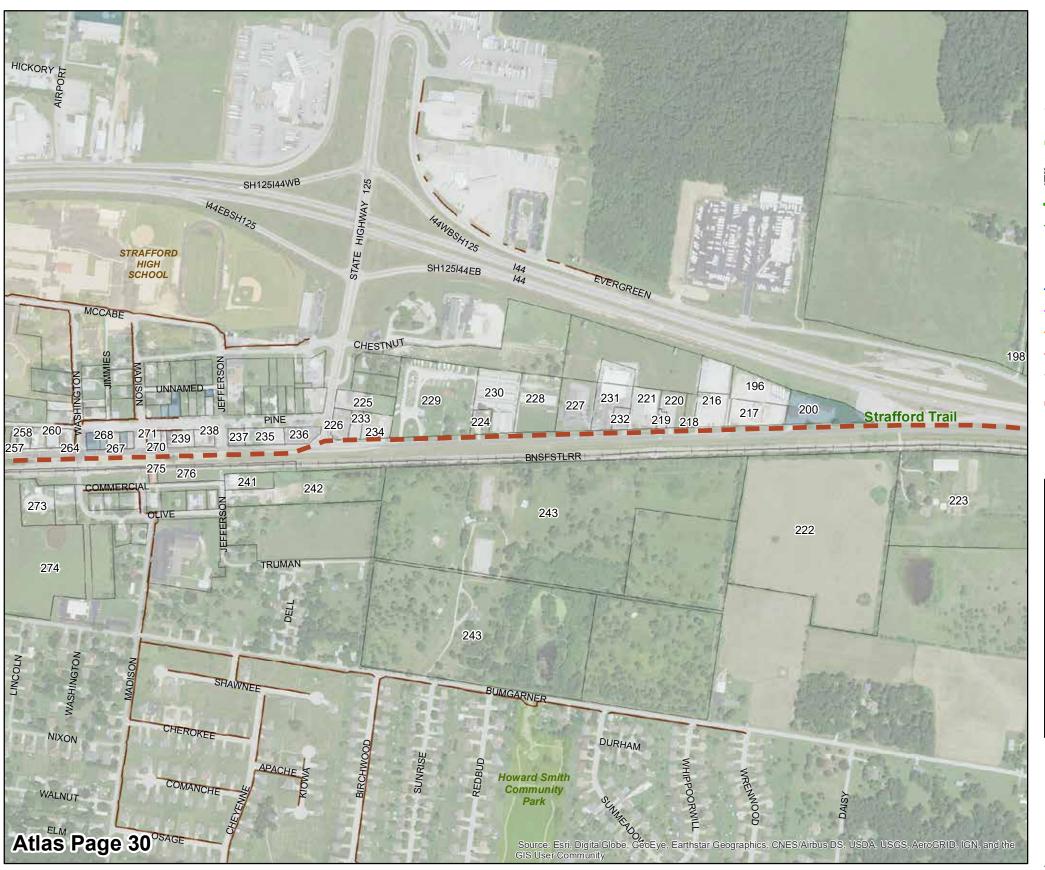




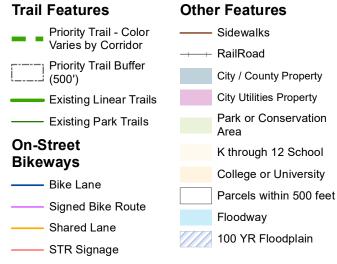






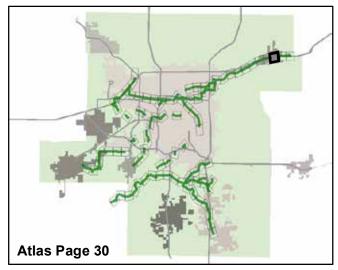


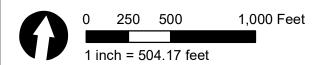
## Legend



# **Visible Priority Trail Segments**

Strafford Trail

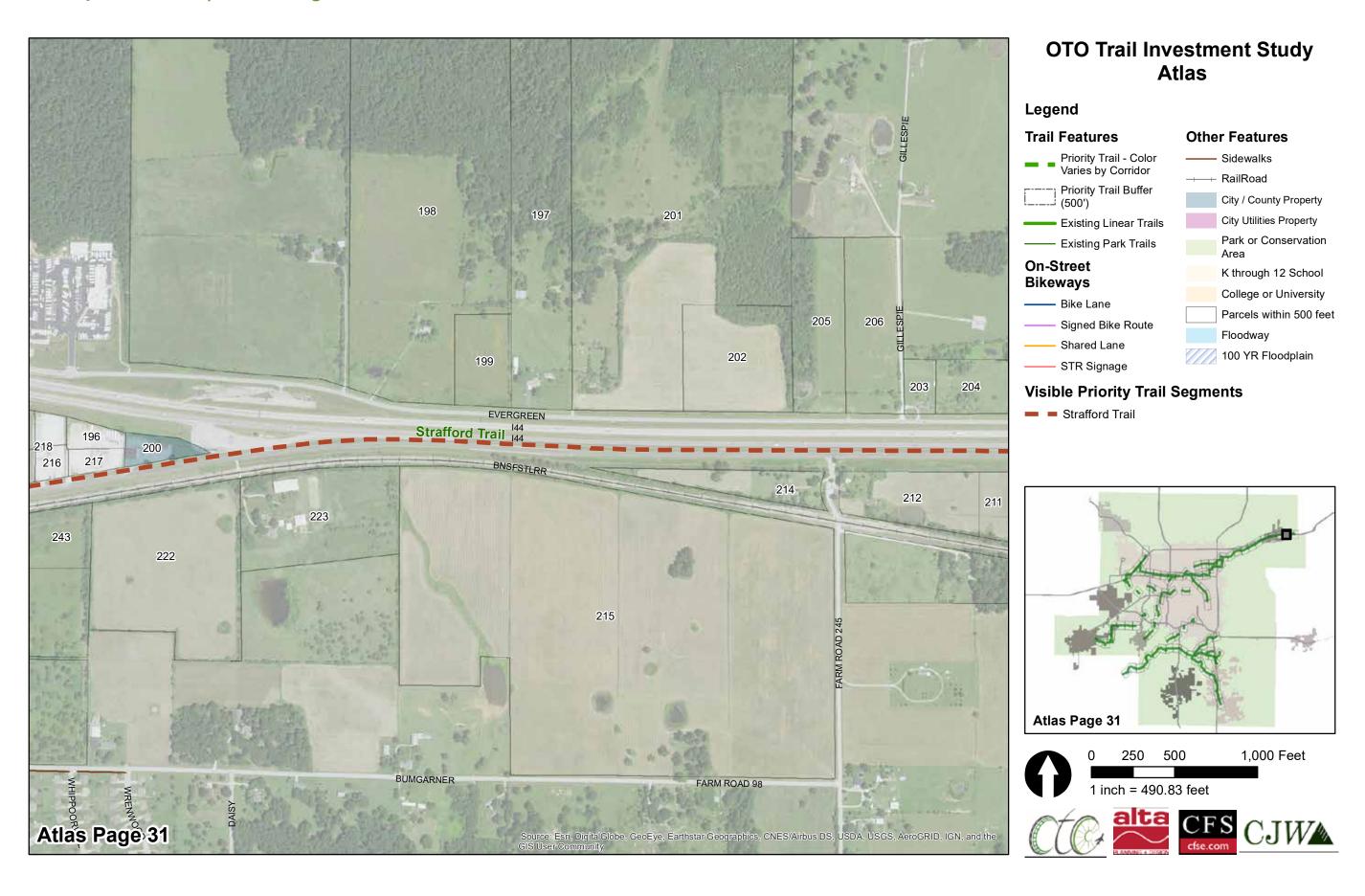


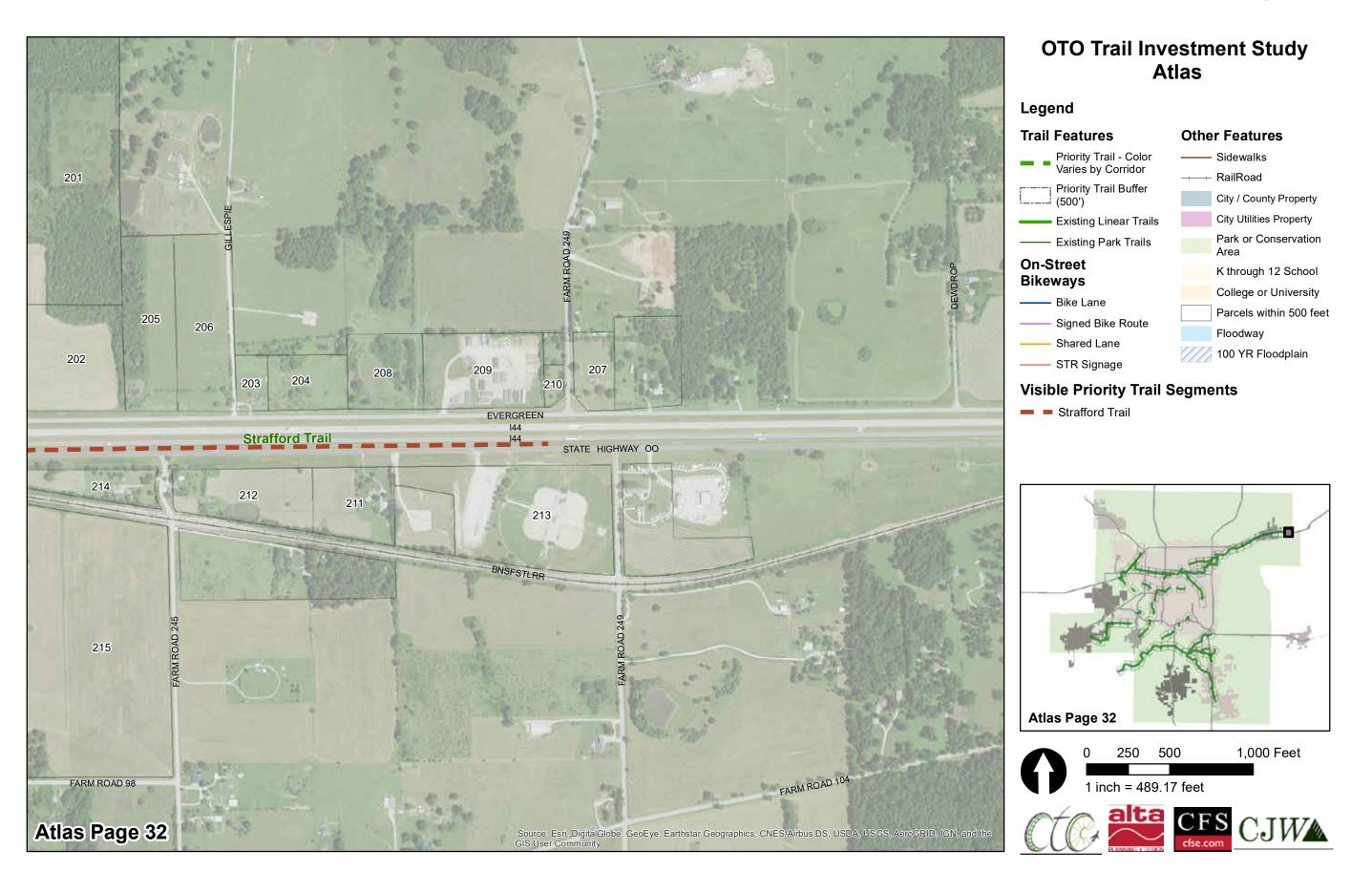


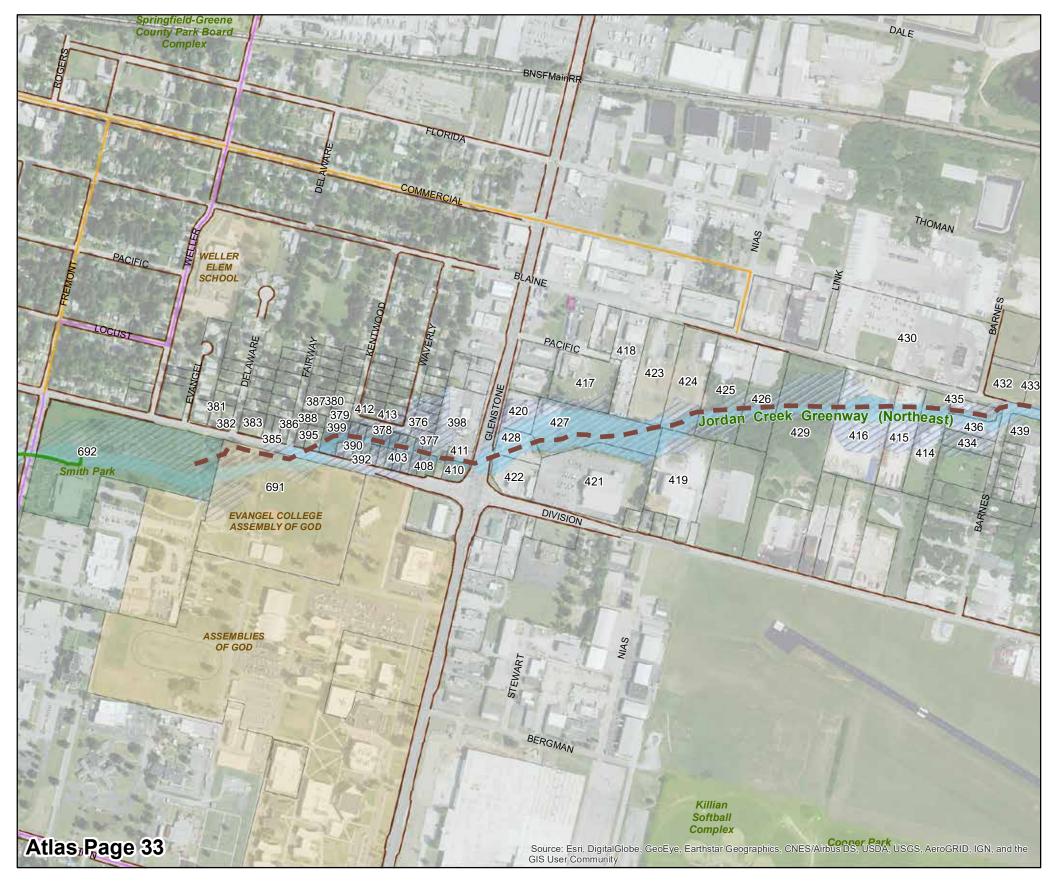




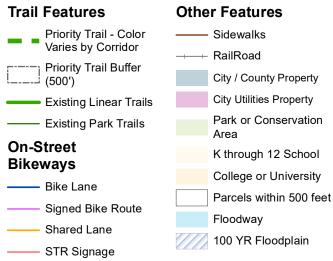






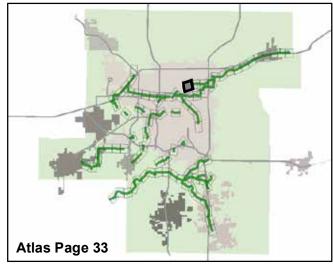


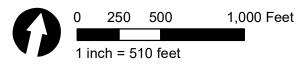
## Legend



## **Visible Priority Trail Segments**

Jordan Creek Greenway (Northeast)

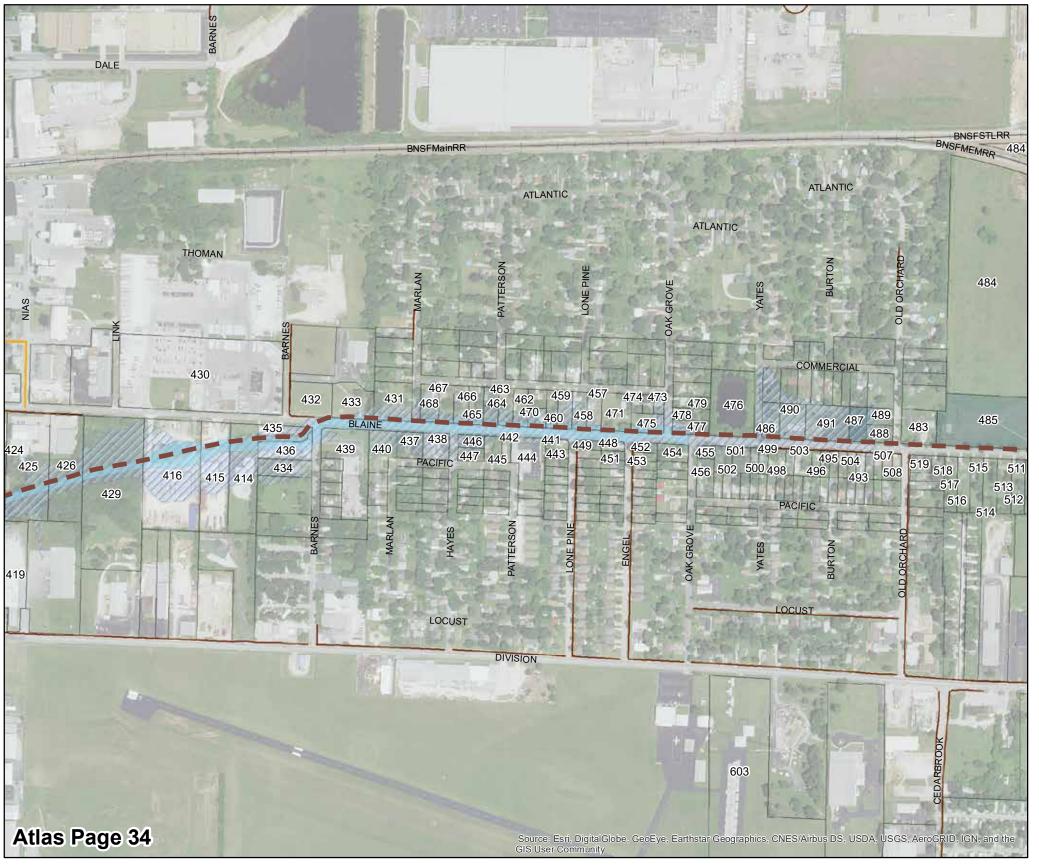




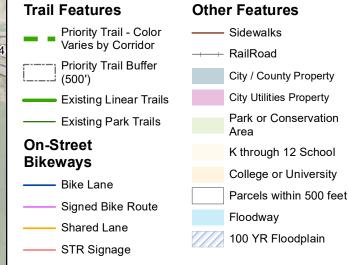






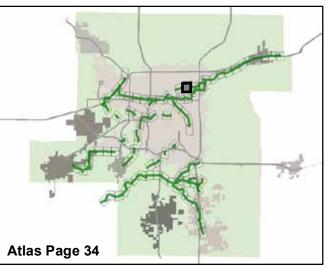


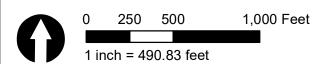
#### Legend



## **Visible Priority Trail Segments**

Jordan Creek Greenway (Northeast)

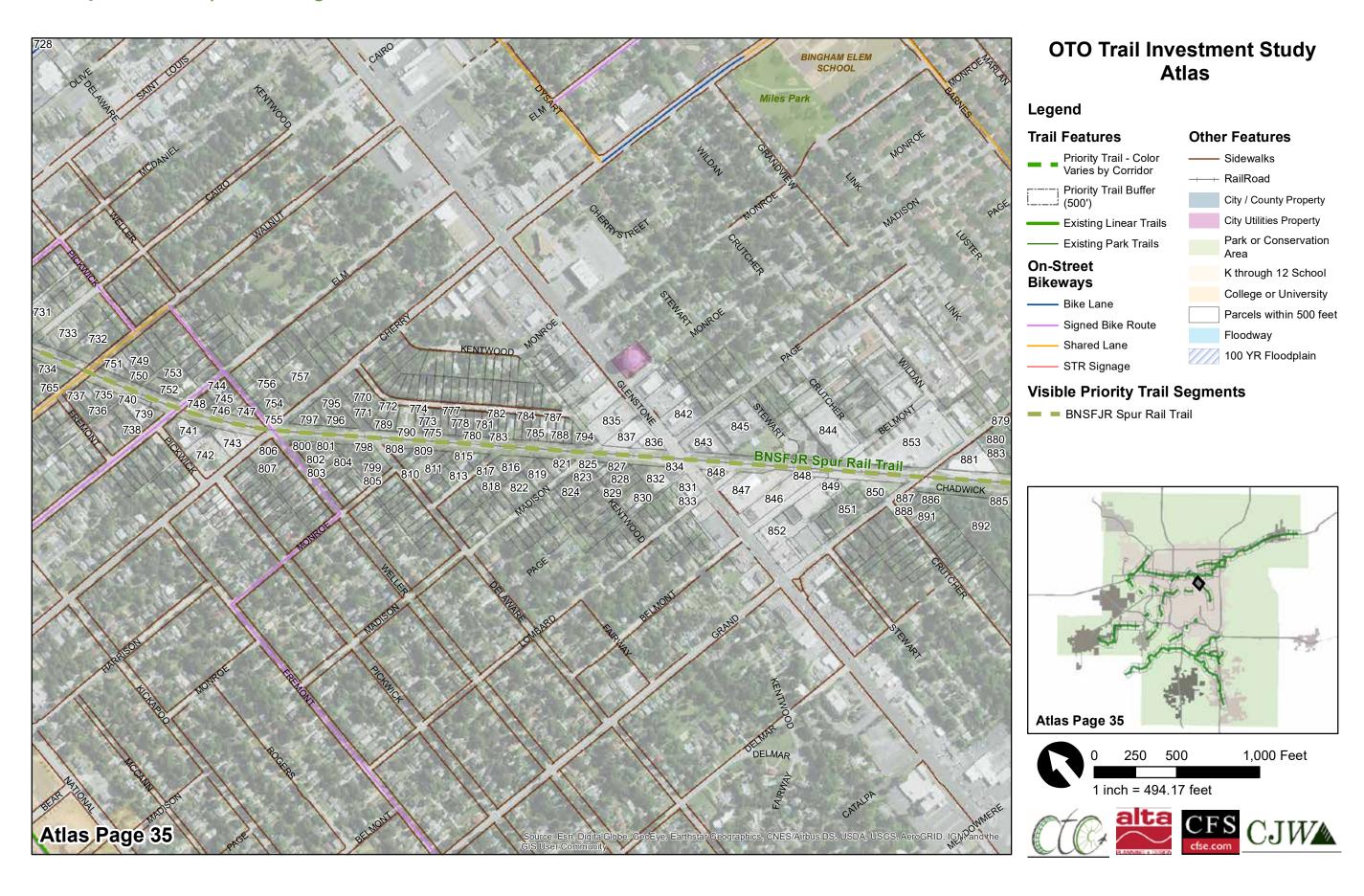














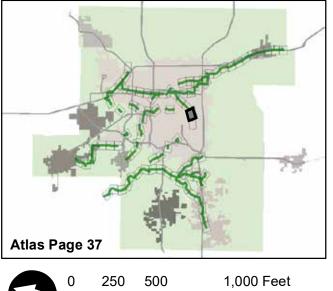


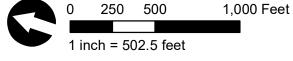
## Legend



## **Visible Priority Trail Segments**

BNSFJR Spur Rail Trail

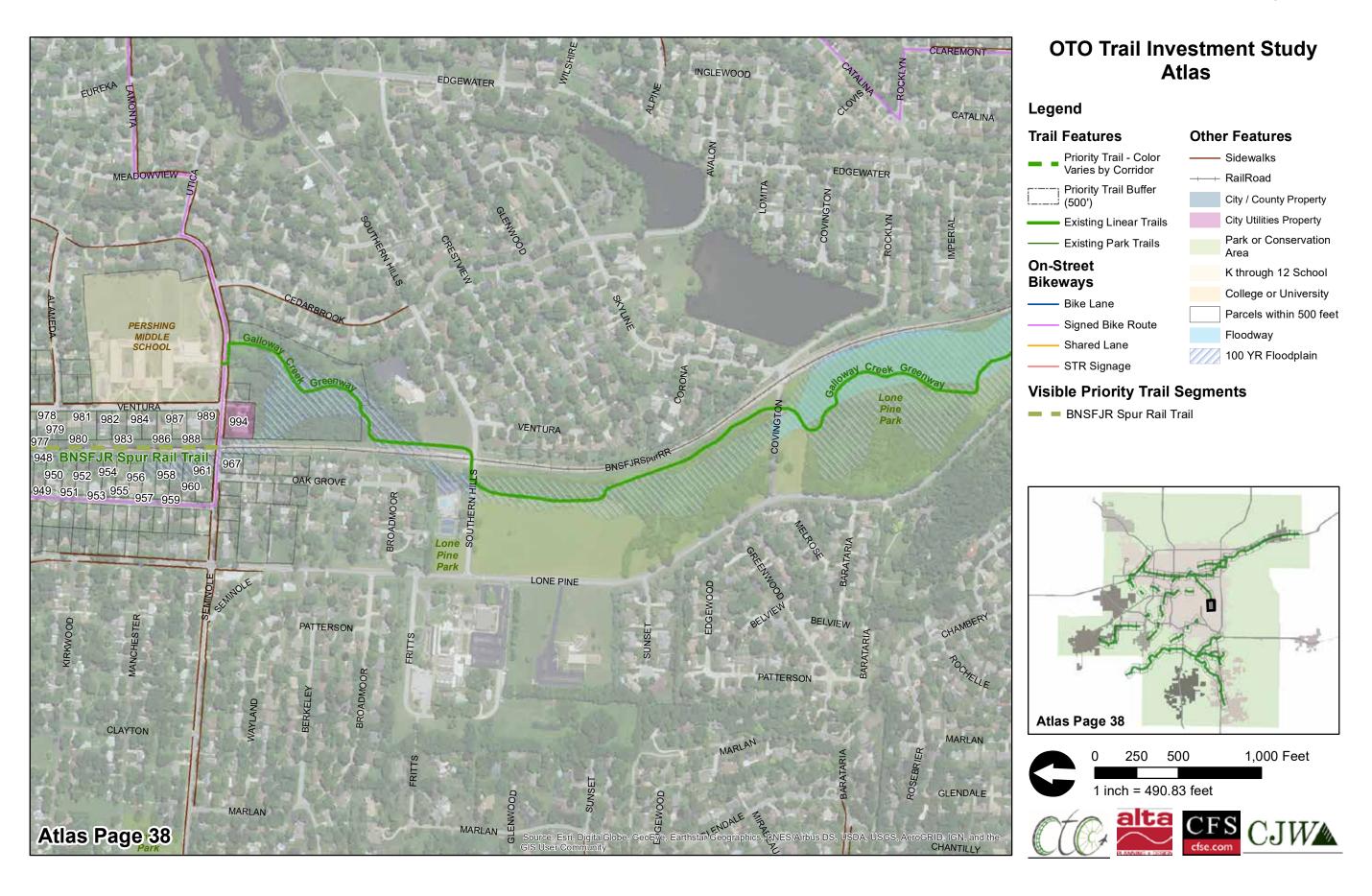


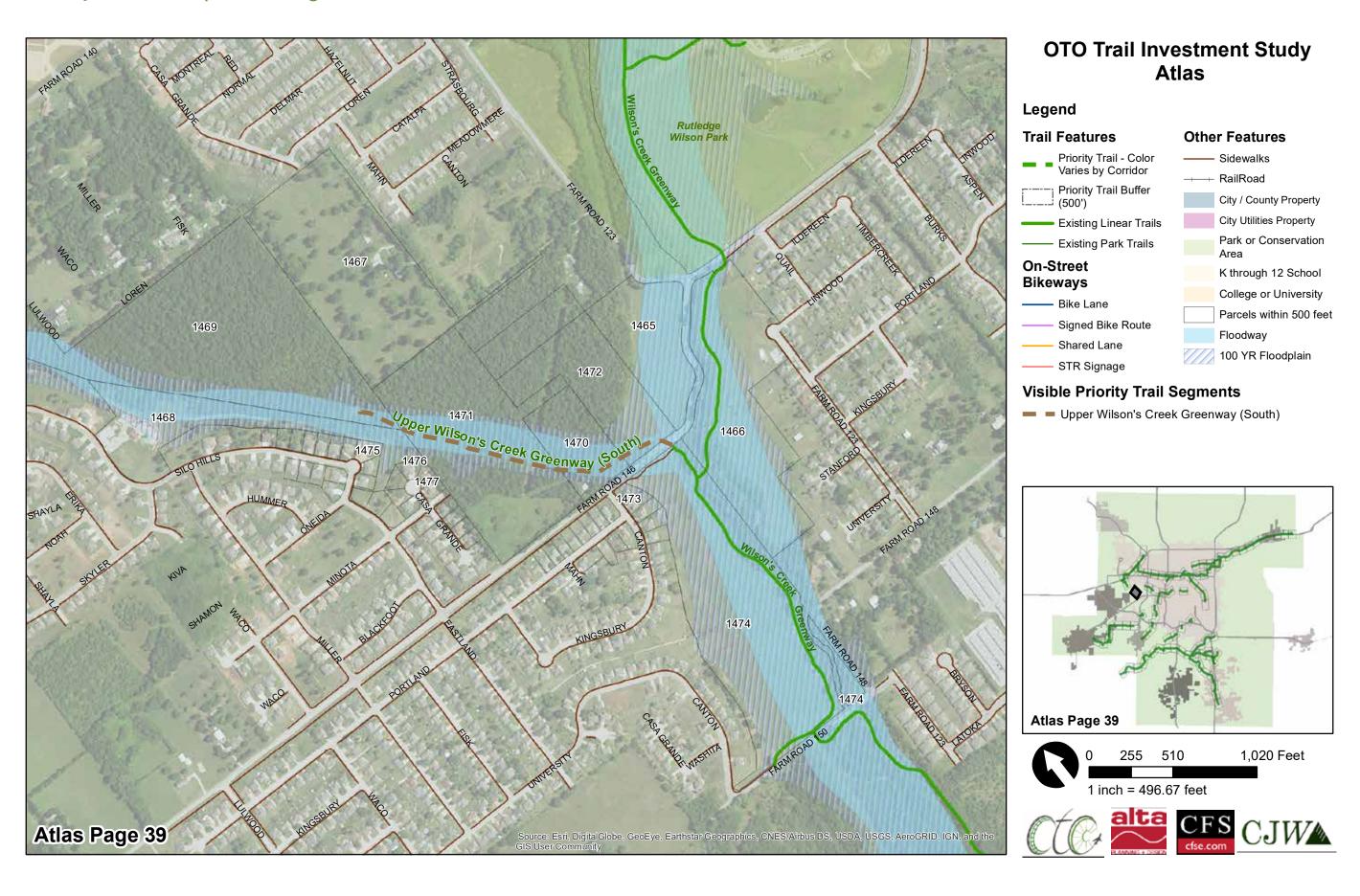


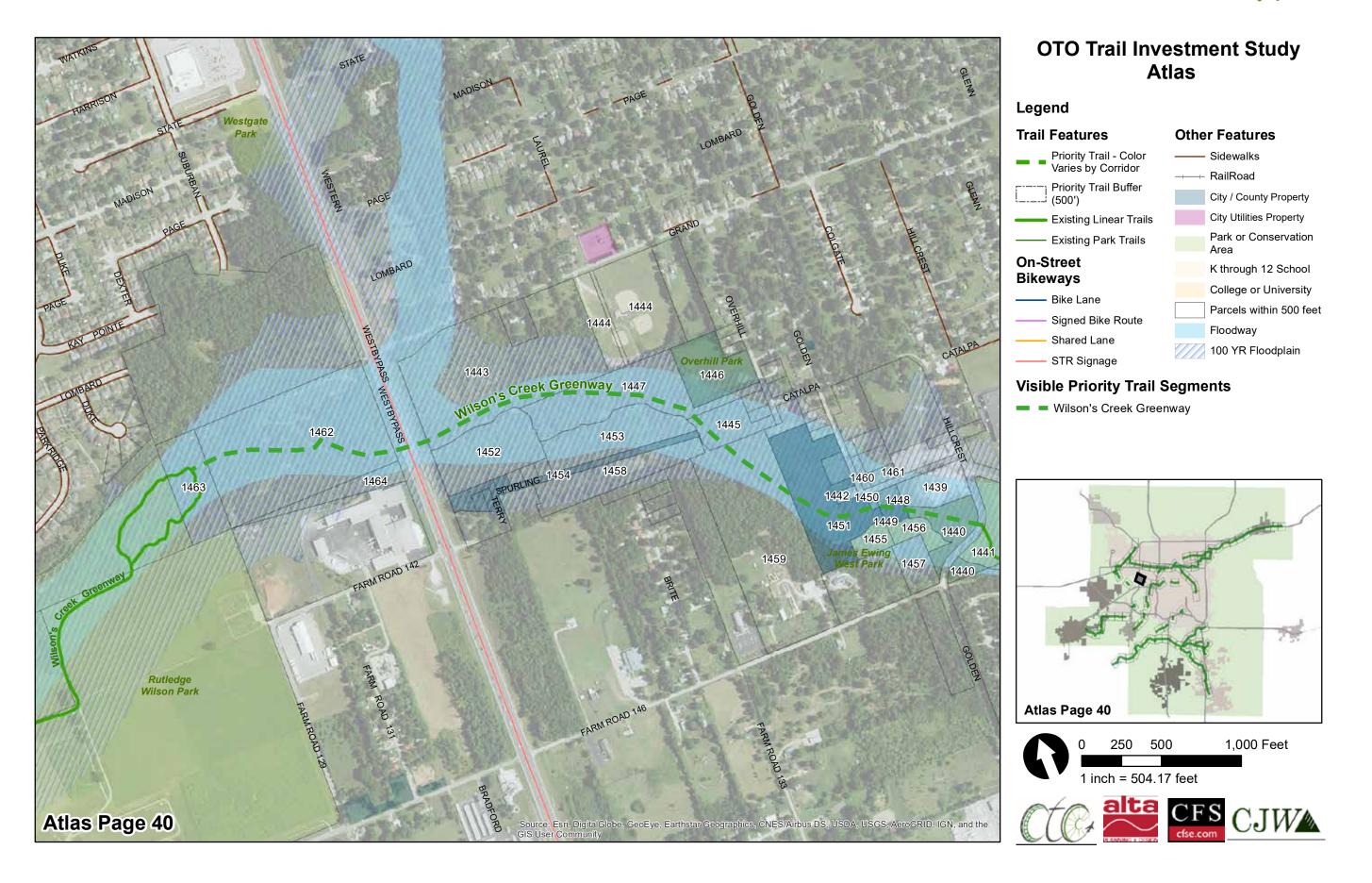


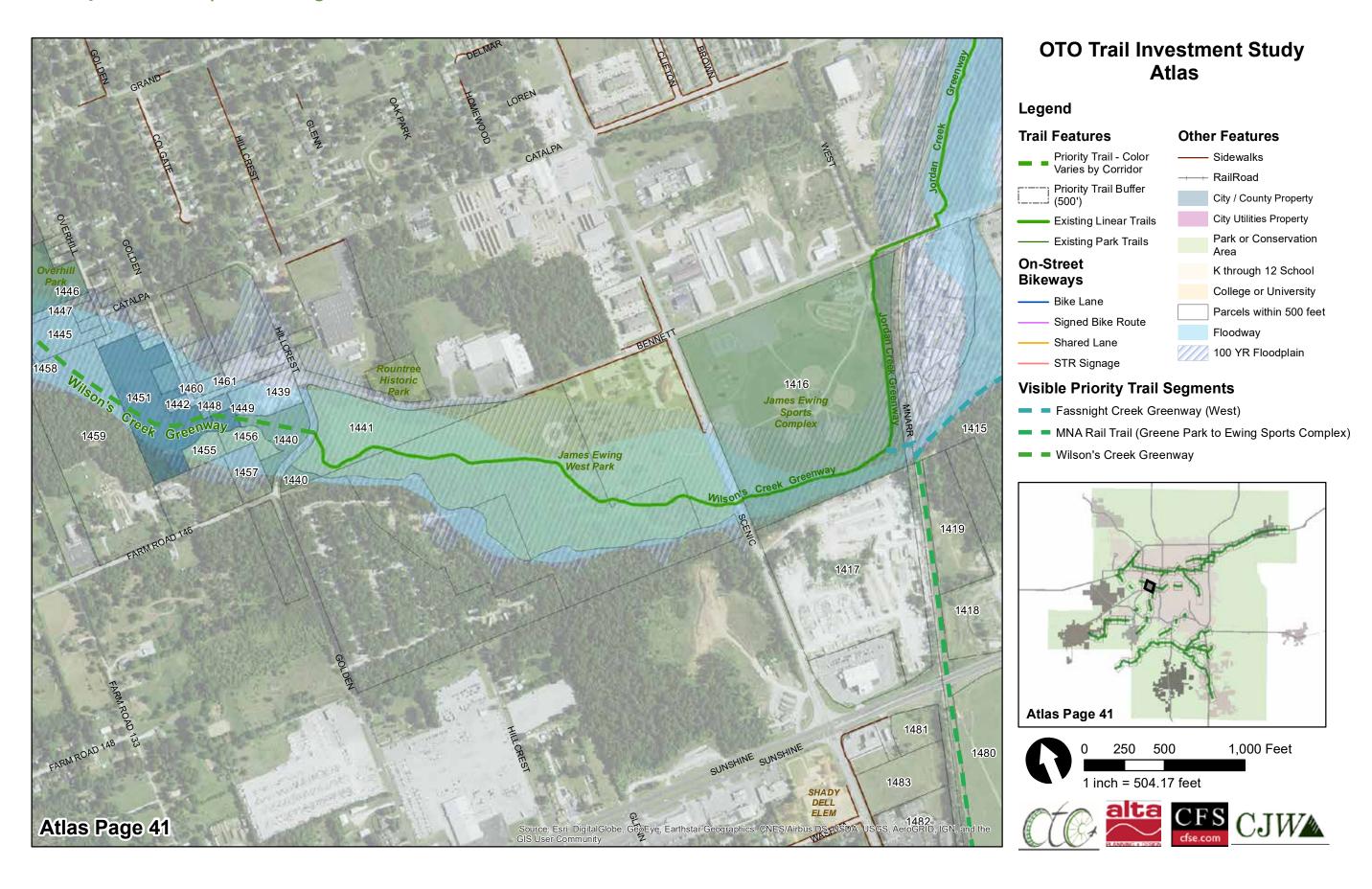


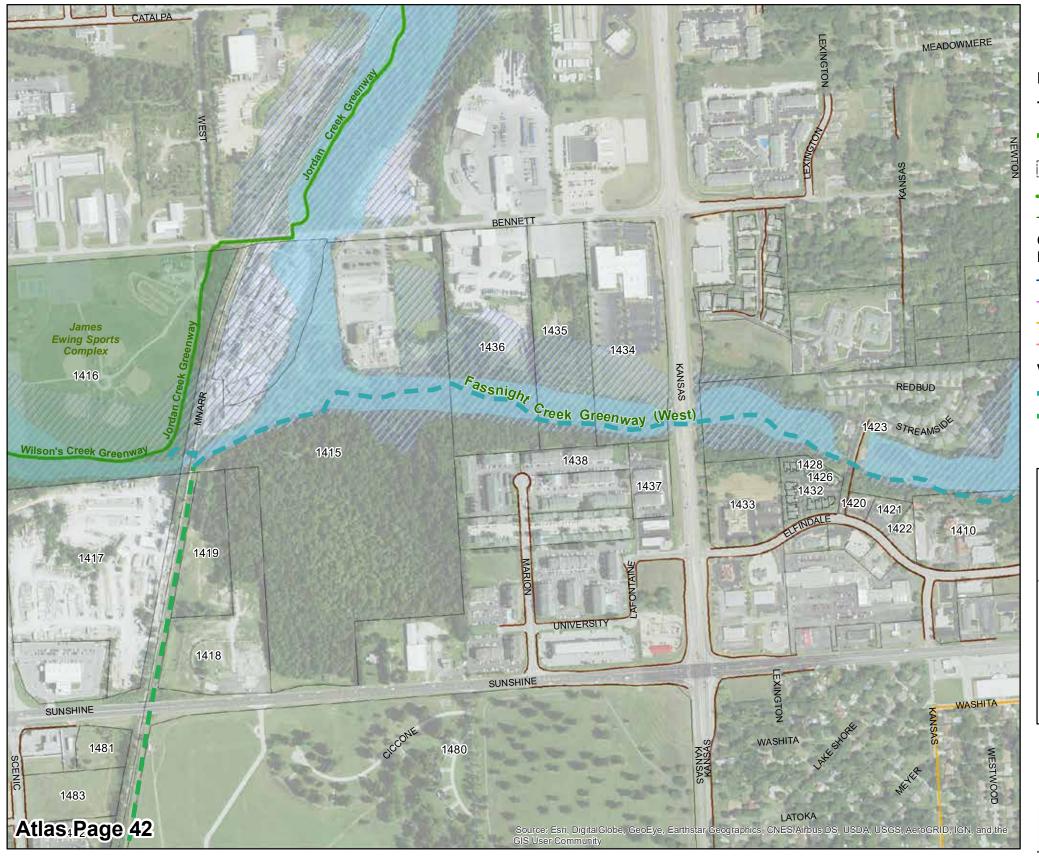










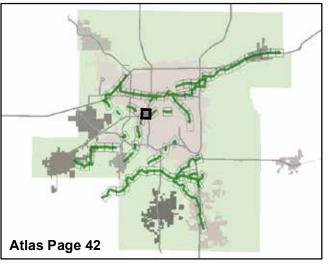


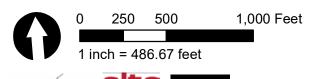
### Legend



## Visible Priority Trail Segments

- Fassnight Creek Greenway (West)
- MNA Rail Trail (Greene Park to Ewing Sports Complex)



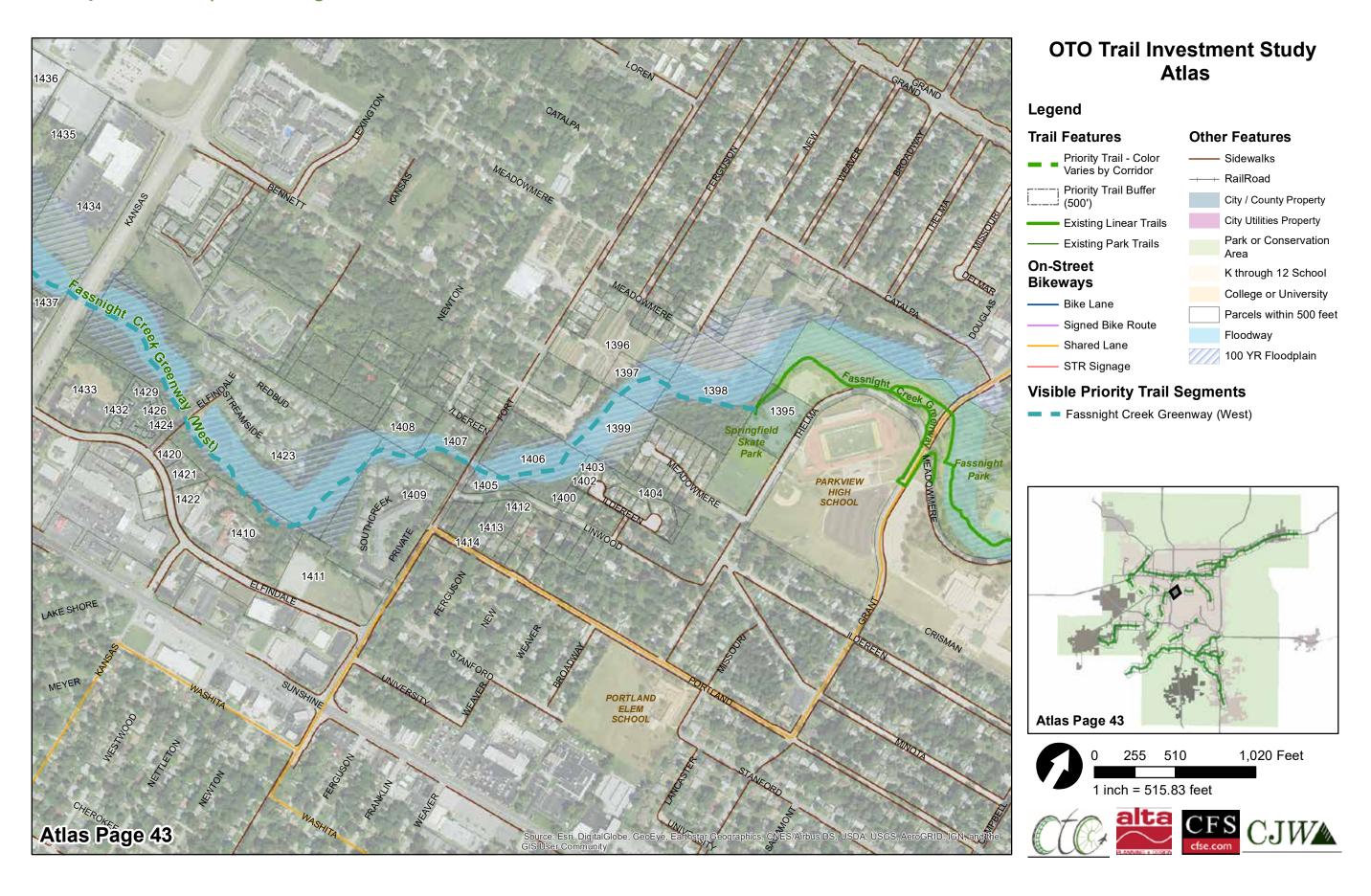


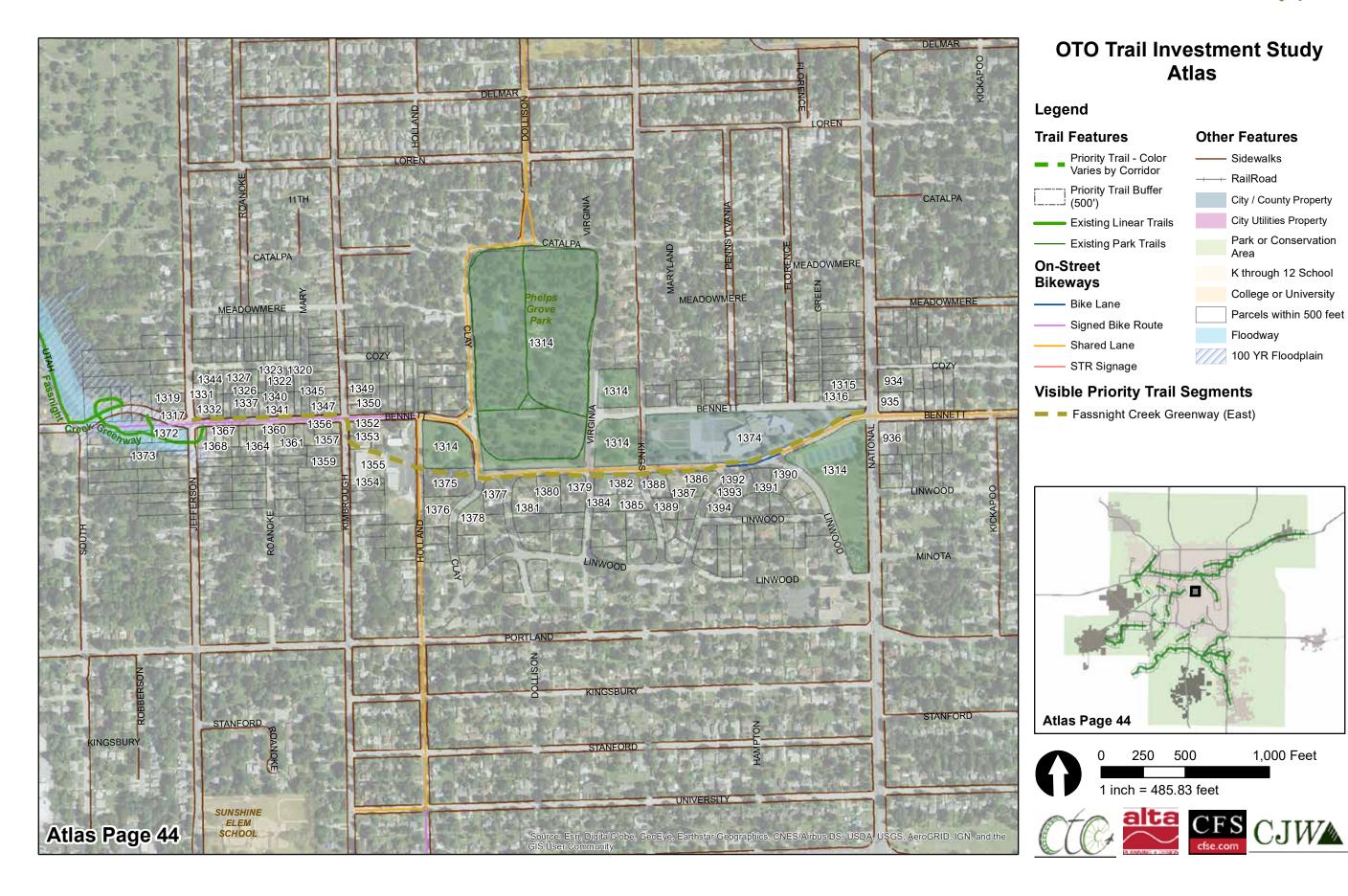


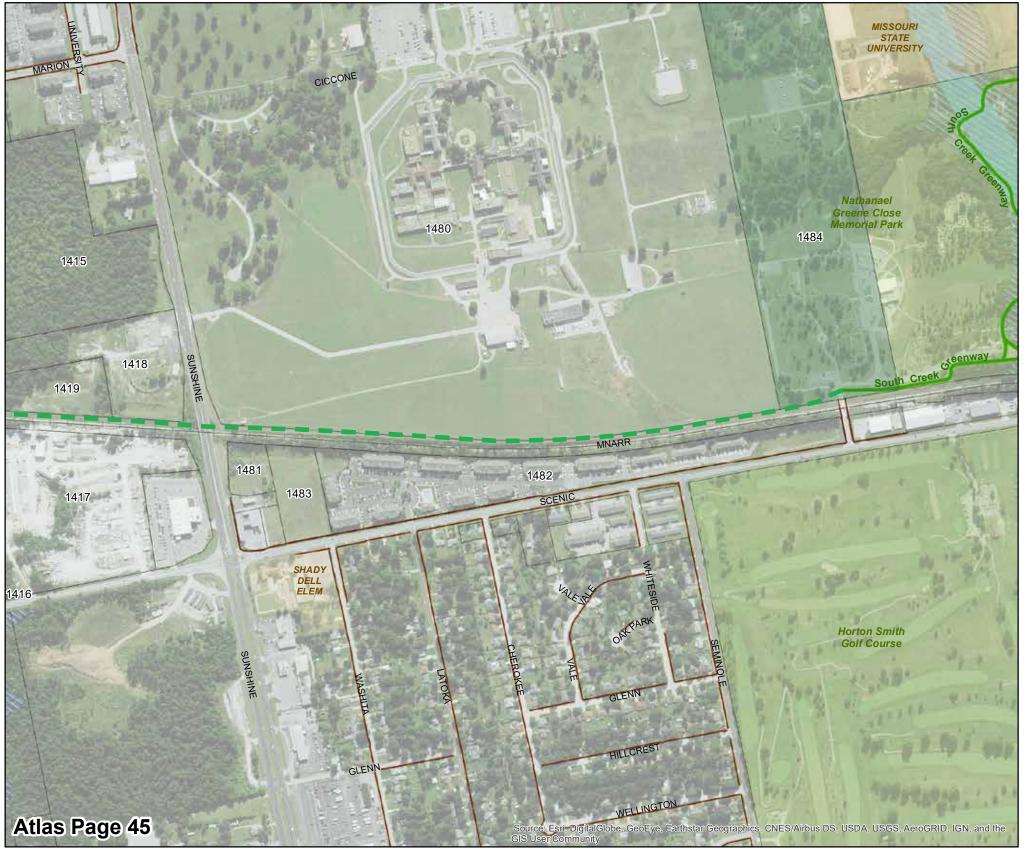










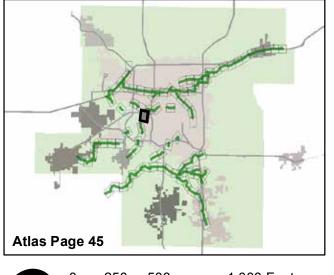


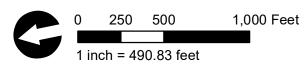
## Legend



## **Visible Priority Trail Segments**

MNA Rail Trail (Greene Park to Ewing Sports Complex)



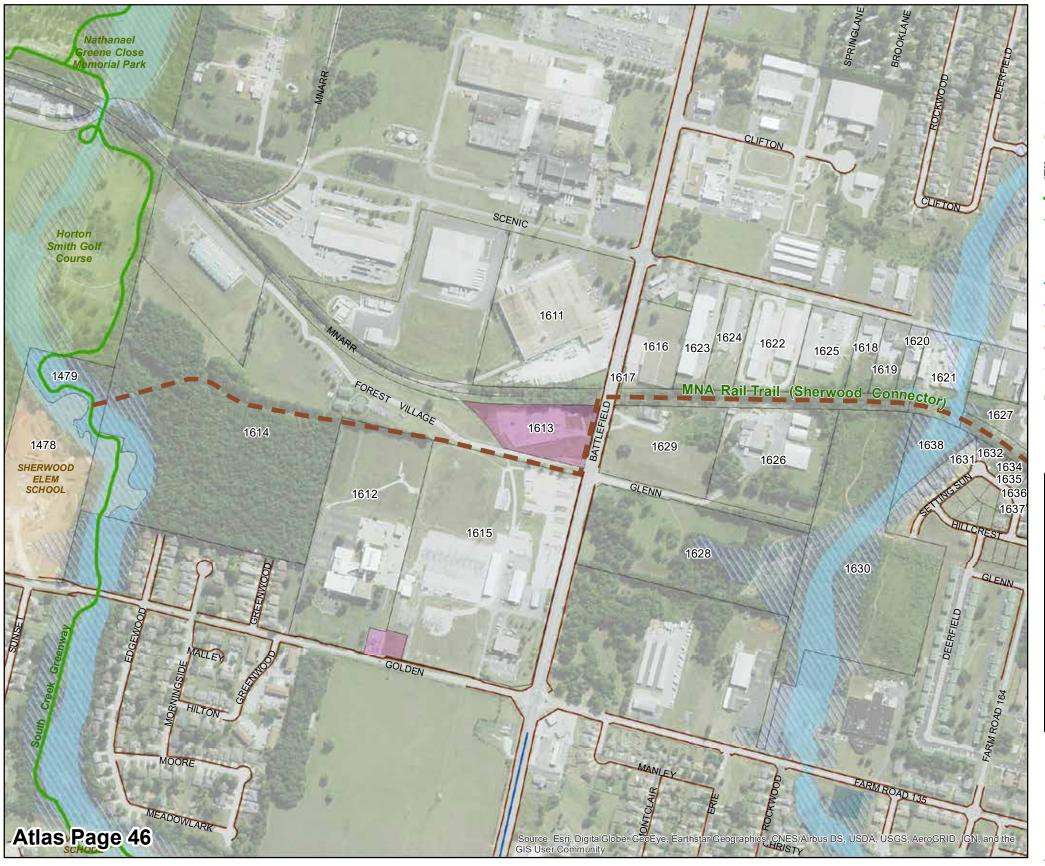




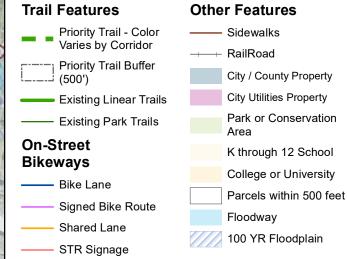






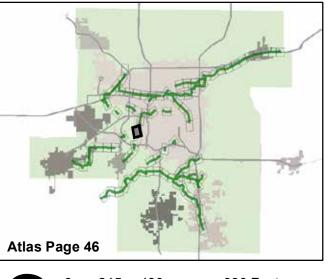


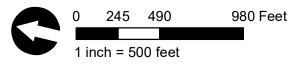
## Legend



## **Visible Priority Trail Segments**

MNA Rail Trail (Sherwood Connector)









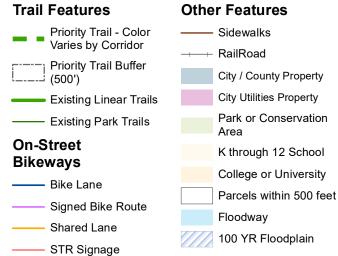






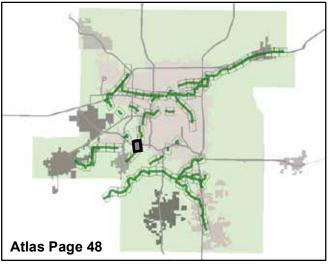


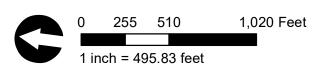
## Legend



## **Visible Priority Trail Segments**

MNA Rail Trail (at Farm Road 135)





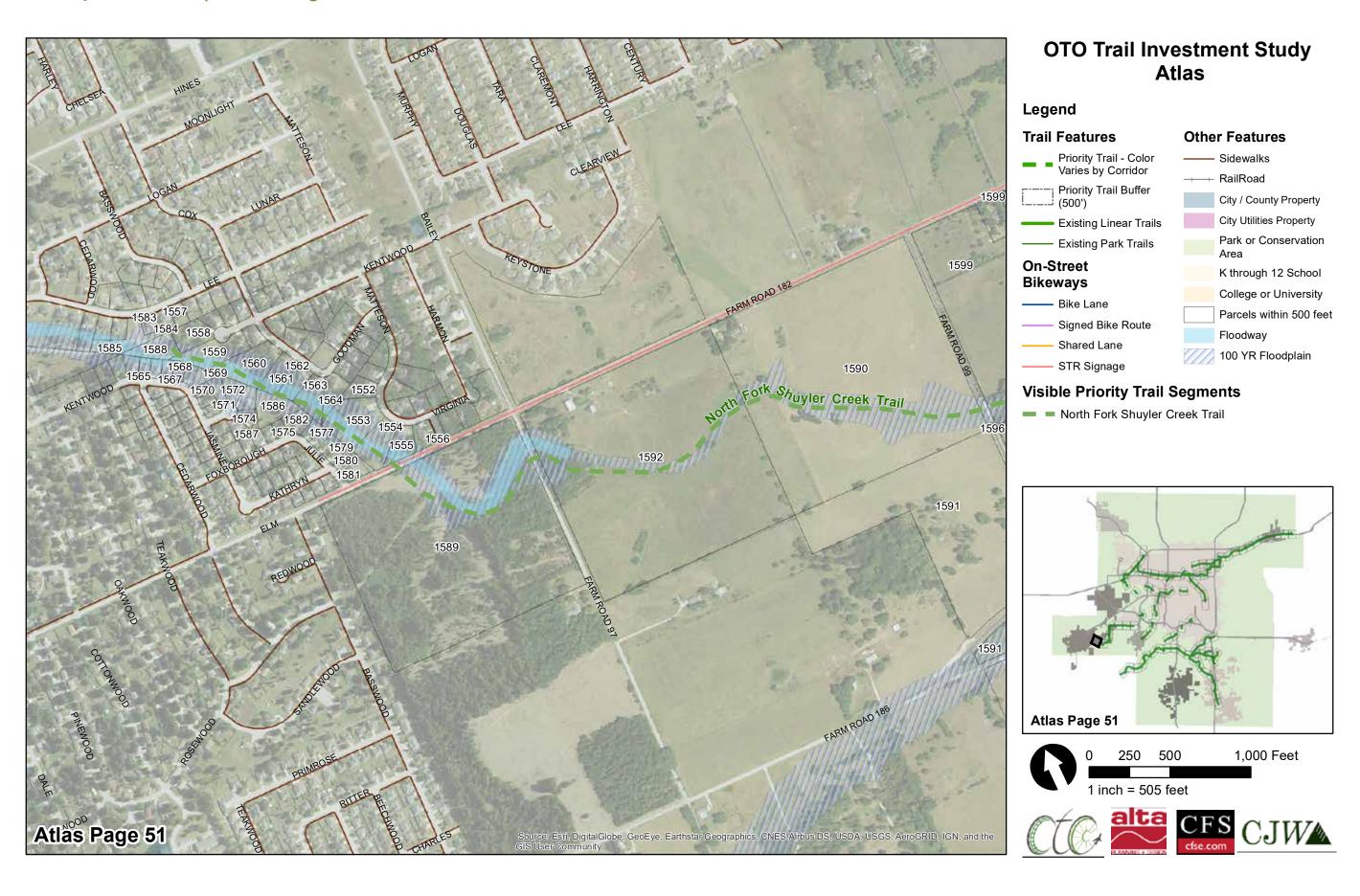


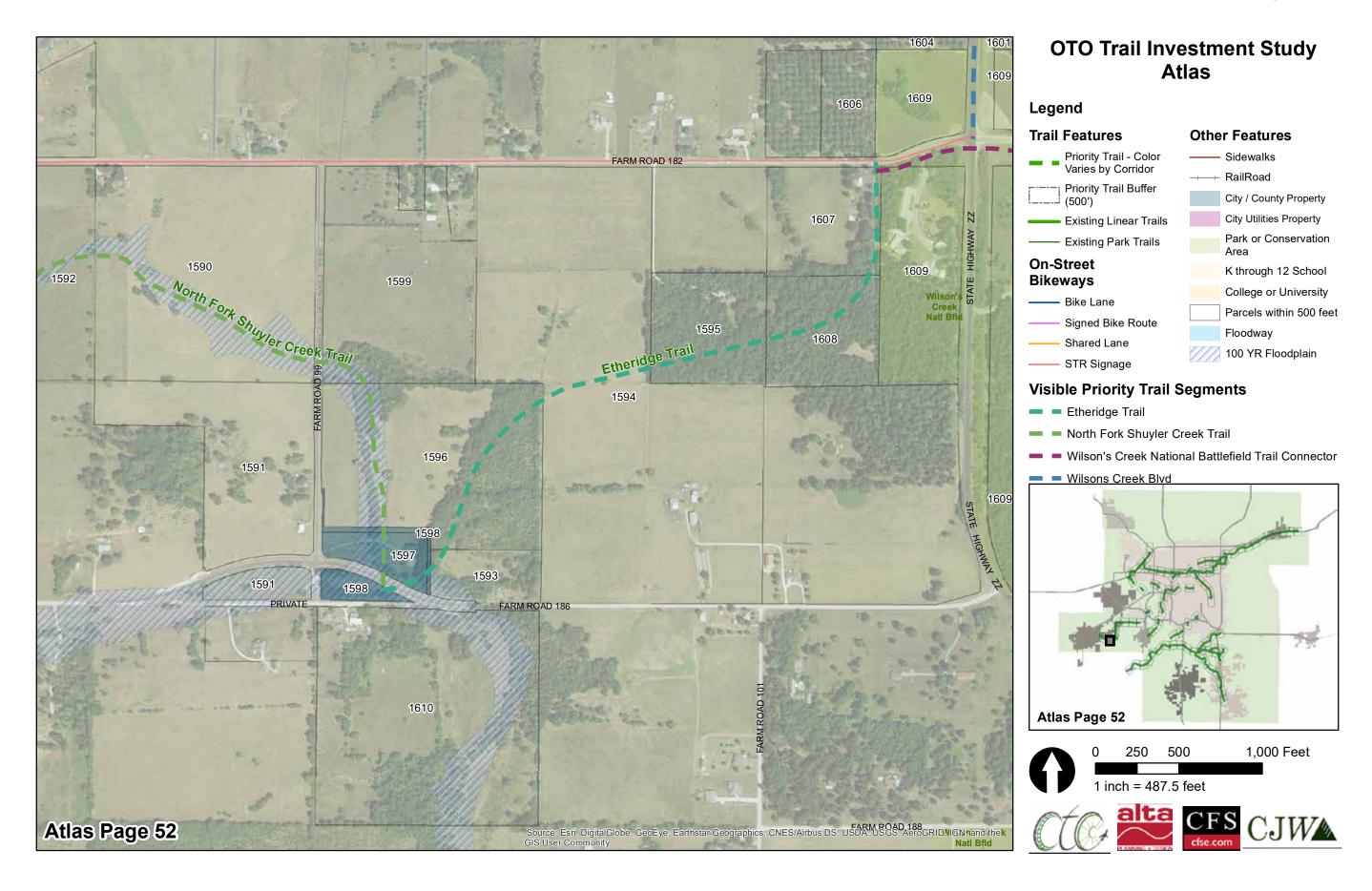






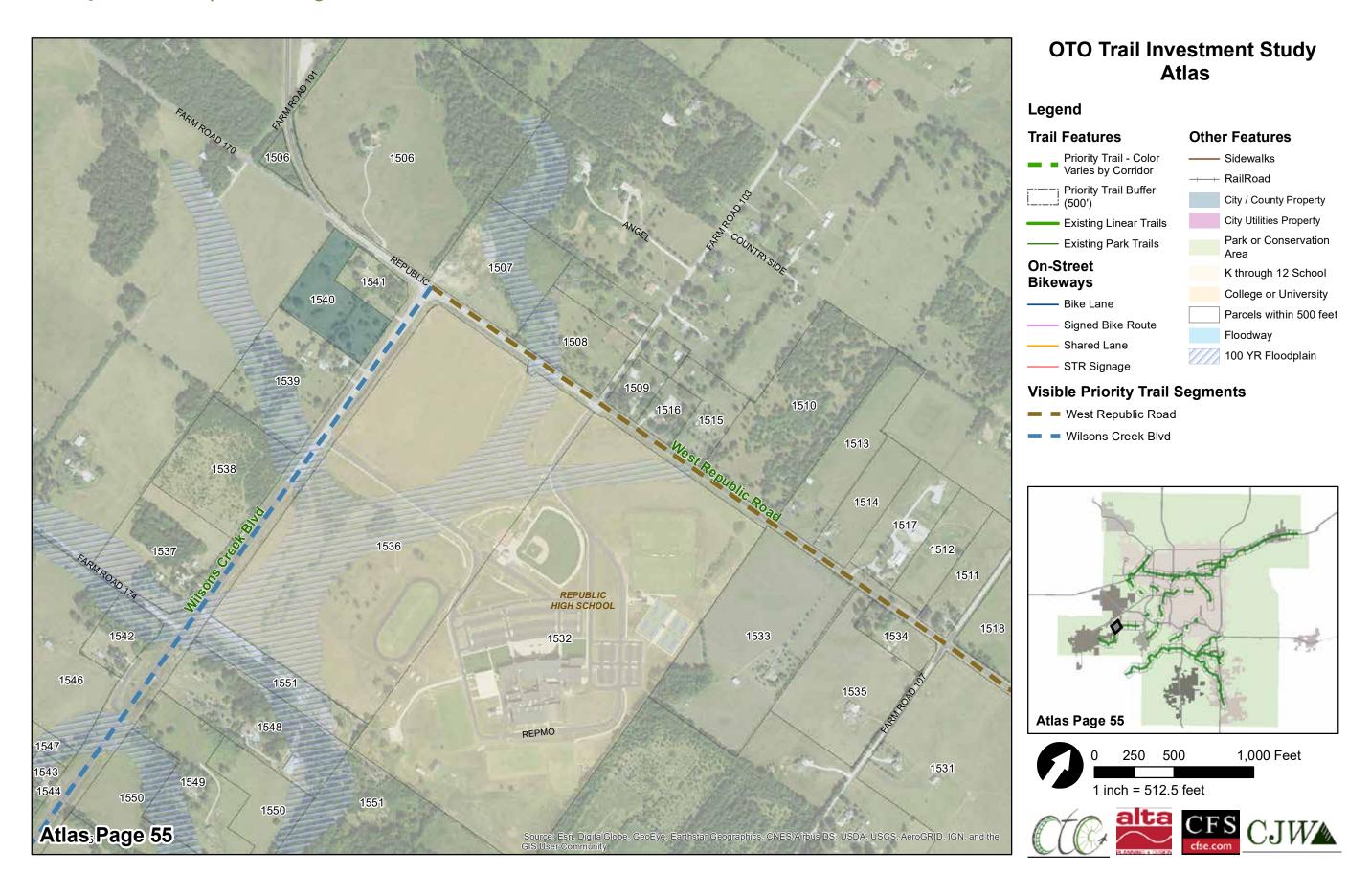


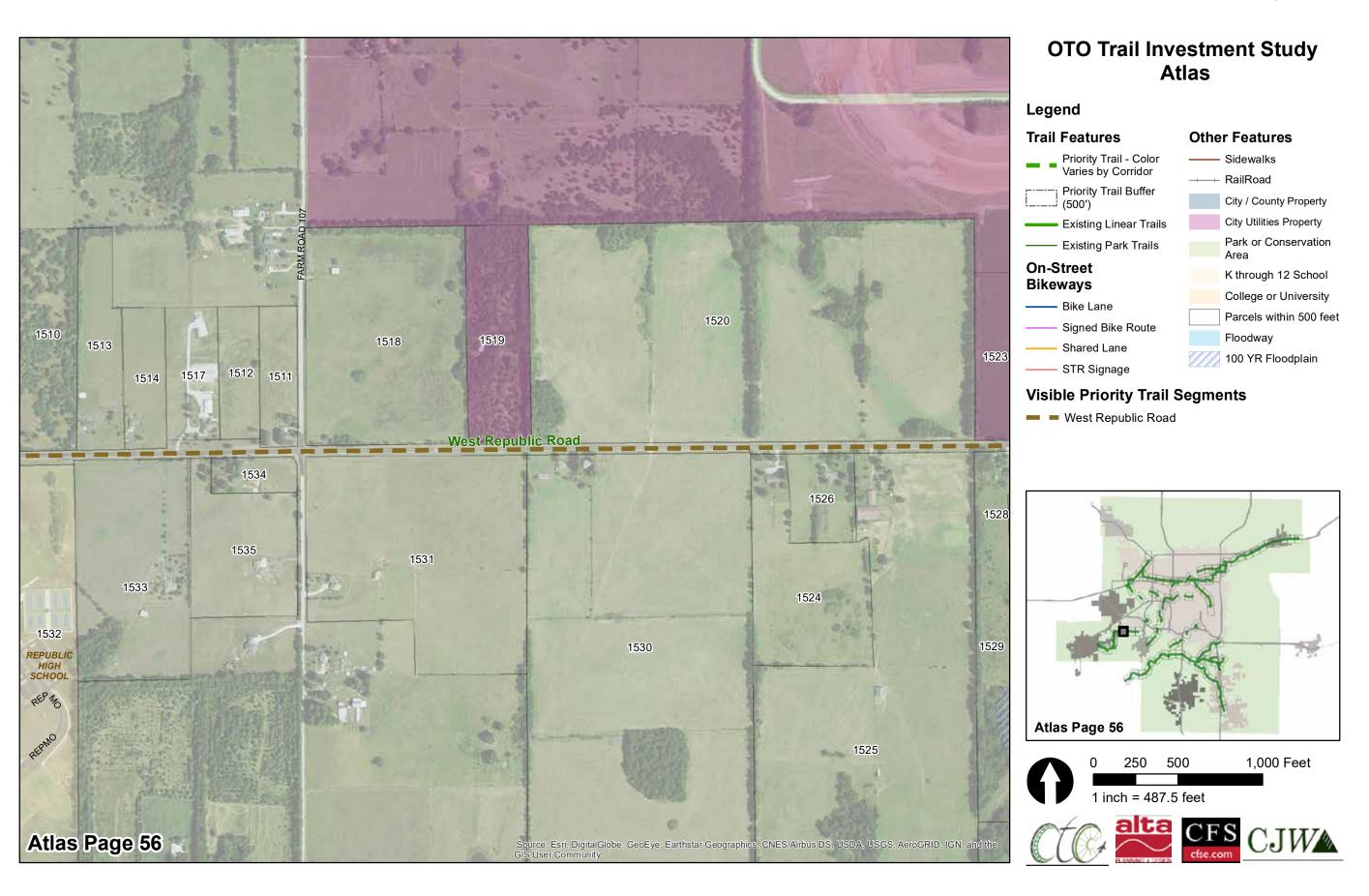


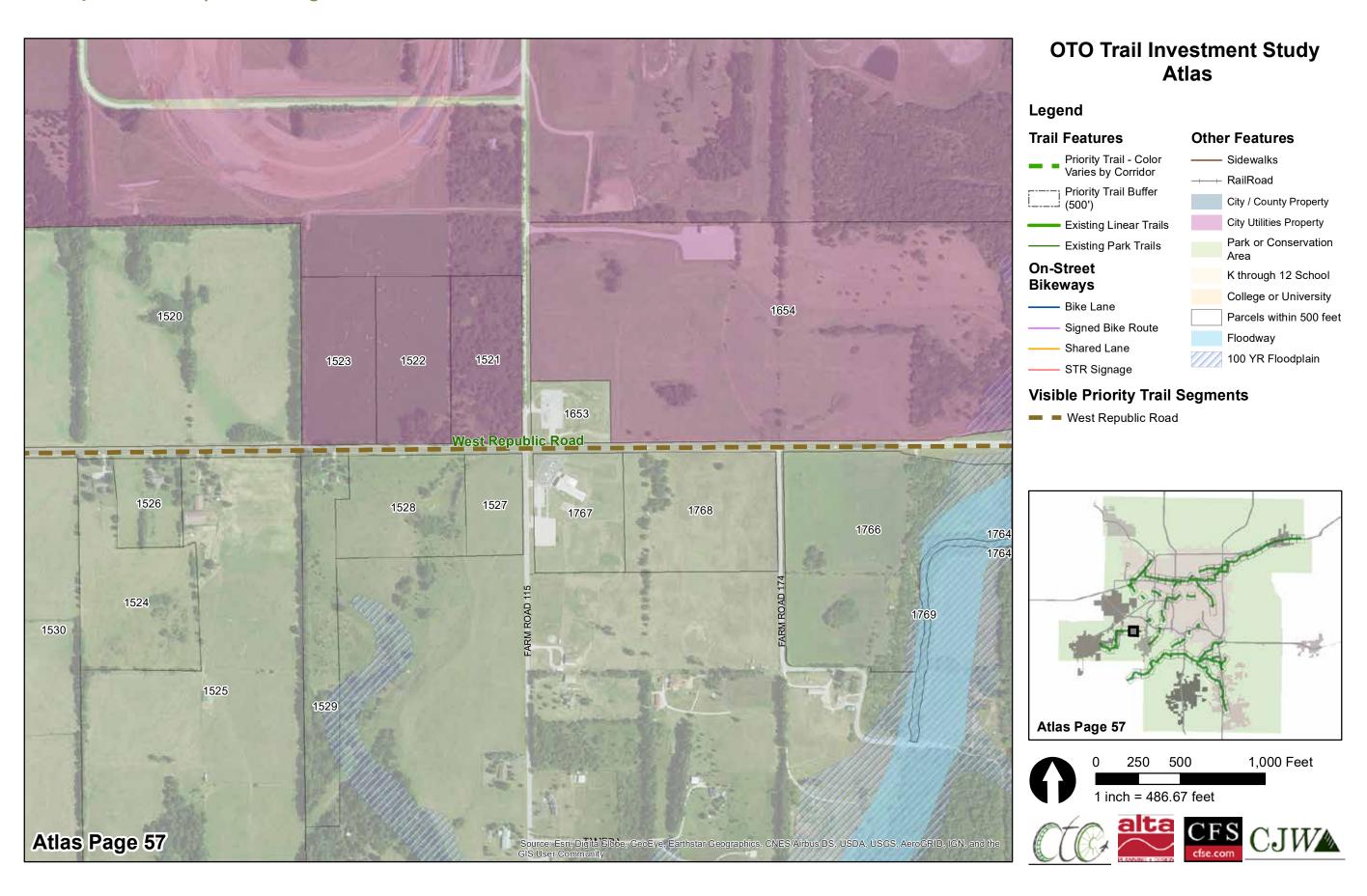


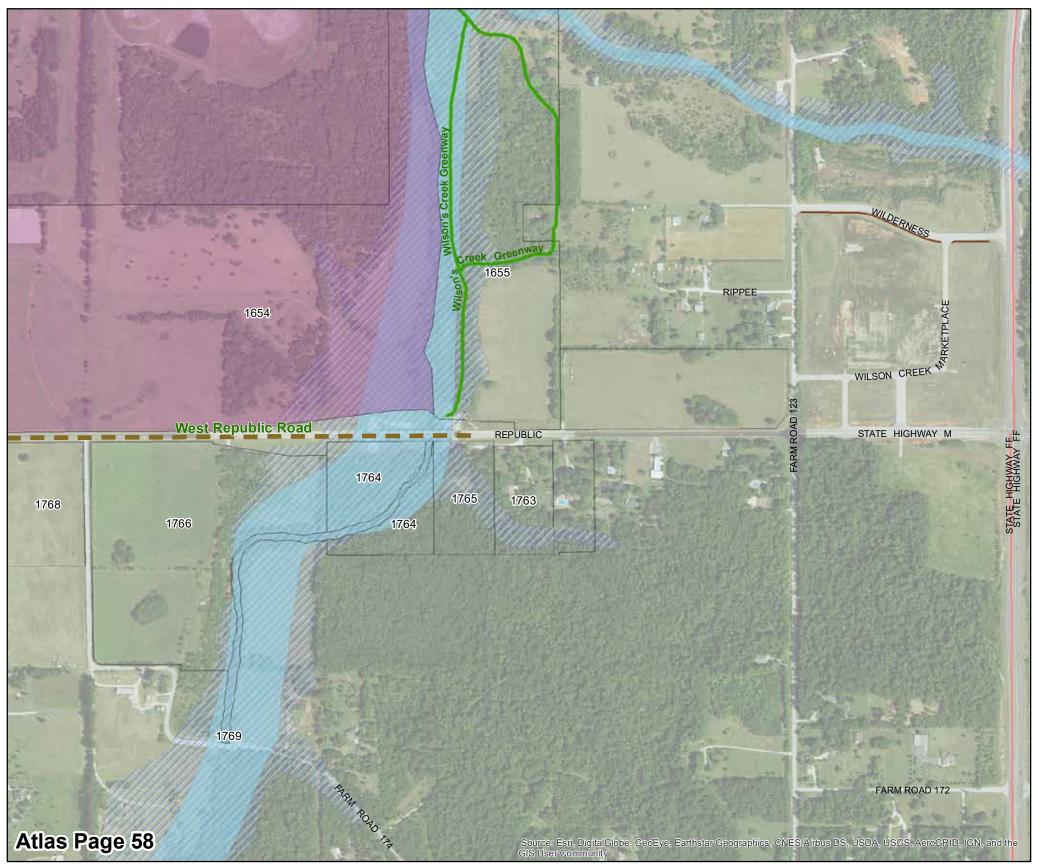










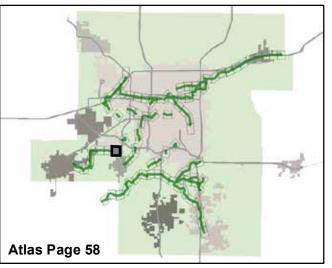


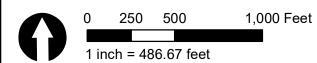
## Legend



# **Visible Priority Trail Segments**

West Republic Road

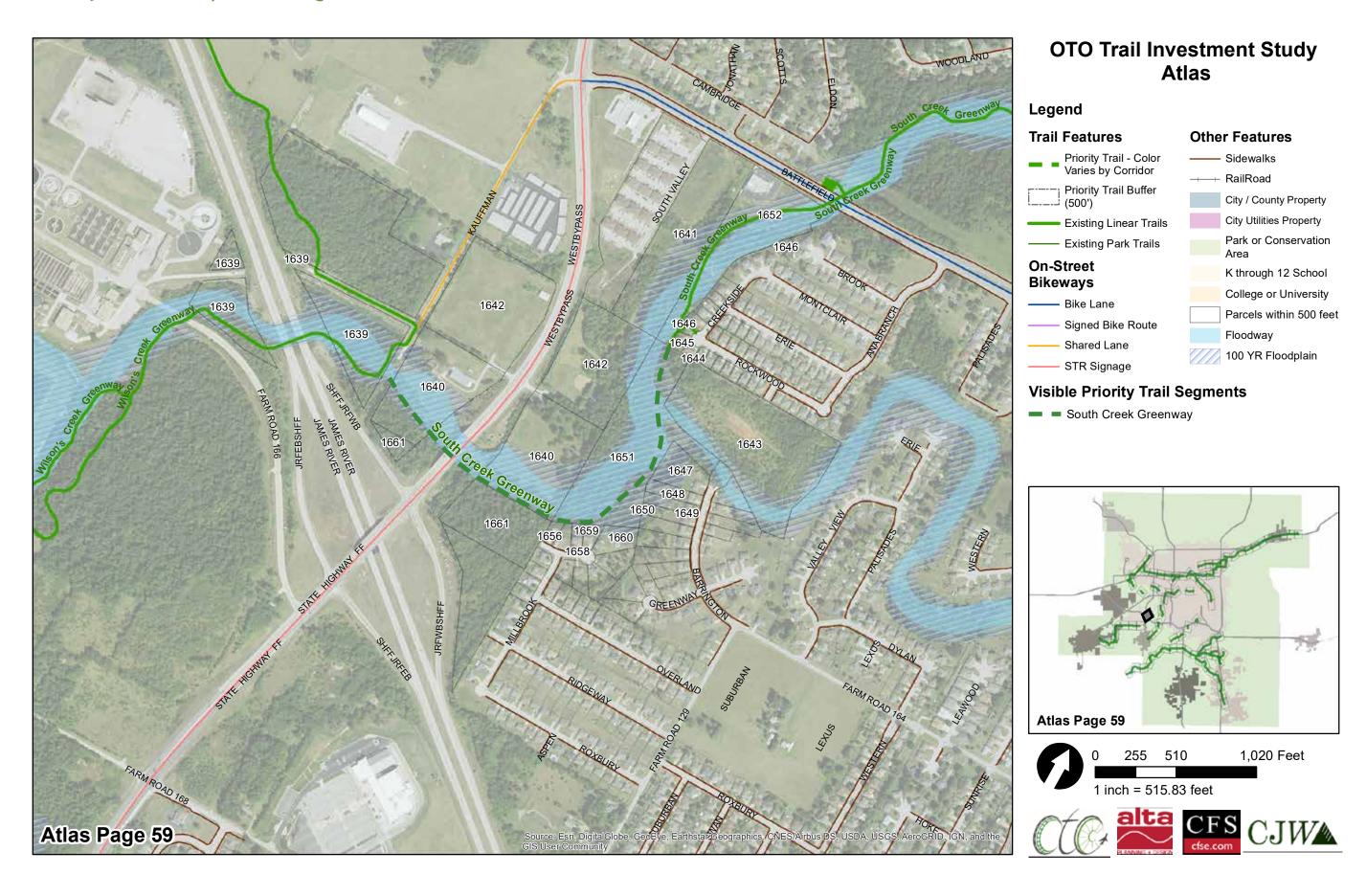


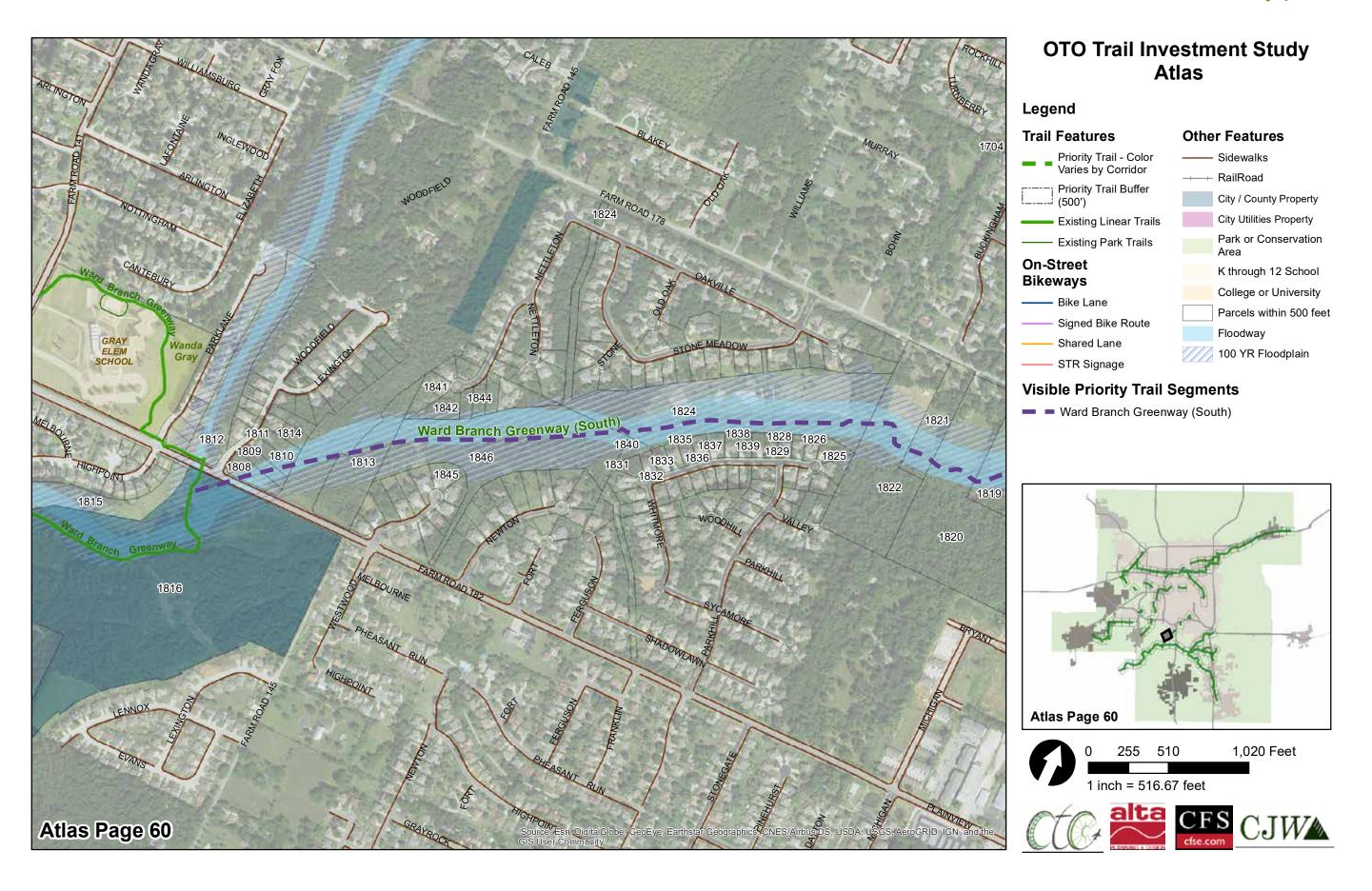


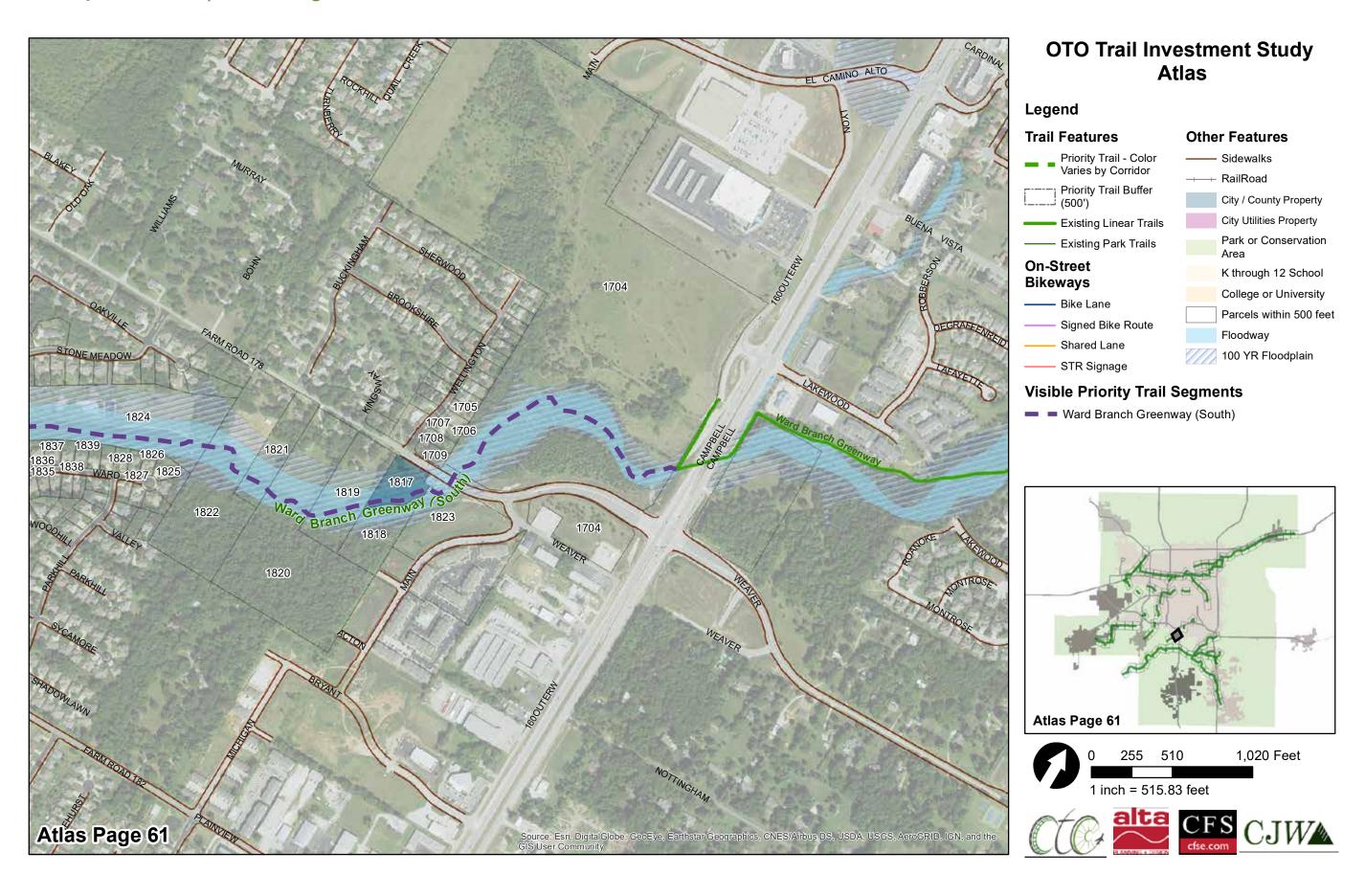


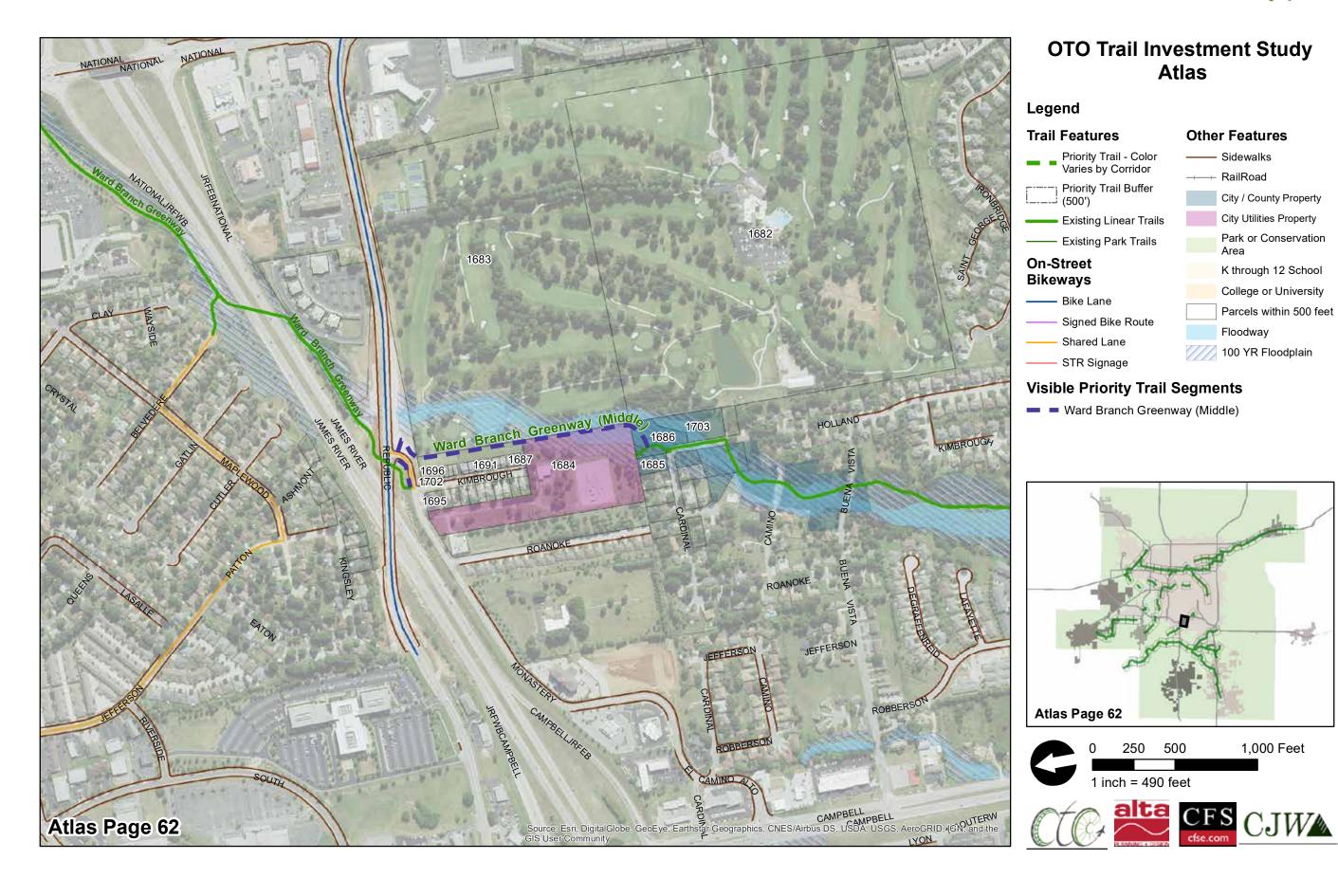


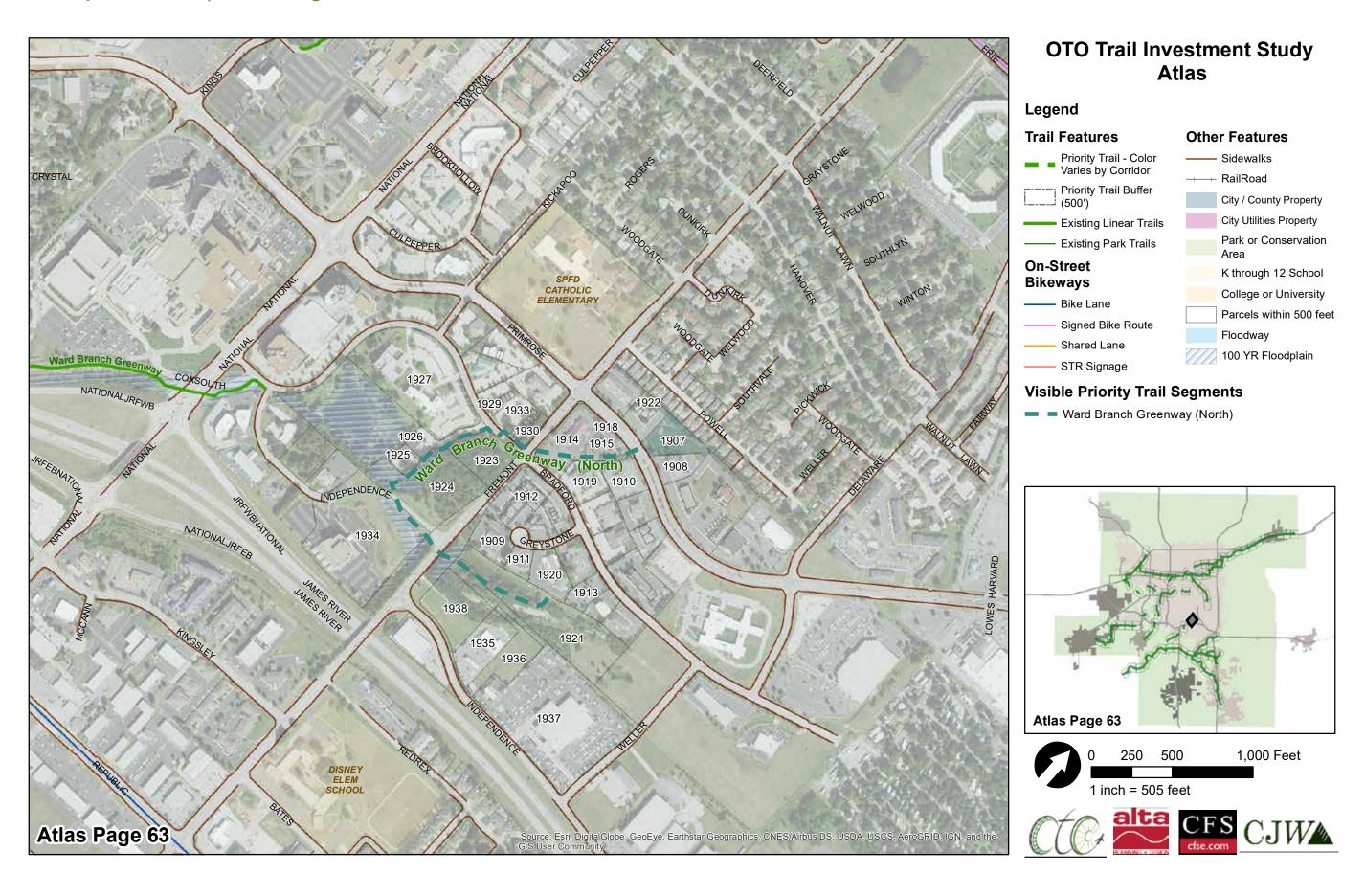


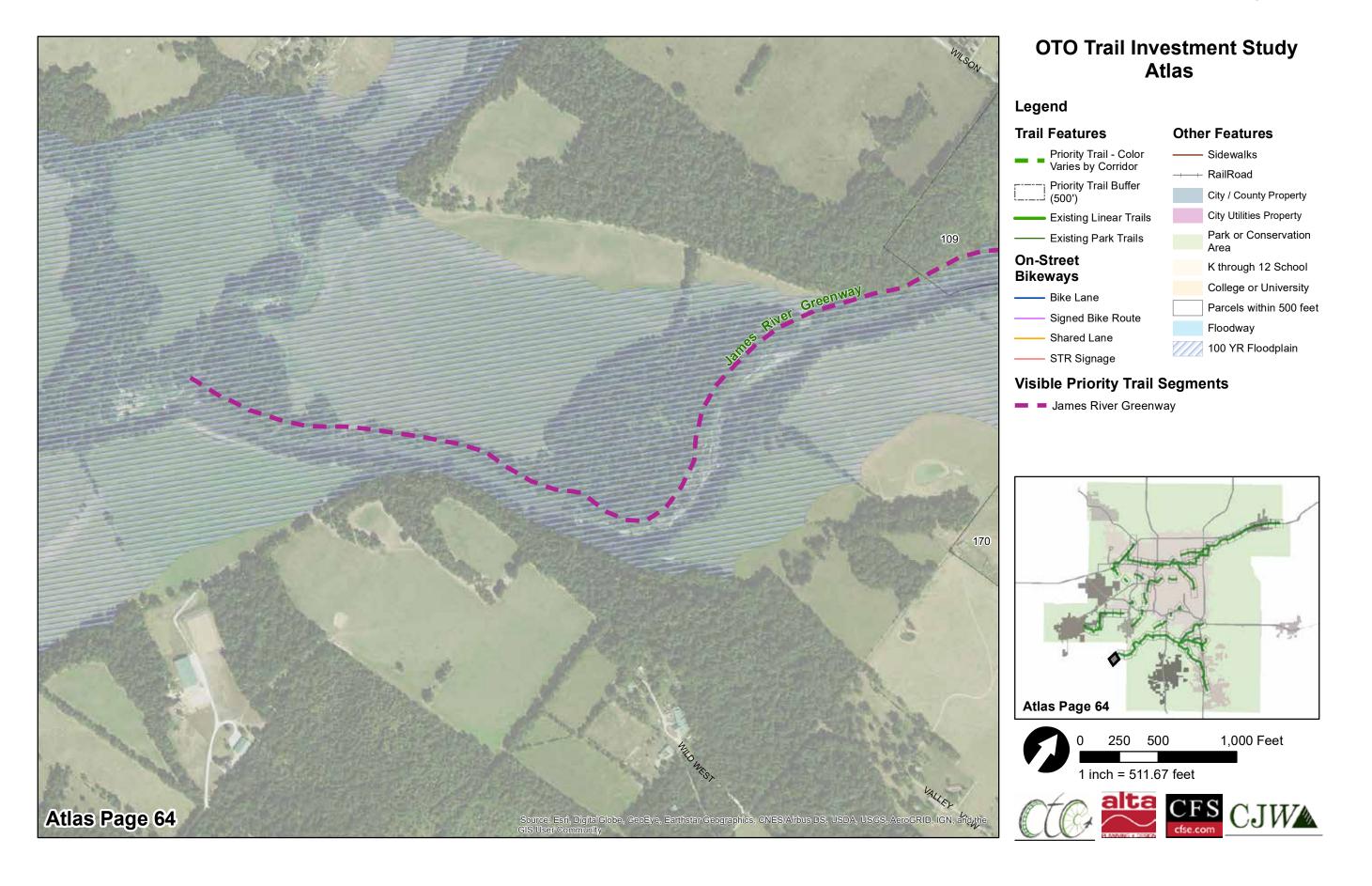


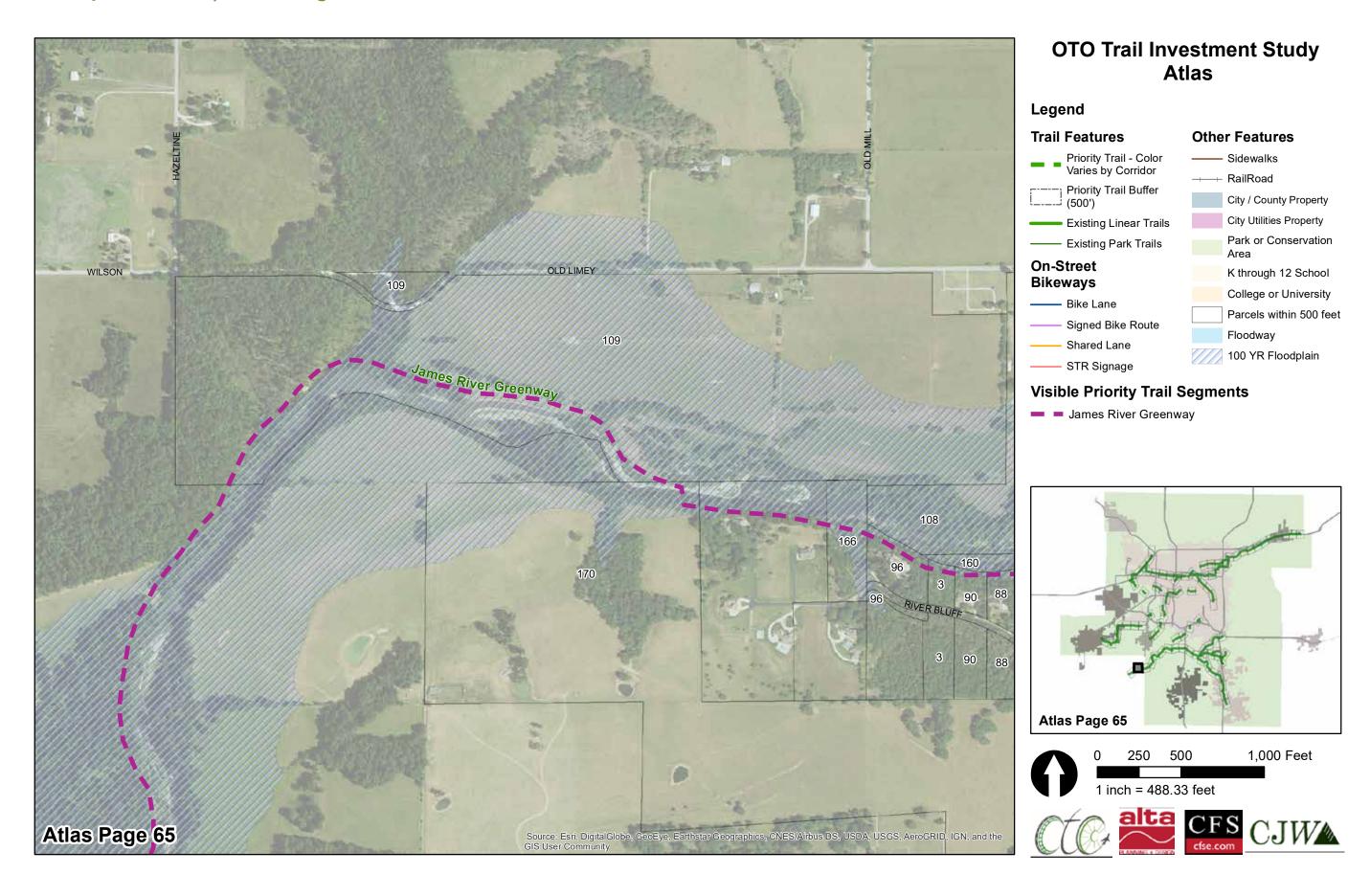


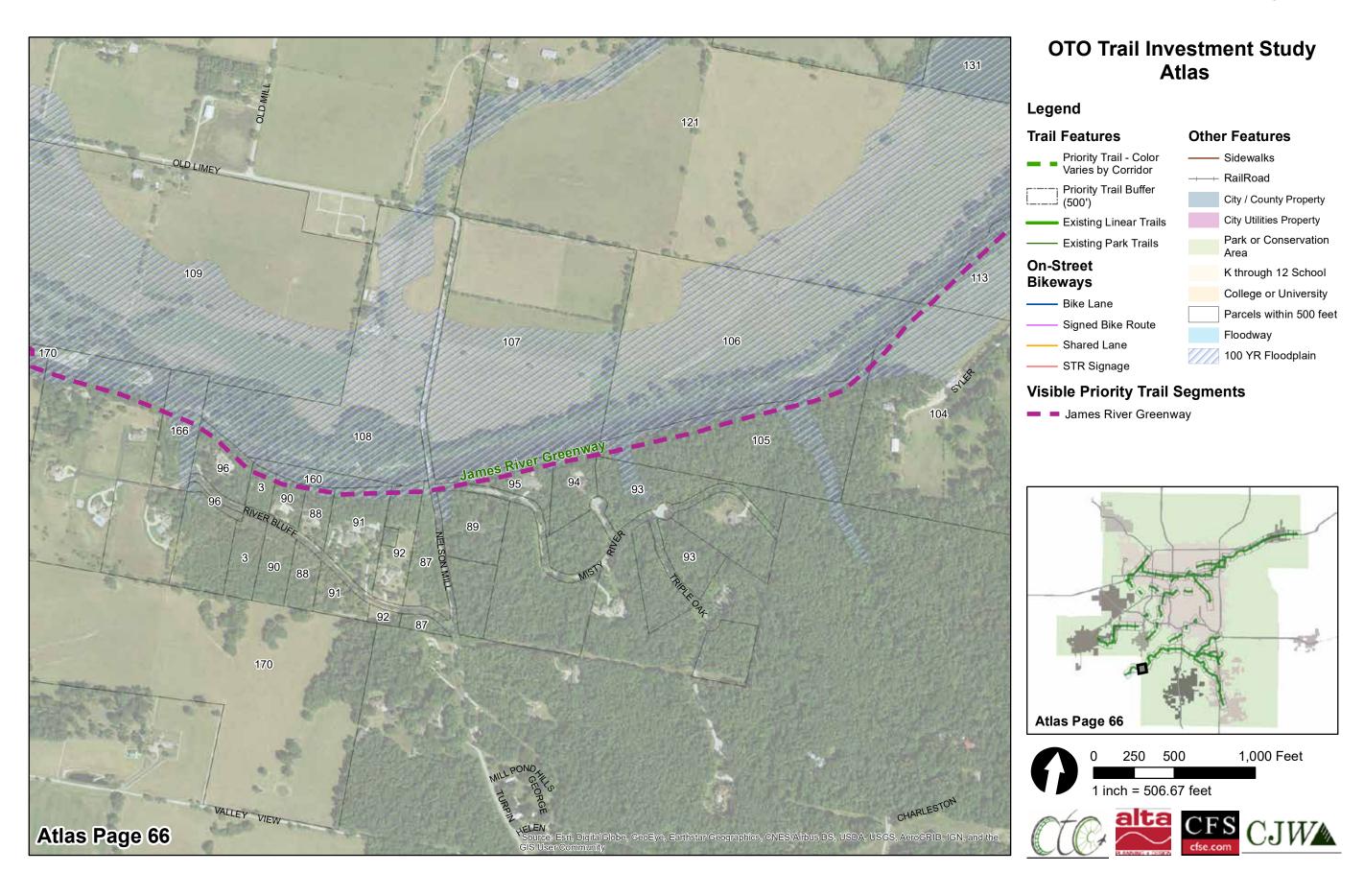


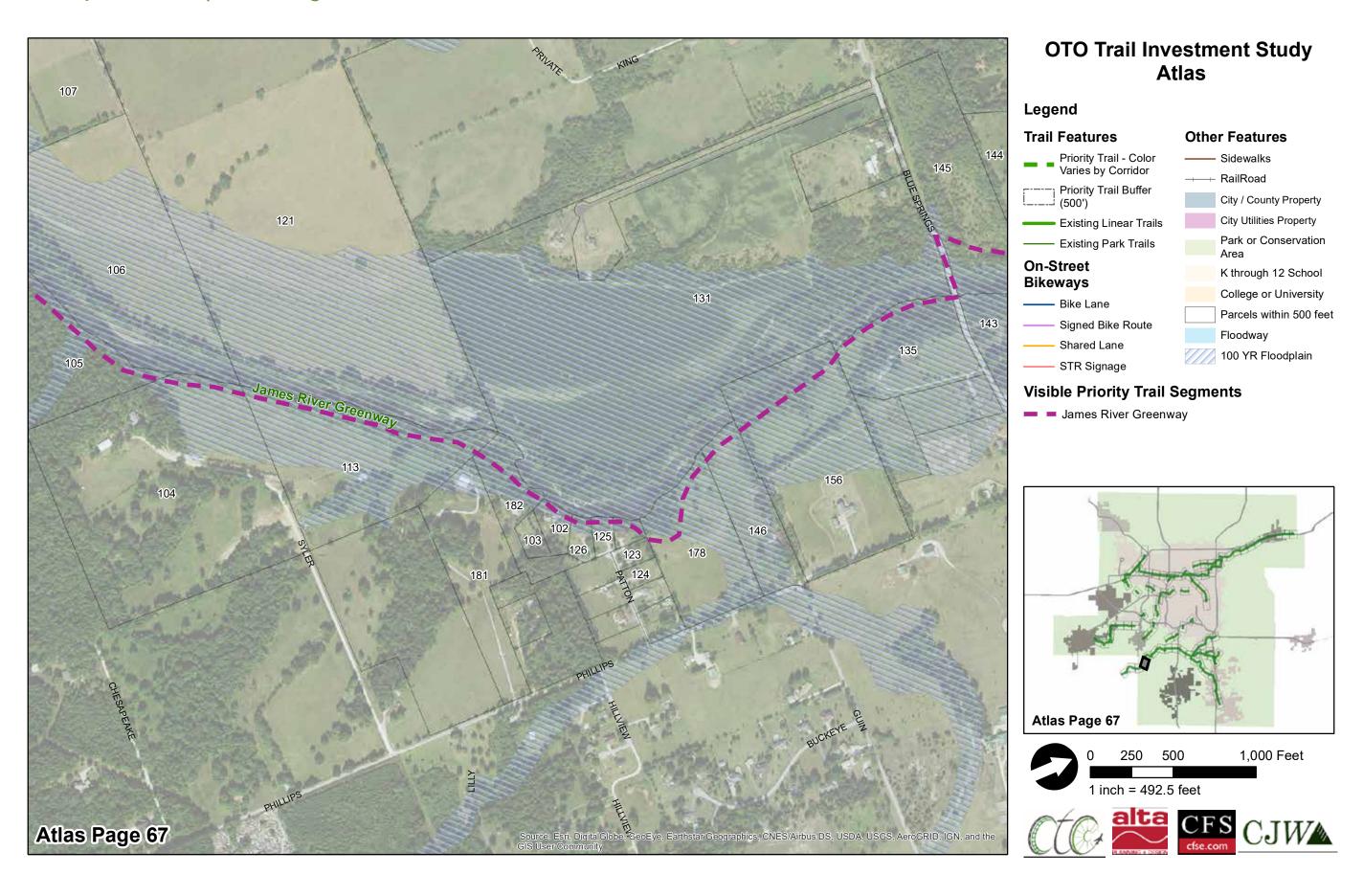


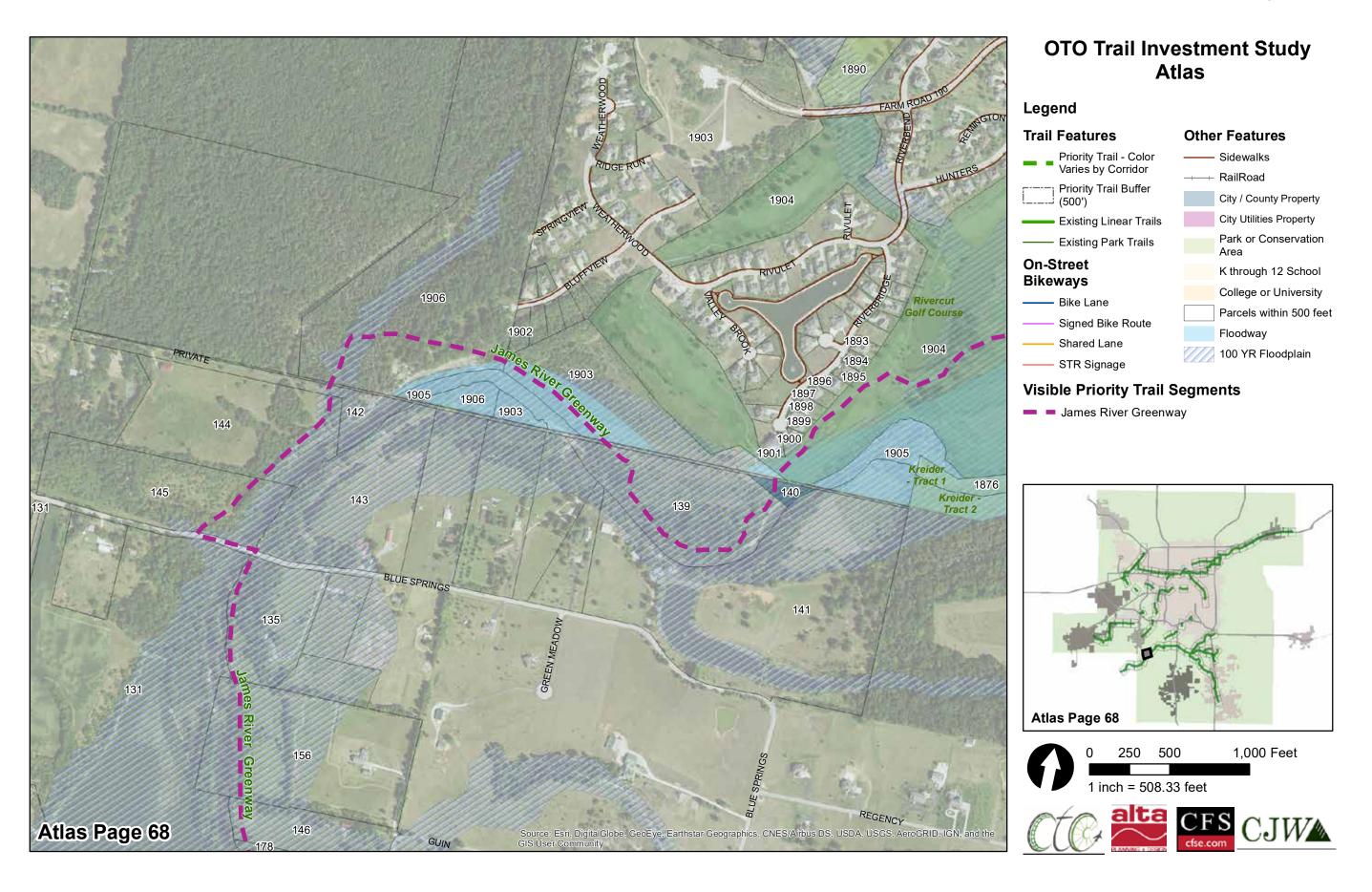




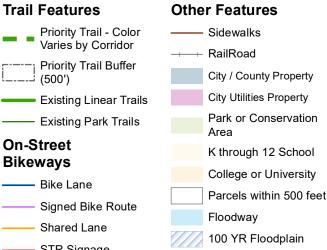




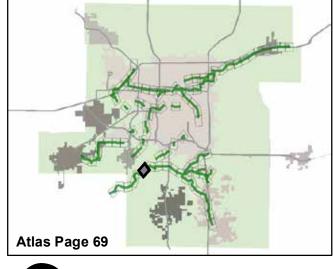


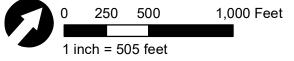




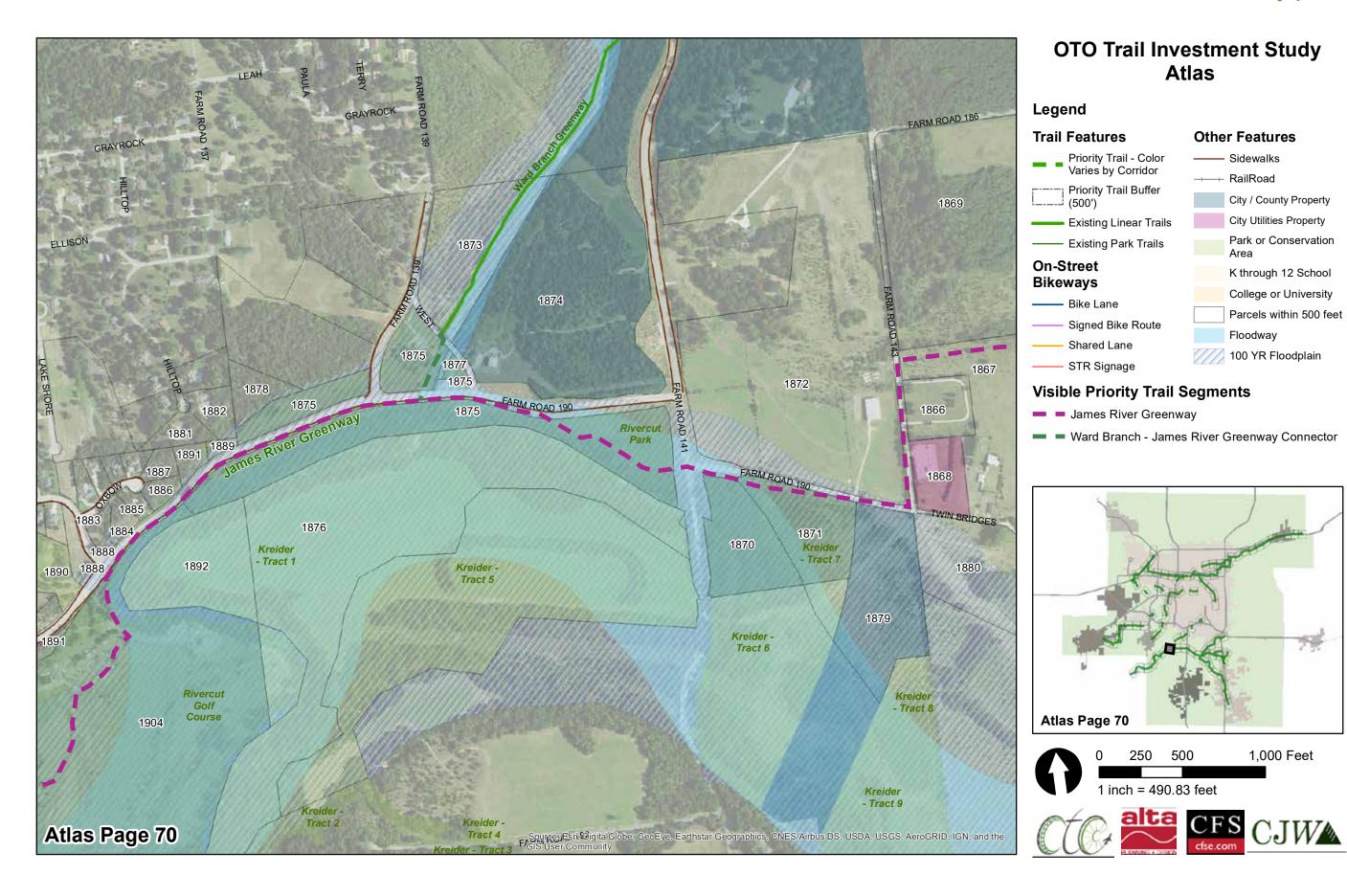


#### **Visible Priority Trail Segments**

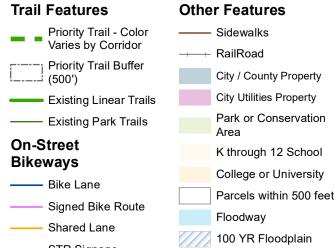






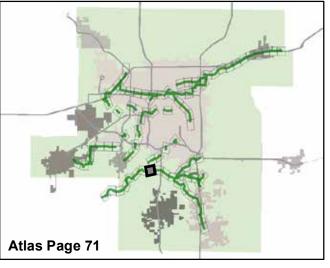


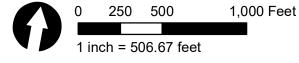




#### **Visible Priority Trail Segments**

James River Greenway

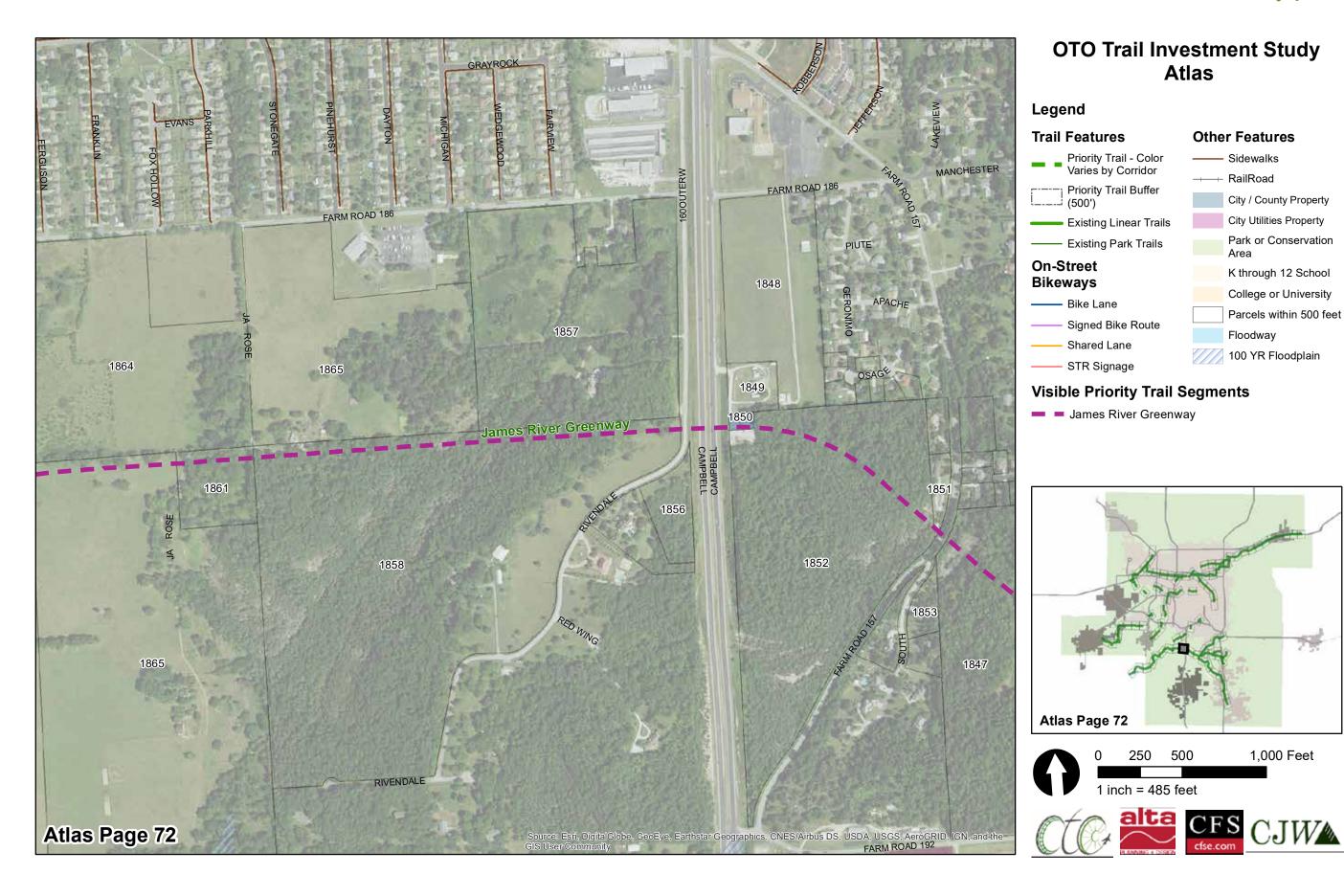


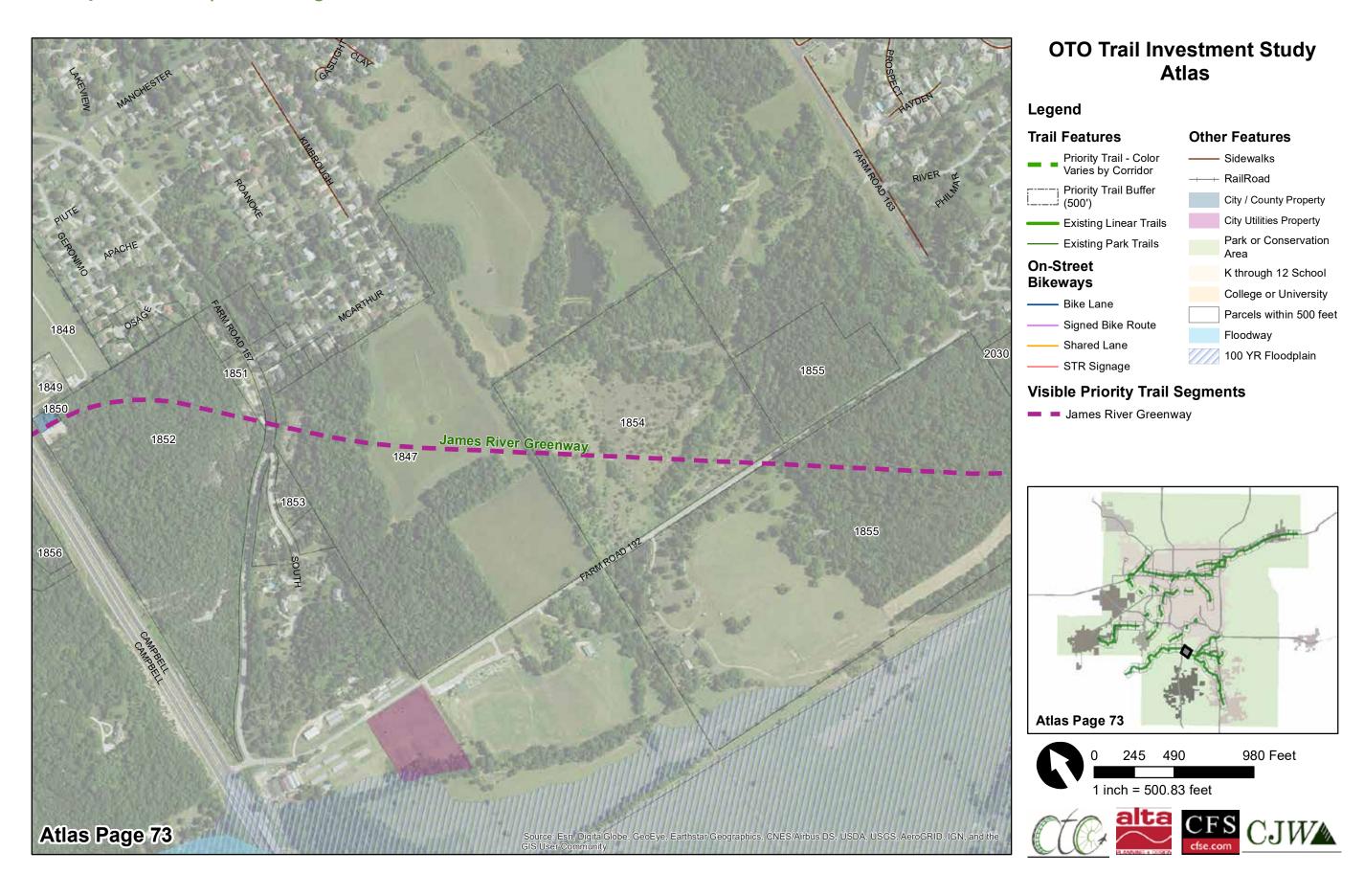


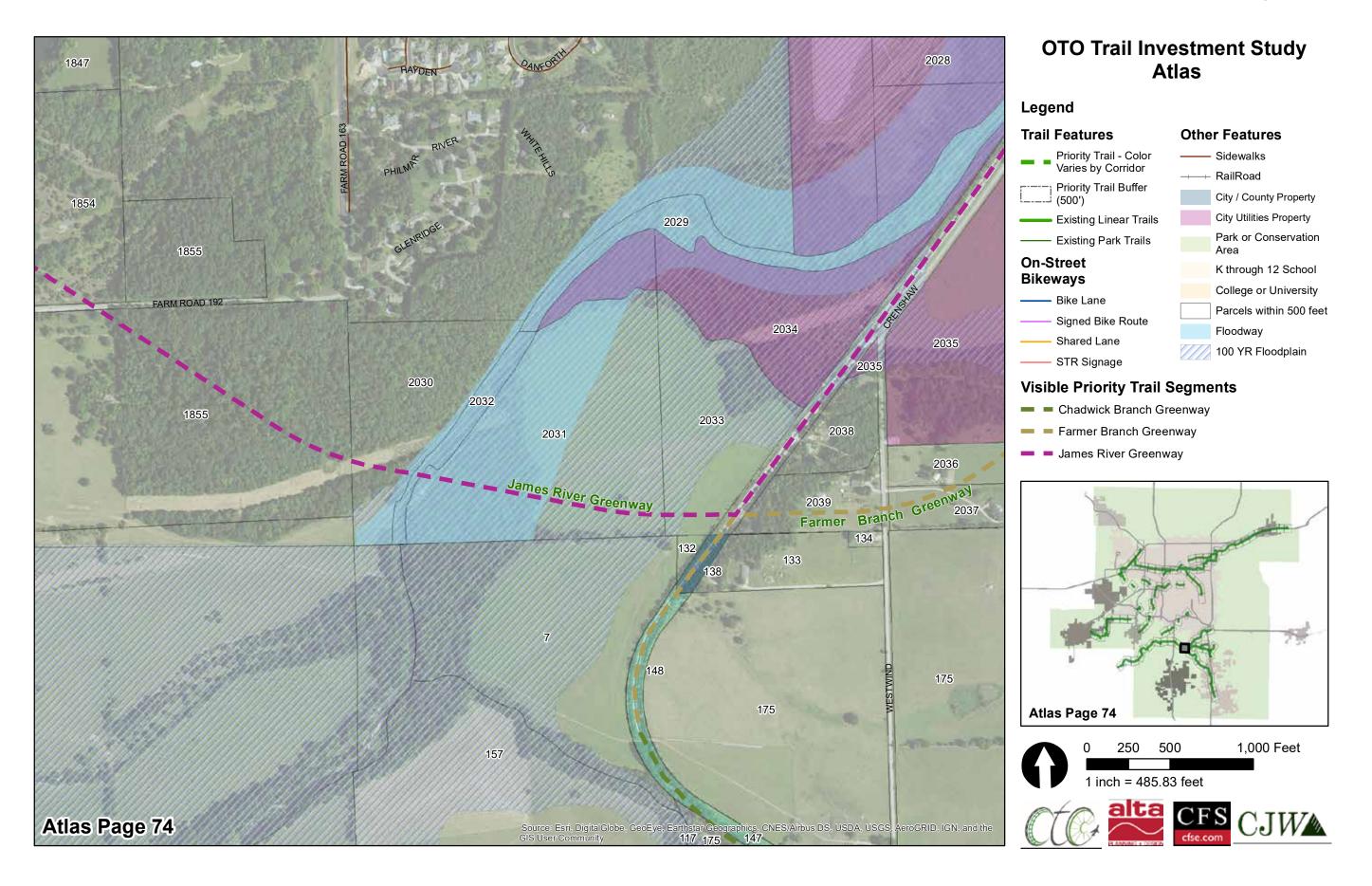


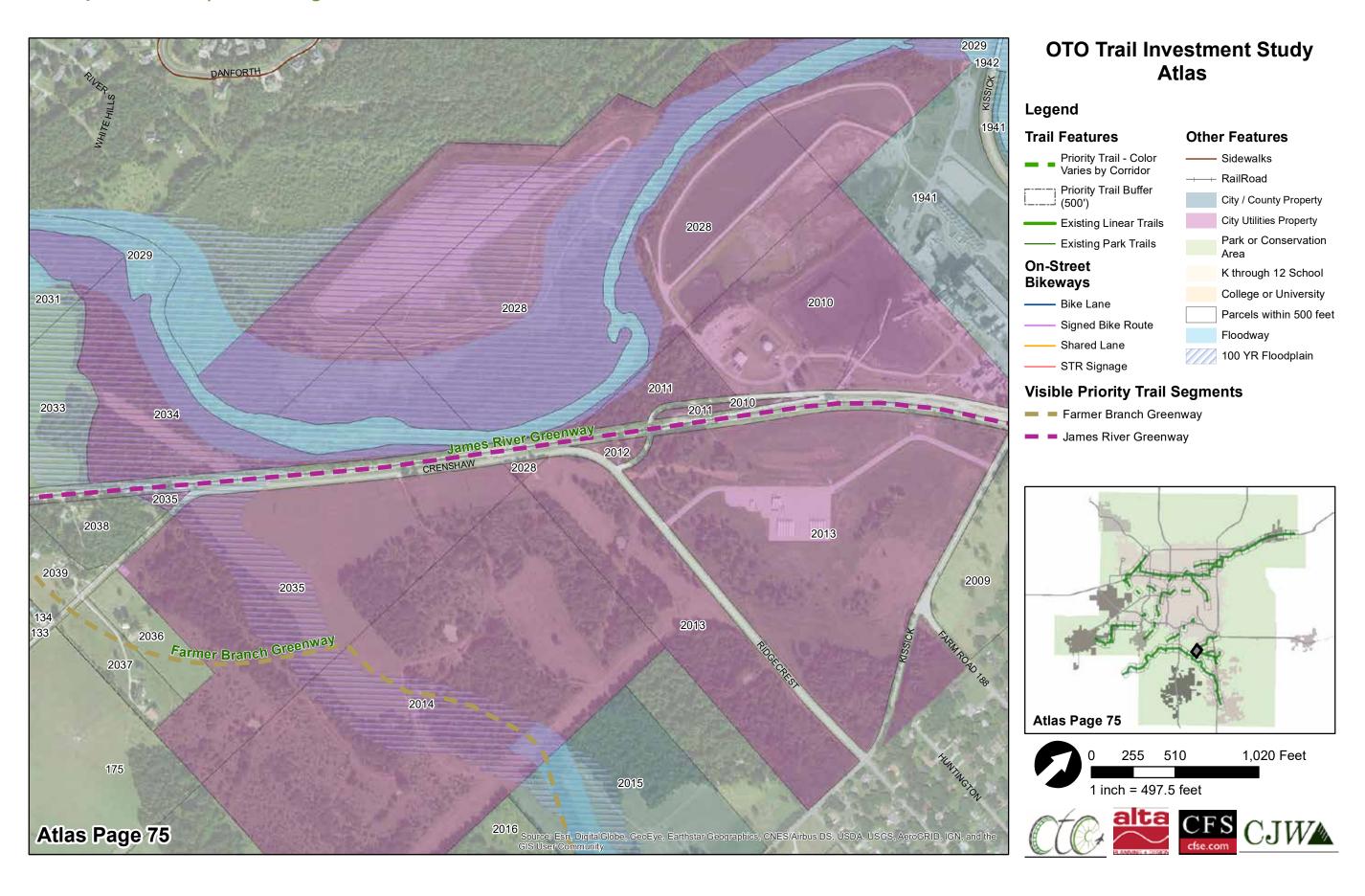


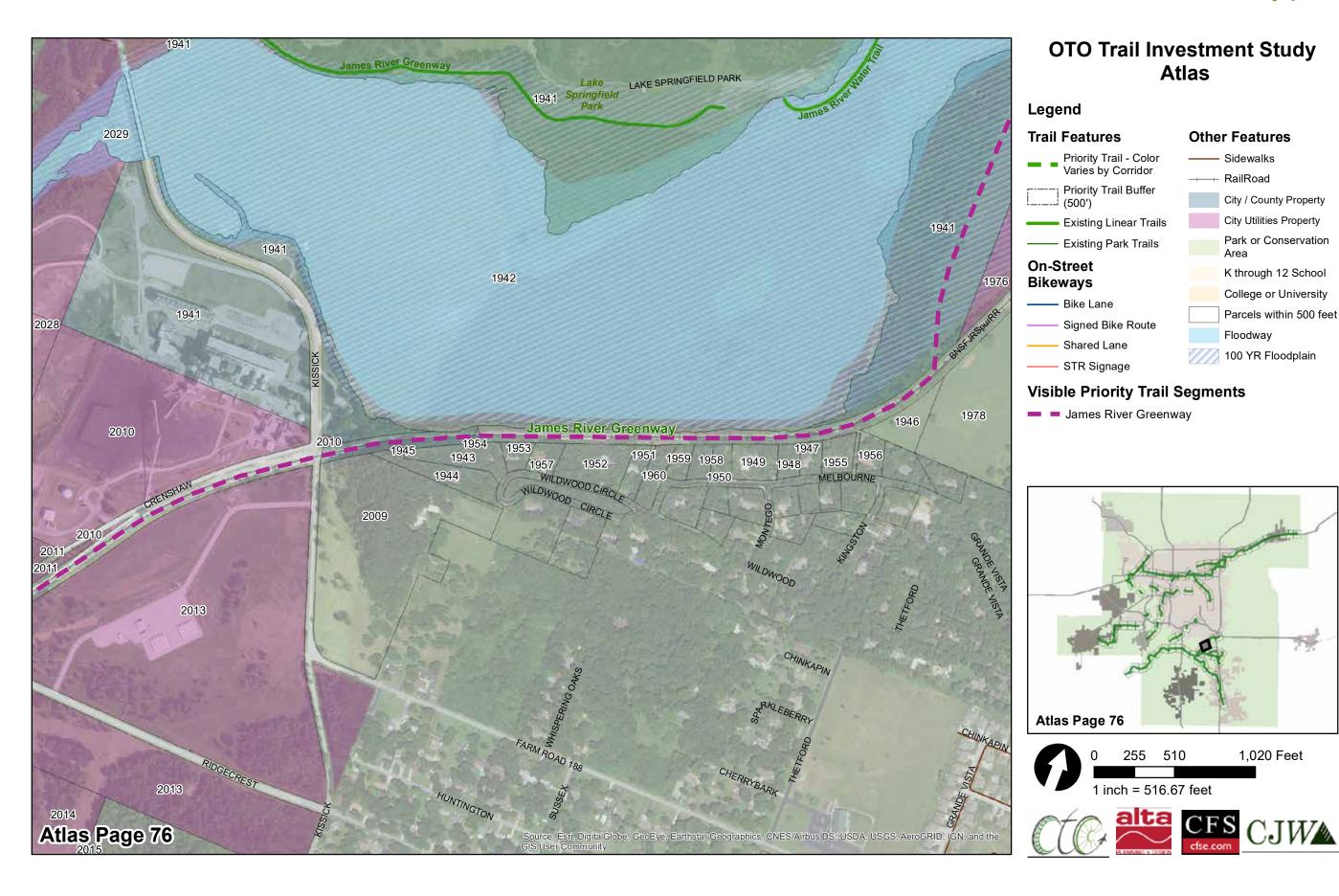


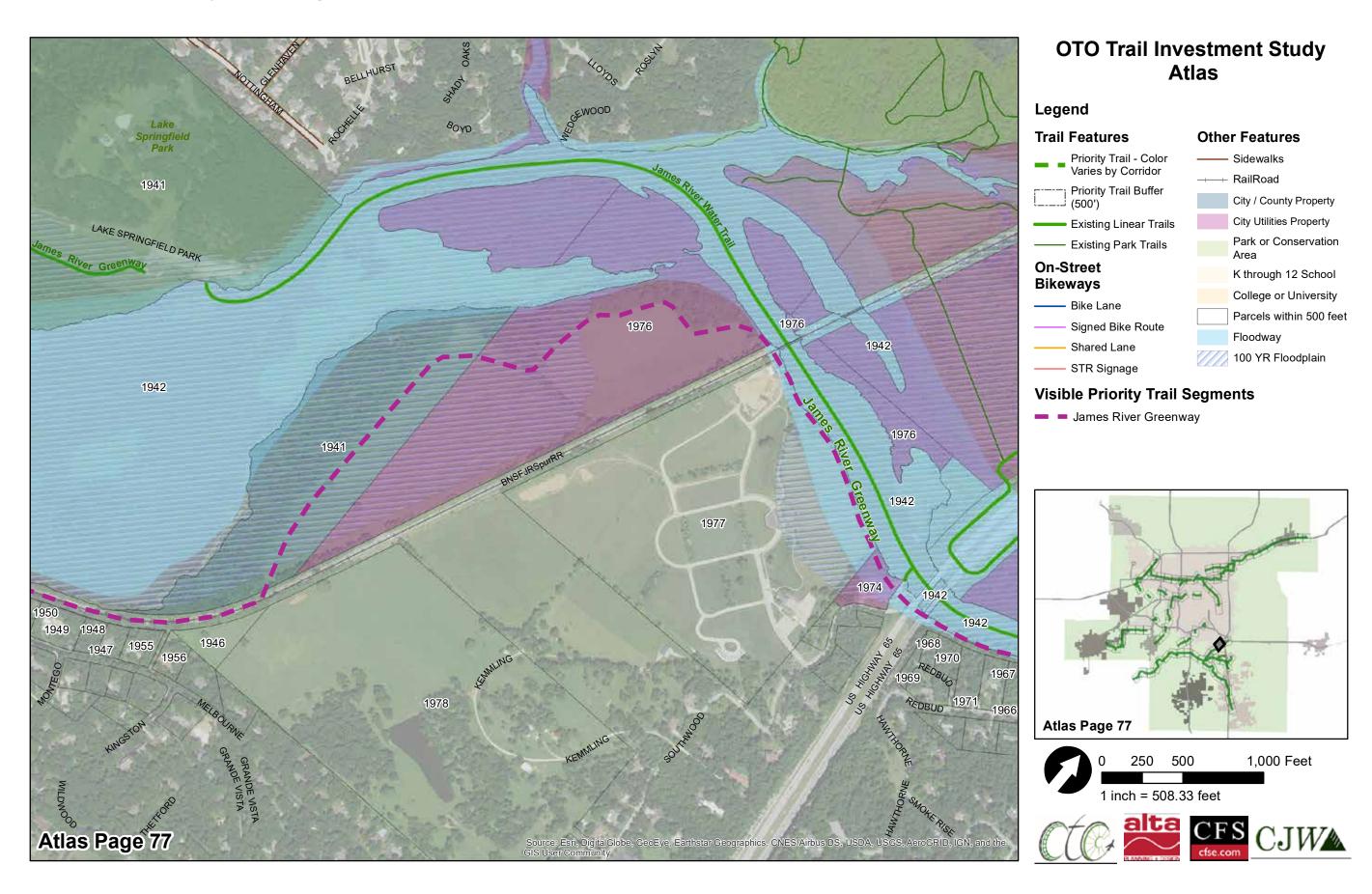


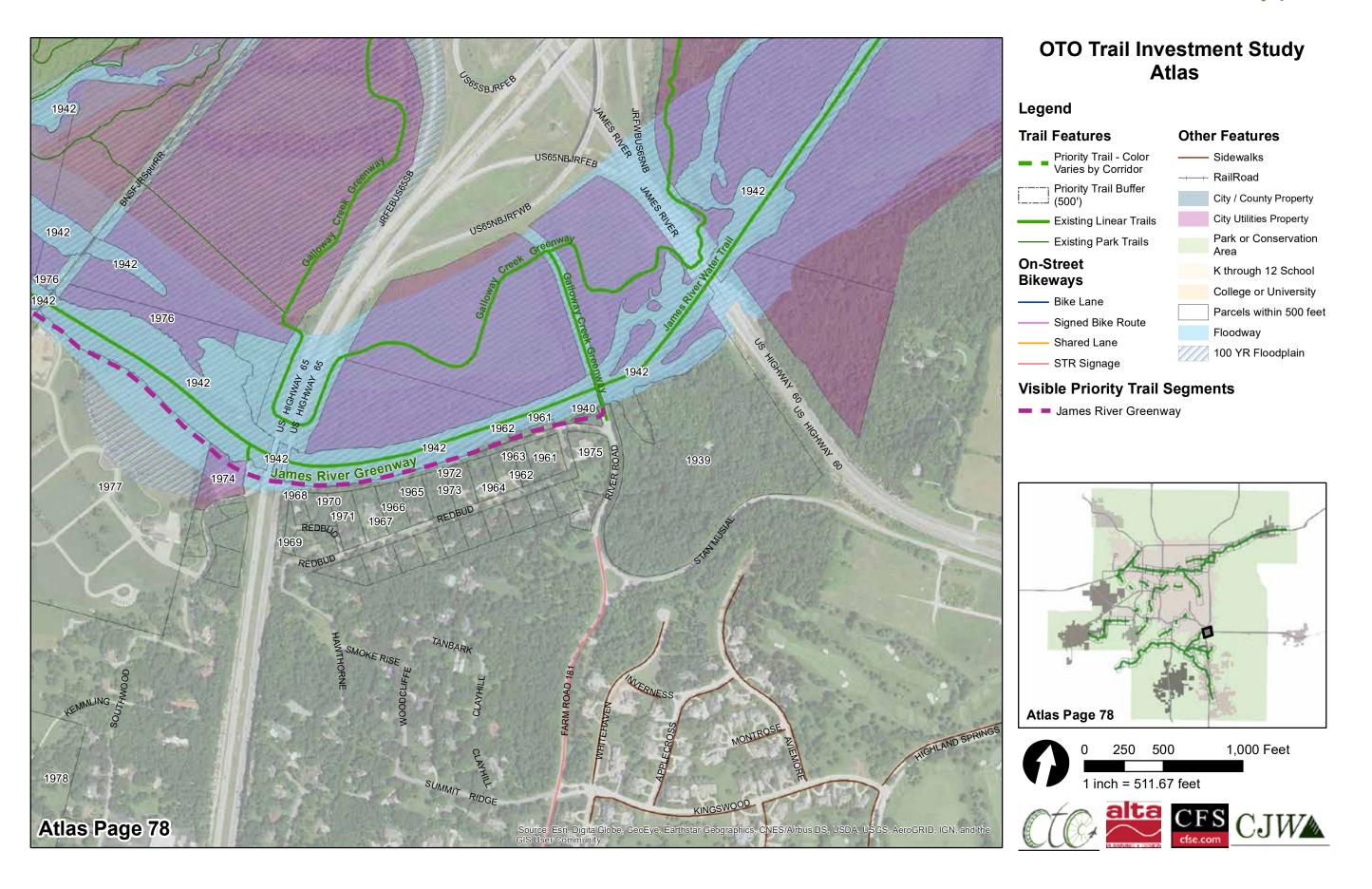


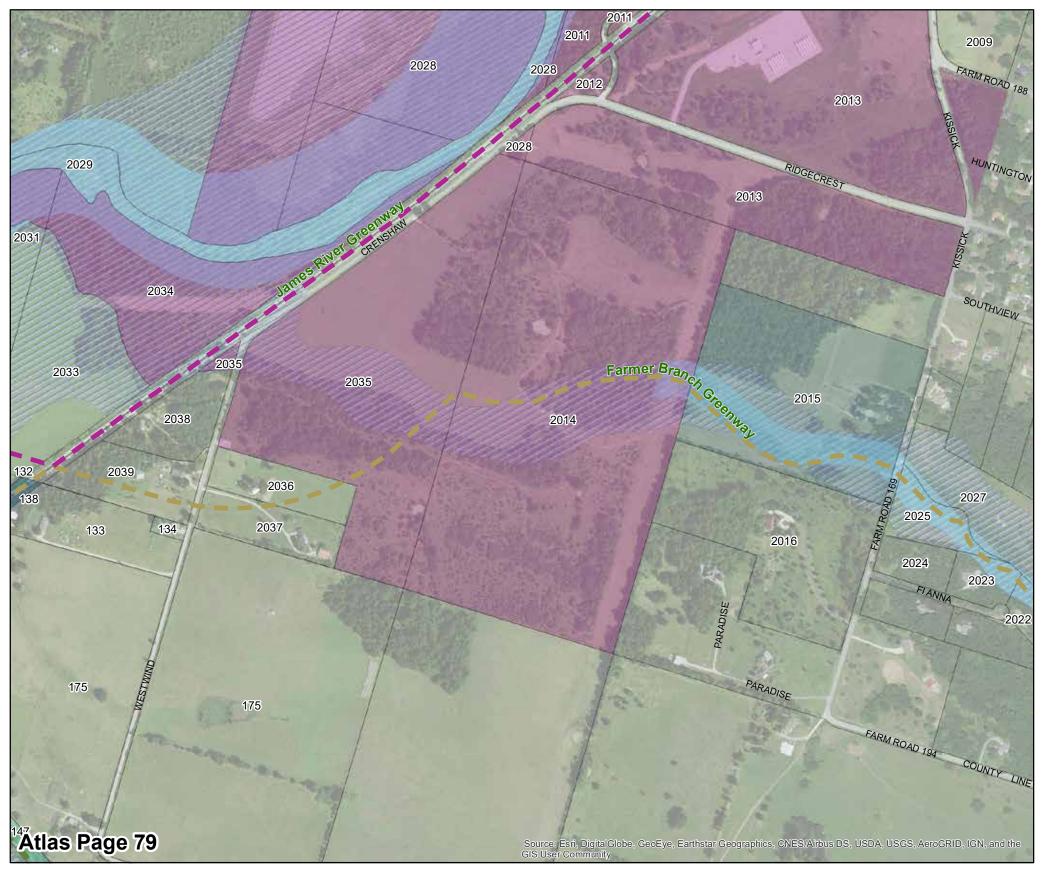










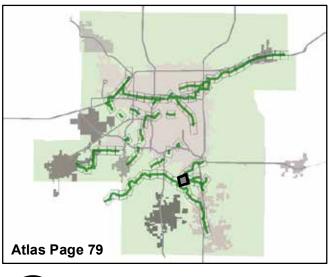


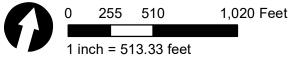
#### Legend



#### **Visible Priority Trail Segments**

- Chadwick Branch Greenway
- Farmer Branch Greenway
- James River Greenway

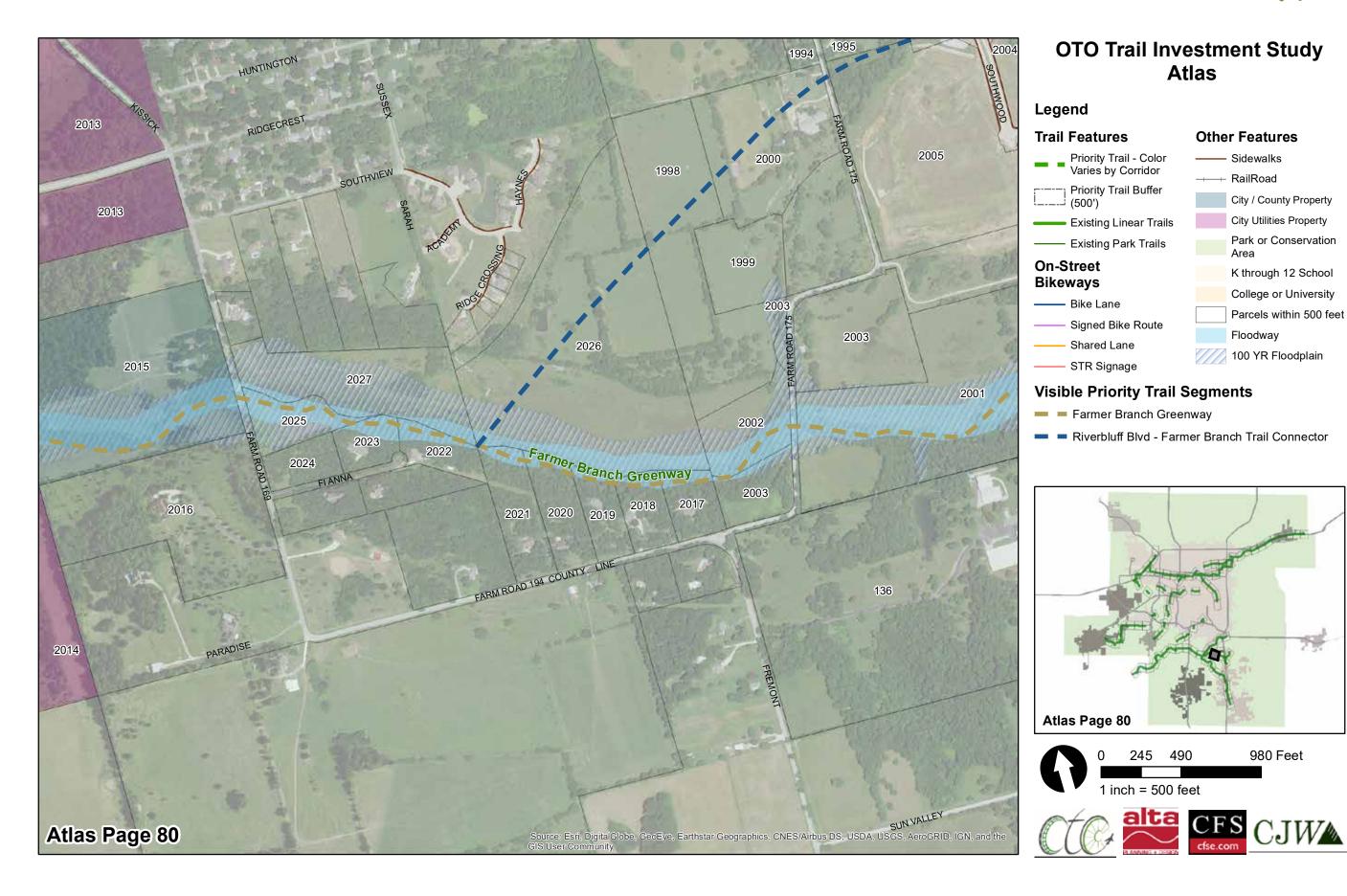


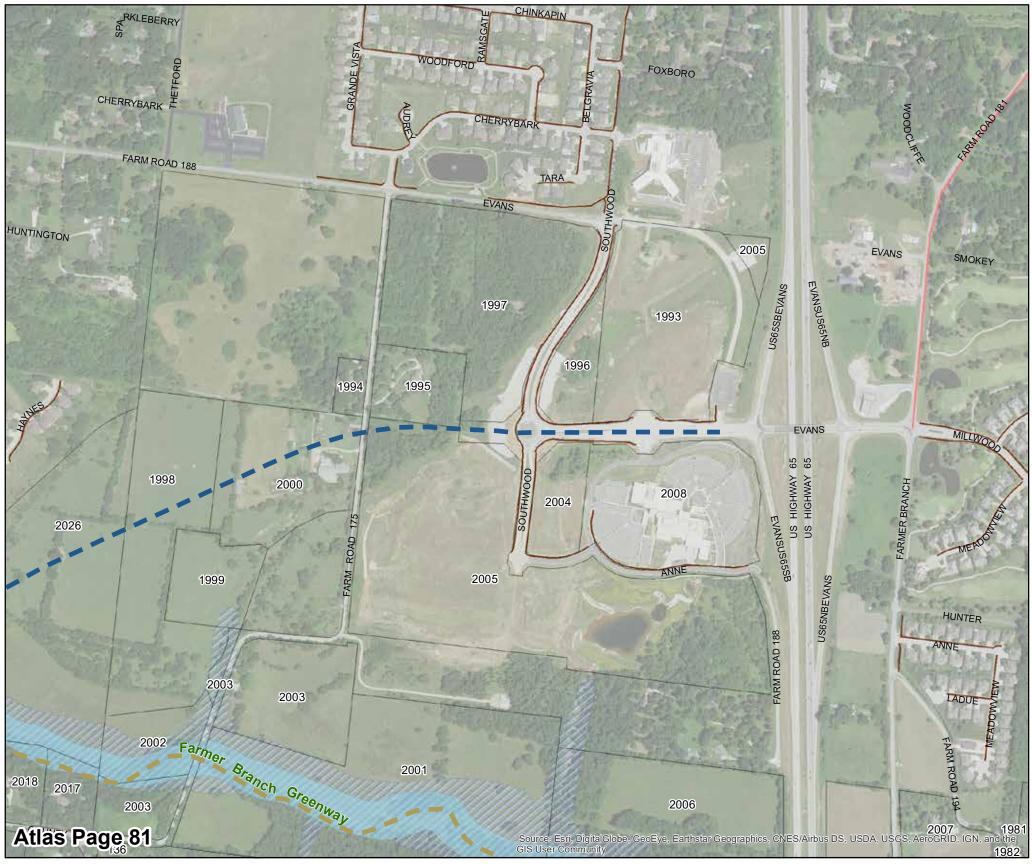




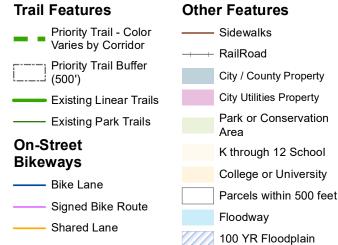








#### Legend

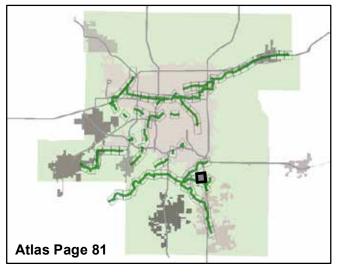


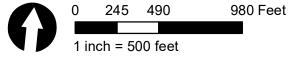
#### **Visible Priority Trail Segments**

Farmer Branch Greenway

—— STR Signage

Riverbluff Blvd - Farmer Branch Trail Connector



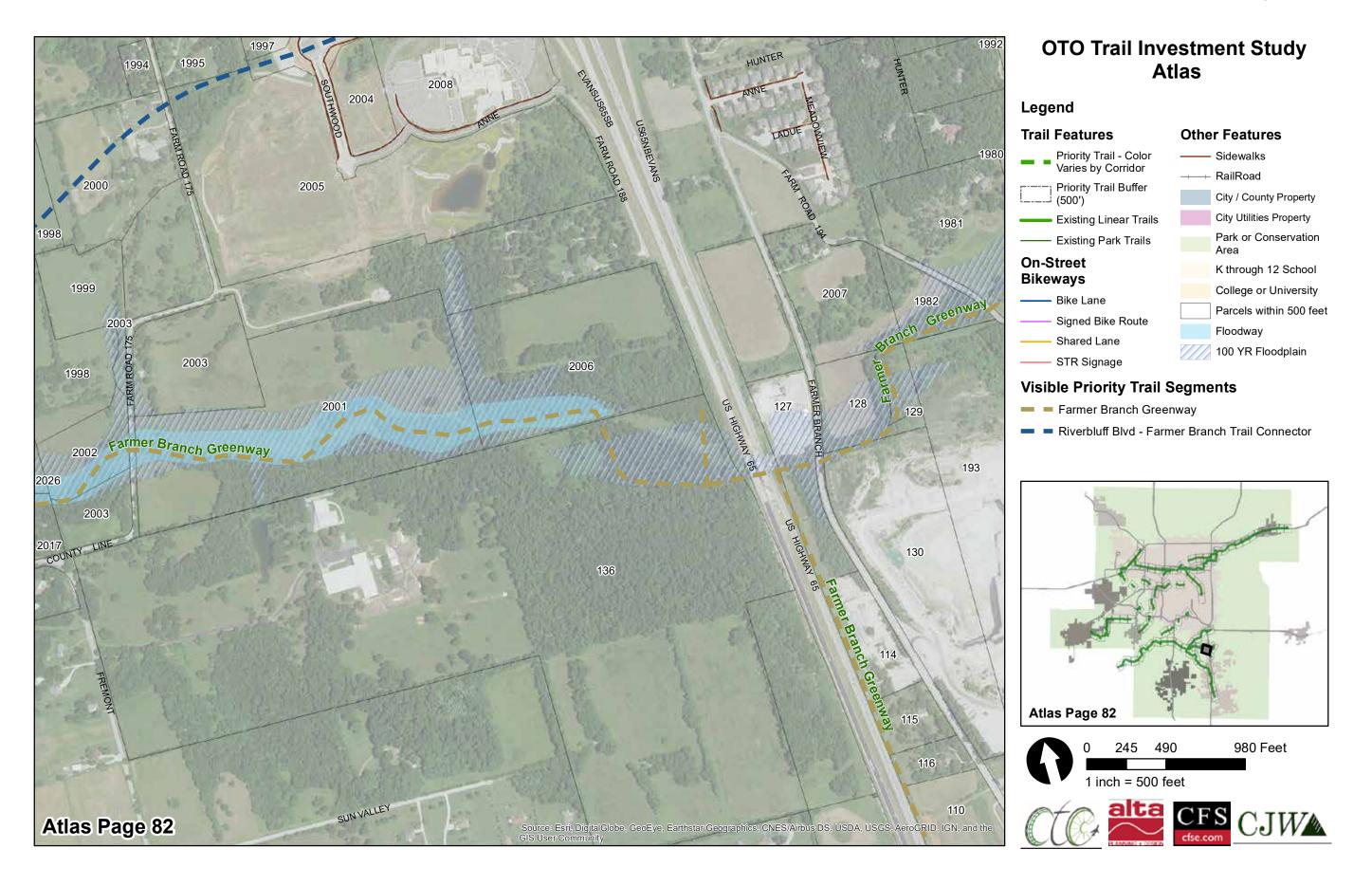


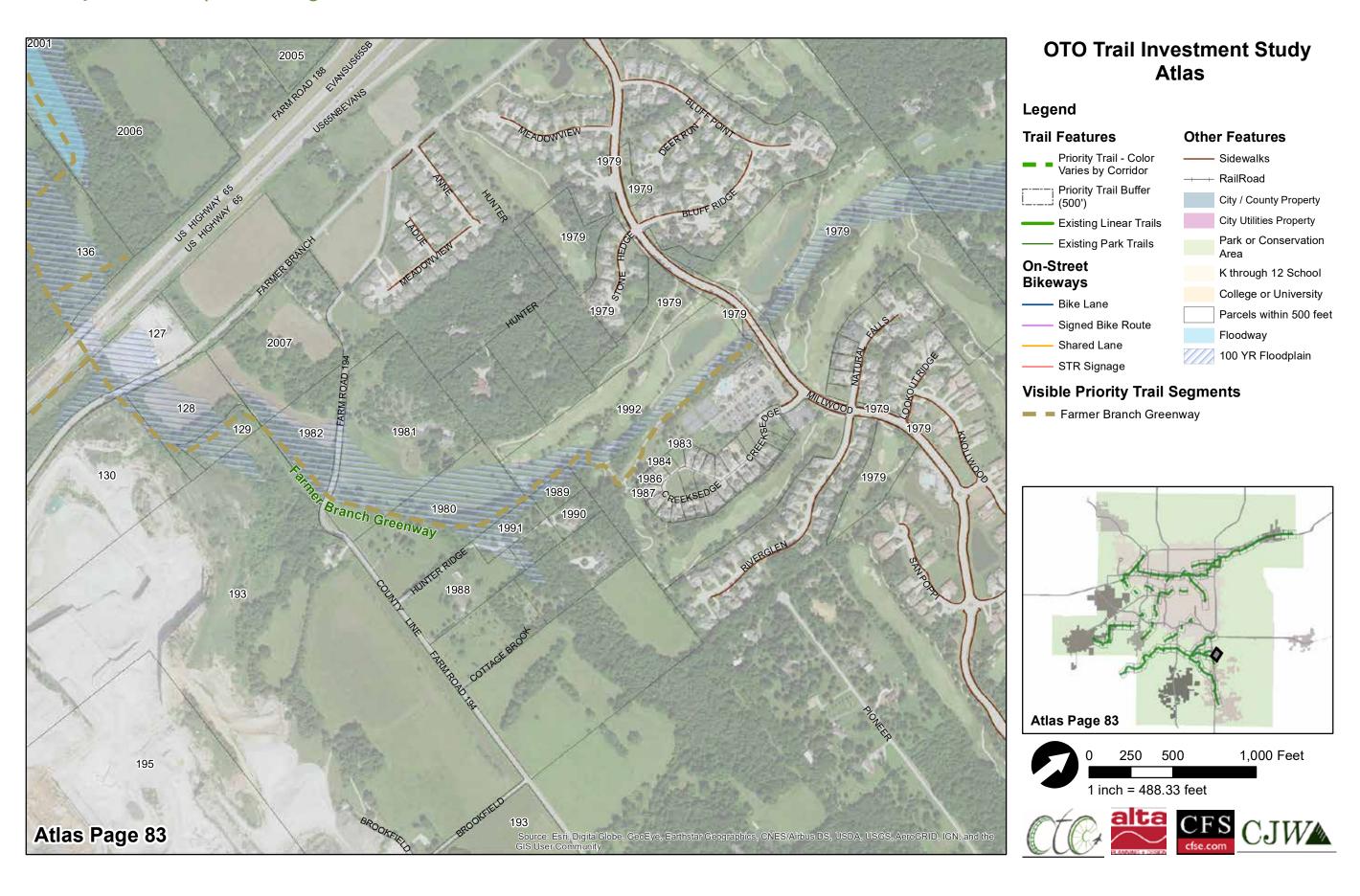


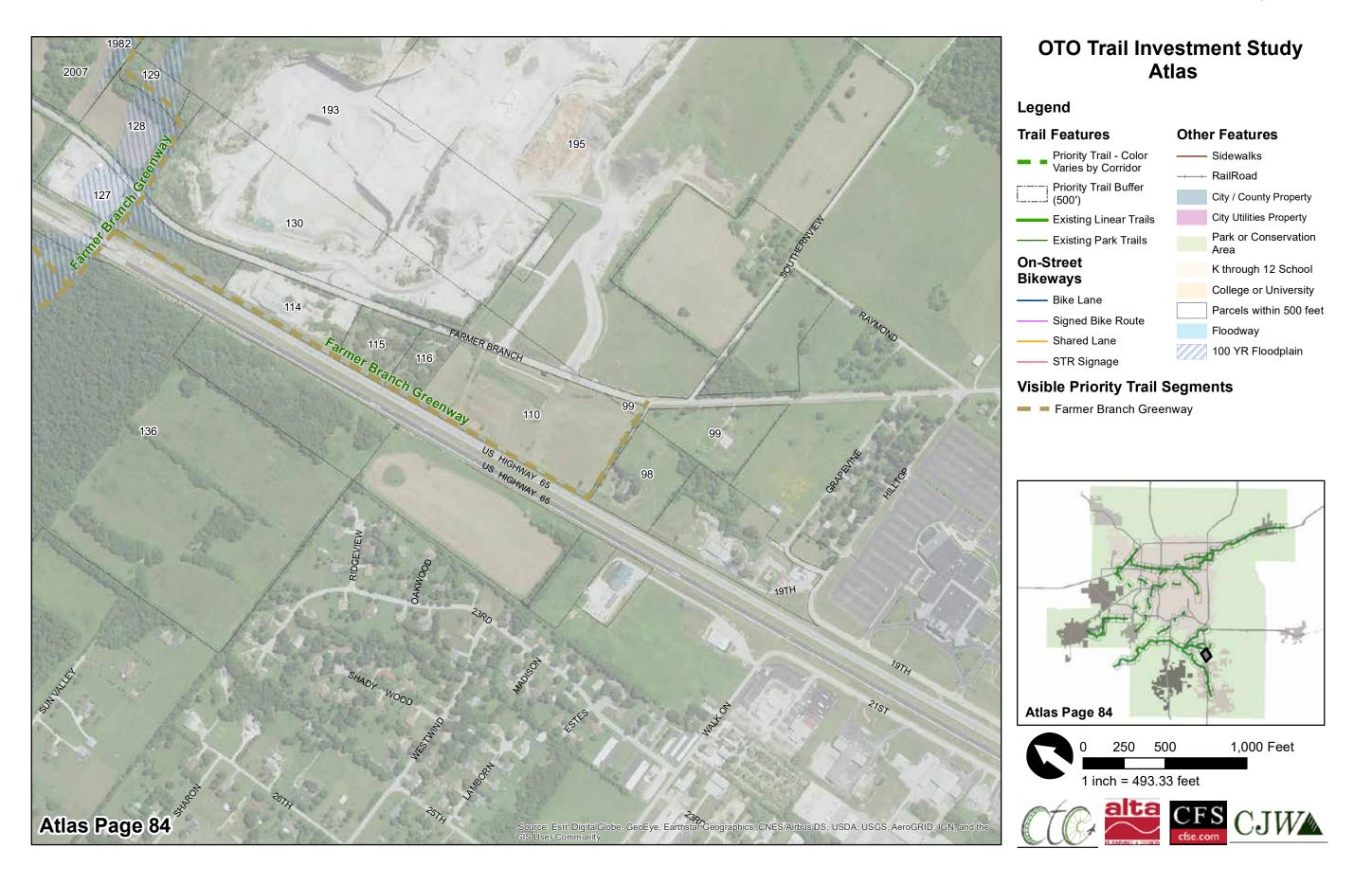




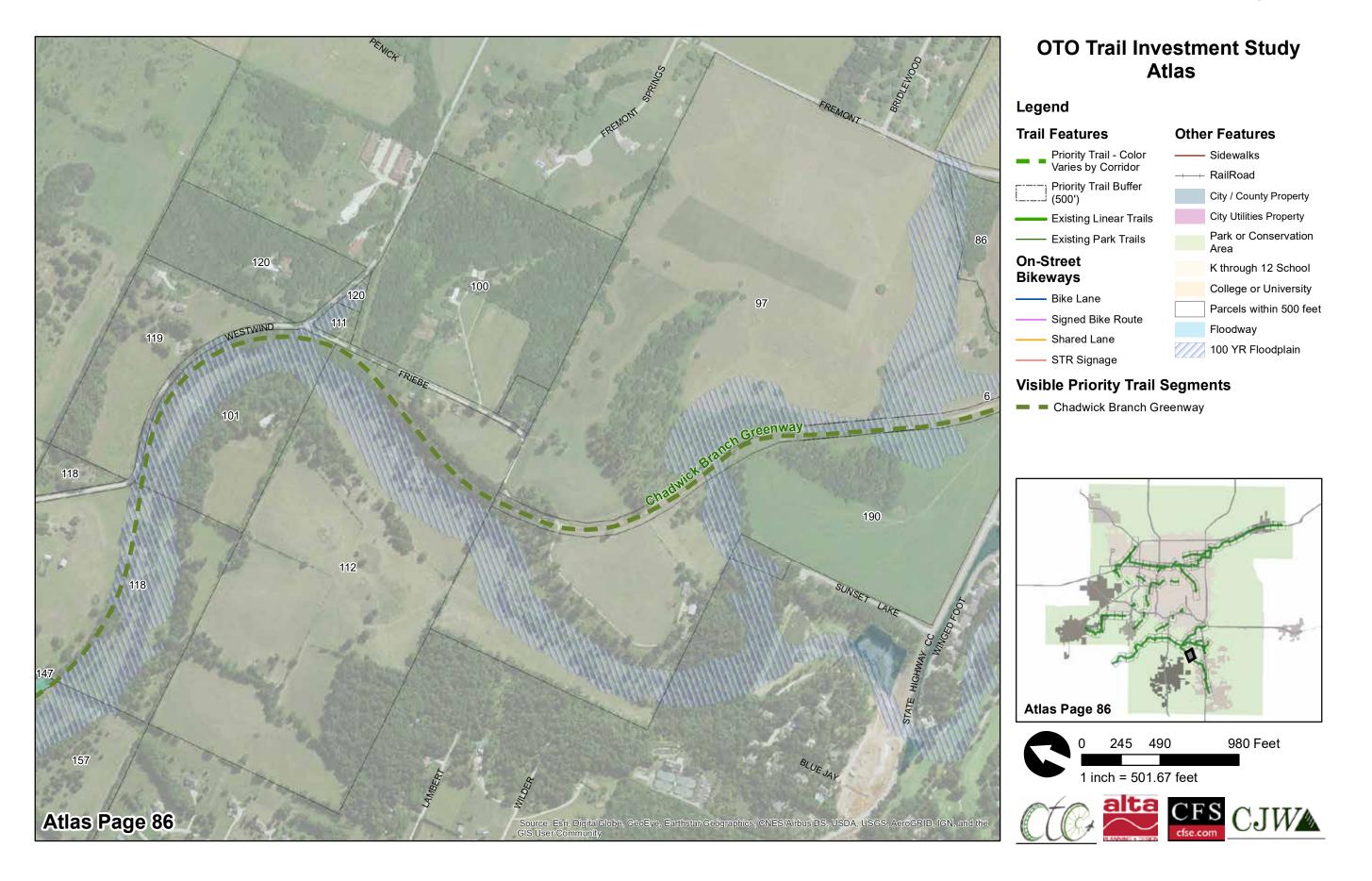


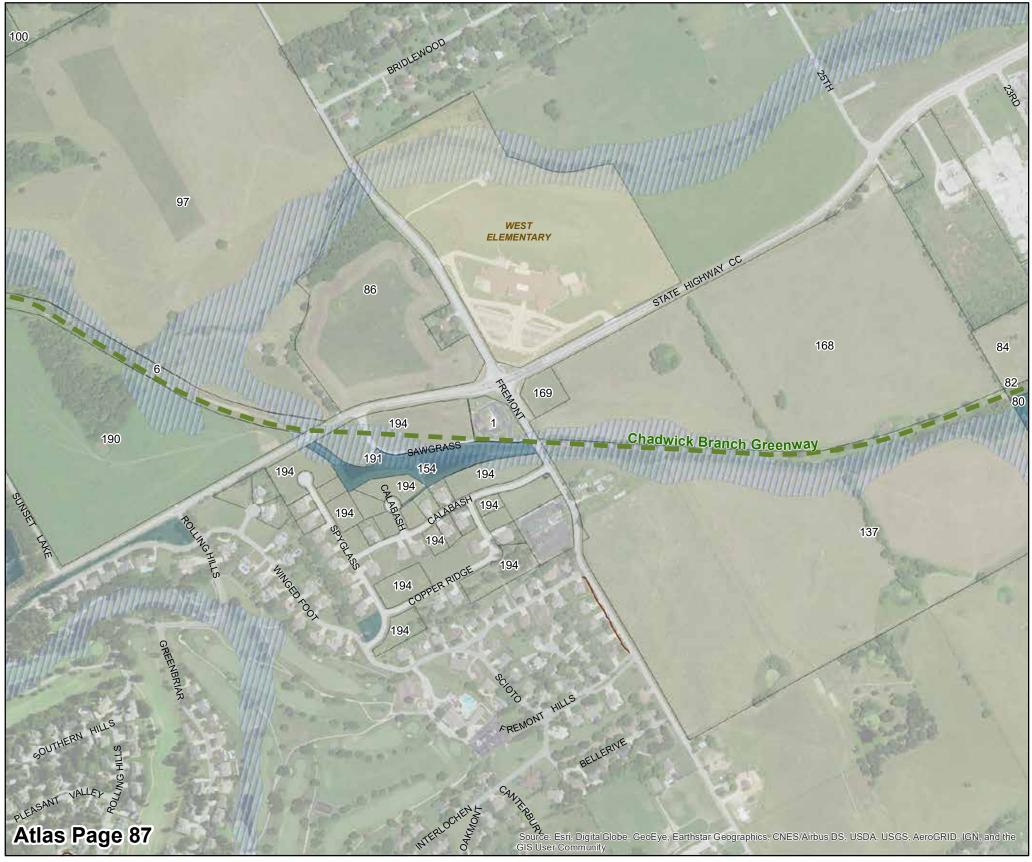




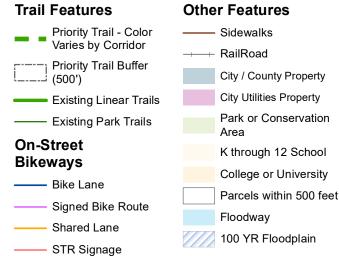






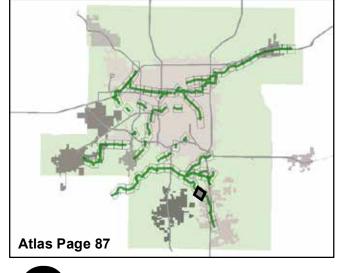


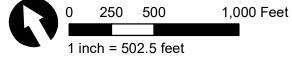
#### Legend



#### **Visible Priority Trail Segments**

Chadwick Branch Greenway

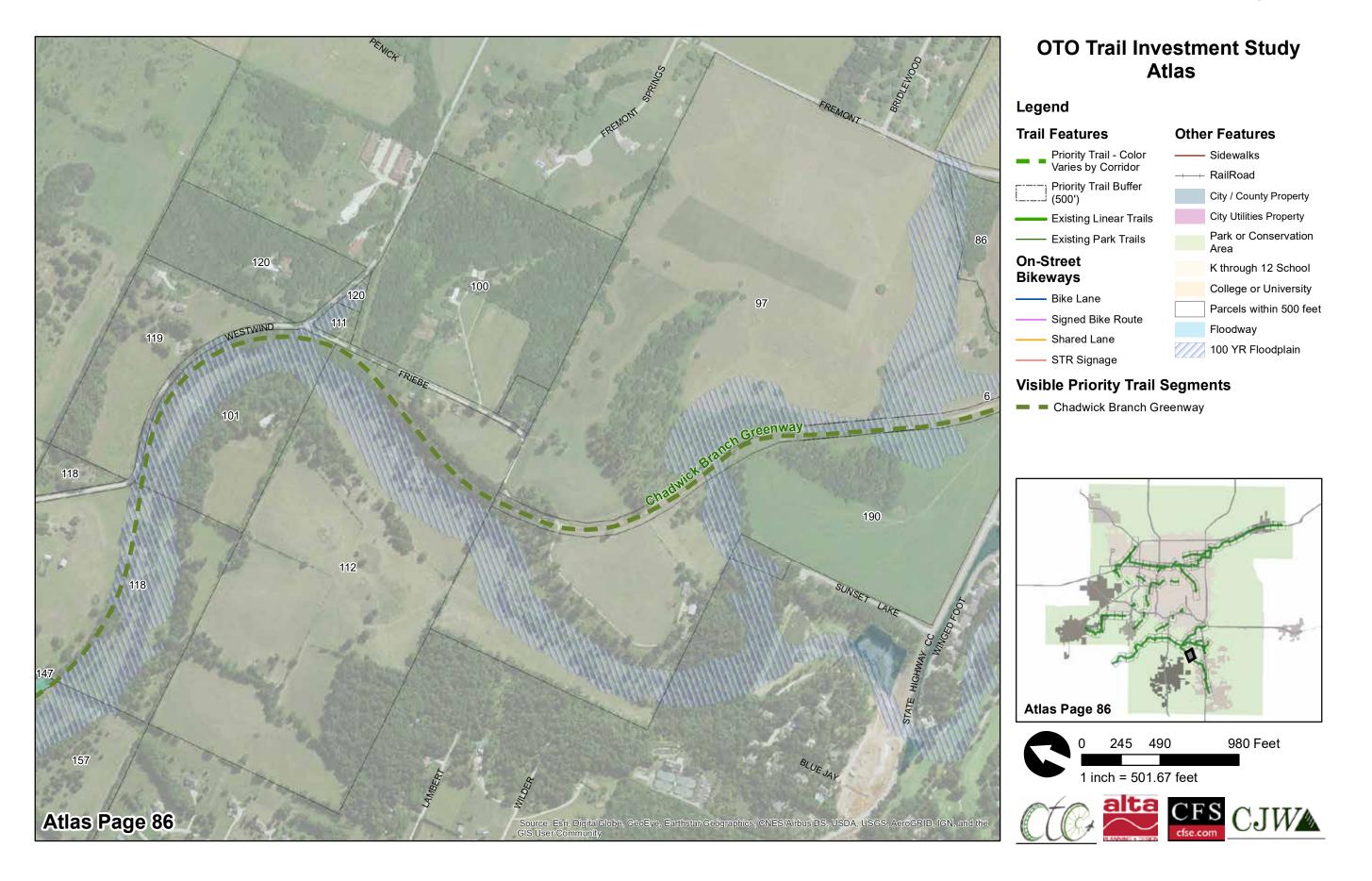






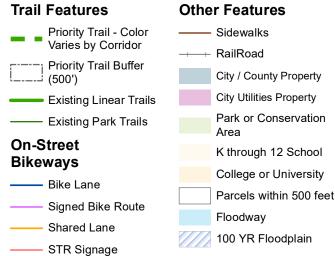






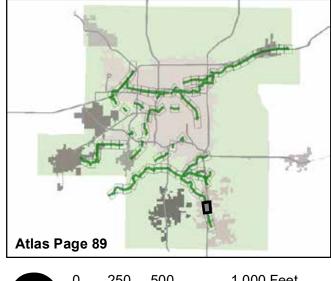


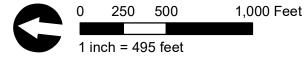
#### Legend



#### **Visible Priority Trail Segments**

Chadwick Branch Greenway





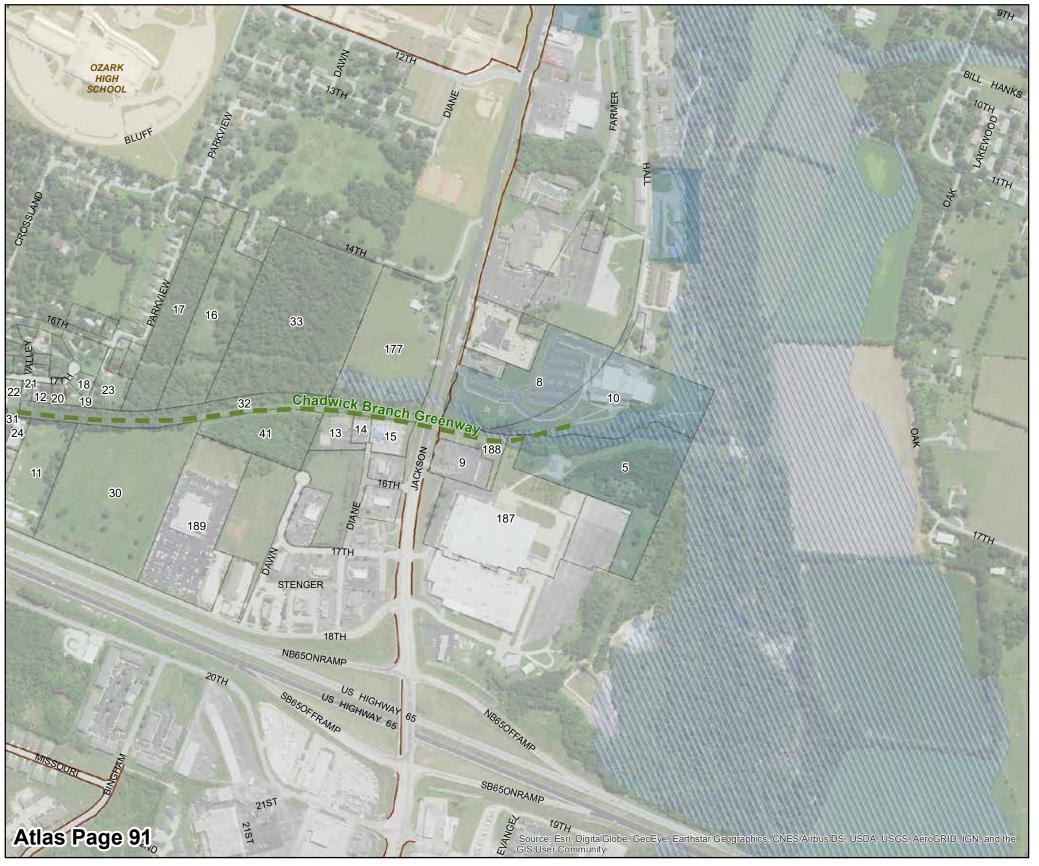




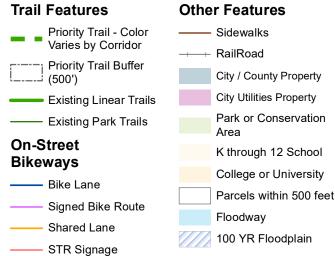






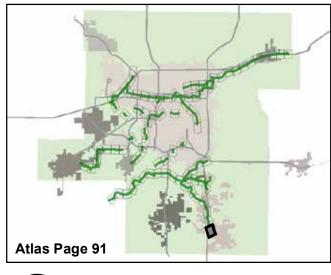


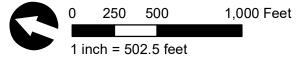
#### Legend



#### **Visible Priority Trail Segments**

Chadwick Branch Greenway

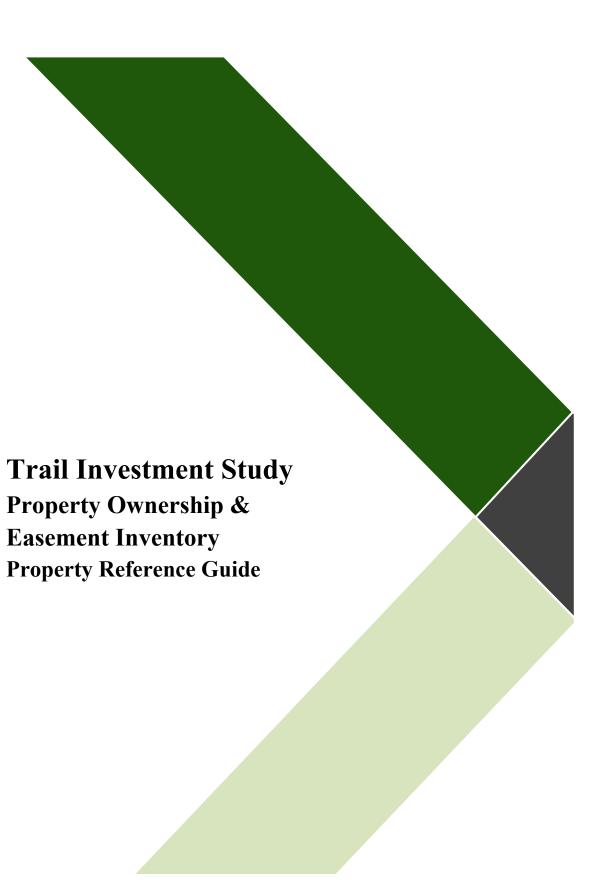












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17	110522002008002000	1199	WEBER, ANNA J	5.90260053960
18	110522002009016000	1315	SPRADLING, ARTHUR L & LOLA M (TRUST	0.34886902369
19	110522002009017000	1319	LITTLEFIELD, GEORGIA & CARL, PEGGY	0.26077970300
20	110522002009018000	1323	LITTLEFIELD, GEORGIA E	0.23049879571
21 22	110522002009020000 110522002009021000	1335 1401	KOONTZ, TEDDY J (TRUST) HICKS, ROCKY D & BETTY S	0.16581177435
23	110522002009021000	1517	MATHEWS, W GLEN & LINDA F	0.60268458901 1.17502460376
24	110522002003001001	1720	COBB, JESSE (TRUST)	0.39167940266
25	110522002007002000	1530	OZARK BAPTIST TEMPLE INC	4.90133106324
26	110522002009024000	1407	MITCHELL, BRENDA	0.32066760619
27	110522002009023000	1405	ROBERTS, BETH & HUG, CHRISTOPHER	0.15397490588
28	110522002009025000	1411	MITCHELL, BRENDA A	0.32214668819
29	110522002009026000	1525	GARLAND, GENEVIEVE	0.17671143118
30	110522002007005000		HEDGPETH, CHLORENE (TRUST)	13.03462157410
31	110522002007003000	1741	CRAFTON, BOBBY R & RHONDA L	0.87809116881
32	110522002008005000		BURLINGTON NORTHERN RAILROAD	5.53290789013
33	110522002008004000	.=	KISSEE, DONALD (TRUST)	14.61421073850
34	110515003003005001	1790	SHANE, THOMAS R & EDWINA M	0.44135708125
35 36	110522002005001000 110522002007001000	1781 1724	HICKS, NORMAN F & RUTH A JTGJM8 LLC	2.60567828292 1.15408425618
37	110522002007001000	1626	CHILDERS, DARLENE	2.12897147780
38	110522002004003000	1576	CHILDERS, I DARLENE	0.18612573207
39	110522002005002000		BURLINGTON NORTHERN RR	0.19028121415
40	110522002009027000	1527	CARTER, RONALD & BONILYN	0.39908333737
41	110522002007007000		HEDGPETH, CHOLRENE (TRUST)	3.73336491526
42	110515003004002000	169	LONG, DAVID R SR & REBECCA JO	0.68565317296
43	110515003002003000	(17TH	FETTERHOFF, BRITTANY NOEL	0.89405081460
44	110515003002005000	(17TH	FETTERHOFF, BRITTANY NOEL	1.59871479789
45	110515003002001000	2201-2301	ROCKY TOP CONSTRUCTION LLC	2.55056407264
46	110515002001009000	2726	FRHS PROPERTIES LLC	0.52195726435
47	110515002001009001	2728	STARK ENTERPRISES OF OZARK LLC	0.56017030701
48	110516004001001000	2400	KELLY INVESTMENTS PROPERTIES LLC PARKER, SANDRA & CASTLEBERRY, LARRY	1.74060168244
49 50	110516001004023000 110516001002022001	2045	WILLIAMS, KEITH T & REBECCA J	3.68319087303 0.93505567354
51	110516001002022001	2045	MILLER, JOSHUA D & CANDACE	1.17352399328
52	110515002001005000	2604	CAROLINE'S PAMPERED PET MOTEL	1.01629859734
53	110515002001003000	2574	MILLER, KELVIN R & JANET L (TRUST)	0.99103035619
54	110515002001002000	2460	WOLANSKY, MARK	1.00003429679
55	110516001002022006	2599	CAYOCCA, ANGEL G	2.09923821690
56	110516001002003001	2451	RICE, HENRY & JADONNA	6.50307118479
57	110515000000015000	2878	JOHNSON, JIMMY L & PAULETTE B LEE	0.66353037388
58	110515002001010000	2836	EMERY INVESTMENTS LLC	0.28179477367
59	110515002001010001	2802	COBRA KAI DOJOS LLC	0.55543032749
60	110515002001010002	2804	M & M INVESTMENTS ENTERPRISES I LLC	0.47981975347
61	110515002001010003	2836	M & M INVESTMENTS ENTERPRISES I LLC	0.72140687543

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62	110515002001011000	2850-54	CRAPENHOLFT, CLIFF & JANICE	0.51016207641	124	05093200000016000	1935	BUECHLER, STEPHEN & PAULA	0.69190621402
63	110515002001011000	2948	LOUALLEN, STEPHEN J & DIANE L	0.73739066485	125	050932000000011008	1957	KERSHAW, MARK D & KAREN D	0.67312459332
64	110515000000014000	2902	DUMITRASH, ANDREY	1.08724083596	126	050932000000011011	1961	BLAKESLEE, BILLY C	0.84394623921
65	110210000000014000	2005	DILLMAN, WILLIAM C & THERESA A	4.61028916742	127	040833000000002000	1817	CITY WIDE CONSTRUCTION PRODUCTS CO	7.61600188451
66	110209000000030000	N	HICKS, EDWARD & MARSHA	1.65454490394	128	040833000000001000	N	MAY, GARY D	5.62243942825
67	11020900000032009		MICHAEL DOBBS HOMES LTD	1.10464396284	129	040833000000001001		LEO JOURNAGAN CONST CO INC	1.83856278912
68	110209000000030002	3851	HIGGS, EDWARD T & MARCIA K	2.23806480940	130	040833000000133000	1506	JOURNAGAN, LEO CONSTRUCTION CO	23.95724647070
69	110209000000031000	2012	HOMESTEAD REAL ESTATE LLC	2.45381958977	131	050932000000014000	2076	RUSH, DEL W & LANA K	91.40361685810
70	11020900000035000	3628	TRACKER MARINE, L P	23.03491593290	132	040931000000003000	(WESTWIND	LYNCH, THOMAS	0.61568236585
71	11020400000090001	2406-2436	STEWART, CHARLES (TRUST)	0.99253421475	133	040931000000002000	7612	TERRILL, DENZIL L	7.58199489244
72	110209000000032008	3998	TJMAC PROPERTIES LLC	0.53561366968	134	040931000000002001	7702	TERRILL, DENZIL	0.44887896575
73	110209000000032000		WEATHERMAN, SUZANNE	1.32727067981	135	050932000000013000	1956	HEAVENLY PROPERTIES LLC	8.55194976780
74	110209000000020000	4399	MO-MAX SALES INC	2.84643675805	136	040833000000003000	6930	FIOCCHI OF AMERICA	165.85263876400
75	11020900000016000	4425	RLS OF SPRINGFIELD LLC	2.09406910065	137	110204000000061000	5176	ESTES, DORIS SUE (TRUST)	78.85816501050
76	11020900000015000	4476	C & C MINI STORAGE, LLC	1.10832935018	138	040931000000065000	(WESTWIND	CITY OF SPRINGFIELD	1.03458404553
77	11020900000014001	4575	HUTSELL, JAMES J (TRUST)	1.06319931502	139	050833002001002000		RIVERCUT WEST LLC	13.37097190810
78	11020900000019000	4625	ARCHER CONSTRUCTION CO	0.97702390892	140	050833002001002001		CITY OF SPRINGFIELD	0.69677617538
79	11020400000066010	4800	OLD SOUTH PLANTATION INC	6.99145507073	141	050833002001001000	1815	WINCHELL, CRAIG & TERESA Y TRUST	40.32332959400
80	11020400000062000	(N	CITY OF SPRINGFIELD	21.48771295530	142	050932000000004000	2003	CONDUFF, LESTER & TAYLOR, MARSHA	4.89069341956
81	11020400000069000	N	CITY OF SPRINGFIELD AIRPORT	0.76825831094	143	050932000000003000	1939	TORGESON, CHARLES & MELISSA	15.57503842770
82	11020400000069001		RJC, LLC	1.65918708522	144	050932000000005000		CONDUFF, LESTER & TAYLOR, MARSHA	16.95864463640
83	11020900000018000	2120	STORAGE SOLUTIONS OF SW MO LLC	0.74011449567	145	05093200000014003	2003/2011	CONDUFF, LESTER & TAYLOR, MARSHA	14.30719041880
84	11020400000064000		HS INVESTMENTS LLC	4.13322938195	146	05093200000011004	1999	HEAVENLY PROPERTIES LLC	6.20324745703
85	110204000000089000	5350	LOYD, KENNETH W & NELDA	2.76043535683	147	040931000000026000		BURLINGTON NORTHERN R R	5.91040401317
86	110305000000010000	3655	SONRISE BAPTIST CHURCH	19.22573258410	148	040931000000026001		BURLINGTON NORTHERN RR	4.03571122709
87	100305000000011000	2245	CRABB, JACK	3.45713240236	149	11021000000013000	3630	TRACKER MARINE L P	20.07580158930
88	100306000000020001	2345	JONES, RONALD & JEAN (TRUST)	2.95546059477	150	110515000000011000	RR	TRACKER MARINE, L P	1.48288844499
89 90	100305000000009000 100306000000020000	1650 2391	HELTERBRAND, JAMES L & SYLVIA S	3.71218275573 3.24305713959	151 152	110515000000012000	3106 3050	MARKUS, ESTA LORRAINE (TRUST)  ACTWOB LLC	3.95336467552 2.07771634250
90 91	10030600000020000	2329	JONES, RONALD & JEAN (TRUST) KOENIGSFELD, DAVID J & AMY S TRUST	5.92265779176	153	110515000000012001 110515003006004000	RR	BILYEU, RONALD M & ELDENA F (TRUST)	1.09945739075
92	100306000000013000	2323	HARTFIELD, ANTHONY S & ILAJEAN W (T	3.52194657877	154	110313003000004000	SAWGRASS	CITY OF FREMONT HILLS	3.82162175443
93	100305000000021000	2303	PEBBLE CREEK INC	7.65712948496	155	110209000000010000	4201	CITY OF FREMONT HILLS  CITY OF SPRINGFIELD	103.59449030700
94	100305000000000001	1661	BROOKS, JAMES P & MICHELE M (TRUST)	2.78430760897	156	050932000000012000	2007	YOUNG, ZACHARY O & NATALIE R (TRUST	21.01902907130
95	100305000000000000000000000000000000000	2235	KUBIK, GREGORY & VICTORIA	2.43028573242	157	0409310000000006000	1898	RIVER HAVEN FARMS	185.99612656200
96	100306000000023000	2375	COLLINS, THOMAS A JR & LOLISA J	3.01166767281	158	110515003002004001	1703	SIMS, MITCHELL A	1.47289095552
97	110305000000001000	1219	HAWKINS, KEVIN M	118.43185562700	159	110515003002004002	2700	SIMS, MITCHELL A	0.74144666044
98	040833000000126000	1099	HAWKINS, ROBERT & KIMBERLY	5.42885417657	160	GREEN AREA		· · · · · · · · · · · · · · · · · · ·	3.73880807346
99	040834000000007000	947	HAWKINS, ROBERT & KIMBERLY	5.56592224778	161	110204000000090003	2362-2392	DIVERSITY COMMERCIAL INVESTMENTS	0.84006010641
100	04093200000011000	318-320	RAINEY, GARY & PATRICIA	37.37669477340	162	110204000000088001	2316-2354	DIVERSITY COMMERCIAL INVESTMENTS	1.19207701944
101	040932000000008000	4106	PRICE, JOHN D & JESSIE F	21.21499883820	163	110515000000017000	2802	MALAGON, EFRAIN & GUZMAN, BENJAMIN	0.30294069807
102	050932000000011002	1975	GIBONEY, REBECCA (TRUST)	1.18898130281	164	110515000000016000	2820	MALONEY, MICHAEL SR	0.44517161144
103	050932000000011009	1975	GIBONEY, REBECCA (TRUST)	0.80573321585	165	110515000000017001	2804	LAKES LLC	0.75293139765
104	100305000000002000	2089	SYLER, C WILLIAM & SHARON ANN	38.06089272800	166	100306000000015004		COLLINS, THOMAS JR & LOLISA (TRUST)	3.93417195065
105	100305000000003000		CUNNINGHAM FAMILY LTD PRTNSHP	15.92906780740	167	110516001002003005	N	LACY LEANN LLC	38.86089108530
106	100305000000004000		CUNNINGHAM FAMILY LTD PRTSHP	31.29706950550	168	110204000000061001		ESTES FAMILY LIMITED PARTNERSHIP	57.80118230580
107	100305000000005000		CALHOUN, JOHN F (TRUST)	36.02030497910	169	110204000000061002	3064	CASEYS MARKETING COMPANY	1.18255302747
108	10030600000001000	1783	FITZGERALD, MARK & MICHELLE	26.59368567860	170	100306000000009004	W	NEAL LAND & CATTLE LLC	104.83799740700
109	100306000000004000	2450	PARRISH, CHARLES	123.21697678200	171	110515003006002000	RR	BURLINGTON NORTHERN RR	0.31076908009
110	040833000000129000	420	STINE, C TERRY	15.15270504500	172	110515003006005000	1880	COBB EQUIPMENT INC	1.61227559730
111	040932000000012001	138	WILDER, ALTON L & TAMRE L	0.98007748504	173	110515003006004002	(N	COBB, JAMES THOMAS & GLORIA J TRUST	3.75712816999
112	040932000000009000	269	FRIEBE, EARL	79.58432458420	174	110515003002004000	RR	EGE, RICHARD D & TENA MARIE	0.61440754713
113	05093200000010000	2019	SYLER, C WILLIAM & SHARON	17.75303981710	175	04093100000001000	7204	LYNCH, THOMAS	143.47242311200
114 115	040833000000132000 040833000000132003	1451 1423	SUHOR INDUSTRIES PLATCHER, JONELLE	5.58443915262 3.34636760252	176 177	110515003002004 110522003001001000	775	KISSEE, DOANLD (TRUST)	0.92214049192 9.83355508134
116	040833000000132003	1347	PLATCHER, JONELLE	2.30015104069	178	050932000000011005	773	STRAUSS, GARY L & AMY	9.60238321816
117	040931000000132002	134/	RIVER HAVEN FARMS	2.09208895064	179	110515000000069000		BURLINGTON NORTHERN RR	0.79938857046
117	0409320000000000000	4410	SEBOLDT, RUTH K (TRUST)	39.37386772730	180	110515002001013000		WW OUTDOOR LLC	0.05838586229
119	04093200000000000	3925	COATS, ASHLEY E & NANCY C (TRUSTS)	17.41714881400	181	05093200000011010	N	ROBERTS, STONY & EILEEN	9.44665184658
120	040932000000007000	3811	RUETER, ROBERT C & BARBARA P	14.23533909530	182	05093200000011016	1983	ROBERTS, STONEY & EILEEN	4.27152996241
121	05093200000009000	2339	CUNNINGHAM FAMILY LTD PRTSHP	143.90024442900	183	110515003009019001	N	WOLANSKY, MARK S	6.05202005550
122	050932000000018000	1951	COZBY, SHAWN G & LISA K	0.62086276071	184	110515002001001000	2450	WOLANSKY, MARK	1.99655895016
123	05093200000017000	1943	GERRY, PRESTON H & KRISTY L	0.71788403688	185	110515002001008000	2726	FRHS PROPERTIES LLC	2.87972701828

1.00   1.00	186	110209000000033000		BIBLER, JAMES & LAURIE A (TRUST)	3.94896111566	248	1104106023	417	COLLINS, ORIE	0.40220091661
1800   1000000000000000000000000000000			1600/1624						•	
10050000000000   1005000000000   10050000000000			,						•	
1000000000000000000000000000000000000	189	110522002007006004	1020	RYDELL MANAGEMENT COMPANY LLC	8.51158900317	251	1104107011		ESTES, DIANA S	0.24771539530
1951   1951-00000000000	190	110305000000002000	808	MCDANIEL, ALBERT P. & PEGGY L.	72.88273364060	252	1104107012	311	HARRELL, WILLIAM P TRUSTEE	1.05356501256
19	191	110305000000010065	SAWGRASS	CITY OF FREMONT HILLS	0.07802210872	253	1104107013	305	KELLOGG, KATTY	0.33754565100
11099999999999999999999999999999999999	192	110515003003003000	1796	CLOSSER, CARL & JESSICA R	0.41046290928	254	1104107018	225	CROSSER-RYAN, GAY	0.26791965986
100   100	193	040834000000003000	269/355	LEO JOURNAGAN CONSTRUCTION CO INC	138.47852525300	255	1104107019	221	V DAWG ENT LLC	0.26190456653
1869   1003-00010   798	194	110305000000010001	5525	WASSON DEVELOPMENT INC	14.53351637610	256	1104107020	217	V DAWG ENT LLC	0.11974116815
105-09/2013   957	195	040834000000025000		LEO JOURNAGAN CONSTRUCTION CO INC	121.89234357300		1104107021		V DAWG ENT LLC	0.12999156242
1858-191110   1872				•						
1985   1885   1985				•					•	
129-942000   999				•						
1980    1980    1990				•					-	
1286    1286									•	
205   1935,00021				•					•	
204   1925/3000/22   9379   \$51MTZEL, NELS   3.6 1819/37/289   266   1304/89/02   307   \$FIRM/FORD (TYP OF STAM/FORD CTYP OF STAM/FORD C				•					·	
109-800000   925				•						
1061800005				•						
1054600006										
1094-00022   2015   COMSETT, MARISE   4.6995978102   270   11011-10002   100   CAMSTON PROPERTIS LC   0.0049401910   1094-00024   149   PLYMOUTH MOT LC   0.5398314630   272   11011-10002   100   KERER PROF NOUSTRIAR PARK LC   41.0018098191   11011-10002   100   KERER PROF NOUSTRIAR PARK LC   41.001809				•						
1035-800022   1139				•						
1004-000002				•						
102100001		1036400024		PLYMOUTH MGT LLC	0.63386314630					
1101100099   950	211	1102100020	9478	NEESE, DENNIS	4.87046465953	273	1104115097	0	EASTERLY, RICHARD ETAL	1.18025829426
110220034   457   MELTOM, MARTHA   3,85008075790   276   110415000   7599   EASTERLY ROPAME INC   3,8506587914   210   110220005   439   81HTNE, BERY   6,99070225410   210   1103101007   521   510CKTOM, DONALD ITRUST   1,09501801275   278   110420007   513   ASMAIN, DOUGLAS   1,095050590   8008FRSOM, BILLE   110310101   382.9   HITE, TIMOTHY H   0,28334907404   280   110420000   505   KELLOGG, GARY   0,5225613885   410310101   382.9   HITE, TIMOTHY H   0,28334907404   280   110420000   505   KELLOGG, GARY   0,5225613885   410310101   383.9   MARTELLER, THOMAS   0,13281558922   281   110420000   505   KELLOGG, GARY   0,5225613885   410310101   475   VERTIFLY CARRES   0,6321606660   282   110420000   615   ALIEN, MARY ANN   0,4727462903   420   410310101   475   VERTIFLY CARRES   0,6321606660   284   110420000   615   CARPS, ROBERT   0,83224731082   420   410310000   105   MARTELLER, THOMAS   0,6321606660   284   110420000   615   CARPS, ROBERT   0,83224731082   420   410310000   105   HOPER & KERNEN FAMILY TRUST   1,10051646760   284   110420000   615   CARPS, ROBERT   0,4786490814   420   42	212	1102100021	4268	MELTON, MARTHA	6.12603052573	274	1104115110	5863	EASTERLY, JAMES W ETAL	14.38085725490
15         1.102200054         35.0         BLUNT, LEROY FEA, TIK         9.880F9814290         277         1.10420005         429         RHYNE, BERYLE         0.9907002940           216         1.1033101007         5.71         STOCKTON, DONAD LI TRUIT         1.07651081275         279         1.1042000         509         ROBERTSON, BILLE JETAL         0.592795080818           218         1.1033101012         501         MASTELLER, THOMAS         0.12821558292         281         1.1042000         501         WALKER, DANNYL         0.4321573082           219         1.1033101013         503         MASTELLER, THOMAS         0.12821558292         281         1.10420000         601         WALKER, DANNYL         0.43714457903           212         1.1033101013         503         MASTELLER, THOMAS         0.12821558029         283         1.10420000         605         CAPPS, ROBERTE         0.42774457903           212         1.103310013         603         BRIDLE, REARD MALE         0.23754609037         283         1.10420000         605         CAPPS, ROBERTE         0.43774457903           224         1.103310013         630         BRIDLE, REARD MALE         0.2375409087         283         1.10420001         1.21         REARD MALE         0.03794774544	213	1102100029	9602	MO TRANSPORT SERVICE GROUP LLC	14.45273723680	275	1104116001	598	W E LAND CO LLC	0.10501597143
1103.010.003   511	214	1102200033	4267	MELTON, MARTHA	3.88208657950	276	1104116002	7509	EASTERLY PROPANE INC	3.89583529114
11	215	1102200054		BLUNT, LEROY ETAL TR	93.80578142920		1104202005		RHYNE, BERYL E	0.99007229410
103101011   38.29									·	
103101012   501   MASTELLER, THOMAS   0.128158292   281   110420006   501   MALKER, DANNY L 0.41519779620   220   1103101014   475   VEREIT INC-DBA ARCP DOSSIMONO LLC 0.93765400357   283   1104204006   613   DALLER, MARY ANN 0.427164290162   221   1103101014   475   VEREIT INC-DBA ARCP DOSSIMONO LLC 0.93765400357   283   1104204007   605   CAPPR, BOBERT E 0.8324240162   222   1103101014   475   WERLT INC-DBA ARCP DOSSIMONO LLC 0.93765400357   283   1104205008   611   THOTON, KENNETH 0.47863490164   223   1103102013   680   BRIDLE CREEK EQUESTRIAN CENTER LLC 0.23715704725   286   1104205008   713   COBILE, BOBBIE A.SR 0.3797778744   224   1103201006   116   HARRICANE ANCARMASH STAFFORD, LLC 0.90135159759   287   1104205011   221   KELTINER, VENNA 0.36524500067   226   MOUNTAINMEN INV GROUP LLC 0.4326302689   288   110427017   0   DONALDSON, DENINS G 0.55522012688   227   1103201007   303   STIDINS HEALTH STYTEM INV C.47653662009   289   1104207044   809   HALE, ALLE 0.16317830099   228   1103201015   333   GRAVES, LAKE W 0.486955244010   290   1104207049   913   JOYCE ENTREPRIECS LLC 0.256136539048   230   1103201019   333   GRAVES, LAKE W 0.486955244010   290   1104207049   913   JOYCE ENTREPRIECS LLC 0.256136539048   231   1103201019   323   KELTINER, CAROLJ 0.18538653802   292   1104207049   219   PENINA RENTALS LLC 0.45613663939   231   1103201019   323   KELTINER, CAROLJ 0.18538653802   292   1104207049   219   PENINA RENTALS LLC 0.46604004057   233   1103201019   323   KELTINER, CAROLJ 0.2714942068   295   1104207049   219   PENINA RENTALS LLC 0.46604004057   233   1103201019   323   KELTINER, CAROLJ 0.2714942068   296   1104207049   219   PENINA RENTALS LLC 0.4769463748   234   2				•					•	
201   103101013   503   MASTELLER, THOMAS F   0.63216064650   282   1104204007   605   CAPES, ROBER TE   0.83214503057   283   1104204007   605   CAPES, ROBER TE   0.83214503052   283   1104204007   605   CAPES, ROBER TE   0.83214503052   283   1104204002   601   TIPTON, KENNETH   0.47663490814   223   110310013   368   BRIDLE CREEK EQUESTRIAN CENTER ILC   12.27791451650   285   1104205003   713   COBBLE, BOBBIE S RS   0.37977787434   224   1103201003   323   KELTINER, CREEK EQUESTRIAN CENTER ILC   0.3015190725   286   1104205010   218   BROWN, RONALD C   0.646545618   225   1103201006   216   HURRICAME BAY CARMVASH-STRAFFORD, ILC   0.9015159759   287   1104205101   221   KELTINER, VERNON A   0.36524600967   226   1103201007   202   MOUNTAINNEN INV GROUP ILC   0.43204302689   288   1104207017   0.9   DOHALISON, DENNIS G   0.50524500967   228   1103201009   363   ST JOHNS HEALTH SYSTEMS INC   1.47653662009   289   1104207044   809   HALE, ALICE   0.2561850948   229   1103201015   333   GRAVES, IACK W   4.8796524401   290   1104207047   913   JOYCE ENTREPRIZES ILC   0.2561850948   229   1104207044   810   JOYCE STORAGE ILC   0.2561850948   229   1104207049   219   PENINA RENTAIS ILC   0.0561850948   229   1104207049   219   PENINA RENTAIS ILC   0.0561850948   229   1104207049   219   PENINA RENTAIS ILC   0.40618504037   231   11032010109   323   KELTINER, CARDI J   1.853286302   229   1104207058   910   HINNESTMENTS ILC   0.40618504037   231   1103201020   335   ABBIAND HOLDING ILC   0.2811379945   234   1104207058   910   HINNESTMENTS ILC   0.40618504037   234   1103201022   317   ALBERTAIS ILC   0.2811379945   234   1104207058   910   HINNESTMENTS ILC   0.30571867207   234   1103201022   317   ALBERTAIS ILC   0.2811379945   234   1104207058   910   HINNESTMENTS ILC   0.30571867207   234   1103201022   317   ALBERTAIS ILC   0.2811379945   234   1104207058   910   HINNESTMENTS ILC   0.30571867207   234   1103201022   317   ALBERTAIS ILC   0.2811379945   234   1104207058   910   HINNESTMENTS ILC   0.30571867207				•					·	
11031/0014   475   VERETING-DBA ARCP DGSFDMODOL LC 0.93765400357   238   1104204017   605   CAPPS, ROBERT E 0.83224731062   221   11031/00120   610   THETON, KENNETH 0.478640814   122   11031/0013   680   BRIDLE CREEK FOLUSTRIAN CENTRE LC 12.7931451650   225   1104205008   713   COBLE, BOBBIE AS 0.3797778744   122   1103201008   116   HURRICANE BAY CARWASH-STRAFFORD, LLC 0.9013519759   287   1104205101   221   REITINE, VERNON A 0.3652450087   226   1103201007   303   ST 100450010   126   MURRICANE BAY CARWASH-STRAFFORD, LLC 0.9013519759   287   110420511   221   REITINE, VERNON A 0.36524500867   227   1103201007   303   ST 100450010   1.476562009   289   1104207014   809   HALE, ALICE 1.5187305999   228   1103201015   333   GRAVES, LACK W 1.89565424301   290   1104207044   809   HALE, ALICE 1.5187305999   228   1103201015   333   GRAVES, LACK W 1.89565424301   290   1104207048   810   100   100   CESTORAGE LLC 0.3651365908   230   1103201015   333   GRAVES, LACK W 1.89565424301   291   1104207048   101   100   CESTORAGE LLC 0.3651365908   231   1103201010   335   ARBI LAND HOLDING LLC 1.6956679347   293   1104207048   101   100   CESTORAGE LLC 0.3651365908   231   1103201010   335   ARBI LAND HOLDING LLC 1.6956679347   293   1104207083   232   PRODWELL INVESTMENTS LLC 0.40460040057   233   1103201012   423   THACH, HEN 0.88117379945   294   1104207058   905   HS INVESTMENTS LLC 0.40460040057   235   1103201012   423   THACH, HEN 0.88117379945   294   1104207058   905   HS INVESTMENTS LLC 0.4046004057   235   1103201012   423   THACH, HEN 0.88117379945   294   1104207058   905   HS INVESTMENTS LLC 0.4046004057   235   1103201012   423   THACH, HEN 0.88117379945   294   1104207058   905   HS INVESTMENTS LLC 0.4046004057   235   1103201012   307   FAMILY PROPERTY MANAGEMENT LLC 0.5333488566   297   1104200010   601   KEISER ROPI NONUSTRIAL PRAKE LC S.333348566   297   1104200010   601   KEISER ROPI NONUSTRIAL PRAKE LC S.33436857   236   1103200012   0 DONALDSON, DENNIS G 0.2442466375   236   1103207002   110   S				•						
1031/0009   1045				•					•	
103   103									,	
1.03201003   323   KELTNER, EVAN DALE   0.37157004725   286   1104205010   218   BROWN, RONALD C   0.64952154618   225   1103201005   116   HURRICARE BAY CARNASH-STRAFFORD, LC   0.043204302689   287   1104205011   221   KELTNER, VERNOW A   0.365542600967   226   1103201007   303   ST JOHNS HEALTH SYSTEMS INC   1.47653662009   289   1104207014   809   HALE, ALICE   1.63178305999   228   1103201015   333   GRAVES, CHARLES W   1.8506243011   290   1104207044   809   HALE, ALICE   0.256136559048   229   1103201015   333   GRAVES, CHARLES W   1.850785244004   291   1104207048   100   JOYCE STORAGE LLC   0.256136559048   229   1103201019   323   KELTNER, CAROL J   1.85856802   292   1104207049   219   PENIKA RETRIES ILC   0.40466040057   231   1103201010   335   ABB LAND HOLDING ILC   1.05905679347   293   1104207058   823   PRODWELL INVESTMENTS ILC   0.40466040057   232   1103201012   423   THACH, HIN   0.281739945   294   1104207058   901   HS INVESTMENTS ILC   1.08372808942   234   110320102   122   MOUNTAINMEN INV GROUP LLC   0.2714420058   295   1104207058   905   HS INVESTMENTS ILC   0.30571867207   234   110320000   213   PLEASANT HOPE BANK THE   0.83333488566   297   110420801   601   KEISER PROP INDUSTRIAL PARK ILC   0.42787566384   236   1103206009   201   GRANNON BANKING CO   0.43687037825   238   1104208001   601   KEISER PROP INDUSTRIAL PARK ILC   0.25408426875   238   1103206009   201   GRANNON BANKING CO   0.43687037825   238   1104208001   601   KEISER PROP INDUSTRIAL PARK ILC   0.25408426875   238   1103200001   125   BABRON, BARBARA   0.27837615525   300   1105100012   0 DONALDSON, DENNIS G   2.04247866384   239   1103200001   125   BABRON, BARBARA   0.27837615525   300   1105100012   0 DONALDSON, DENNIS G   2.04247866384   239   1103207001   125   BABRON, BARBARA   0.27837615525   300   1105100017   6902   CHAPPELL FAMILY TR   9.07480798250   239   1104200003   311   0.1001001   311   FEISTR SCHEMBLY IN GROUND HEAVE IN THE STANDER HIN OF GROUND HEAVE IN THE STANDER HIN OF GROUND HEAVE IN THE STAN									•	
1103201006									*	
103201007   202   MOUNTAINMEN INV GROUP LLC   0.43204302689   288   1104207017   0   DONALDSON, DENNIS G   0.50522012868   277   1103201009   363   ST JONNS HEALTH SYSTEMS INC   1.47653662009   289   1104207044   809   HALE, ALICE   1.63178305999   1.001201015   333   GRAVES, JACK W   1.83965424301   290   1104207047   913   JOYCE ENTERPRIZES LLC   0.25613659048   229   1103201018   313   GRAVES, CHARLES W   4.69755284004   291   1104207048   1001   JOYCE STORAGE LLC   0.86538263793   200   1103201019   323   KELTRER, CAROL J   1.83286563802   292   1104207049   219   PENIKA RENTALS LLC   0.0460040057   231   1103201020   335   A&B LAND HOLDING LLC   1.05905679347   293   1104207053   823   PRODWELL INVESTMENTS LLC   1.78372089542   232   1103201021   423   THACH, HIEN   0.28117379945   294   1104207055   901   HS INVESTMENTS LLC   1.78372089542   233   1103201022   122   MOUNTAINMEN INV GROUP LLC   0.5891383033   296   1104207055   905   HS INVESTMENTS LLC   0.30571867207   234   1103201023   307   FAMILY PROPERTY MANAGEMENT LLC   0.58930933033   296   1104207055   909   HS INVESTMENTS LLC   0.30571867207   235   1103206007   213   PLEASANT HOPE BANK THE   0.58930933033   296   1104207055   909   HS INVESTMENTS LLC   0.47294437586   237   1103206007   213   PLEASANT HOPE BANK THE   0.58930933033   296   1104208001   601   KIESER PROP INMERTIAL LLC   0.47294437586   237   1103206000   201   GROVADALE, MAX G   0.22452577796   299   1104208001   601   KIESER PROP INMERTIAL LLC   2.574706228640   238   1103207001   125   BARTON, BARBARA   0.22452577796   299   1104208001   3333   VINTON, JOHN TRUST   1.50158171175   238   2				•					•	
103201015   333   GRAVES, JACK W   1.85965424901   290   1104207047   913   JOYCE ENTERPRIZES LIC   0.25613659048   229   1103201018   313   GRAVES, CHARLES W   4.69755284004   291   1104207049   219   PINIKA RENTALS LIC   0.460460040057   231   1103201019   323   KELTNER, CAROL J   1.85328563802   292   1104207049   219   PINIKA RENTALS LIC   0.460460040057   231   1103201020   335   A&B LAND HOLDING LIC   1.05905679347   293   1104207058   823   PROBUELL INVESTMENTS LIC   1.78372089542   232   1103201021   423   THACH, HEIN   0.2811737945   294   1104207056   901   HS INVESTMENTS LIC   1.038259542219   233   1103201022   122   MOUNTAINMEN INV GROUP LIC   0.27149420058   295   1104207058   905   HS INVESTMENTS LIC   0.30571867207   234   1103201023   307   FAMILY PROPERTY MANAGEMENT LIC   0.58930933033   296   1104207059   909   HS INVESTMENTS LIC   0.47294437586   297   11042060007   213   SEASANT HOPE BANK THE   0.58930938038   296   1104207059   909   HS INVESTMENTS LIC   0.47294437586   297   11042060007   213   SEASANT HOPE BANK THE   0.5893348866   297   1104208001   601   KEISER PROP INDUSTRIAL PARK LIC   5.3408426875   238   1103206008   201   CROXDALE, MAX G   0.2452577796   299   110420808   524   STREAMS EDGE PROP LIC   25.74706228640   238   1103207001   125   BANTON, BARBARA   0.27837615255   300   1105100012   0   DONNADOSON, DENNIS G   2.04247866384   239   1103207003   117   KEISER PROP COMMERCIAL LIC   0.36850352798   301   1105100013   3333   VINTON, JOHN WTRUST   1.50158171175   240	226	1103201007	202	MOUNTAINMEN INV GROUP LLC	0.43204302689	288	1104207017	0	DONALDSON, DENNIS G	0.50522012868
103201018   313   GRAVES, CHARLES W   4.69755284004   291   1104207048   101   JOYCE STORAGE LLC   0.86358263793	227	1103201009	363	ST JOHNS HEALTH SYSTEMS INC	1.47653662009	289	1104207044	809	HALE, ALICE	1.63178305999
103201019   323   KELTNER, CAROL J   1.85328563802   292   1104207049   219   PENIKA RENTALS LLC   0.4046004057   231   1103201020   335   A&B LAND HOLDING LLC   1.05905679347   293   1104207053   823   PRODWELL INVESTMENTS LLC   1.7837289542   1103201021   423   THACH, HIEN   0.8117379945   294   1104207056   991   HIS INVESTMENTS LLC   1.02859542219   103201023   307   FAMILY PROPERTY MANAGEMENT LLC   0.27149420058   295   1104207059   905   HIS INVESTMENTS LLC   0.30571867207   1104207059	228	1103201015	333	GRAVES, JACK W	1.85965424301	290	1104207047	913	JOYCE ENTERPRIZES LLC	0.25613659048
231   1103201020   335   A&B LAND HOLDING LIC   1.05905679347   293   1104207053   823   PRODWELL INVESTMENTS LIC   1.78372089542   103201021   423   THACH, HEN   0.28117379945   294   1104207056   901   H.S INVESTMENTS LIC   1.028595728707   104207058   1104207058   905   H.S INVESTMENTS LIC   0.305751867207   103201022   122   MOUNTAINMEN INV GROUP LIC   0.5893093303   296   1104207059   909   H.S INVESTMENTS LIC   0.47294437586   103206007   213   PLEASANT HOPE BANK THE   0.53333488566   297   1104208001   601   KEISER PROP INDUSTRIAL PARK LIC   8.8.128022834707   103206008   201   0.08ANNON BANKING CO   0.4687037825   298   1104208002   0.0   SOUTHWESTERN BLIT EIPHONE CO   2.540424875   236   1103206009   201   CROXDALE, MAX G   0.22452577796   299   1104208008   524   STREAMS EDGE PROP LIC   25.74706228640   238   1103207001   125   BARTON, BARBARA   0.27837615525   300   1105100012   0   DONALDSON, DENNIS G   2.04247866381475   239   1103207002   117   KEISER PROP COMMERCIAL LIC   0.6850352798   301   1105100013   333   VINTON, JOHN W TRUST   1.5015817175   240   1103211003   300   KEISER PROP COMMERCIAL JEFFERSON   0.63814824875   303   1105100031   119   FIRST ASSEMBLY OF GOD CHURCH   6.40826203320   242   1103211009   304   KEISER PROP COMMERCIAL JEFFERSON   0.63814824875   304   1105100070   401   RE-TIRE REALTY LIC   8.9708221636   244   1104106011   425   BARTON, BARBARA   0.55393096517   306   1105100070   401   RE-TIRE REALTY LIC   8.9708221636   244   1104106011   425   BARTON, BARBARA   0.55393096517   306   1105200009   405   AMERICAS PROPANE LIP 2050   1.196323000   245   2	229		313	, -	4.69755284004	291	1104207048	1001	JOYCE STORAGE LLC	0.86358263793
232   1103201021   423	230	1103201019	323	KELTNER, CAROL J	1.85328563802	292	1104207049	219	PENIKA RENTALS LLC	0.40460040057
1103201022   122   MOUNTAINMEN INV GROUP LLC   0.27149420058   295   1104207058   905   HS INVESTMENTS LLC   0.30571867207   1234   1103201023   307   FAMILY PROPERTY MANAGEMENT LLC   0.58930933033   296   1104207059   909   HS INVESTMENTS LLC   0.4729437586   1235   1103206007   213   PLEASANT HOPE BANK THE   0.53333488566   297   1104208001   601   KEISER PROP INDUSTRIAL PRAK LLC   58.12802283470   103206008   201   OBANNON BANKING CO   0.43687037825   298   1104208002   0   SOUTHWESTERN BELL TELEPHONE CO   2.5.4706228640   1103206009   201   CROXDALE, MAX G   0.22452577796   299   1104208038   524   STREAMS EDGE PROP LLC   25.74706228640   239   1103207001   125   BARTON, BARBARA   0.27837615525   300   1105100012   0   DONALDSON, DENNIS G   2.04247866384   239   1103207002   117   KEISER PROP COMMERCIAL LLC   0.36850352798   301   1105100013   333   VINTON, JOHN W TRUST   1.50158171975   241   1103211003   300   KEISER PROP COMMERCIAL LIFERESON   0.63814824875   303   1105100013   1119   FIRST ASSEMBLY OF GOD CHURCH   6.40826203320   242   1103211009   304   KEISER PROP COMMERCIAL JEFFERSON   0.63814824875   303   1105100007   401   RE-TIRE REALTY LLC   8.979082714206   244   1104106011   425   BARTON, BARBARA   0.755393096517   306   1105200009   601   JOHN DEERE SHARED SER INC   40.78133992870   245   1104106014   413   WINDBIGLER, JOHN A FROSSO   0.65812731049   308   1105200012   2858   DUNLAP, ROGER E   2.93472212072   246   1104106015   409   GANN, TIMA   0.65812731049   308   1105200012   2858   DUNLAP, ROGER E   2.93472212072   246   2.93472212	231	1103201020	335			293	1104207053	823	PRODWELL INVESTMENTS LLC	
234         1103201023         307         FAMILY PROPERTY MANAGEMENT LLC         0.58930933033         296         1104207059         909         HS INVESTMENTS LLC         0.47294437586           235         1103206007         213         PLEASANT HOPE BANK THE         0.53333488566         297         1104208001         601         KEISER PROP INDUSTRIAL PARK LLC         58.12802283470           236         1103206008         201         OBANNON BANKING CO         0.43687037825         298         1104208003         50         SOUTHWESTERN BELL ELEPHONE CO         25.4084246875           237         1103206009         201         CROXDALE, MAX G         0.22452577796         299         1104208038         524         STREAMS EDGE PROP LLC         25.74706228640           238         1103207001         125         BARTON, BARBARA         0.27837615525         300         1105100012         0         DONALDSON, DENNIS G         2.04247866384           239         1103207002         117         KEISER PROP COMMERCIAL LLC         0.36850352798         301         1105100013         3333         VINTON, JOHN W TRUST         1.5015817175           240         1103207003         112         WOMMACK, CARMEN L         0.0813032581         302         1105100017         6902         CHAPPELL FAM				•						
235         1103206007         213         PLEASANT HOPE BANK THE         0.53333488566         297         1104208001         601         KEISER PROP INDUSTRIAL PARK LLC         58.12802283470           236         1103206008         201         OBANNON BANKING CO         0.43687037825         298         1104208002         0         SOUTHWESTERN BELL TELEPHONE CO         2.54084246875           237         1103206009         201         CROXDALE, MAX G         0.22452577796         299         1104208038         524         STREAMS EDGE PROP LLC         25.74706228640           238         1103207001         125         BARTON, BARBARA         0.27837615525         300         1105100012         0         DONALDSON, DEN WITG         1.5015817175           240         1103207003         112         WOMMACK, CARMEN L         0.08130325881         302         1105100017         6902         CHAPPELL FAMILY TR         90.74880798250           241         1103211003         300         KEISER PROP COMMERCIAL JEFFERSON         0.63814824875         303         1105100017         6902         CHAPPELL FAMILY TR         90.74880798250           242         1103211003         304         KEISER PROP COMMERCIAL JEFFERSON         3.56327142021         304         1105100031         1119         FI										
236         1103206008         201         OBANNON BANKING CO         0.43687037825         298         1104208002         0         SOUTHWESTERN BELL TELEPHONE CO         2.54084246875           237         1103206009         201         CROXDALE, MAX G         0.22452577796         299         1104208038         524         STREAMS EDGE PROP LLC         25.74706228640           238         1103207001         125         BARTON, BARBARA         0.27837615525         300         1105100012         0         DONALDSON, DENNIS G         2.04247866384           239         1103207002         117         KEISER PROP COMMERCIAL LLC         0.36850352798         301         1105100013         3333         VINTON, JOHN W TRUST         1.50158171175           240         1103207003         112         WOMMACK, CARMEN L         0.08130325881         302         1105100017         6902         CHAPPELL FAMILY TR         90.74880798250           241         1103211003         300         KEISER PROP COMMERCIAL JEFFERSON         0.63814824875         303         1105100031         1119         FIRST ASSEMBLY FAMILY TR         6.40826203320           242         1103211009         304         KEISER PROP COMMERCIAL JEFFERSON         3.56327142021         304         11051000031         119         JEF										
237       1103206009       201       CROXDALE, MAX G       0.22452577796       299       1104208038       524       STREAMS EDGE PROP LLC       25.74706228640         238       1103207001       125       BARTON, BARBARA       0.27837615525       300       1105100012       0       DONALDSON, DENNIS G       2.04247866384         239       1103207002       117       KEISER PROP COMMERCIAL LLC       0.36850352798       301       1105100013       3333       VINTON, JOHN W TRUST       1.50158171175         240       1103207003       112       WOMMACK, CARMEN L       0.08130325881       302       1105100017       6902       CHAPPELL FAMILY TR       90.74880798250         241       1103211003       300       KEISER PROP COMMERCIAL JEFFERSON       0.63814824875       303       1105100017       6902       CHAPPELL FAMILY TR       90.74880798250         242       1103211003       304       KEISER PROP COMMERCIAL JEFFERSON       3.65327142021       304       1105100069       601       JOHN DEET BEARED SERIOR       40.78133992870         243       1103211010       355       ROGERS, J DREWRY       47.29533603670       305       1105100070       401       RE-TIRE REALTY LLC       8.97908221636         244       1104106011       425										
238         1103207001         125         BARTON, BARBARA         0.27837615525         300         1105100012         0         DONALDSON, DENNIS G         2.04247866384           239         1103207002         117         KEISER PROP COMMERCIAL LLC         0.36850352798         301         1105100013         3333         VINTON, JOHN W TRUST         1.50158171175           240         1103207003         112         WOMMACK, CARMEN L         0.08130325881         302         1105100017         6902         CHAPPELL FAMILY TR         90.74880798250           241         1103211003         300         KEISER PROP COMMERCIAL JEFFERSON         0.63814824875         303         1105100031         1119         FIRST ASSEMBLY OF GOD CHURCH         6.40826203320           242         1103211009         304         KEISER PROP COMMERCIAL JEFFERSON         3.56327142021         304         1105100069         601         JOHN DEERE SHARED SER INC         40.78133992870           243         1103211010         355         ROGERS, J DREWRY         47.29533603670         305         1105100070         401         RE-TIRE REALTY LLC         8.97908221636           244         1104106014         413         WINDBIGLER, JOHN A TR         0.66791705302         307         1105200009         1405										
239       1103207002       117       KEISER PROP COMMERCIAL LLC       0.36850352798       301       1105100013       3333       VINTON, JOHN W TRUST       1.50158171175         240       1103207003       112       WOMMACK, CARMEN L       0.08130325881       302       1105100017       6902       CHAPPELL FAMILY TR       90.74880798250         241       1103211003       300       KEISER PROP COMMERCIAL JEFFERSON       0.63814824875       303       1105100031       1119       FIRST ASSEMBLY OF GOD CHURCH       6.40826203320         242       1103211009       304       KEISER PROP COMMERCIAL JEFFERSON       3.56327142021       304       1105100069       601       JOHN DEERE SHARED SER INC       40.78133992870         243       1103211010       355       ROGERS, J DREWRY       47.29533603670       305       1105100070       401       RE-TIRE REALTY LLC       8.97908221636         244       1104106011       425       BARTON, BARBARA       0.55393096517       306       1105200008       6865       MASTELLER, THOMAS F       3.05355742602         245       1104106014       413       WINDBIGLER, JOHN A TR       0.66791705302       307       1105200009       1405       AMERIGAS PROPANE LP 2050       1.19638230507         246       1104106015				•						
240       1103207003       112       WOMMACK, CARMEN L       0.08130325881       302       1105100017       6902       CHAPPELL FAMILY TR       90.74880798250         241       1103211003       300       KEISER PROP COMMERCIAL JEFFERSON       0.63814824875       303       1105100031       1119       FIRST ASSEMBLY OF GOD CHURCH       6.40826203320         242       1103211009       304       KEISER PROP COMMERCIAL JEFFERSON       3.56327142021       304       1105100069       601       JOHN DEERE SHARED SER INC       40.78133992870         243       1103211010       355       ROGERS, J DREWRY       47.29533603670       305       1105100070       401       RE-TIRE REALTY LLC       8.97908221636         244       1104106011       425       BARTON, BARBARA       0.55393096517       306       1105200008       6865       MASTELLER, THOMAS F       3.05355742602         245       1104106014       413       WINDBIGLER, JOHN A TR       0.66791705302       307       1105200009       1405       AMERIGAS PROPANE LP 2050       1.19638230507         246       1104106015       409       GANN, TIM A       0.65812731049       308       1105200012       2858       DUNLAP, ROGER E       2.93472212072				•					•	
241       1103211003       300       KEISER PROP COMMERCIAL JEFFERSON       0.63814824875       303       1105100031       1119       FIRST ASSEMBLY OF GOD CHURCH       6.40826203320         242       1103211009       304       KEISER PROP COMMERCIAL JEFFERSON       3.56327142021       304       1105100069       601       JOHN DEERE SHARED SER INC       40.78133992870         243       1103211010       355       ROGERS, J DREWRY       47.29533603670       305       1105100070       401       RE-TIRE REALTY LLC       8.97908221636         244       1104106011       425       BARTON, BARBARA       0.55393096517       306       1105200008       6865       MASTELLER, THOMAS F       3.05355742602         245       1104106014       413       WINDBIGLER, JOHN A TR       0.66791705302       307       1105200009       1405       AMERIGAS PROPANE LP 2050       1.19638230507         246       1104106015       409       GANN, TIM A       0.65812731049       308       1105200012       2858       DUNLAP, ROGER E       2.93472212072									•	
2421103211009304KEISER PROP COMMERCIAL JEFFERSON3.563271420213041105100069601JOHN DEERE SHARED SER INC40.781339928702431103211010355ROGERS, J DREWRY47.295336036703051105100070401RE-TIRE REALTY LLC8.979082216362441104106011425BARTON, BARBARA0.5539309651730611052000086865MASTELLER, THOMAS F3.053557426022451104106014413WINDBIGLER, JOHN A TR0.6679170530230711052000091405AMERIGAS PROPANE LP 20501.196382305072461104106015409GANN, TIM A0.6581273104930811052000122858DUNLAP, ROGER E2.93472212072				·						
243         1103211010         355         ROGERS, J DREWRY         47.29533603670         305         1105100070         401         RE-TIRE REALTY LLC         8.97908221636           244         1104106011         425         BARTON, BARBARA         0.55393096517         306         1105200008         6865         MASTELLER, THOMAS F         3.05355742602           245         1104106014         413         WINDBIGLER, JOHN A TR         0.66791705302         307         1105200009         1405         AMERIGAS PROPANE LP 2050         1.19638230507           246         1104106015         409         GANN, TIM A         0.65812731049         308         1105200012         2858         DUNLAP, ROGER E         2.93472212072										
244       1104106011       425       BARTON, BARBARA       0.55393096517       306       1105200008       6865       MASTELLER, THOMAS F       3.05355742602         245       1104106014       413       WINDBIGLER, JOHN A TR       0.66791705302       307       1105200009       1405       AMERIGAS PROPANE LP 2050       1.19638230507         246       1104106015       409       GANN, TIM A       0.65812731049       308       1105200012       2858       DUNLAP, ROGER E       2.93472212072										
245       1104106014       413       WINDBIGLER, JOHN A TR       0.66791705302       307       1105200009       1405       AMERIGAS PROPANE LP 2050       1.19638230507         246       1104106015       409       GANN, TIM A       0.65812731049       308       1105200012       2858       DUNLAP, ROGER E       2.93472212072				•						
<b>246</b> 1104106015 409 GANN, TIM A 0.65812731049 <b>308</b> 1105200012 2858 DUNLAP, ROGER E 2.93472212072				•					•	
<b>247</b> 1104106021 421 CAMPBELL, MARY M REVOCABLE LIVING TR 0.59381147525 <b>309</b> 1105200057 1601 WALKER-WALKER FAMILY LTD PTNSHP ETAL 32.95510397450	246	1104106015	409	GANN, TIM A	0.65812731049	308	1105200012	2858	DUNLAP, ROGER E	2.93472212072
	247	1104106021	421	CAMPBELL, MARY M REVOCABLE LIVING TR	0.59381147525	309	1105200057	1601	WALKER-WALKER FAMILY LTD PTNSHP ETAL	32.95510397450

310	1105200059	6684	NOGO TR	46.53902826750	372	1203400037	0	BOARD OF TRUSTEES	0.13104853426
311	1105200059	1325	COMSTOCK TR	32.74616486470	373	1203400037	4049	KILMER INVESTMENTS LLC	1.24921078960
312	1106100012	6395	DUNLAP, ROGER E	5.61414539963	374	1203400041	3900	SLH INVESTMENTS LLC	9.92774926337
313	1106100012	2858	DUNLAP, ROGER E	9.55719799246	375	1203400049	7442	KILMER TR	2.29051181983
314	1106100014	3431	WILLIS, CHRISTINA	4.92939511824	376	1207409018	1532	BRANDT, KATHERINE N	0.17419482042
315	1106100015	3126	STEINERT, EARL A JR TRUST	81.62495534020	377	1207409019	1528	BRUCE, TAMMIE J	0.17495137998
316	1106100056	2135	WICKERSHAM REAL EST HOLDINGS LLC	30.96630701100	378	1207409020	6232	WILLIAMS, WARD R	0.03601397915
317	1106100064	2130	GLS LEASING CO INC	6.63620252956	379	1207409023	1529	MOORE, REX D	0.15815061103
318	1106100069	502	DANIELSON, DORIS J	5.99427364459	380	1207409024	1533	WALLIN, ROBERT E ETAL TR	0.15881060488
319	1106100070	6367	DANIELSON, DONALD P	2.64802798418	381	1207409070	1533	EVANGEL UNIVERSITY ASSEMBLIES OF GOD	0.23258635563
320	1106200007	6117	CROXDALE, MAX	2.68592043402	382	1207409071	1541	EVANGEL UNIVERSITY ASSEMBLIES OF GOD	0.23300195081
321	1106200008	3379	JAN-MAR LLC	4.86730553824	383	1207409096	1561	ACEVEDO, ANTONIO R	0.47523367556
322	1106200013	5985	WILLIAMS, EVERETT	0.39525243524	384	1207409098	1603	PATTERSON, RONALD P	0.16642623217
323	1106200014	201	CROXDALE, MAX G	0.43898640611	385	1207409099	1607	LASHELL, WILLIAM ETAL	0.16643289764
324	1106200021	5887	CHRISTENSON TRANSPORTATION INC	4.89560780707	386	1207409100	1501	DAVIES, SO YOUNG LEE	0.16976028357
325	1106200026	3167	FAIR HAVEN CHILDRENS HOME	52.92057936430	387	1207409121	1524	BALDWIN, NORMAN W	0.28403259919
326	1106200046	5841	GALT GROUP INC	3.43168817128	388	1207409123	1516	KIRKLIN, ERIC P	0.25416433326
327	1106200059	2001	CHRISTENSON TRANSPORTATION INC	1.30908958474	389	1207409124	1621	JMJD LLC	0.18758035919
328	1106200060	2401	JM&M INVESTMENTS LLC	1.64425338185	390	1207409130	1651	AYRES, WILLIAM H & DEBORAH S TRUST	0.25733173939
329	1201100054	5575	TERMINAL LAND & BLDG CORP	32.87644274330	391	1207409131	1657	BLACKARD, ALVIN JR	0.25156788203
330	1201100069	5405	RLR INVESTMENTS LLC	6.35051642891	392	1207409132	1661	HWC LLC	0.25155361834
331	1201100072	5775	CITY UTILITIES	31.25453568020	393	1207409134	1668	THE CITY OF SPRINGFIELD	0.11190611259
332	1201100074	301	CITY UTILITIES	9.77618413172	394	1207409135	1672	THE CITY OF SPRINGFIELD	0.11189175035
333	1201100075	301	CITY UTILITIES	51.75719164680	395	1207409149	1627	CLARIDA, ROSETTA M	0.31823338956
334	1201100078	5759	ROADWAY EXPRESS INC	18.29620607980	396	1207409161	1660	THE CITY OF SPRINGFIELD	0.11191879050
335	1201100081	2441	JM&M INVESTMENTS LLC	4.83948315815	397	1207409162	1665	HWC LLC	0.13962124471
336	1201100082	2441	JM&M INVESTMENTS LLC	12.10367149690	398	1207409175	1537	ELDORADO INV CO LLC	2.20109141318
337	1201200015	3026	LARSON PROP LLC	7.08704702821	399	1207409176	1639	THE CITY OF SPRINGFIELD	0.65270178871
338	1201200016	5325	LARSON PROP LLC	1.56895590238	400	1207409177	1647	AYRES, WILLIAM H & DEBORAH S TRUST	0.10360129618
339	1201200018	5383	LARSON PROP LLC	1.00590568328	401	1207410002	1727	THE CITY OF SPRINGFIELD	0.12735396856
340	1201200029	3026	PETERBILT SPRINGFIELD INC	19.90652530770	402	1207410006	1707	WRIGHT, RICCI D	0.25135732267
341	1201200038	5183	744 CORNER LLC	2.79603310358	403	1207410007	1701	WHITE, ERIC	0.25149611596
342	1201200042	5109	744 CORNER LLC	8.74526878634	404	1207410008	1675	HWC LLC	0.13962013869
343	1201300023	531	SRC HOLDINGS CORP	49.09209377370	405	1207410009	1671	HWC LLC	0.13962204850
344	1201300031	2808	MEEK LUMBER CO	25.48732842460	406	1207410010	18532	BRUCE, TAMMIE J	0.08550520106
345	1202100007	2875	YOUNG, LUCIEN E ETAL	4.88708512649	407	1207410011	1711	COWHERD, JAMES TRENT	0.16548238731
346	1202100009	4825	M&L REAL ESTATE HOLDINGS LLC ETAL	22.20333397560	408	1207410013	1717	BLACKARD, ALVIN JR	0.25061440274
347	1202100018	2760	SADE, RANDALL G ETAL	8.00054869447	409	1207410015	1721	THE CITY OF SPRINGFIELD	0.13825415835
348	1202100045	4727	AMO INVESTMENTS LLC	7.54864182132	410	1207410018	1503	THE CITY OF SPRINGFIELD	0.38598176322
349	1202300002	4803	THOMSON, ROBERT M	1.53443145340	411	1207410019	1519	PHILLIPS, J&P ENT LLC	0.25964854566
350	1202300014	4500	BUCKNER INDUSTRIAL CO LLC	22.82982445100	412	1207411017	1530	WILSON, DANICA L	0.17146848117
351	1202300020	2720	RBELL PROPERTIES LLC	6.85107515720	413	1207411018	1533	ELLIOTT, JOHN D	0.17384526167
352	1202300022	2700	LOUTH, JAMES E ETAL TR	6.94782443567	414	1208307001	2160	REED, BILL LLC	2.34255437620
353	1202300027	2500	DMP PROPERTIES LLC	14.45578183190	415	1208307002	2144	LADY DI PROP LLC	2.40733563275
354	1202300033	301	CITY UTILITIES	3.90062832280	416	1208307003	2140	DJC INVESTMENTS LLC	4.77604880162
355	1202300034	0	BOARD OF TRUSTEES	0.23147864556	417	1208307047	1822 1900	SMITH, WANDA F TR	2.68840792323
356 357	1202400002 1202400003	2795 2879	RUSSELL, DIANE S TR REDING FAMILY TR	5.31292141273 8.56012816493	418	1208307049 1208307051	1955	LATCHKEY PROP LLC LEHAR FAMILY LTD PART	2.04003720554 4.03182494070
358	1202400005	12665	THOMSON, ROYAL K	28.95267434940	419 420	1208307057	1550	SOE, GARSON ETAL	1.00345401989
359	1202400010	4707	LIBERTY PROPERTIES LP	6.00550724029	421	1208307057	1901	REALTY INCOME PROP 30 LLC	5.84147220580
360	1202400010	0	BOARD OF TRUSTEES	0.60021628077	422	1208307053	1510	HUMPHREYS FUND LLC	1.30899794153
361	1202400011	4805	ROBTHOM FARMS LLC	36.88056760170	423	1208307066	1914	HS, INVESTMENTS LLC	3.00349719185
362	1203301065	3659	LEO JOURNAGAN CONSTRUCTION CO INC	29.47146187490	424	1208307067	1936	HARDEN, TERRY	2.99948179690
363	1203301067	3253	SPRINGFIELD UNDERGROUND INC	19.50155744900	425	1208307069	1960	SCAT CAT ENT LLC	3.51976107000
364	1203301007	3755	GAIL RE CAVALLO TR	2.60143844634	426	1208307070	2010	SCAT CAT ENT LLC	2.73614404627
365	1203301075	3637	CUMMINS CENTRAL POWER LLC	13.55839436570	427	1208307070	1548	SHERIDAN, RANDALL K	3.90242609892
366	1203301070	3605	JOINT APPRENTICESHIP COMMITTEE	1.17596947344	428	1208307071	1540	CLEAR LINK TELEPHONE CORP	0.95483750093
367	1203400002	4007	KILMER TR	3.09512307899	429	1208307072	2661	SHELTON, GERALD L ETAL TR	7.02840435056
368	1203400002	4009	CAMP, BETTIE LOU ETAL	1.33695913247	430	1208308011	2109	WHITENER, H E TRUST	9.12481664034
369	1203400004	4111	REH PROPERTIES FAMILY LP	5.04169533185	431	1208405020	2233	PARENT, JAMES JOSEPH	1.10159934669
370	1203400007	4151	4151 E KEARNEY LLLP	4.61467579505	432	1208405033	1810	GIDDENS, ERNEST W ETAL TR	1.09106816122
371	1203400036	3811	SLH INVESTMENTS LLC	8.58732580298	433	1208405036	2225	GIDDENS, ERNEST W ETAL TR	1.06479259105
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434	1208406002	1701	WILSON, JOHN EDWARD	0.71996749723	496	1209307009	2700	AGEE, PAUL L	0.18218202049
435	1208406007	2170	RND PROPERTIES LLC	0.61043686073	497	1209307012	2664	SNOW, JERRY	0.17099796335
436	1208406008	1711	MARLER, STEVE FRANKLIN TR	0.77342679352	498	1209307013	2664	NEW YORK BK OF TRUSTEE	0.35070077549
437	1208407045	2311	GRAY, BARBARA ANN TR	0.52414230930	499	1209307014	2644	JAYNES, THOMAS A	0.17753422894
438	1208407052	1703	JUMP, LONNIE R	0.52316380810	500	1209307015	2636	RUST, ROGER D	0.17503094616
439	1208407053	1710	JANET PROP LLC	2.28130870190	501	1209307016	2626	WILSON, A R	0.35159837431
440	1208407055	1671	SUTHERLAND, PHILLIP R ETAL TR	0.79536132128	502	1209307044	2616	VAUGHN, LORI ANN	0.34690163404
441	1208410001	1721	MERRILL, JOHN	0.17556816029	503	1209307046	2672	HASKETT, LARRY R	0.34224626189
442	1208410004	2405	KAUFMAN, WILLIAM LAWRENCE	0.17460815289	504	1209307049	2710	WILSON, RYAN E	0.18443096200
443	1208410043	1717	COLE, NATHAN	0.15620119517	505	1209307050	2708	KUENZ, PAUL S ETAL	0.17461112044
444	1208410066	2420	LACKEY BLDG LLC	1.20996972464	506	1209307051	2728	COOK, SHERYL	0.17723040136
445	1208410067	2351	RADER, SUSAN ANN	0.34949014141	507	1209307053	2734	BAILEY, RUBY D	0.19224347600
446	1208410069	1706	BAUMGARDNER, MARY	0.25808034140	508	1209307054	2738	BAILEY, PAUL E	0.18930204141
447	1208410070	1702	HOUSING ENT LLC	0.26318467608	509	1209312002	2918	GAMMON ENT INC	2.35486574295
448	1208411001	1721	WIMMER, BRYAN M	0.16570482304	510	1209312003	2852	WILLIS, RICHARD J	0.83835177477
449	1208411002	1720	BCL RENTALS LLC	0.17299126805	511	1209312004	2848	BENNICK INV LLC	0.60503765672
450	1208411003	1716	VUCOVICH, JOSEPH	0.15838982915	512	1209312005	2840	SOUL PROPERTIES LLC	0.57535296327
451	1208411027	1717	MUSE, TERESA	0.15700134025	513	1209312006	2832	YORK, ANDREW J	0.60073174142
452	1208412002	1720	ISAAK, HAROLD H	0.16738405824	514	1209312007	2824	KICKAPOO PRAIRIE INV LLC	0.58384436086
453	1208412003	1716	WAKELEY, MATT K	0.16413210593	515	1209312008	2816	BOYER, SHANNON S	0.54774470598
454	1208412038	1721	IVY LLC	0.41746915242	516	1209312009	2810	HOWDESHELL, KEITH E	0.54112217180
455	1208415001	1728	STRUBLE, JOE	0.17218206050	517	1209312010	2802	BUTCHER, KATHY J	0.54029918439
456	1208415007	1720	ROYSTON, JEFFREY	0.19057177646	518	1209312011	2764	ERWIN, MAX L	0.17738357725
457	1208416005	2502	BAGLEY, GERALD L	0.42343707360	519	1209312012	1724	SMITH, DAWN M	0.28227437383
458	1208416006	2442	SNOW, JANIS E	0.42343599041	520	1209312095	2963	SRC REALTY INC	1.50935299138
459	1208416007	2434	BUTTS, TERRY J	0.42344023241	521	1209312103	1725	PACKER WAREHOUSE LLC	1.34354094490
460	1208416008	2426	417 RENTALS LLC	0.32380620062	522	1209401003	3253	SPRINGFIELD UNDERGROUND INC	26.72506483230
461	1208416009	2420	417 RENTALS LLC	0.25345704240	523	1209401009	3201	ASSOCIATED WHOLESALE GROCERS INC	54.37553835930
462	1208416010	2406	PRATT, ELLA A	0.42343912138	524	1209402007	3001	SRC HOLDINGS CORP	3.03794977350
463	1208416011	2402	CHOATE, PAUL WAYNE ETAL	0.42206050616	525	1209402016	3131	SOMO PART LP	15.25986633880
464	1208416012	2338	CHOATE DALL WAYNE ETAL	0.21165683468	526 537	1209402017	3055	SPRINGFIELD REMANUFACTURING CORP	3.79122434478 18.94247711200
465 466	1208416013 1208416014	2330 2322	CHOATE, PAUL WAYNE ETAL POWERS, ROBERT	0.43327285402	527 528	1209402019 1210100001	1620 4136	LONE, OAK-SPFD LLC E ZONE COURTS LLC	3.02394304171
467	1208416014	2312	TURNER, KAREN	0.42818793204 0.42537890495	529	1210100001	4046	CROXDALE, MAX G	2.08501121950
468	1208416015	2302	DANIELS, CECIL	0.52050837421	530	1210100004	2357	SIMPSON, HAROLD C	0.12144657546
469	1208416017	2341	HOWARD, ALICE	0.21213412647	531	1210100017	2385	WHITE, GLORIA ETAL	0.21869808041
470	1208416017	2421	MILLER, JEFFREY E	0.27225292407	532	1210100017	4014	DAVIDSON, ZACHARY R	4.48469122224
471	1208416019	2520	BUTTS, BOBBIE G	0.84688190242	533	1210100019	3958	ACTION SALES & RENTAL INC	26.84733659550
472	1208416020	2534	TRUITT, JAMES E	0.15707218358	534	1210100068	2364	JOHNSON, PHILLIP	0.12184676384
473	1208416022	2540	TRUITT, JAMES E	0.15586432237	535	1210100069	2380	CALDEIRA, JOSEPH III	0.15353831653
474	1208416024	2530	TRUITT, JAMES E	0.15706168267	536	1210100071	1904	SPRINGFIELD UNDERGROUND INC	175.14114608700
475	1208416025	2541	RGH RENTALS LLC	0.47213839149	537	1210100076	4048	CROXDALE, MAX	2.74341550150
476	1208417016	5759	GATLEY, CHRIS	2.17330104940	538	1210100077	4050	FLAT NOSE PROPERTIES LLC	1.88617629252
477	1208417027	1734	TRK PROPERTIES LLC	0.39880113781	539	1210201004	906	ST LOUIS SAN FRANCISCO RR CO	5.24386583551
478	1208417031	1738	CHOATE, PAUL WAYNE ETAL	0.33143406617	540	1210201006	3500	MISSOURI INTERSTATE INV LTD	7.14767319319
479	1208417032	1742	TURNER, BILL L ETAL TR	0.33743637045	541	1210201010	3605	SPRINGFIELD UNDERGROUND INC	67.17771530800
480	1209101032	2023	ICT II LLC	56.95137008000	542	1210202001	2019	SPRINGFIELD UNDERGROUND INC	53.72541279610
481	1209102003	3253	SPRINGFIELD UNDERGROUND INC	39.77148072760	543	1210202002	3253	SPRINGFIELD UNDERGROUND INC	3.80239074939
482	1209301019	2929	MONDAY, DONALD L	4.41860841682	544	1210301008	3253	SPRINGFIELD UNDERGROUND INC	131.22222783800
483	1209301022	2763	T&W INVESTMENTS INC	0.92206945710	545	1210301011	3253	SPRINGFIELD UNDERGROUND INC	14.30387145230
484	1209301024	2332	H&C PARTNERSHIP	31.36850301320	546	1210400052	1620	CLARK, LARRY B TR	9.52168371158
485	1209301034	840	THE CITY OF SPRINGFIELD	4.49723203152	547	1211200008	4226	WHITE, WILLIAM N ETAL TR	3.71681498582
486	1209306012	2657	LOCKLING, STEPHEN E	0.45857746735	548	1211200009	4224	CITY UTILITIES	1.00581505548
487	1209306020	840	THE CITY OF SPRINGFIELD	0.45988505139	549	1211200011	4341	THOMSON, ROBERT M	65.23001176700
488	1209306022	1741	STEVENS, BRIAN K	0.34774215227	550	1215100002	3830	JENKINS, FAYE L TR ETAL	48.22582661480
489	1209306023	1743	WATSON, GORDON	0.34067757050	551	1215201112	3649	COX, SHARON	0.25147140776
490	1209306035	2669	BLUM, JASON	0.69020378485	552 EE2	1215201113	3655 3661	HESTER, SARA L ETAL DENISON, GORDON ETAL TR	0.21425345641
491	1209306036	2687	BLUM, JASON	1.15613541582	553 554	1215201114	3661 3667	•	0.21475904248
492 492	1209307004 1209307005	2724 2718	UPDEGRAFF, ANDREW WAGNER, CHRISTOPHER D	0.17223320807 0.17771957586	555	1215201115 1215201116	3667 3673	DOEL, MICHELLE RAE ROTTON, KAREN	0.21523461593 0.21570835103
493 494	1209307005	2718	CLARK, ABRAHAM L JR	0.17675834348	556	1215201116	3679	NICHOLS, RICHARD L ETAL TR	0.21570835103
494	1209307007	2702	AGEE, PAUL L	0.17599375037	557	1215201117	3701	DENNIS, DENNY R	0.21617236697
499	1203307000	2700	AULL, FAUL L	0.17.555373037	337	1213201110	3/01	DEINING, DEININI N	0.22340200370

558	1215201119	3709	JENNY DANCE PROP LLC	0.24759327190	620	1216302049	2740	CHILDRENS FOUNDATION OF MID-AMERICA INC	5.86706826766
559	1215201120	3717	LAWRENCE, LARRY WAYNE	0.29545554708	621	1216302053	840	THE CITY OF SPRINGFIELD	7.94057856221
560	1215201121	3725	WOOD, R PAUL	0.41799917614	622	1216302056	819	HS INVESTMENTS LLC	3.17533340057
561	1215201122	3733	DANGELO, SANDRA L	0.48800205129	623	1216302057	855	GRIFFIN, ARCHIE R	0.59892417113
562	1215202001	3645	MURPHY, TYLER JUSTIN ETAL	0.07443539209	624	1216306013	601	SADE, RANDALL G TRUST	0.22411040609
563	1215202002	3637	HARDEBECK, ALMETA A	0.08143251413	625	1216306014	607	COLLINCO LLC	0.25956074637
564	1215202003	3627	ENYART, SHARON J TRUST	0.08809433365	626	1216307001	535	BRADLEY, LOGAN D	0.27087607365
565	1215202004	3619	PHILLIPS, THEOLA J	0.08054669818	627	1216307002	517	PINGEL, RUTH A	0.18340354578
566	1215202005	3609	S&A INVESTMENTS LLC	0.07149451507	628	1216308001	515	FETTER, JOSH	0.28860536548
567	1215202023	3508	NOBLE ESTATES	13.11997237550	629	1216308002	526	LEGACY MANAGEMENT GROUP LLC	0.33819486999
568	1215202062	2847	COOPER ESTATES OF SPRINGFIELD	0.63241933067	630	1216308003	516	ALLISON, MARTHA S	0.28191707221
569	1216101002	3248	SOUTHERN SUPPLY CO	41.18373329320	631	1216308017	511	WOLFE, TONNY B	0.25560782646
570	1216102012	3110	STARK PROCESSING	7.81273723778	632	1216309009	610	BOYTS, BARBARA A TR	0.35706068756
571	1216102013	3156	ELITE STORAGE CTRS NORTH LLC	5.09269368168	633	1216309010	602	SWISHER, DAVID H	0.27656874655
572	1216102017	3100	TROJEN PROP LLC	2.98642241194	634	1216309011	603	FORTNER HOLDINGS LLC	0.21001739317
573	1216102018	3140	COYOTE CROSSING HOLDING CO LLC	0.50172786200	635	1216309012	611	COURTOIS, MARIANE	0.21507350294
574	1216102020	3000	B&G REAL EST INV LLC	2.34619014514	636	1216309013	617	GILLOGLY, JULIE A	0.21479345760
575	1216102021	1419	R&B DEVELOPMENT LLC	0.90292210683	637	1216310032	540	CARDIFF PARK LLC	6.54147736419
576	1216102029	1225	GIDDENS, ERNEST W ETAL TR	7.90291847686	638	1216310033	800	SKAGGS, JACK C	1.46472478986
577	1216102031	1351	EDCO HEALTH INFORMATION	5.90044984434	639	1216310034	808	W W GRAINGER INC	2.88222587029
578	1216102032	3020	SPRINGFIELD FREIGHTLINER SALES INC	9.70284069842	640	1216310036	424	CCMC PROP LLC	7.81009288983
579	1216201001	2958	CUSTOM REALTY DEVEL LLC	7.41925726019	641	1216310047	720	HOLLOWAY PROPERTIES LLC	2.57885785938
580	1216201008	2841	HERMAN, CLARENCE C	0.35208158955	642	1216310048	730	HOLLOWAY PROPERTIES LLC	1.39861592461
581	1216201009	2849	STEWART, ELEANOR	0.24791436254	643	1217301003	2159	FAY, LOWELL TRUST	6.62234798911
582	1216201010	2857	BANZ, PAMELA J	0.23077331267	644	1217301039	2118	CLEAN SKY LLC	2.45693797539
583	1216201011	2863	BILLS, DANIEL WARD	0.23017906706	645	1217301040	2115	MAVEN LLC	0.89387977954
584	1216201012	2871	KELLY, SUSAN B	0.22958566505	646	1217303032	315	PIONEER ADVERTISING CO	2.16098458568
585	1216201013	2905	WAGNER, MARK ANDREW	0.22899279104	647	1217303045	2021	FISK PROPERTIES, LLC	7.60110894169
586	1216201014	2911	FULLER, ROBERT ETAL	0.22840054262	648	1217303050	1913	MFA INC	6.15224768741
587	1216201015	2919	CALTON, MATTHEW	0.22780559785	649	1217304003	840	THE CITY OF SPRINGFIELD	0.50146184269
588 589	1216201016 1216201017	2925 2933	BOSSI, BRUCE KLEIER, LEEMAN A TR	0.22721390288 0.22662003012	650 651	1217304006 1217304007	1801 840	DIVERSITY COMMERCIAL INV LLC THE CITY OF SPRINGFIELD	0.51191151251 0.21881839099
590	1216201017	2939	CHOPSKI, DON L	0.23570061648	652	1217404052	626	FIELD, THOM G TR ETAL	0.67248796257
591	1216201018	2947	MARTINO, JOHN G	0.21576007585	653	1217404052	610	417 RENTALS LLC	0.16671186458
592	1216201020	2953	JDP PARTNERS LLC	0.21472384397	654	1217404057	602	CAMERON, ELLA B ETAL	0.16823342308
593	1216201021	2961	NSI C LLC	0.20534602361	655	1217404060	605	WOLKEN, AARON M	0.21122073106
594	1216201023	1212	THE CITY OF SPRINGFIELD	5.08072835929	656	1217404061	601	WOLKEN, AARON M	0.21708187733
595	1216201146	840	THE CITY OF SPRINGFIELD	6.97987773886	657	1217405002	2244	STONEMOR MISSOURI LLC	30.23307185810
596	1216202014	1035	WILSON, MELVIN WAYNE	0.24101247246	658	1217405010	2334	THE CITY OF SPRINGFIELD	26.47513305170
597	1216202015	1041	STILL, MICHAEL B	0.24101256836	659	1217405011	2335	JRW REAL EST INC	12.71643076460
598	1216202016	1105	MECUM, SANDRA KAY	0.24101256836	660	1217405012	2323	LINCOLN MEMORIAL CEMETERY SPFD MO	1.12180088828
599	1216202017	1109	HOLDEN, KATHRYN P	0.24101256836	661	1217406001	543	SUTHERLAND FAMILY MGT TR	0.28793924856
600	1216202018	1113	MIC DUNDEE PROP LLC	0.21775551209	662	1217406022	541	JAY & KAYE RENTALS LLC	0.25529940276
601	1216202031	2701	THE CITY OF SPRINGFIELD	15.46162561680	663	1217406028	548	SUTHERLAND, PHILLIP R ETAL TR	0.41464686432
602	1216202035	605	SHERMAN ST ACQUISITION CO INC	5.07137176801	664	1217406034	538	SUTHERLAND, PHILLIP R ETAL TR	0.12899609149
603	1216202037	605	SHERMAN ST ACQUISITION CO INC	19.73917983660	665	1217407001	543	FIELD, THOM G TR ETAL	0.39445701832
604	1216202038	1121	SHERMAN ST ACQUISITION CO INC	2.97664478894	666	1217407002	548	MORTON, MARK S	0.24527109274
605	1216202041	2759	WOODFIELD PARK LP	5.72847682838	667	1217407003	542	HEDRICK, DAVID P	0.26845899525
606	1216203017	2824	KELKRIST II LLC	0.20921348406	668	1217407004	534	REM, ROBERTUS H	0.26852516615
607	1216203018	2814	SNIDER, WILLIAM REX	0.19825919230	669	1217407020	529	ADAMS, CLARENCE E	0.25677690491
608	1216203019	2806	WRIGHT, JOHN	0.35122548159	670	1217407021	537	FIELD, THOM G TR	0.25243661462
609	1216203020	1120	CLUCK, ARVEL DALE	1.01840062942	671	1217408004	526	GARRISON, JAMES R	0.27068846224
610	1216203021	1006	PYTHIAN PROPERTIES LLC	1.23535880630	672	1217408019	530	BRANSON, DONALD L	0.18846180941
611	1216203022	1359	SPRINGFIELD SCHOOL DIST R-12	8.34644711634	673	1217408020	540	BRANSON, DONALD L	0.31643406711
612	1216301003	820	MILLER, LOWELL R ETAL TR	2.27314690072	674	1217408021	521	DIANA DRIVE LLC	0.30492484624
613	1216301015	2830	KENT, DAVID DOUGLAS	2.77470944361	675	1217408022	531	DIANA DRIVE LLC	0.43120206274
614	1216302026	614	KICKAPOO PRAIRIE INV LLC	0.22424225617	676	1217409002	526	WHITE, JIM A	0.36209755269
615	1216302027	608	VANDERHOOF, BENTLEY F JR	0.29271643229	677	1217409003	518	DURHAM, GREGORY	0.26184383047
616	1216302029	520	WICKS, JEREMY	0.25940170379	678	1217410011	610	CONGER, JUDY K	0.23708083822
617	1216302030	514	MARK, PAUL RALPH	0.26063786648	679	1217410012	600	GODDARD, TIMOTHY JR	0.25686740021
618	1216302040	811	HOUSING AUTHORITY OF SPFD	7.98643678026	680	1217410022	616	CEN-ESTRELLA, ENRIQUE	0.22271664296
619	1216302046	815	HS INVESTMENTS LLC	2.37512791883	681	1217411018	616	CUNNINGHAM, KENNETH W	0.20694793387

682	1217411019	606	MCHAFFIE, GERALD T TR	0.29358431604	744	1219114001	501	ASHLEY PROPERTIES LLC	0.19279865370
683	1217411019	2529	BENDON, BRENDA M	0.30348597926	745	1219114001	507	FELDY, MARTIN DAVID	0.23041799392
684	1217411021	603	HESLIN, JEREMY J	0.29586407363	746	1219114005	515	THOMAS, ROBERT W	0.21154035014
685	1217411022	617	RICHARDSON, MICHAEL J	0.36459304095	747	1219114006	525	RUSHING, SAMANTHA F	0.19085909718
686	1217412020	620	CHAPPELL FAMILY TR	0.17405124016	748	1219114007	1464	JARMAN, JEFFREY	0.15239359663
687	1217412021	616	CROXDALE, MAX G	0.17438024860	749	1219115004	1448	BERRY, CHRISTOPHER	0.37027893985
688	1217412022	608	CARDEN, GEORGE LLC	0.28966409075	750	1219115005	1440	HICKS, JOEL	0.26357729521
689	1217412023	607	GANN, DALE	0.31154403681	751	1219115006	1430	THOMAS, BRAD L	0.29077829013
690	1217412024	617	MORRIS, JAMES E	0.23039854186	752	1219115008	1451	GALLAGHER, BRIAN C	0.41780921934
691	1218101002	1650	EVANGEL COLLEGE ASSEMBLY OF GOD	13.80704927400	753	1219115009	1457	YOUNG, DAVID E	0.65376533738
692	1218101043	1536	THE CITY OF SPRINGFIELD	12.17552373210	<b>754</b>	1219125027	530	SPRINGER, PATRICIA FAYE	0.20664123383
693	1218310012	620	WALKER, LORI ANN	1.09696570317	<b>755</b>	1219125028	538	ASHLEY PROP LLC	0.29982432647
694	1218310015	610	CARTER, JERRY R TR	0.24305046961	756 	1219125052	516	JOHNSTON, AMANDA E	0.52900033599
695 696	1218310016	433 0	WARLICK, STEVEN W SPG SW RR CO	0.90454472220	757 758	1219125056 1219201004	1525 1312	REESE, JON A	1.41935249611 0.21404925632
697	1218311002 1218311007	420	MORRIS, JIM D TR (6/17/81)	0.06105009373 0.67340728422	759	1219201004	1359	CARY, GAYLA ETAL SPFD SCHOOL DIST R-12	1.91038473268
698	1218311007	2808	CARTER, JERRY R TRUSTEE	0.27542558494	760	1219201010	1326	MSRP LLC	1.28660026310
699	1218312008	535	STAR WHOLESALE SUPPLY CO	0.36107435301	761	1219201023	227	GRAHAM, LAURENCE W ETAL TR	1.47865143457
700	1218312009	535	STAR WHOLESALE SUPPLY CO	0.36522026733	762	1219202001	1301	BARKER, HARVEY D ETAL TR	1.50837576106
701	1218312016	615	JAMERSON, LAMARR P	0.68858270987	763	1219202003	1313	NAHON, PAUL G SR ETAL TR	0.59243351637
702	1218312017	535	STAR WHOLESALE SUPPLY CO INC	0.68858535140	764	1219204022	1258	STORAGE CLIMATE CONTROLLED LLC	1.04614816963
703	1218313005	1630	JOHNSON, PATRICA L	0.18547434728	765	1219210013	1363	WRIGHT, ANDY J	0.83989494156
704	1218313013	1350	BRIDGEFORTH, PATRICIA L TR	2.75557951414	766	1219210018	1362	RUSS MECK MOTORS INC	1.64835004713
705	1218314013	500	MORRIS, JIM D TR (6/17/81)	1.77640365527	767	1219211018	1324	CENTRAL SELF STORAGE SPFD INC	2.73688883991
706	1218314014	420	MORRIS SPFD II LLC	0.37410574343	768	1219212001	1350	STOUT REALTY LLC	1.66036071995
707	1218314017	420	MORRIS, JIM D TRUST	0.04560456180	769	1219212002	1342	BOEHM, ROBERT K ETAL TR (BOEHM FMLY TR)	0.25217081246
708	1218314018	535	STAR WHOLESALE SUPPLY CO INC	8.10992004828	770	1219403004	617	CRISP, PAMULA R	0.20505588058
709	1218315015	427	CROWLEY, DAVID L TR	0.56000305440	771	1219403005	623	YOUNGBLOOD, B A	0.28883297270
710	1218315017	1325	DIRLA INC	0.61780634949	772	1219403006	629	SHANE PEAK PROPERTIES LLC	0.13534251824
711	1218315018	1315	1315 E TRAFFICWAY DEV LLC	4.95834731556	773	1219403012	653	IVY LLC	0.17504512462
712	1218315019	1345	TK FITCH PROP LLC	1.75008709794	774	1219403013	647	VAUGHAN, CAROLYN K	0.17504718093
713	1218316003	412	SPRINGFIELD TABLET MANUFACTURING CO	1.37837961467	775	1219403014	657	BYNUM, BRITTNI M	0.17504676819
714 715	1218316005 1218316006	1225 1635	JOHNSON & LUMLEY REAL ESTATE LLC JOHNSON & LUMLEY ENTERPRISES INC	0.68639170035 1.15134628208	776 777	1219403015 1219403016	663 673	WINGED FOOT INV LLC SPFD REAL EST HOLDINGS LLC	0.17504634900 0.17504716916
716	1218413008	1600	HIDEAWAY INV LLC	4.61217435313	777	1219403017	701	EVANS, ROBERT B	0.17504716916
717	1218413008	516	REYNAUD ENT LLC	0.66103752496	778	1219403017	707	CCM, PROPERTIES LLC	0.17504593626
717	1218413032	505	DLND HOLDINGS LLC	5.67192339383	780	1219403019	707	GP PROPS LLC	0.17504634900
719	1218413043	514	REYNAUD ENT LLC	8.98462296667	781	1219403020	715	TUCK, JEREMY JON	0.17504634900
720	1218413046	1630	EDEL, CHARLES B ETAL TR	9.61639428965	782	1219403021	721	BARBER, JAMES R	0.17504717242
721	1218414001	1749	STOUT REALTY LLC	0.87606324663	783	1219403022	727	LI, HONG TAI	0.17504592981
722	1218414002	11501	FEDEROW, HARRY	0.67391507006	784	1219403025	741	SWAN CREEK PROPERTIES LLC	0.17504758835
723	1218414010	1601	FANNIN, LINDA	0.80473000328	785	1219403026	747	WISE, MARGARET F	0.17504717560
724	1218414012	1661	FEDEROW IRON & METAL CO	3.03275519835	786	1219403027	751	KING, FAY	0.17504635545
725	1218415002	1505	GOURLEY, EWING B	0.67984969252	787	1219403028	757	EQUITY TRUST CO	0.17504634901
726	1218415017	1401	DABNEY RENTAL PROP LLC	3.20187286357	788	1219403029	761	FITZGERALD, ASHLEIGH M	0.17504634900
727	1218415023	1477	BURKS MACHINERY CO	2.68032603030	789	1219403033	633	GIDEON, JOSEPH M	0.36854447082
728	1218415024	1511	PARADIDDLE, LLC	1.92114704765	790	1219403034	637	RENSCH, GEORGE E	0.38510238829
729	1219108010	1406	UNION NATL BK & TR V DICKEY	0.16069951145	<b>791</b>	1219403038	737	BRUMMEL, SARA	0.17504511283
730	1219108011	1400	HAMPTON, VICTOR R	0.16069871646	792	1219403039	731	NEEDEM, VERNA M	0.17504841178
731	1219108022	1423	D & B HOMES LLC	0.84026993042	793	1219403040	767	CHALIFOUX, NICHOLAS	0.16885460529
732	1219109009	1435	HALTER, CHARLES T	1.00662059096	794	1219403041	773	STIRLING PROPERTIES LLC RELAXIN LLC	0.20236601934
733	1219109012	1422	CLARK, DANIEL R ETAL TR	0.96773720590	795 706	1219404001 1219404002	1526	SCHOENAUER, JOSH ETAL	0.21533494374 0.50635215239
734 735	1219110001 1219111001	1401 1420	DURNELL, GLENDA J ASHLEY, JAMES R	0.51443169068 0.36754208943	796 797	1219404002	1520 1516	BOYER, KENNETH C	0.33049599610
735 736	1219111001	1410	VINCEL, GEORGE W ETAL TR	0.36754208943	797 798	1219404005	1531	WHALEN, DAVID J	0.26538898137
737	1219111003	1410	LABARR PROPERTIES LLC	0.25252437399	799	1219405001	1527	THORNTON, AMY SUE	0.20661258773
738	1219111004	1421	FRITZ, DANIEL J	0.37878707729	800	1219405005	616	KLOTZ, JUDITH A	0.16652447445
739	1219111009	1435	HWC LLC	0.52215482900	801	1219405006	620	SERRANO PROP LLC	0.18913399585
740	1219111011	2500	BURLINGTON NORTHERN & SANTA FE	0.08267587511	802	1219405007	626	BRUER, BOB	0.20546454717
741	1219113001	1438	ASHFORD COURT SPFD LLC	0.73230062682	803	1219405008	630	PAINTER, PAUL D	0.20546530569
742	1219113002	1445	EL MADRID INVESTORS	0.99702884758	804	1219405009	636	CHRISTENSON, LISA D	0.20546499356
743	1219113005	1451	FRANKIE PROPERTIES LLC	0.56733230542	805	1219405015	1523	REESE, KENNETH	0.56580428277

806	1219406001	1460	LEXINGTON INV INC	0.39026557287	868	1229104022	1335	COOK, JILL	0.15716183167
807	1219406025	611	KELTNER, DIXIE L	0.19513539062	869	1229104023	1331	JULIAN, KEVIN	0.27675674273
808	1219411001	660	ASKREN, HEIDI L TR	0.15969475001	870	1229104024	1323	LAWSON, LESLIE D	0.22029068386
809	1219411001	700	NIMMO, HEATHER N	0.21049246812	871	1229104043	2250	CATALPA REAL EST CO LLC	8.60256220800
810	1219411002	702	HOM, HARRY TR	0.38574749227	872	1229104044	0	CATALPA REAL EST CO LLC	1.20979871440
811	1219411003	702	BATTEN, JAMES R	0.36462740954	873	1229201012	0	PEDEN, MARGARET ELIZABETH B	1.46624599767
812	1219411007	1619	OSBORNE, JOSEPH RYAN	0.15151604309	874	1229201012	1165	LATHAM, ORVILLE JAMES ETAL TR	0.47373753786
813	1219411007	1621	TRK PROPERTIES LLC	0.15151820313	875	1229201013	1049	FAUCETT, JOEL COLIN	2.98676288697
814	1219411008	1625	MATTHEWS SPOUSAL TR	0.23439112798	876	1229201014	2120	DAVIS, TRUST	1.71477875154
815	1219411019	1625	NELSON, JOHN T	0.19399671245	877	1229201017	2120	DAVIS, TROST  DAVIS PROPERTIES LLC	1.59071525941
816			,	0.19399671243			2030		0.82965526269
817	1219412001 1219412002	1644 1638	FUERSTINGER, ERIC ETAL 1638 E MONROE TERRACE LLC	0.22038671679	878 879	1229201023 1229201024	2024	HOPKINS, JOHN C HARDIN, JOHN D	0.82965526269
	1219412002		SHAFFER, RHONDA	0.20202131903		1229201024			0.87783288176
818		1632	•		880		2014	AGEE, SHELLY MARIE	
819 820	1219412018	1659	CLIMER, LINDA TRUST	0.44834922239	881 882	1229201028	1944	GRAND ST WAREHOUSE LLC	0.82615077752
	1219412019	1667	ROGERS, HAROLD D	0.18352815565		1229201035	2100	MCKINNIS, JOSEPH L	4.43955318598
821 822	1219412020	1675	MIC DUNDEE PROP LLC	0.13346792657	883	1229201036	2008	DNCD PROPERTIES LLC	0.70257883631
	1219412021	1641	HANLON, CHRISTOPHER W ETAL	0.63636677204	884	1229205003	1115	CITY UTILITIES	0.85489189405
823	1219413001	1676	ADE II PROPERTIES LLC	0.19114478983	885	1229205004	801	KRAFT HEINZ FOODS CO	5.51410693068
824	1219413002	1668	ZUHAUSE PROPERTIES LLC	0.19111512406	886	1229205007	1914	KRAFT HEINZ FOODS CO	0.10545292641
825	1219426001	1702	G P PROPS LLC	0.11703110277	887	1229205008	1002	ANDRUS, MASON S	0.19692625967
826	1219426002	810	BURTON, DAN	0.14174574386	888	1229205009	1006	WORKMAN, RAY D	0.16933625069
827	1219426003	814	JLM PROPERTY LLC	0.19633702713	889	1229205094	2035	KRAFT HEINZ FOODS CO	44.13586814390
828	1219426004	818	WHITE, RICHARD L ETAL TR	0.27557094589	890	1229205103	1012	CEDERBLOM FAMILY TR	0.17241111855
829	1219426005	824	INGERLY, LINDA ETAL	0.22957745888	891	1229205104	1016	CEDERBLOM FAMILY TR	0.22967374441
830	1219426006	836	TIMS, EDDIE K	0.43559807075	892	1229205105	801	KRAFT HEINZ FOODS CO	7.06350919564
831	1219426016	1737	GRIFFIN, ARCHIE R	0.27548347474	893	1229401012	2442	TURNER, FRED L	0.36166973208
832	1219426017	839	GWIN, JEAN ANN	0.72124293955	894	1229401013	2438	MCCAIN, JANICE E	0.36167009447
833 834	1219426021	1731	GRIFFIN, ARCHIE R	0.17217686554	895	1229401014	2432	BENNETT RENTAL PROP LLC	0.34405231010
	1219426022	0	GWIN, JEAN A	0.03120578388	896	1229401015	2428	WHEAT, WAYNE M	0.21091419921
835 836	1219427019	765	MATHUS, GRAYSON ROBERT	0.98573597828	897	1229401016	2416	507 PROPERTY HOLDINGS LLC	0.18273521242
837	1219427022 1219427023	815 801	DIVERSITY COMMERCIAL INVESTMENTS LLC	0.29857984628 0.60507273855	898	1229401037 1229401038	2503	EQUITY TRUST CO FBO MARIA A MENDEZ	0.44136967508 0.21841791705
83 <i>7</i> 838	1219427023	2050	DIVERSITY COMMERCIAL INVESTMENTS LLC TRIPP RENTALS LP	7.40683341430	899 900	1229401038	2504	SWAIN, MAX	0.21841791705
839	1220201003	1940	EARL SCHEIB REALTY CORP	0.95910856677	901	1229401039	2508 1453	ZOU, YANG ETAL NTR LLC	0.20433443443
840	1220201007	1820	GOTT INVESTMENTS INC	1.18786345396	902	1229401040	1459	MCCRACKEN, HIRAMA DARLENE TR	0.20433443443
841	1220204029	1920		5.53609447736	903	1229401041	1465	BOWERS, CHARLES W JR	0.14144914829
842	1220309036	814	EDGE, ROY L TRUST RUBINFELD, SAMUEL TR ETAL	0.83419654528	904	1229401042	1503	DELCOUR, ALICE TRUST	0.13720087162
843	1220310008	840	NSI A LLC	0.76176775307	905	1229401044	1509	SHIPMAN, CAROL D	0.13720087102
844	1220310008	903	HERRMAN REALTY CO	1.44322399386	906	1229401045	1515	CASHEL, DANIEL V	0.13500200286
845	1220310010	1830	PAGE CROSSING APTS LLC	3.44370562499	907	1229401046	1521	HOPPER, GINA L	0.13511555174
846	1220310022	928	SANVID INV	1.05465089407	908	1229401047	1527	BUMGARNER, FREDA MAY TR	0.13511333174
847	1220312009	910	SANVID INV	1.43816414528	909	1229401047	1533	BENNETT, J RYAN	0.13337113232
848	1220312009	854	SANVID INV	0.32588950720	910	1229401049	1539	ROBERTSON, BOB	0.14305292121
849	1220312010	2634	SANVID INV	0.21900526936	911	1229401049	2534	BALALZOSKI, CANI	0.44531681760
850	1220313001	2634	SANVID INV	0.73628776337	912	1229401051	2540	WERDEMAN, ANDREW B	0.46516110226
851	1220313014	1859	SANVID INV	1.05448665131	913	1229401051	2546	CARNAHAN, CAROLINE LEE TR	0.57163755618
852	1220313010	960	ONE HUNDRED TWO GLENSTONE INC	2.21708470325	914	1229404059	2401	SOUTHWEST MISSOURI INV INC	40.89078210670
853	1220313020	971	HERRMAN REALTY CO	3.28947930783	915	1229404060	2350	KRAFT EMPLOYEES CREDIT UNION	0.46431799445
854	1229101157	1116	PEDEN, WILLIAM J	1.35921470179	916	1229404089	2400	PETROL PROPERTIES INC	5.17255014768
855	1229103001	1218	SOUTH BARNES DEV CO	1.64380766577	917	1229404112	1554	ENTERPRISE LAUNDRY INC	7.70253624819
856	1229103001	1256	SOUTH BARNES DEV CO	1.24841781795	918	1229405009	1561	NUTTER, VIRGINIA S	0.45910882355
857	1229103004	1306	SPFD LODGE NO 409 BPO ELKS INC	1.03070820299	919	1229405010	1573	POWELL, GARY	1.29128863571
858	1229103004	2347	BARNETT, WILLIAM M & NORMA TR	0.13092334929	920	1229405010	1585	JACOBS, AUSTIN	0.57476887443
859	1229103014	2353	PATRICK, ELIZABETH F TR	0.10061026366	921	1229405011	1601	HAMILTON, GARY L ETAL	0.44109957502
860	1229103015	2335	BENNETT BLDG LLC	0.10061026366	921	1229405012	1609	FEAR, PAUL E	0.44109957502
861	1229103017	2335	BENNETT STREET LLC	1.98922067504	922	1229405013	1615	BREESE, J E	0.49286984177
	1229103018	2331	1330 S BARNES LLC	2.01966152251	923	1229405014	1619	KELLER, EDDIE	0.46636000931
862 863	1229103019	241	CRAMER, DONALD ETAL	0.19521306142	925	1229405015	1629	FERGUSON, KENT J ETAL	0.46636000931
864	1229104011	2419 2427	KOHLBECK, KRISTAN M	0.73405944820	925	1229405016	1639	GADDIS, JACOB	0.48174315584
865	1229104012	2427	CRAMER, DONALD L ETAL	0.20266103934	926	1229405017	1703	STAYKOV, DOBRIN T	0.43995727394
866	1229104019	2419	ELLIS, ANGELA K	0.21691654834	927	1229405018	1713	GRAY FAMILY TRUST	0.43995727394
867	1229104020	1340	DIAZ, WILLIAM CARLOS	0.15279460013	929	1229405019	1713	JOHNSON, KELLY	0.31875801413
307	1223104021	1340	DIAL, WILLIAM CARLOS	0.132/3400013	323	1223403020	1/21	JOHNSON, RELLT	0.2233341030

930	1229405021	1723	MCINTOSH, LEON TR	0.20434379301	992	1233203063	5690	ELLISON, ALVA R	0.04510148083
931	1229405022	1735	MCINTOSH, LEON TR	0.28709849353	993	1233203064	1901	TWDS INV LLC	0.07582723713
932	1229405023	1743	BARRETT FISK INVESTMENTS LLC	0.18319018441	994	1233303004	2660	CITY UTILITIES	0.88083113000
933	1229405024	2565	BENNETT, JOHN L	0.32375686418	995	1305300019	3845	OZARK GREENWAYS	9.54857895807
934	1230208008	1344	GOODWIN, DAVID	0.65408477992	996	1305300027	2541	TINDALL-WALKER CONST	29.71338806410
935	1230208024	1211	FUCHS DENTAL BLDG LLC	0.40293834552	997	1305403014	0	OZARK GREENWAYS INC	0.45713383054
936	1230303011	1408	MEXICAN VILLA FOOD PRODUCTS INC	0.48982543662	998	1305403039	2440	REDFEARN, WILLIAM C	1.00799714677
937	1232101001	2604	RED FISH PROP LLC	1.23938337696	999	1307400006	4301	WALKER, BARBARA	3.78856075388
938	1232102001	2540	BOATMENS UMB	2.03280547541	1000	1307400013	4400	DRB REAL EST LLC	14.94952828320
939	1232102026	1922	HEITZ, JOHN A PROP V LLC	0.29977297949	1001	1307400029	4404	SPRINGFIELD BUSINESS & DEV CORP	19.54994235810
940	1232102027	1928	CLARK, MICHAEL E	0.31456336545	1002	1308201029	500	WEST BYPASS LLC	46.34337137560
941	1232102028	1934	OHARA, MATTHEW K	0.32559355398	1003	1308201046	2110	ONEILL, DAVID	24.32561269580
942	1232102032	1956	CUFF, SCOTT	0.35355400750	1004	1308201048	2024	ONEILL, DAVID	6.13059825547
943	1232102033	1962	FRANKLIN, GARY D	0.35255712600	1005	1308202004	500	WEST BYPASS LLC	6.23398905755
944	1232102034	1966	HAUTH, ROGER DALE ETAL TR	0.33796325000	1006	1308306045	4151	WILLARD MO SCHOOL DIST	35.39524778670
945	1232102035	1972	CHILES, DANIEL THOMAS	0.37209857292	1007	1308307005	1900	DAVIS, DOUGLAS A ETAL TR	10.12484608090
946	1232102036	1980	LEE, GREGORY S	0.42391753381	1008	1308307007	1942	MKI & ASSOC LLC	4.65126310450
947	1232102037	2004	STANTON, HERBERT L TRUST	0.43394592583	1009	1308307009	1942	MKI & ASSOC LLC	5.25630115440
948	1232102038	2014	BOULANGER, TERRY E	0.44397700460	1010	1313118017	829	DRURY COLLEGE	0.16300642556
949	1232102039	2018	DORSHORST TR	0.37623272833	1011	1313118032	1002	DRURY COLLEGE	0.72086274069
950	1232102040	2020	HAWKINS, DOROTHY J	0.47933997872	1012	1313118033	831	DRURY UNIVERSITY	0.34602089171
951	1232102042	2028	FINDLEY, DONNA	0.42040719906	1013	1313118034	1011	DRURY UNIVERSITY	0.21369237388
952	1232102043	2100	GRISHAM, MARK	0.41652873300	1014	1313122001	1145	THE CITY OF SPRINGFIELD	4.13619487903
953	1232102044	2108	PEEBLES, MARION	0.43597536140	1015	1313310013	327	BRICK CITY TWO LP	0.40650056738
954	1232102045	2116	WISE, ESTEL C	0.45677487627	1016	1313318009	405	MISSOURI STATE UNIVERSITY BOARD	2.65497502176
955	1232102046	2124	SPROUSE, KEITH F	0.45346618723	1017	1313319013	404	WHOLESALE LMBR & MATERIALS CO	3.14970765830
956	1232102047	2132	POMRENING, BRIAN D	0.46224541041	1018	1313327008	509	SQUIRES, CHARLES A ETAL TR	1.08215927479
957	1232102048	2140	ELKINS, SHERRY BETH	0.47102700006	1019	1313328007	405	405 WASHINGTON AVE LLC	1.34213056815
958	1232102049	2148	SMITH, JAMES L	0.47980726768	1020	1313328010	602	BUNSELMEYER, BARBARA J ETAL TR	0.43998176111
959	1232102050	2154	INGEMI, WILLIAM M	0.48858448651	1021	1313329006	0	405 WASHINGTON AVE LLC	1.75000331451
960	1232102051	2160	FISK, JUDY A TR	0.49737787363	1022	1313330001	514	COMMERCIAL METALS CO	2.00499164312
961	1232102052	2168	MCCURDY, WILLIAM H ETAL TR	0.62874386189	1023	1313404001	929	DRURY UNIVERSITY	0.15061045615
962	1232102053	1942	CHRISTY, KATHERINE LARUE	0.50707480038	1024	1313404002	835	JUNIOR COLLEGE DIST CENTRAL SW MO	1.37281815572
963	1232102059	1952	HEITZ, JOHN A PROP V LLC	0.52060046636	1025	1313405001	940	DRURY COLLEGE	0.56777801405
964	1232102073	2553	MOORE, MAX	0.25161735241	1026	1313405002	930	DRURY COLLEGE	0.58353091291
965	1232102074	2557	LONESKY, TOM	0.30813605142	1027	1313406003	701	SPRINGFIELD SCHOOL DISTRICT	3.94232215504
966	1232102082	2527	OAK TERRACE PROP OWNERS ASSOC INC	0.73751026822	1028	1313407007	630	DRURY UNIVERSITY	1.50807174829
967	1232401001	2210	LOMAN, LYLE M ETAL TR	0.34095650683	1029	1313408003	700	DRURY UNIVERSITY	0.79484623349
968	1233203004	1905	MURRAY, THOMAS R	0.38229505870	1030	1313408004	900	DRURY UNIVERSITY	0.55999371802
969	1233203005	1915	BURK, TINA M	0.36716248709	1031	1313409002	800	JUNIOR COLLEGE DIST CENTRAL SW MO	0.97761499118
970	1233203006	1923	FISCHER, ANDREW C	0.35362991219	1032	1313409003	701	COMMUNITY COLLEGE DIST CENTRAL SW	1.39834446125
971	1233203007	1933	KLINELINE-JAY LLC	0.34615280924	1033	1313417001	701	COMMUNITY COLLEGE DIST CENTRAL SW	3.67096185314
972	1233203008	1939	KLINELINE-JAY LLC	0.34511792453	1034	1313417002	900	DRURY UNIVERSITY	0.09490129591
973	1233203009	1951	KAJ RENTALS LLC	0.34588470268	1035	1313418007	640	DRURY UNIVERSITY	1.71641980000
974	1233203010	1959	MOONDANCE INV LLC	0.34668005090 0.34747426018	1036	1313419001	625	LGR RENTAL PROP LLC	1.15662987493
975	1233203011 1233203012	2001	COTNER, DONNA KAYE BEANSTALK PROP LLC	0.34747426018	1037	1313420001 1313422002	12700	COMMERCIAL METALS CO	0.62331109571 1.30870632953
976		2013			1038		435	HITCHCOCK, SAMUEL D	
977 978	1233203013 1233203014	2021 2031	BEANSTALK PROP LLC SCOTT, JOANNE	0.34906584381 0.34985851764	1039 1040	1313422005 1313423005	634 840	COMMERCIAL METALS CO THE CITY OF SPRINGFIELD	4.30912987743 0.15508582883
979	1233203014	2037	SHIRK, JAMES W TR	0.35065398777	1041	1313424007	605	SHERMAN ST ACQUISITION CO INC	9.87980078546
980	1233203015	2049	DOOLITTLE, ANDREW	0.35145188105	1041	1313424007	0	CONCRETE CO OF SPFD	0.41996865993
981	1233203017	2055	KLINELINE-JAY LLC	0.35224657794	1042	1313426008	1045	THE PUBLIC BUILDING CORP	9.41851090983
982	1233203017	2059	ROBARDS, BETTY J TR ETAL	0.35283340573	1044	1313426009	1109	THE CITY OF SPRINGFIELD	8.96579881025
983	1233203019	2101	STOUT, DAVID K & SUE J TRUST (3/25/2015)	0.35263057655	1045	1313427002	420	MORRIS SPFD II LLC	0.40053932339
984	1233203019	2111	STOUT, DAVID K & 30E J TRUST (3/25/2015)	0.35234878855	1046	1313427002	501	BARBER, RONALD J	1.80990108509
985	1233203020	2119	EDCO HOMES LLC	0.35206466584	1047	1313427003	510	CONCRETE CO OF SPRINGFIELD	4.52179374991
986	1233203021	2131	MOONDANCE INV LLC	0.34790125584	1048	1313428004	545	JD NATIONAL LLC	3.60714824635
987	1233203022	2143	MOONDANCE INV LLC	0.35150296919	1049	1313429039	1010	BIG WINDOWS LLC	0.23265548424
988	1233203023	2147	HUFF, CHARLES D	0.34343778299	1050	1313429040	1010	BIG WINDOWS LLC	0.32400626218
989	1233203024	2613	KAJ RENTALS LLC	0.34535396034	1051	1313429041	1010	BIG WINDOWS LLC	2.50120053265
990	1233203023	1901	BLMH, PROP LLC	0.15843020074	1052	1314307001	1000	ZAHN FAMILY PROP LLC	0.51143409598
991	1233203062	2847	BLACKSTONE OFFICE VILLAS OWNER ASSOC	1.63046940761	1053	1314307003	1022	ZAHN FAMILY PROP LLC	0.87673555898
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1054	1214212001	1025	MAODILE DADIO COMMUNICATIONIC INC	1 5161600005	1116	1216202027	2442	HELEBECHT KLOVA	2.04207204000
1054	1314313001 1314315001	1925	MOBILE RADIO COMMUNICATIONS INC	1.51616808085 7.31300290395	1116	1316303027	3443	HELFRECHT, KLOVA	3.04387304908 0.61524707387
1055 1056	1314315001	420 405	CHAPPELL FAMILY TR		1117 1118	1316303028	600 3131	HELFRECHT, KLOVA	
	1314325003		ARCHITECTURAL DESIGN CONCEPTS LLC ARCHITECTURAL DESIGN CONCEPTS LLC	0.36060198894 0.18030045225		1316303029		S&M 3131 LLC MCELROY PROP LLC	7.70302880935
1057 1058	1314325004	413 0	PAUL MUELLER CO	2.20431379159	1119 1120	1316303030 1316307001	3315 3102	MARTINEZ, LUCIO C & SARAH M TRUST	3.37929205676 0.71835403321
1059	1314406012	400	CITY UTILITIES	1.99259881132	1120	1316307001	3110	YATES, DALE	0.73867101037
1060	1314406012	425	HAYES, TERRY J & JUDY C LLC	0.30524462469	1121	1316307002	3220	KING, DAVID G	5.16791971365
1061	1314406014	405	SIBLEY, NICK L.	0.35004113755	1123	1316307011	606	WILSON, JESSICA ETAL	0.23706523592
1062	1314406015	417	MAULDIN FAMILY LP	0.39961839058	1124	1316307021	602	JOHNSON, NAKEISHA	0.19064649985
1063	1314407009	634	VINEYARD CHRISTIAN FELLOWSHIP	0.67235233862	1125	1316307022	601	MARSHALL, DWIGHT	0.18825013316
1064	1314407010	5910	STRONG CAPITAL V LP	0.10313192603	1126	1316307024	605	BARNETT, JAMES D	0.22644187511
1065	1314423013	910	MID AMERICA DAIRYMEN INC	10.84793633560	1127	1316406004	3044	OGDEN, WILLIAM M	1.05231778692
1066	1314424006	10220	MID-AMERICA DAIRYMEN INC	0.06885822223	1128	1316406005	3060	DARNELL, CHERYL L	1.25286058765
1067	1314426005	2500	BURLINGTON NORTHERN & SANTA FE	0.63068368749	1129	1316406020	601	LOGAN, DALE W	1.69771536626
1068	1314427009	800	MID-AMERICA DAIRYMEN INC	0.56787310016	1130	1316406022	543	LOGAN, DALE W	1.20693651442
1069	1315316005	2634	ULMER, TOMMY R	0.20282357466	1131	1316407001	3005	WOLTER, FRED	4.77591419045
1070	1315316008	2660	417 RENTALS LLC	0.20282698255	1132	1316407002	3011	AMERICAN BUILDERS & CONTRACTORS	4.88523120205
1071	1315316009	2662	AFFORDABLE HOUSING ACTION BOARD	0.24274680702	1133	1316408013	2921	P&S STONE LLC	1.60154641079
1072	1315316011	2640	BIEKERT, JOHN	0.40564808052	1134	1316408018	2743	GREAT SOUTHERN BANK	2.51105506885
1073	1315316012	2630	THE CITY OF SPRINGFIELD	0.27505343292	1135	1316408020	2755	WESTWAY SHOPPING CENTER LLC	0.71425988508
1074	1315316013	2622	THE CITY OF SPRINGFIELD	0.31549028512	1136	1316408021	2837	WESTWAY SHOPPING CENTER LLC	4.45726054260
1075	1315318003	2525	GILMORE, EDWARD TRUST	0.49732236251	1137	1316408022	2845	WESTWAY SHOPPING CENTER LLC	2.69759568903
1076	1315318004	2541	ANDERSON MIDWEST PROP LLC	0.85657449552	1138	1316408023	2867	WESTWAY SHOPPING CENTER LLC	1.80878860634
1077	1315318005	2611	WEATHERWAX, BEVERLY TR ETAL	1.82190042130	1139	1316408027	2945	KRAMER ENT CHESTNUT LLC	1.76646702277
1078	1315318009	2501	DUPREE PROP LLC	0.23849245918	1140	1316408028	2715	MARYOTT, DOUGLAS R	2.81254000729
1079	1315318010	2517	CLIMER, FLOYD	0.26405453026	1141	1316408031	518	BEN TREI TERMINALS LLC	3.33204910228
1080	1315319001	2429	HS INVESTMENTS LLC	0.47586262325	1142	1316409006	534	LOGAN, DARRELL E	0.53208371880
1081	1315320001	2306	PAUL MUELLER CO	4.48240513544	1143	1316409007	522	LOGAN, DARRELL	0.78923667334
1082	1315320005	424	NEEDHAM, JEAN ANN TR	0.14703787996	1144	1316409013	629	HAYES, JOANNA KAY	2.81289586576
1083	1315320006	418	WENDT, WARREN J	0.14703830218	1145	1316410014	628	GOTT, JOHN CHARLES	2.16052390228
1084	1315320007	412	PRIER, JERRY F	0.18430915590	1146	1316410015	2142	GOTT, JOHN CHARLES	0.80818647396
1085	1315320009	2420	TERRY, DONALD M TRUST	1.04549251061	1147	1316410020	521	RUBRECHT, PAUL	1.05995305128
1086	1315321008	416	SIMS, CAROLE L TR	0.22728281718	1148	1316411059	499	HAMILTON, DAVID	3.99316520461
1087	1315321009	410	PAUL MUELLER CO	0.61897511677	1149	1317201009	1160	JAVALINA LLC ETAL	45.99328390170
1088	1315321015	415	PENNER, JERRY L JR	0.62011514812	1150	1317201010	1300	GORDON, SHANE V	9.75331456682
1089	1315327005	2564	417 RENTALS LLC	0.20215232213	1151	1317201013	1300	JAVALINA LLC ETAL	13.94496566160
1090	1315327006	1615	KESSLER, EARL	0.14514061242	1152	1317201014	4150	JOHNSON, STEPHEN W ETAL TR	14.68908740510
1091	1315327012	2550	SHIVE, ROBERT L TR	0.62704100173	1153	1317301001	3848	DAVIS, DONALD B ETAL TR	9.59888573331
1092	1315327013	2542	RUBLE, JIM L	0.20621657278	1154	1317301002	3940	KEITHLEY, WILLIAM T ETAL TR	3.86415922015
1093	1315327014	2538	THOMPSON, ROBERT H	0.20621785827	1155	1317301003	3980	RENSCH, GEORGE TR	3.24067178774
1094	1315328001	435	UHLMAN, EDWARD L	0.51653801998	1156	1317301009	4040	NICHOLS DEV LLC	2.72903201772
1095	1315328003	421	SILLAS, ADOLFO P ETAL	0.27306986612	1157	1317302001	4030	NEWELL, ROGER	0.82570792448
1096	1315328004	2520	CUMMINGS, CLAUDE	0.69731825456	1158	1317303001	4101	TARTENAAR, EARL ETAL	0.60076018487
1097	1315411009	2100	LEWIS, MICHAEL 417 RENTALS LLC	0.25254008904	1159	1317303002	4830	HICKS, DERL M	0.01314739265
1098	1315411013	2122		0.12627111736	1160	1317304001	490	ESTES, C M PROPILIC	0.19183585326
1099 1100	1315411014 1315411015	2126 2130	417 RENTALS LLC COWHERD, JAMES W TRUST	0.12627111736 0.12627138113	1161	1317305001 1317307001	4277 805	ESTES, C M PROP LLC ESTES, C M PROP LLC	3.08198004133 0.53408849109
	1315411015	2136	WORKMAN, RAY	0.12627158115	1162	1317312001		HAMLETT, STEVE	0.73362290618
1101 1102	1315411016	2140	MOORE, ANISSA WHITTLE	0.12627195116	1163 1164	1317312001	805 4126	BOSWELL, JOHN STEVEN TR	0.37190704551
1102	1315411017	2146	PROPERTY BROKERS INC	0.12627200119	1165	1317312002	4134	MILLER, SHIRLEY DARLENE	0.40679900200
1104	1315411019	2154	JDP PARTNERS LLC	0.25254421988	1166	1317312003	4140	HICKS, DERL M	0.23117975150
1105	1315411023	2112	ROBINSON, GLEN T	0.12627237923	1167	1317312005	810	ESTES FARM HATCHERY LLC	0.43870425972
1106	1315411024	2116	ARNOLD, KIRK A	0.12626985549	1168	1317313001	3905	COMOTEX LLC	2.55273033030
1107	1315411025	533	PAUL MUELLER CO	34.06791424660	1169	1317313001	818	HINDS, DEBORAH	0.90548905890
1108	1316302009	734	SAFETY KLEEN CORP	3.18153730643	1170	1317313003	737	TEAGUE, COLLIN	0.71676404053
1109	1316302005	820	HOKE PROPERTIES LLC	4.28493248805	1171	1317313021	741	WALLACE, JACK	0.36105777925
1110	1316302029	710	WEST NICHOLS INDUSTRIAL PARK LLC	4.44511753867	1172	1317313022	3957	RENTALS LLC	0.19990120585
1111	1316302030	731	WEST NICHOLS INDUSTRIAL PARK LLC	6.16943086571	1173	1317313023	3953	RENTALS LLC	0.14471464878
1112	1316303004	3357	MCELROY, CLARENCE EARL TR	0.15978474976	1174	1317313024	3947	STANLEY, DRAKE M ETAL	0.14475328434
1113	1316303005	3357	MCELROY, CLARENCE E TR	3.32499858575	1175	1317313025	3941	RENTALS LLC	0.14479303138
1114	1316303025	3357	MCELROY PROP LLC	2.14843797600	1176	1317313026	3935	RENTALS LLC	0.14483261775
1115	1316303026	3411	MCELROY PROP LLC	1.37114928982	1177	1317313027	3929	RENTALS LLC	0.16632875353

## Trail Investment Study (

1178	1317313028	3921	HILTON, JASON W	0.22553430602	1240	1322102004	2117	HAWKS, SANDRA L ETAL	0.15828934073
1179	1317313029	736	RENTALS LLC	0.22670772910	1241	1322102005	2121	NANNEY, JEFFREY A	0.21806209112
1180	1317401005	3648	PEARLE PROPERTIES LLC	5.03783103147	1242	1322102006	2129	AFFORDABLE HOUSING ACTION BOARD	0.21444563645
1181	1317401006	3702	FULBRIGHT, LETHA M	4.77261705343	1243	1322102007	2135	EVANS, GAIL E	0.15740822557
1182	1317401007	3726	KOEHLER, EVERTT R TR	2.42202802447	1244	1322102008	2139	FREEMAN, DARRELL E	0.15717319365
1183	1317401008	3736	HICKS, RALEIGH SR ETAL	2.37357499023	1245	1322102009	2145	FAIRCHILD, ALLEN	0.15693665448
1184	1317401012	840	THE CITY OF SPRINGFIELD	4.13537580706	1246	1322112009	1610	THOMPSON, CHRIS RAY	3.62292865644
1185	1317401015	735	BRIDGEFORTH, PATRICIA LEE (GEORGE)	2.89234270958	1247	1322121001	1723	DOUBLE D PROPERTIES LLC	2.89931581933
1186	1317401016	3802	BOLIN, JOHN WAYNE	9.60397825578	1248	1322122001	555	DIVERSITY COMMERCIAL INV LLC	2.21291737774
1187	1317401019	3614	HARTMAN & COMPANY INC	14.82189492170	1249	1322201001	351	MY BOYS LLC	0.41808598695
1188	1317402002	615	WILSON, RICHARD K ETAL TR	7.93946823399	1250	1322201026	352	MUCHMORE, JAMES T TR	0.24021259274
1189	1317402004	3859	D W DANIEL INC	13.12409188690	1251	1322201027	348	HARRIS, PATRICIA A	0.22956970702
1190	1317402233	630	JLSL LLC	10.07236049620	1252	1322202002	351	ANDRUS, BOYD	0.22555095666
1191	1318100001	1489	HM LLC	1.23505822235	1253	1322202043	360	BROWNING, BETTY	0.18431820168
1192	1318100002	4450	BATTERSON, RAY E	1.10299870093	1254	1322202044	359	417 RENTALS LLC	0.21747074545
1193	1318100008	1111	WESTGATE IND LLC	0.99183198247	1255	1322202045	355	JDP PARTNERS LLC	0.22555321047
1194	1318100010	1100	FYFFE, MARGIE V	1.44719348203	1256	1322202048	2343	SPRINGFIELD SCHOOL DIST	7.02246805497
1195	1318100023	1131	BEST CARE PROPERTIES LLC	0.78394294152	1257	1322402001	1610	WILSON, TERRY L	4.18193869437
1196	1318100031	1205	VINCENT, JAMES A TR	0.85701271390	1258	1322405035	840	THE CITY OF SPRINGFIELD	15.88558635940
1197	1318100034	911	OZARK SALES & LEASING CO	16.96897904300	1259	1322405036	1724	NAREMCO INC	2.69658396740
1198	1318100037	4315	BLUE BELL CREAMERIES LP	0.90760952694	1260	1323101001	353	MAULDIN, PATTY L TRUST	1.55620010502
1199	1318100042	4395	SRC HOLDINGS CORP	1.47284433860	1261	1323101002	344	THE CITY OF SPRINGFIELD	1.19936806703
1200	1318100052	4575	SRC, HOLDINGS CORP	0.84883966990	1262	1323101003	334	MATHIS, JOHNNY	0.08581847107
1201	1318100053	4593	SRC HOLDINGS CORP	0.85353457561	1263	1323101004	525	330 NORTH MAIN LLC	0.03432748121
1202	1318100054	4611	K&W, INVESTMENT CO LLC	0.85142032761	1264	1323101005	328	THE CITY OF SPRINGFIELD	0.06865625036
1203	1318100062	4646	APAC-CENTRAL INC	11.36952454000	1265	1323102001	3224	KOHR, MICHAEL C ETAL TR	0.04866831221
1204	1318100066	4645	K&W INVESTMENT CO LLCC	1.71751925461	1266	1323102002	301	CITY UTILITIES	0.03384043894
1205	1318100068	1203	VINCENT, JAMES A TR	6.04983059899	1267	1323102005	301	CITY UTILITIES	0.26299930118
1206	1318100069	4580	APAC-CENTRAL INC	22.31013313210	1268	1323102006	320	CITY UTILITIES	0.55789704321
1207	1318100079	4314	FORERUNNER LLC ETAL	0.83134985708	1269	1323103006	405	PUBLIC BLDG CORP	0.98583798366
1208	1318100080	1430	ARC FESPFMO001 LLC	55.05694255250	1270	1323112069	319	319 NORTH MAIN LLC	0.28906380208
1209	1318100081	4358	HAYDEN, JUSTIN D ETAL TR	5.15621286913	1271	1323112070	0	P&G PROPERTIES LLC	0.17132665074
1210 1211	1318100082 1318100083	4336 4539	HM LLC SRC HOLDINGS CORP	2.66101306638 7.91500351540	1272 1273	1323113002 1323114003	840 840	THE CITY OF SPRINGFIELD THE CITY OF SPRINGFIELD	1.72765622714 0.41889490563
1211	1318100083	4539 948	JOPLIN & SPFD RAILWAY LLC	8.30389170072	1273	1323114003	357	VONBEHREN, JAMES K	1.21217571119
1212	1318200007	1320	NORTHSTAR BATTERY CO LLC	33.87475005900	1275	1323201010	1401	MCHENRY, RICK	0.50851657894
1213	1318300015	743	HANCOCK, DONALD K TRUSTEE	3.06839340306	1276	1323202001	350	MCHENRY, RICK	0.26113620668
1215	1318300016	791	HANCOCK, DONALD K TRUSTEE	4.49561076850	1277	1323202009	2702	MCHENRY, RICK	0.78340682128
1216	1318300019	804	HANCOCK, DONALD K TR	0.40528325478	1278	1323203005	353	TORTORICE, JOHN	1.20251990457
1217	1318300022	718	ANSTINE, DONALD F SR ETAL TR	2.32545052708	1279	1323206017	321	MCCOY, MIKE	4.14828705039
1218	1318300026	786	ANSTINE, DONALD F SR ETAL	2.67225985555	1280	1323208009	221	MCCOY IRON & METAL INC	0.60938354415
1219	1318300027	614	HANCOCK, DONALD K TR	7.14908743988	1281	1323208010	0	UNKNOWN	0.07210897780
1220	1318300028	834	BLANTON, BERT DEAN	26.55976200980	1282	1323209010	1315	NEWMAN, DONALD	0.81327868934
1221	1318300031	4765	CORPORATE PROP LLC	4.95408879933	1283	1323210001	220	BOFFS AUTO REPAIR LLC	1.56193105648
1222	1318300032	4771	J&B WAREHOUSING LLC	4.97041605044	1284	1323210004	1435	THE CITY OF SPRINGFIELD	0.95301639736
1223	1318300036	876	ALEJANDRA CARDEN LLC	2.41963721066	1285	1323212008	1500	NEWMAN ENTERPRISES LLC	1.44838826439
1224	1318300037	99	SCOGGINS, JAMES M	0.07066082440	1286	1323212011	1531	SCE HOLDINGS LLC	0.62152780441
1225	1318300039	910	JOPLIN & SPFD RAILWAY LLC	7.34417229159	1287	1323212012	0	AIRGAS USA LLC	0.19080591868
1226	1318300048	615	PILOT TRAVEL CTRS LLC	11.93038933090	1288	1323213004	1432	THE CITY OF SPRINGFIELD	0.27456446398
1227	1318401036	4661	ROBERTS, JANE - SPFLD, LLC	19.83890803080	1289	1323213005	1420	THE CITY OF SPRINGFIELD	0.54913002023
1228	1318401040	12500	PERFORMANCE FOOD GROUP INC	6.89247658127	1290	1323214001	1524	WOMMACK MONUMENT CO	0.74947779464
1229	1318402011	4440	POJAC REALTY INC	6.15820483064	1291	1323215022	1551	MEEK LUMBER YARD INC	7.87049229093
1230	1322101013	1927	PARTNER PROP LLC	0.18484614896	1292	1323215028	940	CRANE, WM H (PETE)	0.00860776664
1231	1322101016	2013	HILL, VIRGIL J	0.36458775560	1293	1323215029	431	PROCK, RON	0.27835197984
1232	1322101017	2021	CREATIVE INVESTMENTS LLC	0.18119881063	1294	1323215031	437	NETZER, PHYLLIS A	0.21992418878
1233	1322101018	2027	WATSON, JAMES EARNEST	0.36021008708	1295	1323215034	1500	GUFFEY, ROBERT H	0.55031023580
1234	1322101019	2041	MULLIKIN, RODNEY L	0.43524153066	1296	1323215036	414	GUFFEY, ROBERT H	0.53563443560
1235	1322101022	2001	PARTNER PROP LLC	0.18411819711	1297	1323215041	1220	GUFFEY, ROBERT H	0.91530496040
1236	1322101023	2007	SCHREINER, CLIFFORD H JR	0.18338721362	1298	1323223007	0	AIRGAS USA LLC	0.69685248348
1237	1322101024	347	PAUL MUELLER CO	12.11044077120	1299	1323223011	1405	AIRGAS USA LLC	2.50955771138
1238	1322102001	2111	WHITE, JONATHON KODI	0.39147149109	1300	1323224005	1320	AIRGAS USA LLC	3.86728872206
1239	1322102003	2115	MARRA, DANNY	0.15852508469	1301	1323229001	420	MORRIS, JIM D ETAL	0.31881100225

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1302	1323230002	840	OZADIKE CDEENIMANE INIC	17.58639890130	1364	1225202001	434	THE CITY OF CODINICATE D	0.18952302747
1302	1324104017	635	OZARKS GREENWAYS INC THE CITY OF SPRINGFIELD	16.41155921170	1365	1325303001 1325303002	434	THE CITY OF SPRINGFIELD THE CITY OF SPRINGFIELD	0.12863414653
1304	1324204004	320	THE CITY OF SPRINGFIELD	1.35335492477	1366	1325303002	432	THE CITY OF SPRINGFIELD	0.12863495789
1304	1324205008	330	COMMUNITY PARTNERSHIP OF THE OZARKS INC	1.23771724706	1367	1325303005	418	THE CITY OF SPRINGFIELD	0.12863493789
1306	1324205008	840	THE CITY OF SPRINGFIELD	0.32128117065	1368	1325303005	410	THE CITY OF SPRINGFIELD	0.14292738501
1307	1324207024	309	FRISCO LOFTS LP	1.54477443742	1369	1325303007	406	THE CITY OF SPRINGFIELD	0.14292590714
1308	1324207027	1923	SPFD-GREENE COUNTY PARK BOARD	0.84491975671	1370	1325303007	400	THE CITY OF SPRINGFIELD	0.14292733556
1309	1324208001	331	FOUNDERS PARK LOFTS LP	0.57205607278	1371	1325303055	426	THE CITY OF SPRINGFIELD	0.12863486535
1310	1324209004	0	BRICK CITY LP	1.02860656386	1372	1325304001	840	THE CITY OF SPRINGFIELD	0.22039692245
1311	1324209010	840	THE CITY OF SPRINGFIELD	0.21811026828	1373	1325305039	1409	DURHAM, PAUL A TRUST	0.44314820143
1312	1324210005	1010	YELLOW BONNET LLC	0.17958693736	1374	1325401001	1111	THE CITY OF SPRINGFIELD	6.65835204366
1313	1324210006	0	PUBLIC BLDG CORP	0.52176877392	1375	1325404001	1437	LEDGER, MOLLY A TR	1.13097411629
1314	1325119009	840	THE CITY OF SPRINGFIELD	29.95231228930	1376	1325404002	1455	ROBEEN, JEROME D	0.72081199584
1315	1325124016	1369	ROWLAND CO LLC	0.35861405956	1377	1325405001	800	LUEHR, ERIC A	0.53083866481
1316	1325124017	1375	ROWLAND LAND CO LLC	0.35862613547	1378	1325405006	1460	BROCK, PHILLIP C TR	0.68444919130
1317	1325204011	840	THE CITY OF SPRINGFIELD	0.17987571117	1379	1325406001	928	BARKOFSKY, DONALD M TR	0.75790817662
1318	1325204012	1351	KOLLMEIER PROP LLC	0.18122039706	1380	1325406002	920	GARRETT, FILIP J	0.71763940127
1319	1325204013	1347	EVERETT, AARON J	0.16496088611	1381	1325406003	900	LKL TR	0.73437959748
1320	1325207001	526	BARRETT FISK INVESTMENTS LLC	0.13613226880	1382	1325407001	960	HALL, BARBARA C TR	0.38328498057
1321	1325207002	522	LEWIS, LOLA R	0.13613065694	1383	1325407002	950	BROCK, STEPHEN	0.38754401341
1322	1325207003	512	COLLINS, MARY E	0.27226436219	1384	1325407003	1448	DONELAN, ANDREW	0.33933818881
1323	1325207004	508	HAIGHT, LINDA J	0.13613208769	1385	1325407009	1423	FORTE, ANGELO N ETAL	0.35841092540
1324	1325207005	504	HUGHES, CECIL E	0.13613199731	1386	1325408001	1030	ANAND, MANEESH	0.47334988489
1325	1325207006	500	HURST, MARTY D ETAL	0.13613017258	1387	1325408002	1020	GARRISON, GAYLORD ROBERT	0.39675269475
1326	1325207007	430	KRK PROPERTIES LLC	0.13613258548	1388	1325408003	1420	PRYOR, DAVID L	0.40161465324
1327	1325207008	426	BROADSTREET, LYDIA	0.13613097361	1389	1325408004	1452	CLOPTON, JERRY D	0.38287894677
1328	1325207009	420	CHADWICK, MATTHEW V	0.13613178445	1390	1325430002	1120	MATTHEWS, JAMES CORBIN	0.32119966140
1329	1325207010	416	KENT, DIANE	0.13613178444	1391	1325430003	1102	MATTHEWS, JAMES C	0.34108615996
1330	1325207011	412	CRABB, MICHAEL	0.13486821933	1392	1325430004	1060	ROWLAND LAND CO LLC	0.34262686321
1331	1325207013	403	CHRISTIAN, CH NEW TESTAMENT	0.42355000178	1393	1325430005	1040	1/2 NELSON LLC	0.34284527824
1332	1325207015	409	JOHNSTON, DONNA J	0.14877339576	1394	1325430006	1036	VREELAND, JOHN B ETAL	0.40274344248
1333	1325207016	413	STOTLEMEYER, CLAIRE W	0.13159611211	1395	1326106003	945	THE CITY OF SPRINGFIELD	2.71366063241
1334	1325207017	417	LETTERMAN, TERRY	0.13632084903 0.13635800747	1396	1326210059	1366	BIGBEE, DANIEL	4.85684209919
1335	1325207018 1325207019	421 425	KRK PROPERTIES LLC CG INVESTMENTS SPFD LLC	0.13639327980	1397 1398	1326210060	2108	BIGBEE, BETTY BIGBEE, DANIEL CLARK	1.93910733698 7.49983712432
1336 1337	1325207019	425	FOREMAN, MICHAEL G	0.13639327980	1398	1326210068 1326301022	2103 1414	KRISTEK, GLEN ETAL	6.55676609022
1338	1325207021	435 435	SECOND BELL TRUST	0.13646496644	1400	1326301022	1119	RESER, JACK TR	0.20285027973
1339	1325207021	439	MASON, FORREST ETAL	0.16885516097	1401	1326301040	1071	GBC INVESTMENTS LLC	0.08970731012
1340	1325207023	503	WILSON, CAROLYN M	0.17797105047	1402	1326301061	1067	EATON, RAYMOND L	0.10525261006
1341	1325207024	507	LABARR, CAMERON F	0.17803230933	1403	1326301063	1063	DANIELS, JAMES E	0.11062041375
1342	1325207025	509	FUHRMAN, ANN C ETAL	0.15801383430	1404	1326301079	4880	FASSNIGHT MEADOWS HOMEOWNERS	1.02079515934
1343	1325207026	515	BOWE, LAURA M	0.13668341200	1405	1326301080	1223	CHISM, R GERALD	0.85856403677
1344	1325207028	408	NICKOLS, BEVERLY J	0.13739532890	1406	1326302002	1442	SWAIN, ARTHUR J	5.12589431645
1345	1325215010	1347	HATFIELD PROP INC	0.20207685164	1407	1326304031	1467	MATHEWS, JOSHUA D	2.40410776666
1346	1325215011	1353	CREATIVE INV LLC	0.15200198185	1408	1326304052	1508	BOYD, JOHN PATRICK	1.72097931715
1347	1325215012	1357	RCK TR	0.16525447973	1409	1326305017	1601	ELFINDALE VILLAGE INC	10.11194514890
1348	1325215013	521	DAVIS, KRISTEN	0.10730463228	1410	1326305035	1701	CORNERSTONE WORLD OUTREACH CENTER	6.88198212407
1349	1325216009	1346	DAVIS, CHANCE	0.16507046057	1411	1326305036	1401	CORNERSTONE WORLD OUTREACH CENTER	4.60073911208
1350	1325216010	1350	MALCOLM, ALICE ELAINE	0.16369315418	1412	1326313011	1140	TRACY, KIMBERLY D	0.45352354710
1351	1325216011	1356	BRAAM, GERALD F JR	0.16231554046	1413	1326313012	1200	KEITHLEY, DARIEN	0.43941186276
1352	1325301005	1400	BAKER, CLATE J	0.23510097185	1414	1326313015	1212	DARNELL, RUSTY	0.55428832960
1353	1325301006	1410	DUGAN, DAVID D TRUST	0.23510169324	1415	1327301003	2460	ARCHIMICA INC	60.52845928620
1354	1325301009	1434	GRAHAM, CLAYTON P ETAL	0.16071215428	1416	1327303001	2550	THE CITY OF SPRINGFIELD	35.57293616310
1355	1325301047	1415	TRINITY LUTHERAN CONGREGATION	3.69232892643	1417	1327304005	1600	PRESTRESSED CASTING CO	20.33550088310
1356	1325302001	1401	THE CITY OF SPRINGFIELD	0.23474406192	1418	1327305027	2429	JOHNSON, CHARLOTTE L TRUST	9.95606665128
1357	1325302002	1407	THE CITY OF SPRINGFIELD	0.22647144509	1419	1327305029	11117	PRUIETT, LYNN ANN	4.91030502667
1358	1325302003	1417	LAZZARO, CHRISTOPHER D	0.28892314725	1420	1327401038	1661	VISION REHABILITATION CTR OZARKS	0.43412962402
1359	1325302004	1423	BARNETT, LARRY	0.29578849666	1421	1327401039	1631	MATHEWS, FRED M ETAL TR	0.79242673280
1360	1325302039	500	THE CITY OF SPRINGFIELD	0.18182466835	1422	1327401040	1613	KERRI DUNCAN LLC	0.69624964361
1361	1325302040	506	THE CITY OF SPRINGFIELD	0.18182248353	1423	1327401045	20220	ELFINDALE VILLAGE INC	29.13170466170
1362	1325302041	514	THE CITY OF SPRINGFIELD	0.18181689934	1424	1327401046	1353	MAERZ, SHEILA R	0.06118965915
1363	1325302042	520	THE CITY OF SPRINGFIELD	0.18207474639	1425	1327401047	1717	WAITE, WILLIAM E ETAL TR	0.04853006857

## Trail Investment Study (

1426	1327401048	1717	NICKERSON, WILLIAM R	0.04243800330	1488	1424100012	431	JENKINS FAMILY TRUST	6.61161544561
1427	1327401049	1717	MATHIS, SUSAN L TR (8/5/14)	0.04671047201	1489	1424100013	0	HONE, DEBORAH	3.76796776895
1428	1327401050	1717	PAUL, PRISCILLA B	0.05820232235	1490	1424100042	5348	ROCKY HILL PROPERTIES LLC	13.43429236130
1429	1327401051	1717	CRABTREE, ROBERT JEWELL	0.05294595544	1491	1424100043	0	HOMETOWN BK	7.47664604028
1430	1327401052	1717	PEACOCK, LINDA K	0.04166107360	1492	1424200018	5544	DEER LAKE PART LLC	148.05455045300
1431	1327401053	0	HUNT, KENNETH C FAMILY TR	0.04258061673	1493	1424300260	4500	DEER LAKE PART LLC	30.24440568300
1432	1327401071	0	VILLAS AT ELFINDALE DELELOPMENT CO	1.73647204132	1494	1424400002	9714	COHU, STEVEN G	23.06041345080
1433	1327401104	1721	ARC PROPERTY MGT LLC	4.76494179108	1495	1424400004	3024	H'DOUBLER, CHARLES ETAL	40.09144576610
1434	1327402001	1930	WARREN DAVIS PROP XXXI LLC	12.61210370930	1496	1424400007	9714	COHU, STEVEN	31.06247605460
1435	1327402002	2032	DIVERSITY COMMERCIAL INV LLC	9.74807844879	1497	1424400089	5379	SUDHOLT, JARED	0.22979960935
1436	1327402003	2120	WASTE CORPORATION OF MISSOURI INC	14.72878011330	1498	1424400090	5367	MAPLES, GLENDA R & HAROLD E	0.22979893949
1437	1327403049	1625	MV SHERWOOD VILLAGE EAST LLC ETAL	2.33052667379	1499	1424400091	5355	MATTHEWS, RYAN R	0.22979736014
1438	1327403055	1531	SHERWOOD VILLAGE APARTMENTS LLC	2.11306303236	1500	1424400092	5343	SCHMIDT, DAVID W	0.22979865247
1439	1328106001	1307	LORANCE TR	2.06726086017	1501	1424400093	5331	REED, CYNTHIA ETAL	0.22413253297
1440	1328106003	840	THE CITY OF SPRINGFIELD	2.56904861124	1502	1424400094	5319	KHOURY, NAIM	0.22956042705
1441	1328109001	840	THE CITY OF SPRINGFIELD	6.91912963071	1503	1424400095	5303	LOWE, CHRISTI L	1.52987436531
1442	1328203032	1309	THE CITY OF SPRINGFIELD	0.22428402616	1504	1425100161	5190	COLLINGS, CLINT JAY	4.49633537389
1443	1328203045	3326	ADAMS, RACHEL R TR ETAL	16.48162471210	1505	1425100162	7317	ZHU, FENGJUAN	3.69110028498
1444	1328203048	3250	OPTIMIST CLUB WEST SIDE	7.36045781670	1506	1711300002	6581	FLETCHER, GEORGE R TRUST	37.51011411400
1445	1328203057	616	EMERY, TOM	2.04291197077	1507	1711300010	7349	JONES, JOE PAUL TR	9.61801692593
1446	1328203059	940	GREENE COUNTY	3.47046253473	1508	1711300018	0	EISERER, GARY ETAL	6.14503628779
1447	1328203060	616	EMERY, TOM	6.91913913611	1509	1711400014	6267	VENABLE, MARK A	1.92188561731
1448	1328203068	3116	THE CITY OF SPRINGFIELD	0.33028484975	1510	1711400027	2305	JONES-PULLEY CO LLC	16.60500909210
1449	1328203069	940	GREENE COUNTY	0.42100001829	1511	1711400028	4209	CENDROSKI, ERIC BRADLEY	4.27748118580
1450	1328203070	840	THE CITY OF SPRINGFIELD	0.11305454286	1512	1711400029	6005	SANDERS, GLENN W	4.35689443946
1451 1452	1328203071 1328204014	940 1025	GREENE COUNTY ADAMS, RACHEL A TRUST	6.90574902295 5.07032917018	1513 1514	1711400031 1711400032	6097 6041	LAFFERTY, GREG E ETAL HARDCASTLE, JERRY D ETAL	7.51155901070 4.81899364504
1452	1328204014	3517	BUMGARNER, JERRY L ETAL	4.64779244690	1515	1711400032	6225	KEETER, DIANE LOUISE TR	3.92728629157
1454	1328205008	940	GREENE COUNTY	1.89965335476	1516	1711400038	6259	HORST, CHARLES R	2.06901965653
1455	1328206059	840	THE CITY OF SPRINGFIELD	0.87713575416	1517	1711400045	6005	SANDERS, GLENN W	5.62459094604
1456	1328206060	840	THE CITY OF SPRINGFIELD	1.00753023467	1518	1712300002	1463	BENNETT, REX C ETAL TR	28.13404897800
1457	1328206061	3165	HAMMERS, WILLIAM DALE JR	1.51410765976	1519	1712300003	5705	CITY UTILITIES	11.05369316180
1458	1328206069	3517	BUMGARNER, JERRY L ETAL	3.98919293565	1520	1712300004	11787	PAGE, WANDA ROSE	78.45111285330
1459	1328206075	3201	HAMMERS, WILLIAM ETAL TR	15.15078145810	1521	1712400005	301	CITY UTILITIES	9.63064878211
1460	1328207007	840	THE CITY OF SPRINGFIELD	0.10419390092	1522	1712400006	301	CITY UTILITIES	10.05358773780
1461	1328207008	1306	THE CITY OF SPRINGFIELD	0.36467714258	1523	1712400007	301	CITY UTILITIES	10.06296147290
1462	1329101001	1025	ADAMS, RACHEL R TR ETAL	17.26756983220	1524	1713100012	5422	SMITH, BOBBY E	14.45902654530
1463	1329102001	1221	HOPPY LLC	4.03817449157	1525	1713100013	5300	CWR PROPERTIES LLC	60.22838608860
1464	1329102005	1025	ADAMS, RACHEL R TR ETAL	1.75231791781	1526	1713100020	5394	WILSON, RYAN	4.71306064120
1465	1329300093	473	WOLVIN, GERALDINE	7.65456008183	1527	1713100021	3649	DULIN, WILLIAM P	4.66816843367
1466	1329300222	1625	JACKSON PLACE HOMEOWNERS ASSOC	17.14357833210	1528	1713100024	504	DULIN FAMILY TR	10.16056167750
1467	1330100046	1395	NETZER, CHARLES ANTHONY TRUST	20.67986993940	1529	1713100029	5296	ELLERMAN, KATHLEEN (DULIN)	10.76698210190
1468	1330100187	4781	VINTAGE HILLS HOME OWNERS ASSOC	10.00110524270	1530	1713200001	5470	PAGE, WANDA ROSE	107.09293413600
1469	1330200119	0	GREAT SOUTHERN BANK	150.31016223700	1531	1713200011	4314	TUNNELL, DAVID H	34.07308479400
1470	1330400006	4371	HENSON, JERRY J	4.99903190237	1532	1714100008	4370	REPUBLIC R-III SCHOOL DISTRICT	79.13695857090
1471	1330400011	4371	HENSON, JERRY J ETAL	19.85129734370	1533	1714100009	6302	GOEKE, KEN	20.31000833570
1472	1330400013	473	WOLVIN, GERALDINE	8.98946870969	1534	1714100010	5952	SMITH, LANA M ETAL	2.43362486319
1473 1474	1330400105 1330400220	1502 0	WILLIAMS, THOMAS P OZARK, GREENWAYS INC	0.27478935668 25.22375399510	1535 1536	1714100013 1714200009	4311 6310	MOORE, MICHAEL A REPUBLIC SCHOOL DIST R-III	11.18541500740 66.95760665160
1474	1330400220	4525	MOONEY, JONATHAN	0.39397483106	1537	1714200009	4569	LITZSINGER, JOHN	9.11694333806
1476	1330400251	1370	FRANKLIN, PERRY L	0.33421085867	1537	1714200011	6205	HILL, RAYMOND E	9.82030166074
1477	1330400252	1382	CAGLE, TRAVIS W	0.26795672055	1539	1714200015	4297	CANTWELL, ERNEST E	10.08992327240
1478	1333401005	2524	SPFD SCHOOL DIST R-12	12.24769421440	1540	1714200016	213	CITY OF REPUBLIC	6.03227107429
1479	1333401006	1300	BURRELL INC	3.15669783725	1541	1714200017	6552	DRAPH PROP LLC ETAL	2.54378410687
1480	1334201001	1900	US OF AMERICA	257.11133649800	1542	1714300002	4655	MOONEYHAM, TERRY	3.32794125144
1481	1334202020	2620	GARDNER PROP SPFD LLC	1.67055739183	1543	1714300004	4793	HARRINGTON, MELBA L TR	1.00011537544
1482	1334202025	1950	SENIC PARK LLC	17.50609996700	1544	1714300005	3445	LACY LEANN LLC	38.44259461570
1483	1334202026	1840	GARDNER PROP SPFD LLC	3.50375869024	1545	1714300006	3250	MCELHANY, DON	36.01661161010
1484	1334301001	2400	THE CITY OF SPRINGFIELD	59.47528584000	1546	1714300010	623	HARRINGTON, RONNIE	24.74374419460
1485	1413400001	763	SPFD UNDERGROUND INC	196.60194349900	1547	1714300011	4793	HARRINGTON, MELBA L TRUST	8.71010908223
1486	1424100005	5318	ROGERS, IVOE D ETAL TR	5.64357775339	1548	1714300014	4660	GERDES, KARL ERIC	10.67190973910
1487	1424100006	5376	JENKINS, JASON L ETAL	7.32755429287	1549	1714300015	4736	CARLSON, JAY W	9.67602087677

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1550	1714300016	4736	JAY CARLSON FARMS LLC	16.08635366730	1612	1804102004	2814	ASSOCIATED ELECTRIC CO OP INC	16.28154611810
1551	1714400006	4660	GERDES, KARL ERIC TRUST	45.71598685270	1613	1804102008	2851	CITY UTILITIES	4.39593323709
1552	1721100128	199	BASTA, NICHOLAS R	0.51771325449	1614	1804102056	2771	BURRELL INC	45.21615925410
1553	1721100129	171	WHITE, DAVID A	1.77957756796	1615	1804102062	2858	US GOVERNMENT	26.23550900520
1554	1721100130	143	ZINTER, RYAN T	1.09962880277	1616	1804401002	2750	WEST BATTLEFIELD WAREHOUSE LLC	3.47670683023
1555	1721100131	131	PILAND, GERALD TR	0.69428087862	1617	1804401003	840	THE CITY OF SPRINGFIELD	0.02920075846
1556	1721100131	101	DIMERY, ROBERT J JR	0.48199156163	1618	1804401010	3211	JIMS VIDEO & AUDIO INC	1.50026873059
1557	1721100132	2118	•	0.29372579354	1619			LKM INVESTMENT PROP LLC	1.50020873033
			ODONNELL, JAMES B III			1804401011	3221		
1558	1721100346	2203	SHURMAN, LARRY TR	0.80080833991	1620	1804401012	3231	JOHNSON, CHARLES LEROY TRUST	0.93730056595
1559	1721100347	2214	GOCHENAUER, JAMES V	1.24012290064	1621	1804401018	3249	ROWDEN PROP MGT LLC	3.66115737621
1560	1721100349	309	BAKER, MICHAEL J	1.52798369608	1622	1804401022	3119	SCENIC PROP INC	4.35954838073
1561	1721100350	213	FARIA, RICHARD D	0.70360032300	1623	1804401027	3045	CARTER, JERRY R TR	2.58097027796
1562	1721100351	207	LAKIN, FAMILY TR	0.59886597402	1624	1804401028	3101	FFACE INC	2.42955481941
1563	1721100352	201	MACE HOMES INC	0.80696679846	1625	1804401029	3149	BLOUGH, JAY A	3.37505691383
1564	1721100353	2344	CASELLA, ADAM	0.61065966914	1626	1804402019	3100	ADSI LLC	9.13819798445
1565	1721100367	2103	MURRAY, EARL H JR	0.19388739475	1627	1804402025	3330	BOWGEN, ETHEL SUE TR	2.92239549286
1566	1721100368	2109	MCCAFFERTY, STANCE ETAL	0.19300244073	1628	1804402026	3046	ALCANCIA, ELPIDIO Y TRUSTEE	14.74413787970
1567	1721100369	2115	COOPER, GAYLE LYNN	0.19421792821	1629	1804402045	2800	WEST BATTLEFIELD WAREHOUSE LLC	7.10552678723
1568	1721100370	2121	GILMORE, DUSTIN	0.19526460227	1630	1804402087	1417	TITAN LEASING LTD	22.20730418410
1569	1721100371	2127	REID, JAMES R III	0.44217329244	1631	1804402096	3310	JOHNSON, LENA C	0.27909824005
1570	1721100372	318	AUST, DAVID A	0.16142436120	1632	1804402097	3322	BEARD, KEVIN L	0.25381135852
1571	1721100375	2135	WEST, STEPHEN	0.32681252093	1633	1804402098	3334	BLOSCH, BOBBY H	0.24351500950
1572	1721100376	2201	KECK, KEVIN M	0.37052465670	1634	1804402099	3346	MARTIN, SETH A	0.23578963855
1573	1721100377	2207	EGAN, SARAH E	0.33486023940	1635	1804402100	3356	HAVEN POINT PROP LLC	0.23547184509
1574	1721100377	2202	KILPATRICK, KYLIE C ETAL	0.22398724049	1636	1804402101	3370	HAVEN POINT PROPILEC	0.23317350518
1575	1721100378	2213	GILL, JOHN	0.16106260125	1637	1804402101	3382	SPARAPANI, SCOTT	0.23317330318
1576	1721100388	132	•	0.20425190034	1638	1804402102	910	J&B LAND DEV LLC	2.56222376225
			MCDOWELL, RANDELL R						
1577	1721100389	126	PUTMAN, DAVID T	0.20865166491	1639	1805300007	840	THE CITY OF SPRINGFIELD	9.20491849533
1578	1721100390	120	NEVESTYUK, ILLYA	0.21854595556	1640	1805300008	3350	POSENKE, FLOYD R	15.05936556040
1579	1721100391	114	RODDEN, WILLIAM R	0.22767975321	1641	1805300009	8941	GILKERSON, ROBERT PAUL	9.58559079657
1580	1721100392	108	SCHROEDER, ERIC	0.25135405566	1642	1805300014	3252	WILLIAMS, DONALD E	16.93232996970
1581	1721100393	102	CARPENTER, BOYD	0.36975633324	1643	1805400136	0	MONTILEONE, TYLER R	13.03685459070
1582	1721100463	2219	ROBERT, JONATHON B	0.44643776324	1644	1805400180	3886	PARRISH, JUSTIN	0.15049460061
1583	1721100467	2104	STEWART, ROGER	0.26130169638	1645	1805400181	3898	SMITH, SUE ANN	0.25710410543
1584	1721100468	2106	SMITH, MARI LOU	0.25744587457	1646	1805400251	3159	CREEKSIDE SUB HOMEOWNERS ASSOC	0.41177652553
1585	1721100469	0	AMERICAN AUCTIONS INC ETAL	0.96268895500	1647	1805400271	3301	CHAFFEE, JENNIFER J	1.57078121888
1586	1721100470	2207	EGAN, SARAH E	0.90677177996	1648	1805400272	3309	JOHNSON, LARRY B	0.64555823311
1587	1721100471	0	CRAWFORD, JERRY L	0.13806826202	1649	1805400273	3321	RAY, JACK H TR	0.57113891323
1588		1824		0.76199243571	1650	1805400274	3333	PIGG, SARAH	0.55934531087
1589	1721400001	0	GIBAS, SUSAN MARIE	34.04255029410	1651	1805400281	0	MONTILEONE DEVELOPMENT CO INC	11.28855136450
1590	1722300001	7294	NAU ANGUS FARMS LLC	39.13833499570	1652	1805400297	3880	TREADWELL ENT INC	7.44788392801
1591	1722300005	5687	MCCONNELL, HARRY L ETAL	22.53405846930	1653	1807300002	5095	KAMO ELECTRIC	3.99053339822
1592	1722300006	7450	NAU ANGUS FARMS LLC	38.14537106860	1654	1807300003	301	CITY UTILITIES	104.51592944700
1593	1722400008	6947	HESS SERVICES LLC	4.75455698706	1655	1807400019	4680	THE CITY OF SPRINGFIELD	41.20720936870
1594	1722400014	6695	SANDERS, VERNON DALE	71.35640828580	1656	1808100261	3909	MONSEES, ADAM R	0.26928376794
1595	1722400015	6810	PECK, PHILLIP C	10.51846330790	1657	1808100262	3891	WINSTEAD, JOHN	0.34019178651
1596	1722400013	91	ETHERIDGE, WARREN A ETAL TR	28.12486641610	1658	1808100262	3873	LUNA, BRENT ETAL	0.31079377702
	1722400013		CITY OF REPUBLIC	3.41138061897		1808100263		SPALDING, ROGER M	0.34511229952
1597		5730	GREENE COUNTY	2.17857920188	1659		3855	•	
1598	1722400024	940			1660	1808100265	3837	BROWN, MICHAEL	0.89722621368
1599	1722400026	6998	OWENS, BENNY R	24.55968887030	1661	1808200001	1068	STEINERT, SAMMY D JR ETAL	5.23080281879
1600	1723200001	6462	MCELHANY, DOROTHY M ETAL	36.43863469800	1662	1809101001	3411	MOBILE HM SALES INC	7.88481285309
1601	1723200003	5228	USA	19.69118432110	1663	1809101239	0	OZARK GREENWAYS INC	6.56460645628
1602	1723200006	5175	MCCONVILLE, JEFFREY P TR	5.51198031479	1664	1809102001	2824	HUBBARD, H G	0.92295263784
1603	1723200019	3448	COWHERD, TRENT	4.71633415163	1665	1809306001	3108	JONES, BRIAN K	0.32632660075
1604	1723200020	9469	TUURI, STEPHEN & GEORGIANNA TRUST	8.96413440748	1666	1809306077	3145	SOUTH CREEK CHURCH	1.57144680958
1605	1723200024	5133	PEABODY, RON	5.54620358350	1667	1809306105	3118	LUCHT, TIMOTHY A	0.33987333928
1606	1723200026	9469	TUURI, STEPHEN & GEORGIANNA TRUST	4.82847073199	1668	1809306138	4005	ADAMS, JOHN G	0.95348476793
1607	1723300005	6618	ROLLER, BOB	10.11078827980	1669	1809306160	3145	SOUTH CREEK CHURCH	0.30959879382
1608	1723300006	6838	ROLLER, BILLY FRANCIS	10.31279389100	1670	1809406203	3045	SPRINGFIELD PHARMACY LLC	2.32997776885
1609	1723400001	6556	UNITED STATES OF AMERICA	311.65593990600	1671	1809406204	4115	GOLDEN POND PHASE IV LLC	3.14699099236
1610	1727100002	7098	MANESS, DONALD S	39.57211992880	1672	1809406205	3035	GOLDEN POND PHASE V LLC	6.23556910041
1611	1804101006	2705	STONE BROWN PAPERS INC	14.66993879370	1673	1809406209	2925	GOLDEN POND PROP OWNERS ASSOC INC	4.57368764231

## Trail Investment Study (

1674	1809407007	3920	HUNTON, PATRICIA	1.15316364125	1736	1816306014	3348	BROWN, RICKY L	0.30755352412
1675	1809407011	4006	HEPPARD, NOEL L	1.03984387650	1737	1816306015	3358	MORRIS, JIM L TR	0.30640818324
1676	1809407012	4016	MORTON, KIRBY GENE	0.57752207203	1738	1816306024	4616	KING, ANGELA ETAL	1.15089709253
1677	1809407013	4030	SMITH, PAULA CATHERINE	0.52628552025	1739	1816306041	4767	SHEEHAN, PAUL M	0.63566613202
1678	1809407014	4046	ENGLE, TERRY E	0.68703432202	1740	1816306043	3438	WENZL TRUST	0.39659745175
1679	1809407015	4050	KKB DEVELOPMENT LLC	0.38931494948	1741	1816306045	3424	HART, DARREL G	1.91243508903
1680	1809407016	4110	YOUNG, RONNIE L	0.87194229926	1742	1816306048	0	STILES, KAREN M AP TR	0.41020859963
1681	1809407026	0	OZARK GREENWAYS INC	0.70801891343	1743	1816306050	3452	STILES, KAREN M AP TR	0.36584145295
1682	1813101003	1020	TWIN OAKS COUNTRY CLUB	91.45721069350	1744	1816306051	4606	STEELE, PATTI A	1.17483994274
1683	1813101017	1020	TWIN OAKS COUNTRY CLUB INC	78.00620532990	1745	1816306059	3502	QUIGG, KELLY A ETAL	0.32844713603
1684	1813201004	608	CITY UTILITIES	9.72293046765	1746	1816306060	3514	MITCHELL, DEVIN	0.32946810284
1685	1813201079	635	GREENE COUNTY	0.40682225618	1747	1816306061	4886	LAMB, STEPHEN B	0.28545881678
1686	1813201080	940	GREENE COUNTY	1.20868040615	1748	1816306062	4898	CIGOIANU, CONSTANTIN	0.48342590520
1687	1813201156	4250	WILLIAMS, JAMES A	0.07794495196	1749	1816306063	4910	RT SCHELL DEV CO LLC	0.36268814002
1688	1813201157	4248	RICHARDS, THOMAS L	0.06428836864	1750	1817400011	4976	SORCI, MICHAEL J	3.19441760811
1689	1813201158	4246	QUIGLEY TR	0.06428802428	1751	1817400012	4930	PUBLIC WATER SUPPLY DIST 1	0.28799423917
1690	1813201159	4244	BURK, BRENT	0.07794549299	1752	1817400013	3475	CORBETT FAMILY TRUST	13.15950878950
1691	1813201160	4230	GARRISON, DAVID MURRAY TR	0.07907088440	1753	1817400393	3544	MILLER, ROBERT EARL	0.39781223463
1692	1813201161	4228	CISNA, JOHN E TR ETAL	0.06428523930	1754	1817400394	3556	MUSE, ROBERT C ETAL	0.38069790420
1693	1813201162	4226	JACKSON, RICHARD L TRUST	0.06428527161	1755	1817400395	3568	MARTIN, RODNEY D	0.38047862662
1694	1813201163	4224	WILKINS, PHILIP W	0.07794374927	1756	1817400396	3580	COLLIER, ROBERT E	0.38506764189
1695	1813201226	622	LANSDOWN, RICHARD LEE JR	0.27100870370	1757	1817400397	3592	HEALEY, ROBERT P ETAL TR	0.43704787455
1696	1813201233	4210	RENTALS LLC	0.04901747395	1758	1817400399	3618	LONG, WALTER JR	0.34913135333
1697	1813201234	4212	RENTALS LLC	0.04660597357	1759	1817400401	4922	SPENCER, ANDREW R TR	0.56253563371
1698	1813201235	4214	RENTALS LLC	0.04660723152	1760	1817400428	3532	MELTON, HOLLY L ETAL TR	0.46435007763
1699	1813201236	4216	RENTALS LLC	0.04660609052	1761	1817400441	3604	FLUEKIGER, EDWARD	0.53454012387
1700	1813201237	4218	RENTALS LLC	0.04660580626	1762	1817400446	4937	EDWARDS, JOSEPH R	0.78819564501
1701 1702	1813201238 1813201242	4220 4248	RENTALS LLC OAKHURST EST CONDO ASSOC	0.04901631631 1.64592522479	1763 1764	1818100021 1818100030	4530 3025	STICH, AARON S	4.76727814315 8.23373192093
1702	1813211001	4450	GREENE COUNTY	1.28133948518	1765	1818100030	4552	MISSOURI HWY & TRANS COMM WATKINS, BOBBY	5.16458016393
1704	1814400003	4833	WARD BRANCH ETAL TR	93.54491783870	1766	1818200001	2410	DUNCAN, LINDA L TR	29.49773862220
1705	181440003	4938	COPENHAVER, BRANDON	0.29789095840	1766	1818200001	4224	CHRIST COMMUNITY CHURCH	8.63188912778
1706	1814400028	4950	WELCH, REGINA S	0.31636658262	1768	1818200027	828	KINDER, DON	14.67276820590
1707	1814400029	4962	BURDICK, MAX WILLIAM	0.35361478462	1769	1010200027	1824	KINDEN, DON	2.39100033212
1708	1814400031	4974	JONES, MICHAEL	0.37288753805	1770	1820100001	10555	CORBETT FAMILY TRUST	2.77182015975
1709	1814400032	4986	LASHMET, CHARLES R	0.49580589222	1771	1820100015	5134	HILTON, LOREN ETAL TR	2.41415085703
1710	1816104008	4306	A&B SELF STORAGE LLC	2.39613079030	1772	1820100017	5216	FOLEY HOMESTEAD TR	1.19090369987
1711	1816104159	4236	FAMILY VIDEO MOVIE CLUB INC	2.27614995675	1773	1820100032	5227	NIMMO, HAROLD L	1.08845429042
1712	1816104160	4232	LISENBY, LLOYD K ETAL TR	0.84482440106	1774	1820100033	5211	GREGORY, LEE ANN	1.62792975287
1713	1816201122	4542	KIM, SUKSOO	0.42100993978	1775	1820100060	5154	SELIM, ELMER C	1.16285041586
1714	1816201123	4534	DILLARD, JAMES E	0.32228259294	1776	1820100061	5156	KINDEL, MICHAEL	0.68860007103
1715	1816201124	4526	GHOSH, KARTIK C	0.26691623180	1777	1820100064	5155	PARKER, DANIEL R	0.28258968806
1716	1816201125	4518	CATT, RICHARD C	0.22888425293	1778	1820100065	5145	WARREN, CHARLES D	0.22978223332
1717	1816201161	3202	VAN BOKHOVEN, TODD	0.34415097731	1779	1820100066	5139	MESSNER, BRANDON	0.23114157993
1718	1816201162	3194	SCHULTE, CORNELIUS PAUL	0.35908712353	1780	1820100067	5133	RATLIFF, CAROL	0.23071713265
1719	1816201166	840	THE CITY OF SPRINGFIELD	1.60963886157	1781	1820100068	5127	ALLHANDS, HANNAH	0.23071936074
1720	1816201169	3173	CASEYS MARKETING CO	1.27148061658	1782	1820100069	5121	MILLER, TROY M	0.23071884278
1721	1816201181	3150	WAL-MART REAL EST BUSINESS TR	6.64057296945	1783	1820100070	5115	KELLER, MICHAEL	0.23071884278
1722	1816207001	4353	ROSENDAHL, ROBERT D	2.42046755510	1784	1820100071	5109	MORRIS, KELLY	0.22764249119
1723	1816207025	3242	COBB, DENNY J	0.23693084914	1785	1820100072	5103	ANDREWS, JILL	0.23071724915
1724	1816207044	2726	FRISCO TRAILS SUB HOMEOWNERS	0.68019077893	1786	1820100073	5045	LECLAIRE, BRIAN M	0.23071724915
1725	1816301044	3411	CANTRELL, DONNIE R	0.85079340225	1787	1820100074	5039	MONTEJO, BEATRIZ M	0.23071893471
1726 1727	1816301045 1816301046	3427 3433	SHULER, GONDY TRUST CANTRELL, DONALD RAY ETAL	1.13244943139 1.16097915152	1788	1820100075 1820100076	5033 5027	STAELENS, VICTOR SAMFORD, DAVID	0.23071841267 0.23072064076
1727 1728	1816301046	4849	WARFORD, CLAUD D	0.99721551200	1789 1790	1820100076	5027	SAMFORD, DAVID  SELF, PAULA RACHELLE	0.23072064076
1728	1816301047	4903	HORNBACK, PAUL ROBERT	1.09070525197	1790	1820100077	5015	KRAUSE, LEO	0.23072116279
1730	1816301048	4721	PARTENHEIMER, MILTON ETAL TRUST	13.24741241580	1792	1820100078	5009	LANE, STEPHANIE LYNN	0.23071937021
1731	1816301038	3387	SIFFERMAN, KENNETH S	6.71352688725	1793	1820100079	5003	PABST, EUGENE D	0.28680556679
1732	1816301069	3172	GOLDEN AVE DEV LLC	2.33127912520	1794	1820100080	5238	SMITH, DONALD L	0.64047159848
1733	1816306003	3318	BAKER, TROY L	0.60558341972	1795	1820100231	5226	NIMMO, HAROLD L	1.28561919311
1734	1816306012	3330	MEANS, CHARLES S	0.86991634988	1796	1820100231	3645	BRIGHT-CRIDER, VICKEY	0.53296440568
1735	1816306013	3340	BREAKERS INV GROUP LLC	0.57633769441	1797	1820100234	3651	FINNELL, JUDITH ANN	0.21839616081
								,	

1909   1909	1798	1820100325	5102	SCHELL. R T DEV CO LLC	0.35160218144	1860	1826200004	1511	COX, KENNY TR	16.55378745750
140				,					•	
140				•						
1807-1803-1803   MoS				•						
1800.000.000   5272				•						
1500/07/18   1500/07/18   5727   DAMS, ORDINETY   D. 2550/07/18/19   1600   DAMS, ORDINETY   D. 2550/07/18/19   DAMS, ORDINETY   D. 2550/				·						
1400,000.000   1400				·					•	
1800   1800/00055				,	0.23699446581					
1800   1800				•						
1402   1422,000239   2396				•						
1822   1822		1822100239		BUILT BY BRETT INC	0.88841150338	1870	1827100010		THE CITY OF SPRINGFIELD	6.33638846080
1812   1822/100742   3917				VO, MAI Y ETAL	0.63233855969					
1822   1822/100267   90. WOODRELD-YMEN IDATE LITED. \$ 5-5410-9-97-92-5-5   1879   1827/20012   3989   THE CUTP OF PROMINGING DE L'AMPEZIANDE	1810	1822100241	5380	FRASER, RYAN	0.62335539391	1872	1827100017	1941	KREIDER, DEANNA L TR	48.93954873670
1813   1822/200248   12001   DOWES, JOHN ETAL   477794121797   1875   182720013   5906   THE CTTY OF SPININGFRED   21 4879732732   1815   1827200213   5906   THE CTTY OF SPININGFRED   21 4879732732   1815   1827200213   5906   THE CTTY OF SPININGFRED   21 497973273   1815   1827200213   5906   THE CTTY OF SPININGFRED   21 497973273   1817   182720031   5906   CHINST TOWN OF THE CTTY OF SPININGFRED   21 497973273   1817   182720031   5906   CHINST TOWN OF THE CTTY OF SPININGFRED   21 497973273   1817   182720031   5906   CHINST TOWN OF THE CTTY OF SPININGFRED   21 450530076   1818   182720031   5907   CHINST TOWN OF THE CTTY OF SPININGFRED   21 450530076   1818   182720031   5907   CHINST TOWN OF THE CTTY OF SPININGFRED   21 450530076   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200314   1818   1	1811	1822100242	5372	PATTERSON, DEREK S	0.57380299998	1873	1827200011	4099	B&B RENTAL & REAL EST	9.35358956056
1813   1822/200248   12001   DOWES, JOHN ETAL   477794121797   1875   182720013   5906   THE CTTY OF SPININGFRED   21 4879732732   1815   1827200213   5906   THE CTTY OF SPININGFRED   21 4879732732   1815   1827200213   5906   THE CTTY OF SPININGFRED   21 497973273   1815   1827200213   5906   THE CTTY OF SPININGFRED   21 497973273   1817   182720031   5906   CHINST TOWN OF THE CTTY OF SPININGFRED   21 497973273   1817   182720031   5906   CHINST TOWN OF THE CTTY OF SPININGFRED   21 497973273   1817   182720031   5906   CHINST TOWN OF THE CTTY OF SPININGFRED   21 450530076   1818   182720031   5907   CHINST TOWN OF THE CTTY OF SPININGFRED   21 450530076   1818   182720031   5907   CHINST TOWN OF THE CTTY OF SPININGFRED   21 450530076   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200312   5917   SOURCE, STEPLING TATA IT   15 12-5428740   1818   1828200314   1818   1	1812	1822100247	901	WOODFIELD PARK HOMEOWNERS ASSOC	5.54104537325	1874	1827200012	2327	GREENE COUNTY	27.42979132550
1815   1822/00076   558   08/00ES-PROP CWINTER-ASSOCIANT   5.8354-5888157   1877   1872   1822   594   COLLING, TICAMS A 1.319805712   1871   1872	1813	1822100248	10201		4.57734212673	1875	1827200013	5909	THE CITY OF SPRINGFIELD	21.64897237230
1824   1827-180007	1814	1822100252	5364	RAYNOR, JAMES A JR	0.63899569896	1876	1827200014	840	THE CITY OF SPRINGFIELD	49.20488863750
1817   1823   180006   754   GREEN COUNTY   1.7453154439   1879   182740015   5752   ACCOUNTY   10.425902770   1819   182110006   810   GREANGE, CHARLS I TRUST   2.8815450078   1818   182810012   5947   BOWNS, STEINLA   1.2875917371   1819   1.82110007   852   MILLER, NUTH AFEA,   1.181907373   1818   1.82810012   5947   BOWNS, STEINLA   1.2875717373   1819   1.28110007   8752   MILLER, NUTH AFEA,   1.181907373   1818   1.28110007   870   GREEN COUNTY, THE AFEA,   1.2875717373   1819   1.28110007   870   GREEN COUNTY, STEINLAND COUNTY, STEINLAN	1815	1822400076	5506	BROOKES PROP OWNERS ASSOCINC	5.80546368157	1877		1824		0.14463798215
1818   1823100005   70.2   DISCINGER, CHARLES TRUST   2.865.4500707   1880   1827.400159   57.72   LACOSESM, STEPLAL   1.27971715135   1810   1827.800159   597.7   SOLVEN, SPRILA   1.27971715135   SOLVEN, SPRILA	1816	1822400077	940	GREENE COUNTY	55.05755263280	1878	1827200023	5940	COLLINS, THOMAS A	1.91940251362
1821   1821	1817	1823100004	754	GREENE COUNTY	1.74153164839	1879	1827400017	940	GREENE COUNTY	10.16299027670
1820   1933-00007   950   MILER, RUTHA FEAL   1.14987/98330   1882   1878/105494   9540   CCUINS, THOMAS A   1.5787/17983   1822   1823/10505   944   PALMER, ERCLAMIS   1.12786.13987/75   1884   1878/105496   9562   CCUINS, THOMAS A   0.73898881244   1823/10505   2820   CCUINS, THOMAS A   0.7389881244   1823/10505   2820   CCUINS, THOMAS A   0.7389881244   1823/10505   2820   CCUINS, THOMAS A   0.7389881244   1823/10505   2820   THOMAS A   0.7489878125   1824/10505   1824   0.7489878125   1824/10505   1824/105	1818	1823100005	702	DISCHINGER, CHARLES L TRUST	2.86154350876	1880	1827400019	5752	JACOBSEN, STEPHEN ETAL TR	16.32546287840
1821   1821	1819	1823100006	810	GIMSON, JOSEPH E	4.75877422847	1881	1828103012	5947	BOWEN, SHEILA L	1.29797115133
1822   1821/10050   94   PALMER, RICK AMMS   11.12785.1387/0   1884   18281.0056   2820   SOOTER, TRAGO TRE FLAT   0.50217578/1885   18281.00566   2820   SOOTER, TRAGO TRE FLAT   0.754518/1885   18281.00566   2820   TEMPOROLO-WHITE SPOUSA, TR. 0.754518/1885   18281.00566   1898   18281.00566   1898   SOOTER, TRAGO TRE FLAT   0.754518/1885   18281.005666   18281.00566   18281.00566   18281.00566   18281.00566   18281.	1820	1823100007	852	MILLER, RUTH A ETAL	16.14985789330	1882	1828103049	5940	COLLINS, THOMAS A	1.57357177593
1823   1823	1821	1823100045	910	HALWEG, CHAD E	2.97205234519	1883	1828103064	6062	RIVERCUT WEST LLC	0.67488309680
1824   1823/00580   5051   STONE MEADOW ILC   17.3858/299230   1886   1823/10567   2808   TROMBOILD-WHITE SPOUSAL TA   0.7158/307/6057   1826   1823/201580   2011   GIGISON, DAN P   0.5227/75677   1897   1823/201580   2011   17.08563/2007/60   1825   1823/201541   1025   KOS, GARRY SCOTT   0.7946/46005   1889   1828/103181   1518   RYPENCUT WEST ILC   0.395695/3763   1828   1823/201541   1025   KOS, GARRY SCOTT   0.7946/46005   1889   1828/103181   1800   1828/103181   1800   1828/103181   1800   1809/103181   18	1822	1823100050	944	PALMER, ERIC JAMES	11.12785339570	1884	1828103065	2832	DELONG, JOHN W	0.72398891244
1825   1823/200149   1013   GIRSON, DAN P   0.52287750R0T   1878   1828/101068   2801   TROMBOLD-WHITE SPOUSAL TR. 0.7554.3886647   1828/200144   1015   ROS-G. GARRY SCOTT   0.2946.3466005   1889   1828/101361   5189   RVRECUT WEST LLC   0.3806851763   1828/20142   1037   RVITA, DANE M   0.3278811541   1890   1828/101361   5189   RVRECUT WEST LLC   0.3806851763   1828/20142   1049   GERHARDI, TARINET B   0.11114277870   1891   1828/101361   5189   RVRECUT WEST LLC   5.5925371763   1839   1828/201044   1061   MARBLET TR. (DUIS/RETTINA)   0.27889053624   1892   1828/10101   840   THE CUTY OF SPRINGELD   5.9225371763   1838   1828/200231   1171   STOKE MEADOW LOTS LLC   0.38665861273   1893   1328/300060   6494   KIETHERKEN, WILLAM N TR   0.3788799795   1838   1828/200232   1199   SCHIPPERT, DAVID   0.29665867433   1894   1328/300060   6494   KIETHERKEN, WILLAM N TR   0.3788799795   1838   1828/200233   1147   COULTEA, ANGEL KAYT R   0.32827594836   1895   1328/300062   6518   ELLIS, STEVEN AUSTINITUS   0.30856780212   1893   1328/300062   6518   ELLIS, STEVEN AUSTINITUS   0.30857856202   1894   1328/300062   6518   ELLIS, STEVEN AUSTINITUS   0.30857856202   1894   1828/200235   1199   SCHIPPERT, DAVID   0.29658805402   1894   1328/300065   6556   HELLIS, STEVEN AUSTINITUS   0.30857856302   1894   1328/300065   6556   HELLIS, STEVEN AUSTINITUS   0.30856775533   1894   1328/300066   6556   HELLIS, STEVEN AUSTINITUS   0.4085677105   1894   1328/3000	1823	1823100063	0	LANDMARK BUILDING & DEV CO LLC	3.95482021775	1885	1828103066	2820	SOOTER, TRACI D TR ETAL	0.50217516328
1826   1822/20040	1824	1823200080	5051	STONE MEADOW LLC	17.38584299230	1886	1828103067	2808	TROMBOLD-WHITE SPOUSAL TR	0.71858078085
1827   1827   1827   1925   1925   1925   1925   1925   1925   1828   1828   1828   1828   1828   1925   1925   1925   1828   1828   1925   1828   1925   1828   1925   1828   1925   1828   1925   1828   1925	1825	1823200139	1001	GIBSON, DAN P	0.52287750407	1887	1828103068	2801	TROMBOLD-WHITE SPOUSAL TR	0.75645386647
1828   1827/001/13   1099   GERHARDT, IEANNE B   0.31142575868709   1891   18278103186   5189   RIPECTIV OF SPRINGFIELD   5.97625737763   1830   1822/20014   1061   MARBLE TR (LOUIS/RETTINA)   0.298093542   1892   1822400001   840   THE CITY OF SPRINGFIELD   9.29263905948   1832   1822/200231   1171   STONE MEADOW LOTS LC   0.38609861273   1893   1822400080   6494   KIETHENBERS, WILLIAM NT R. 0.3787694798   1832   1822200232   1159   SCHPPERT, DAVID   0.29669547433   1894   1822400081   6506   MAGGI, STAN   0.31913291850   1834   1822200233   1147   COLUTER, AMGELA KAY TR   0.218275744818   1895   1822400082   6518   ELIS, STEVRA AUSTIN TRUST   0.3988758902   1894   1822200234   1133   DISYLISTER, BRYAN V   0.3389719567   1896   1822200084   6512   BUTLER, CHARLES C   0.4199479347   1836   1822200235   1121   ADAPRA, TILAHUN   0.34586001600   1896   1822200086   6554   BALLEY, LUNIAL TR   0.4966371034   1832   1832200235   1109   BROWN, VALIGHN   0.36518906100   1896   1822200086   6554   BALLEY, LUNIAL TR   0.44064371034   1832200236   1832200236   1109   BROWN, VALIGHN   0.39695730030   1899   1822200086   6556   HULS, SKINCHT FTAL TR   0.4456410915   1838   1832200236   1073   PROSSER, ILERINY S   0.31560185799   1900   1822200087   678   CHOWDHURY, RINIT   0.4456410915   1839   1832200236   5506   HULS, SKINCHT FTAL TR   0.4566571034   1839   1832200236   55	1826	1823200140	1013	CAIN, SCOTT C ETAL TR	0.29525872262	1888	1828103081	5189	RIVERCUT WEST LLC	1.03740024934
1829   1823	1827	1823200141	1025	ROSE, GARRY SCOTT	0.29463466005	1889	1828103180	5189	RIVERCUT WEST LLC	0.33080651763
1830   18,22,000.44   1061   MARRLETR (QUUS/RETTINA)   0.298,0938342   1892   1331,0001   840   THE CITY OF SPRINGFIELD   9.292,690,0964   1818   1822,00023   117   STORM MADOW LOTS LC   0.38005,861,273   1894   1823,00081   6506   MAGG, STAN   0.31913291850   1838   1822,00023   117   COUTER, ANGEL KAYTR   0.3260,744,38   1894   1823,00081   6506   MAGG, STAN   0.31913291850   1838   1822,00023   117   COUTER, ANGEL KAYTR   0.3806,761,3008   1895   1233,00082   6518   ELLS, STEVEN AUSTIN TRUST   0.3898,763,902   1894   1823,00083   6530   PANNE, MADDISON MARIE   0.4396,034,000   1897   1823,00083   6530   PANNE, MADDISON MARIE   0.4396,034,000   1897   1823,00083   6530   PANNE, MADDISON MARIE   0.4396,034,000   1898   1823,00084   6542   BULTER, CHARLES C   0.4396,034,000   1898   1823,00085   6554   BAILEY, LAURA LTR   0.4396,637,100   1899   1823,00085   6554   BAILEY, LAURA	1828	1823200142	1037	NITTA, DIANE M	0.32374811411	1890	1828103181	840	THE CITY OF SPRINGFIELD	37.11255856070
1831   1823/200231   1171   STONE MÉADOW LOTS LLC   0.38605861273   1893   1228300080   6494   KLIETHERMÉS, WILLIAM NTR   0.37897879785   1832   1823200232   1159   SCHIPPERT, DAVID   0.2968547433   1894   1228300081   6506   MAGGI, STAN   0.37918794785   1834   1823200233   1147   COLUITER, ANCELE AVY TR   0.32673544368   1895   1828300082   6518   ELLIS, STEVEN AUSTIN FRUITY   0.389663902   1835   1823200235   1121   ADERA, TILAHUN   0.3458601603   1897   1828300084   6542   BUTLER, CHARLES C   0.4199479347   1836   1823200235   1109   BROWN, VALIGHN   0.36589061603   1897   1828300084   6542   BUTLER, CHARLES C   0.4199479347   1836   1823200237   1097   IDORAN, ANDRES L   0.396952020   1899   1228300086   6564   BUTLER, CHARLES C   0.4199479347   1828300283   1832   1823200235   1097   IDORAN, ANDRES L   0.396952020   1899   1228300086   6566   BUTLER, CHARLES C   0.4199479347   1838   1823200235   1097   IDORAN, ANDRES L   0.396952020   1899   1228300086   6566   MUELS, KEINTEHT FETA LTR   0.41602140514   1838   1823200235   1085   TILLER, CHARLES RAY   0.3135088579   1900   1828300087   6578   CHOWDHURY, ABUIT   0.386057553   1840   1823200259   5051   STONE MEADOW LC   0.38164952639   1902   1828300184   3396   SMITH, ROYCE ATR   0.65638953955   1842   1823200256   5228   STONE MEADOW LEC   0.3816736512   1904   1828400006   2850   THE CITY OF SPRINGFIELD   152.390083075000   1848   1823200250   5228   STONE MEADOW DEV LLC   0.3516749577   1905   1907101179   840   MUELLER, LAWRENCE   49.01969023570   1846   18232000218   5399   SMITH, ROYCE ATR   4.7818866190   1908   1907101120   1460   SOUTHERN ROCK RETSAURANTS LC   1.27933815750   1846   1823200018   5051   STONE MEADOW DEV LLC   0.3516489428   1906   1829400007   6195   MUELLER, LAWRENCE   49.01969023570   1846   1823200018   5051   STONE MEADOW DEV LLC   0.3516489428   1906   1829400007   6195   MUELLER, LAWRENCE   49.01969023570   1846   1823200018   5051   STONE MEADOW DEV LLC   0.351648933070   1909   1907101120   1460   SOUTHERN ROCK RETSAURA	1829	1823200143	1049	GERHARDT, JEANENE B	0.31114257280	1891	1828103196	5189	RIVERCUT WEST LLC	5.92623571763
1812   1822/00232	1830	1823200144	1061	MARBLE TR (LOUIS/BETTINA)	0.29380935342	1892	1828104001	840	THE CITY OF SPRINGFIELD	9.29263905948
1833         1147         COULTER, ANGELA KAY TR         0.32677544368         1895         1282800082         618         ELILIS, STEVEN AUSTIN TRUST         0.3088756300200           1835         1832200235         1121         ADERA, TILAHUN         0.3458601603         1897         1282800084         6542         BUTLER, CHARLES C         0.41994079847           1836         1823200236         1109         BBOWN, VAUCHIN         0.365801603         1897         1828200085         6554         BRUEL, ALURA LT         0.406971045           1837         1822200237         1097         JORDAN, JAMES L         0.3969020820         1899         1828300086         6566         HUELS, KENNETH ETA, TR         0.41624104915           1838         1822200237         1097         JORDAN, JAMES L         0.3969020820         1899         1828300086         6566         HUELS, KENNETH ETA, TR         0.41624104915           1839         1822200239         1073         PROSSER, JERNAY         0.3138508575         1901         1282800088         6590         PARMENSWARAH, ANDOY CETAL         0.41354104915           1840         1823200259         5051         STONE MEADOW LC         0.38504592629         1902         1828800184         3949         RIVERCU WEST LC         3.0457242240	1831	1823200231	1171	STONE MEADOW LOTS LLC	0.38605861273	1893	1828300080	6494	KLIETHERMES, WILLIAM N TR	0.37887694795
1834   1823200235   1121   ADRA, TILAHUN   0.34907919567   1896   1828300083   6530   PAYNE, MADDISON MARIE   0.34990734007   1896   1828200225   1109   BROWN, VAUGHN   0.365189061003   1897   1828300085   6554   BAILEY, LAURA LTR   0.43066371045   1837   1823200237   107   JORDAN, JAMES L   0.35969520820   1899   1828300086   6566   HUELS, KENNETH ETAL TR   0.4106410415   1838   1822200238   1085   TILLER, CHARLES RAY   0.3135085759   1900   1823300087   6578   CHOWDHURY, ARBUIT   0.33506757553   1839   1832200239   1073   PROSSER, JEREMY S   0.31626136155   1901   1823300088   6590   PARAMESWARAM, ANOPIC ETAL   0.4106410415   1832200259   5051   STONE MEADOW LICE   0.3850637599   1902   1823300138   3494   RIVERCUT WEST LIC   3.4061735150   1841   1832200268   5225   WEST, GREGORY V   0.8902537037   1903   1823300158   3494   RIVERCUT WEST LIC   3.406173742240   1848   1832200269   5228   STONE MEADOW LEV LIC   0.8102765112   1904   1823400006   2850   THE CITY OF SPRINFFIELD   3.406173742240   1844   1832200270   5216   STONE MEADOW LEV LIC   0.31547390771   1905   1824   183220021   5204   STONE MEADOW LEV LIC   0.3154489428   1905   1822400007   6195   MUELLER, LAWRENCE   4.901690735750   1845   1832200211   5204   57016   MEADOW LEV LIC   0.4764489428   1905   1822400007   6195   MUELLER, LAWRENCE   4.901690735750   1846   1832200211   5319   JONES, TIMOTHYL   0.64657774957   1907   1907101179   840   THE CITY OF SPRINFFIELD   1.43628414202   1846   1832200013   5319   JONES, TIMOTHYL   0.64657774957   1907   1907101170   1860   SOUTHERN ROCK RESTAURANTS LIC   1.27936754526   1908   1907101120   1360   SOUTHERN ROCK RESTAURANTS LIC   1.2793675652   1848   1832500017   218   RANNEY, HARCID G ETAL TR   1.478818866190   1910   1907101120   1360   SOUTHERN ROCK RESTAURANTS LIC   1.2793675652   1848   1832500017   200   HERCID ROCK RESTAURANTS LIC   1.2793671499   1913   1907101120   3766   CARLETON BLOG CO   0.70884515652   1854   1832500017   0.0000000000000000000000000000000000	1832	1823200232	1159	SCHIPPERT, DAVID	0.29668547433	1894	1828300081	6506	MAGGI, STAN	
1835   1823/200235   1121   ADERA, TILAHUN   0.345/86001603   1897   1828/300084   6542   BUTLER, CHARLES C   0.41994/979472   1836   1823/200237   1097   IORDAN, JAMES L   0.395/905/20820   1899   1828/300085   6556   HUELS, KENNETH ETAL TR   0.4306/3710455   1838   1823/200238   1095   TILLER, CHARLES RAY   0.3158/008759   1900   1828/300087   6578   CHOWDHURY, ARUIT   0.335/0677553   1839   1823/200239   1073   PROSSER, JEREMY S   0.3165/031555   1901   1828/300088   6590   PARAMESWARAN, ANOOP CETAL   0.41013/675150   1840   1823/200259   5051   STONE MEADOW LIC   0.385/04592629   1902   1828/300114   3396   SMITH, ROYCE A TR   0.653/8873875   1841   1823/200268   5225   WEST, GREGORY V   0.8905/370037   1903   1828/300158   3494   RIVERCUT WEST LIC   3.4061/7324/240   1842   1823/200269   5228   STONE MEADOW DEV LIC   0.82102762512   1904   1828/40006   2850   THE CITY OF SPRINGFIELD   152.39083/075000   1843   1823/200270   5216   STONE MEADOW DEV LIC   0.82102762512   1904   1828/40006   2850   THE CITY OF SPRINGFIELD   152.39083/075000   1844   1823/200271   5704   STONE MEADOW DEV LIC   0.35187/390771   1905   1824   MUELLER, LAWRENCE   45.019603/3570   1845   1823/200281   5319   JONES, TIMOTHY L   0.64657774957   1907   1907/101179   840   THE CITY OF SPRINGFIELD   1.43628414/202   1846   1823/200281   5319   JONES, TIMOTHY L   0.64657774957   1907   1907/101179   840   THE CITY OF SPRINGFIELD   1.43628414/202   1846   1823/20017   218   RANNEY, HAROLDO GETAL TE   1.478608190   1908   1907/101120   1460   SOUTHERN ROCK RESTAURANTS LIC   0.9705646260   1847   1825/200017   218   RANNEY, HAROLDO GETAL TE   1.47856612770   1907   1907/10122   3820   SOUTHERN ROCK RESTAURANTS LIC   0.5093/391149   1852/20017   0.05   SPRINGFIELD   1.23462200278   1854   1825/20017   0.05   SPRINGFIELD   0.970564560   1918   1907/10124   1544   LIBERTY BANK OF SPRINGFIELD   0.970593/391149   1907/10124   1544   LIBERTY BANK OF SPRINGFIELD   0.970593/391149   1907/10124   1544   LIBERTY BANK OF SPRINGFIELD   0.970593/3914	1833	1823200233	1147	COULTER, ANGELA KAY TR	0.32627544368	1895	1828300082	6518	ELLIS, STEVEN AUSTIN TRUST	0.30887563902
1836   1822200236   1109   BROWN, VAUCHN   0.36518906100   1398   1828200085   6554   BAILEY, LAURA LTR   0.410647104915   1837   1823200237   1097   JORDAN, JAMES L   0.3969503820   1899   182830086   6566   HULLS, KENNETH ETALT   0.41064104915   1838   1822200238   1085   TILLER, CHARLES RAY   0.31358085759   1900   182830087   6578   CHOWDHURY, ARUIT   0.33506757533   1839   1822200229   1073   PROSSER, JEREMY S   0.31058136155   1901   182830088   6590   PARAMESWARAN, ANOPO F. ETAL   0.41013675150   1848   1823200259   5051   STONE MEADOW LUC   0.38504932629   1902   1828300114   3396   SMTH, ROYGE A TR   0.6513893955   1841   1823200268   5225   WEST, GREGORY V   0.89025370037   1903   1828300158   3494   RIVERCUT WEST LIC   3.4061723422400   1848   1823200270   5216   STONE MEADOW DEV LIC   0.35187390771   1905   1824   1823200270   5216   STONE MEADOW DEV LIC   0.35187390771   1905   1824   1823200271   5204   5305   5405	1834	1823200234	1133	·	0.33907919567	1896	1828300083	6530	PAYNE, MADDISON MARIE	0.34396023400
1837   1823/200238   1967				ADERA, TILAHUN					•	
1838   1822/00238   1085				BROWN, VAUGHN					•	
1839         1823200239         1073         PROSSER, JEREMY S         0.31626136155         1901         1828300088         6590         PARAMESWARAN, ANOOP CETAL         0.41013675150           1840         1823200259         5051         STONE MEADOW LLC         0.3805495629         1902         1828 300118         3396         SMITH, ROYCE AT R         0.65318953955           1841         1823200269         5228         STONE MEADOW DEV LLC         0.8202370071         1904         1828400006         2850         THE CITY OF SPRINGFIELD         152,39083075000           1843         1823200270         5216         STONE MEADOW DEV LLC         0.41564489428         1906         1829400007         6195         MUELLER, LAWRENCE         49,01969023570           1844         1823200271         5204         STONE MEADOW DEV LLC         0.41564489428         1906         1829400007         6195         MUELLER, LAWRENCE         49,01969023570           1845         1823200271         5204         STONE MEADOW DEV LLC         0.41564489428         1906         1829400007         6195         MUELLER, LAWRENCE         49,01969023570           1846         1823200218         5319         JONES, TIMOTHY         0.64657774957         1907         1907101179         840         THE CITY OF SPRING									•	
1840   1823/200259   5051   STONE MEADOW LLC   0.850459/2629   1902   1828/300114   336   SMITH, ROYCE A.TR   0.65318953955   1841   1823/200268   5225   WEST, GREGORY V   0.89025370037   1903   1828/300158   3494   RIVERCUT WEST LLC   34.06712342240   1842   1823/200269   5228   STONE MEADOW DEV LLC   0.82102762512   1904   1828/400006   2850   THE CITY OF SPRINGFIELD   152.3908/3075000   1843   1823/200270   5216   STONE MEADOW DEV LLC   0.53187390771   1905   1824   1823/200270   5204   STONE MEADOW DEV LLC   0.4156484248   1906   1829/400007   6195   MUELLER, LAWRENCE   49.0159023570   1845   1823/200281   5319   JONES, TIMOTHY L   0.64657774957   1907   1907/101179   840   THE CITY OF SPRINGFIELD   1.43628414202   1846   1823/200316   5051   STONE MEADOW DEV LLC   1.27730680190   1908   1907/101179   840   THE CITY OF SPRINGFIELD   1.43628414202   1847   1825/200017   3807   ANTHONY FAMILY PROP III LLC   99.7483563370   1908   1907/101120   3820   O.5E LLC   1.27933517555   1848   1825/200017   218   RAINEY, HAROLD G ETAL TR   1.7818866190   1910   1907/101210   3816   SOUTHERN ROCK RESTAURANTS LLC   1.22440474278   1850   1825/200018   5942   MEDICAL INVESTMENT ASSOCIAC   1.0142220468   1911   1907/101211   3816   SUITER & GILL ENT LLC   0.5993791149   1850   1825/200019   6002   GREENE COUNTY   0.34881814821   1912   1907/101222   3756   CARLETON BLDG CO   0.70884515652   1851   1825/200171   6065   SPRINGFIELD ROPERTY LLC   1.03379741699   1913   1907/101242   1524   MACK, JOHNNY ENT LLC   0.77594325064   1852   1825/200172   0 HUSTON INVESTMENTS INC   41.79356612770   1914   1907/101247   1440   PAYNE, JAMES ALLEN   0.03793325678   1854   1825/400010   0 CHF HOLDINGS INC   31.9085748910   1916   1907/101247   1440   PAYNE, JAMES ALLEN   0.03641641580   1856   1826/400014   850   DONKEY HILLS LLC   3.9052879814   1917   1907/101247   1440   HOB TITLE INV LLC   0.03641641580   1856   1826/400014   850   DONKEY HILLS LLC   3.9052875891   1917   1907/101249   1440   HOB TITLE INV LLC   0.03641641580   18				•					•	
1841         1823200268         5225         WEST, GREGORY V         0.89025370037         1903         1828300158         3494         RIVERCUT WEST LLC         34.06172342240           1842         18232002769         5228         STONE MEADOW DEV LLC         0.82102762512         1904         182840006         2850         THE CITY OF SPRINGFIELD         152.39083075000           1843         1823200271         5204         STONE MEADOW DEV LLC         0.41564489428         1906         1829400007         6195         MUELLER, LAWENCE         49.01969023570           1845         1823200281         5319         JONES, TIMOTHY L         0.64657774957         1907         1907101179         840         THE CITY OF SPRINGFIELD         1.4362441402           1846         1823200216         5051         STONE MEADOW DEV LLC         12.77730680190         1908         1907101179         840         THE CITY OF SPRINGFIELD         1.4362441402           1847         1823200018         5901         ANTHONY FAMILY PROP II LLC         99.74835363370         1909         190710120         3820         OF REINGREE INV LLC         0.97050546260           1849         1825200017         218         RAINEY, HARCID G ETAL TR         14.78818866190         1910         190710121         3860         SO				•					· · · · · · · · · · · · · · · · · · ·	
1842         1823200269         5228         STONE MEADOW DEV LLC         0.82102762512         1904         1828400006         2850         THE CITY OF SPRINGFIELD         152.3998307500           1843         1823200271         5216         STONE MEADOW DEV LLC         0.456489428         1906         1829400007         6195         MUELLER, LAWRENCE         49.0969023570           1845         1823200281         5319         JONES, TIMOTHY L         0.64657774957         1907         1907101179         840         THE CITY OF SPRINGFIELD         1.43628414202           1846         1823200218         5319         JONES, TIMOTHY L         0.64657774957         1907         1907101179         840         THE CITY OF SPRINGFIELD         1.43628414202           1846         1823200316         5051         STONE MEADOW DEV LLC         12.77730680190         1908         1907101180         1465         PRIMORS INV LLC         0.97050546260           1847         1825200017         218         RAINEY, HAROLD GETAL TR         14.78818866190         1910         1907101210         1460         SOUTHERN ROCK RESTAURANTS LLC         1.22440474278           1849         1825200017         5042         MEDICAL INVESTMENT ASSOCINC         2.01142220468         1911         1907101221         316									•	
1843         1823200270         5216         STONE MEADOW DEV LLC         0.35187390771         1905         1824         5.66071825622           1844         1823200271         5204         STONE MEADOW DEV LLC         0.41564489428         1906         1829400007         6195         MUELLER, LAWRENCE         49.01969023570           1845         1823200281         5319         JONES, TIMOTHYL         0.64657774957         1907         1907101179         840         THE CITY OF SPRINGFIELD         1.42828414020           1846         1823200316         5051         STONE MEADOW DEV LLC         12.77730680190         1908         1907101180         1465         PRIMROSE INV LLC         0.97050546260           1847         1825100087         3807         ANTHONY FAMILY PROP II LLC         99.74835363370         1909         1907101202         3820         OSE LLC         1.27933517555           1848         1825200017         218         RAINEY, HAROLO G ETAL TR         14.78818866190         1910         1907101210         1460         SOUTHERN ROCK RESTAURANTS LLC         1.27933517555           1849         1825200018         5942         MEDICAL INVESTMENT ASSOCINC         2.01142220468         1911         1907101211         3816         SUITER & GILL ENT LLC         0.59293791149 </td <th></th> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				•						
1844         1823200271         5204         STONE MEADOW DEV LLC         0.41564489428         1906         182940007         6195         MUELLER, LAWRENCE         49.01969023570           1845         1823200281         5319         JONES, TIMOTHY L         0.64657774957         1907         1907101179         840         THE CITY OF SPRINGFIELD         1.43628414202           1846         1823200316         5051         STONE MEADOW DEV LLC         12.77730680190         1908         1907101120         1865         PRIMROSE INV LLC         0.496056260           1847         1825100087         3807         ANTHONY FAMILY PROPI ILLC         99.74835363370         1909         1907101210         1460         SOUTHERN ROCK RESTAURANTS LLC         1.229406747278           1848         1825200017         218         RAINCH, HAROLD G ETAL TR         14.7881886190         1910         1907101210         1460         SOUTHERN ROCK RESTAURANTS LLC         1.22440474278           1849         1825200018         5942         MEDICAL INVESTMENT ASSOCINC         2.01142220468         1911         1907101211         3816         SUITER & GILLEN LLC         0.59293791149           1850         1825200171         6065         SPRINGFIELD PROPERTY LLC         1.03379741699         1913         1907101242 <t< td=""><th></th><td></td><td></td><td></td><td></td><td></td><td>1828400006</td><td></td><td>THE CITY OF SPRINGFIELD</td><td></td></t<>							1828400006		THE CITY OF SPRINGFIELD	
1845         1823200281         5319         JONES, TIMOTHY L         0.64657774957         1907         1907101179         840         THE CITY OF SPRINGFIELD         1.43628414202           1846         1823200316         5051         STONE MEADOW DEV LIC         12.77730680190         1908         1907101180         1465         PRIMROSE INV LIC         0.97059456260           1847         1825100087         3807         ANTHONY FAMILLY PROP II LLC         99.7483563370         1909         1907101202         3820         OSE LLC         1.27933517555           1848         1825200017         218         RAINEY, HAROLD G ETAL TR         14.78818866190         1910         1907101210         1460         SOUTHERN ROCK RESTAURANTS LIC         1.22440474278           1849         1825200018         5942         MEDICAL INVESTMENT ASSOCINC         2.01142220468         1911         1907101211         3816         SOUTHERN ROCK RESTAURANTS LIC         0.59293791149           1850         1825200019         6002         GREENE COUNTY         0.34881814821         1912         1907101222         3756         CARLETON BLDG CO         0.70884515652           1851         1825200172         0         HULSTON INVESTMENTS INC         41.79586612770         1913         1907101245         1414										
1846         1823200316         5051         STONE MEADOW DEV LLC         12.77730680190         1908         1907101180         1465         PRIMROSE INV LLC         0.97050546260           1847         1825100087         3807         ANTHONY FAMILY PROPI II LLC         99.74835363370         1909         1907101202         3820         OSE LLC         1.27933517555           1848         1825200017         218         RAINEY, HAROLD G ETAL TR         14.78818866190         1910         1907101210         1460         SOUTHERN ROCK RESTAURANTS LLC         1.22440474555           1849         1825200018         5942         MEDICAL INVESTMENT ASSOCINC         2.01142220468         1911         1907101211         3816         SUITER & GILL ENT ILC         0.5993791147           1850         1825200019         6002         GREENE COUNTY         0.34881814821         1912         1907101222         3756         CARLETON BLDG CO         0.70884515652           1851         1825200171         6065         SPRINGFIELD PROPERTY LLC         1.03379741699         1913         1907101242         1524         MACK, JOHNNY ENT LLC         0.77594325064           1852         1825200172         0         HULSTON INVESTMENTS INC         41.79586612770         1914         1907101245         1414 <t< td=""><th></th><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td></t<>									•	
1847         1825100087         3807         ANTHONY FAMILY PROP II LLC         99.74835363370         1909         1907101202         3820         OSE LLC         1.27933517555           1848         1825200017         218         RAINEY, HAROLD G ETAL TR         14.78818866190         1910         1907101210         1460         SOUTHERN ROCK RESTAURANTS LLC         1.22440474278           1849         1825200018         5942         MEDICAL INVESTMENT ASSOC INC         2.01142220468         1911         1907101211         3816         SUITER & GILL ENT LLC         0.59293791149           1850         1825200017         6065         GREENE COUNTY         0.34881814821         1912         1907101222         375         CARLETON BIGG CO         0.70884515692           1851         1825200171         6065         SPRINGFIELD PROPERTY LLC         1.03379741699         1913         1907101242         1524         MACK, JOHNNY ENT LLC         0.77594325064           1852         1825200172         0         HULSTON INVESTMENTS INC         41.79586612770         1914         1907101245         1414         LIBERTY BANK OF SPRINGFIELD         2.28462202278           1854         1825400010         0         CHF HOLDINGS INC         39.19857148910         1916         1907101248         1442				•						
1848         1825200017         218         RAINEY, HAROLD G ETAL TR         14.78818866190         1910         1907101210         1460         SOUTHERN ROCK RESTAURANTS LLC         1.22440474278           1849         1825200018         5942         MEDICAL INVESTMENT ASSOC INC         2.01142220468         1911         1907101211         3816         SUITER & GILL ENT LLC         0.59293791149           1850         182520019         6002         GREENE COUNTY         0.34881814821         1912         1907101222         3756         CARLETON BLDG CO         0.70884515652           1851         1825200171         6065         SPRINGFIELD PROPERTY LLC         1.03379741699         1913         1907101242         1524         MACK, JOHNNY ENT LLC         0.77594325064           1852         1825200172         0         HULSTON INVESTMENTS INC         41.79586612770         1914         1907101245         1414         LIBERTY BANK OF SPRINGFIELD         2.28462202278           1853         1825300033         6168         CATHEY, CHRISTIE L         1.26237284185         1915         1907101247         1440         PAYNE, JAMES ALLEN         0.037518326378           1854         1825400010         0         CHF HOLDINGS INC         39.19857148910         1916         1907101248         1442										
1849       1825200018       5942       MEDICAL INVESTMENT ASSOC INC       2.01142220468       1911       1907101211       3816       SUITER & GILL ENT LLC       0.59293791149         1850       1825200019       6002       GREENE COUNTY       0.34881814821       1912       1907101222       3756       CARLETON BLDG CO       0.70884515652         1851       1825200171       6065       SPRINGFIELD PROPERTY LLC       1.03379741699       1913       1907101242       1524       MACK, JOHNNY ENT LLC       0.77594325064         1852       1825200172       0       HULSTON INVESTMENTS INC       41.79586612770       1914       1907101245       1414       LIBERTY BANK OF SPRINGFIELD       2.28462202278         1853       1825300033       6168       CATHEY, CHRISTIE L       1.26237284185       1915       1907101247       1440       PAYNE, JAMES ALLEN       0.05718326378         1854       1825400010       0       CHF HOLDINGS INC       39.19857148910       1916       1907101248       1442       HOB TITLE INV LLC       0.03250538981         1855       1825400011       724       CHF HOLDINGS INC       91.06002076540       1917       1907101249       1440       HOB TITLE INV LLC       0.03641641580         1856       1826100019       5961										
1850         1825200019         6002         GREENE COUNTY         0.34881814821         1912         1907101222         3756         CARLETON BLDG CO         0.70884515652           1851         1825200171         6065         SPRINGFIELD PROPERTY LLC         1.03379741699         1913         1907101242         1524         MACK, JOHNNY ENT LLC         0.77594325064           1852         1825200172         0         HULSTON INVESTMENTS INC         41.79586612770         1914         1907101245         1414         LIBERTY BANK OF SPRINGFIELD         2.28462202278           1853         1825300033         6168         CATHEY, CHRISTIE L         1.26237284185         1915         1907101247         1440         PAYNE, JAMES ALLEN         0.05718326378           1854         1825400010         0         CHF HOLDINGS INC         39.19857148910         1916         1907101248         1442         HOB TITLE INV LLC         0.03250538981           1855         1825400011         724         CHF HOLDINGS INC         91.06002076540         1917         1907101249         1440         HOB TITLE INV LLC         0.03641641580           1856         1826100014         850         DONKEY HILLS LLC         3.00528770460         1918         1907101258         1435         KENSINGTON PLACE DEV GROUP L				•						
1851         1825200171         6065         SPRINGFIELD PROPERTY LLC         1.03379741699         1913         1907101242         1524         MACK, JOHNNY ENT LLC         0.77594325064           1852         1825200172         0         HULSTON INVESTMENTS INC         41.79586612770         1914         1907101245         1414         LIBERTY BANK OF SPRINGFIELD         2.28462202278           1853         1825300033         6168         CATHEY, CHRISTIE L         1.26237284185         1915         1907101247         1440         PAYNE, JAMES ALLEN         0.05718326378           1854         1825400010         0         CHF HOLDINGS INC         39.19857148910         1916         1907101248         1442         HOB TITLE INV LLC         0.03250538981           1855         1825400011         724         CHF HOLDINGS INC         91.06002076540         1917         1907101249         1440         HOB TITLE INV LLC         0.03641641580           1856         1826100014         850         DONKEY HILLS LLC         3.00528770460         1918         1907101250         1440         HOB TITLE INV LLC         0.83821317334           1857         1826100019         5961         SCHAEFER, JOSEPH SCOTT         33.59804660300         1919         1907101258         1435         KENSINGTON PLACE										
1852       1825200172       0       HULSTON INVESTMENTS INC       41.79586612770       1914       1907101245       1414       LIBERTY BANK OF SPRINGFIELD       2.28462202278         1853       1825300033       6168       CATHEY, CHRISTIE L       1.26237284185       1915       1907101247       1440       PAYNE, JAMES ALLEN       0.05718326378         1854       1825400010       0       CHF HOLDINGS INC       39.19857148910       1916       1907101248       1442       HOB TITLE INV LLC       0.03250538981         1855       1825400011       724       CHF HOLDINGS INC       91.06002076540       1917       1907101249       1440       HOB TITLE INV LLC       0.03641641580         1856       1826100014       850       DONKEY HILLS LLC       3.00528770460       1918       1907101250       1440       HOB TITLE INV LLC       0.83821317334         1857       1826100019       5961       SCHAEFER, JOSEPH SCOTT       33.59804660300       1919       1907101258       1435       KENSINGTON PLACE DEV GROUP LLC       1.28519070963         1858       1826100020       731       CANLAS, EMELITA T TR       77.79237258790       1920       1907101272       3808       GREYSTONE COURT PROP LLC       1.30182246268										
1853       1825300033       6168       CATHEY, CHRISTIE L       1.26237284185       1915       1907101247       1440       PAYNE, JAMES ALLEN       0.05718326378         1854       1825400010       0       CHF HOLDINGS INC       39.19857148910       1916       1997101248       1442       HOB TITLE INV LLC       0.03250538981         1855       1825400011       724       CHF HOLDINGS INC       91.06002076540       1917       1907101249       1440       HOB TITLE INV LLC       0.03641641580         1856       1826100014       850       DONKEY HILLS LLC       3.00528770460       1918       1907101250       1440       HOB TITLE INV LLC       0.83821317334         1857       1826100019       5961       SCHAEFER, JOSEPH SCOTT       33.59804660300       1919       1907101258       1435       KENSINGTON PLACE DEV GROUP LLC       1.28519070963         1858       1826100020       731       CANLAS, EMELITA T TR       77.79237258790       1920       1907101272       3808       GREYSTONE COURT PROP LLC       1.30182246268									•	
1854       1825400010       0       CHF HOLDINGS INC       39.19857148910       1916       1907101248       1442       HOB TITLE INV LLC       0.03250538981         1855       1825400011       724       CHF HOLDINGS INC       91.06002076540       1917       1907101249       1440       HOB TITLE INV LLC       0.03641641580         1856       1826100014       850       DONKEY HILLS LLC       3.00528770460       1918       1907101250       1440       HOB TITLE INV LLC       0.83821317334         1857       1826100019       5961       SCHAEFER, JOSEPH SCOTT       33.59804660300       1919       1907101258       1435       KENSINGTON PLACE DEV GROUP LLC       1.28519070963         1858       1826100020       731       CANLAS, EMELITA T TR       77.79237258790       1920       1907101272       3808       GREYSTONE COURT PROP LLC       1.30182246268										
1855       1825400011       724       CHF HOLDINGS INC       91.06002076540       1917       1907101249       1440       HOB TITLE INV LLC       0.03641641580         1856       1826100014       850       DONKEY HILLS LLC       3.00528770460       1918       1907101250       1440       HOB TITLE INV LLC       0.83821317334         1857       1826100019       5961       SCHAEFER, JOSEPH SCOTT       33.59804660300       1919       1907101258       1435       KENSINGTON PLACE DEV GROUP LLC       1.28519070963         1858       1826100020       731       CANLAS, EMELITA T TR       77.79237258790       1920       1907101272       3808       GREYSTONE COURT PROP LLC       1.30182246268									•	
1856       1826100014       850       DONKEY HILLS LLC       3.00528770460       1918       1907101250       1440       HOB TITLE INV LLC       0.83821317334         1857       1826100019       5961       SCHAEFER, JOSEPH SCOTT       33.59804660300       1919       1907101258       1435       KENSINGTON PLACE DEV GROUP LLC       1.28519070963         1858       1826100020       731       CANLAS, EMELITA T TR       77.79237258790       1920       1907101272       3808       GREYSTONE COURT PROP LLC       1.30182246268										
1857       1826100019       5961       SCHAEFER, JOSEPH SCOTT       33.59804660300       1919       1907101258       1435       KENSINGTON PLACE DEV GROUP LLC       1.28519070963         1858       1826100020       731       CANLAS, EMELITA T TR       77.79237258790       1920       1907101272       3808       GREYSTONE COURT PROP LLC       1.30182246268										
1858         1826100020         731         CANLAS, EMELITA T TR         77.79237258790         1920         1907101272         3808         GREYSTONE COURT PROP LLC         1.30182246268										
				-						
10202 10202 1071 3FRINGFIELD LAIND LF 15.3823/044940 1921 190/1012/3 1545 JACK HUKE CO INC 6.0/182380232				•						
	1033	1020200003	13//	SEMINGELLED FAILD FA	13.3023/044340	1921	190/1012/3	1343	JACK HOKE CO INC	0.07102300232

## Trail Investment Study (

1922	1907101282	1439	PRIMROSE PARK OFFICE	0.92263929475	1984	1927300072	6327	KUTTER, GREGORY	0.20083119452
1923	1907210009	1300	BURRELL CENTER INC	1.89064799288	1985	1927300073	6333	HAWN, ROBERT M	0.17659204655
1924	1907210010	1423	COX, LESTER E MEDICAL CTRS INC	4.64512235959	1986	1927300074	6337	CHERNESKY, ERIN	0.20106478545
1925	1907210011	1370	BURRELL INC	0.51962761184	1987	1927300075	6341	HEWITT, REX L ETAL TR	0.23036149267
1926	1907210012	1350	BURRELL INC	0.88384038160	1988	1927300111	3657	WEBB, DALE E	4.96326204497
1927	1907210014	1300	BURRELL CENTER INC	7.18537445130	1989	1927300116	6467	SNYDER, LARRY	1.08916799342
1928	1907211006	2052	PIATCHEK, JOHN T ETAL TR	0.02609690552	1990	1927300117	6470	SNYDER, LARRY K	1.12035667575
1929	1907211007	1355	OFFICE OWNERS LLC	0.07374782985	1991	1927300118	6479	TRYTEX SHOP LLC	1.67913161073
1930	1907211012	1365	HOUSE OF BROKERS BUILDING CORP	0.11378612742	1992	1927300124	3700	SWEETSHOE LLC	31.69459655890
1931	1907211013	3745	HOUSE OF BROKERS BLDG CORP	0.03105776067	1993	1928105007	1235	TEA PROPERTIES MO I LLC	20.26890541250
1932	1907211014	3745	HOUSE OF BROKERS BLDG CORP	0.03060337828	1994	1928202002	6163	WOLFINBARGER, ROY M TR	1.34587542668
1933	1907211024	1650	BRADFORD WOODS PARTNERSHIP	1.74760270872	1995	1928203006	6146	BRIGHT, JAMES E TR	5.27719851812
1934	1907301054	3901	COX HEALTH SYSTEMS	8.36036783337	1996	1928203009	1235	TEA PROPERTIES OF MO II LLC	4.21125373426
1935	1907401084	1455	TEAM SPIRITS REALTY INC	2.07653905702	1997	1928203010	6116	MYEARS, DONALD W TR	24.72266005380
1936	1907401085	1505	THOMPSON SALES CO	1.76457712293	1998	1928300007	1201	ECK, MARK E	19.94503467970
1937	1907401086	1515	THOMPSON SALES CO	11.58946041020	1999	1928300007	1201	ECK, MARK E	5.91314150331
1938	1907401087	1435	PAIGE REESE LLC	2.69573884086	2000	1928300009	6207	HARTLEY, STEVEN ETAL	13.67296899830
1939	1915304002	2550	SCHWEITZER, JEWELL N	26.72091431210	2001	1928300018	6930	FIOCCHI OF AMERICA INC	42.33747247010
1940	1916404001	840	THE CITY OF SPRINGFIELD		2001	1928300018	1201	ECK, MARK E	5.41442898204
1940	1920102017	5312	THE CITY OF SPRINGFIELD	0.31664013504 228.89906596300	2002	1928300019	6546	BOXLEY FAMILY TR ETAL	14.83450758160
	1920102017	1824	THE CITY OF SPRINGFIELD						
1942	1020204001	1824 2227	DOTY AMANDA M TR	276.54276776000	2004	1928300021	3020	TEA PROPERTIES MO I LLC TEA PROPERTIES MO I LLC	4.54809076500
1943	1920304001		DOTY, AMANDA M TR	1.99331994747	2005	1928300022	1235		47.96582687630
1944	1920304002	2222	MENTGEN, KAREN K TR	2.21017553908	2006	1928400014	9535	STODDARD, KENNETH L ETAL	27.14427141840
1945	1920304003	840	THE CITY OF SPRINGFIELD	2.14482045424	2007	1928400016	3380	MAY, GARY D	10.51415141690
1946	1920403001	5337	SACHS, JACQUES & LUCILLE VAP TR (3/2/15)	1.85027562508	2008	1928400062	3050	HR SPFD MO LLC	16.26294142040
1947	1920403005	2527	GWIN, EDWARD	0.66884294269	2009	1929201004	2193	MENTGEN, KAREN K TR	21.48367274290
1948	1920403006	1514	H'DOUBLER, F T JR ETAL TR	0.68919915740	2010	1929203001	301	CITY UTILITIES	33.45246177790
1949	1920403007	2445	BEUTERBAUGH, JENEE ELIZABETH	1.51908336590	2011	1929203002	301	CITY UTILITIES	5.59742270448
1950	1920403008	731	MULLEN, TOM	0.63895503987	2012	1929205001	301	CITY UTILITIES	0.83743033800
1951	1920403012	2343	DAVIS, DOUGLAS ALAN	0.94249739602	2013	1929206001	301	CITY UTILITIES	84.21686961140
1952	1920403016	2325	WAGASY, WILLIAM A	2.53392038782	2014	1929300002	301	CITY UTILITIES	81.42076340600
1953	1920403018	2233	NEWPORT, MARK D	0.68059763245	2015	1929300005	6303	THE CITY OF SPRINGFIELD	29.42368486740
1954	1920403019	840	THE CITY OF SPRINGFIELD	0.07855774382	2016	1929300008	6475	GASKA, WALTER J	21.37726481330
1955	1920403022	2539	CANALES, ROBERTO	1.05561829219	2017	1929400008	2575	GLOSSIP, LARRY W	2.97560051762
1956	1920403023	2559	KAYTON HOMES LLC	0.93218743513	2018	1929400009	2537	GIBB, JESSE J	2.98304073649
1957	1920403024	2249	PRATT, JOHN S	0.81908261624	2019	1929400010	2497	FISCHER, MICHELLE	2.90339866467
1958	1920403025	731	MULLEN, TOM	0.67662476147	2020	1929400011	2449	GEORGE, KEITH	4.17395326480
1959	1920403027	2405	RUST, ERIC	0.66160441878	2021	1929400012	2419	NOEL, GREGORY S TRUSTEE	4.98781308606
1960	1920403028	2405	RUST, ERIC	1.13069499066	2022	1929400013	2325	DENTON, KENNETH EUGENE	2.71214454697
1961	1921102001	3337	BRYAN PROP II LLC	1.50241652736	2023	1929400014	2309	HAMLET, WM CLAY	2.45103213500
1962	1921102002	3323	ALLEN, PATRICIA E ETAL	0.55083137853	2024	1929400015	6101	MCALLISTER, COLIN DAVID MICHAEL	2.60025260666
1963	1921102003	3307	D'ANDREA, RICHARD J TR	0.87808807022	2025	1929400021	2309	HAMLET, WM CLAY	3.57227526952
1964	1921102004	3253	EMERSON, TERESA D	0.89695159019	2026	1929400082	1201	ECK, MARK E	39.54889502560
1965	1921102009	3209	BROWN, NICOLE M	1.00642192871	2027	1929400085	1201	ECK, MARK E	12.17788068270
1966	1921102010	3209	BROWN, CHRISOPHER J	1.05515344712	2028	1930100012	301	CITY UTILITIES	69.75010355640
1967	1921102011	3161	TRANTHAM, WESLEY	1.13026508090	2029		1824		23.96375836000
1968	1921102016	3111	SHALLA, RUSTY L	0.40180680816	2030	1930300033	0	CHF HOLDINGS INC	18.08892092270
1969	1921102017	0	WOMMACK, SIDNEY J	0.72985414178	2031	1930300035	13329	LYNCH, THOMAS	36.94522935970
1970	1921102021	3125	ROBERTSON, JESSE M	0.75652873180	2032		1824		3.13242972254
1971	1921102022	3135	FRIEDA, DENNIS & LINDA TRUST	1.24811348099	2033	1930400004	13329	LYNCH, THOMAS	17.19227275860
1972	1921102023	3237	INGRAM, PAULA TR	0.93615283750	2034	1930400009	301	CITY UTILITIES	19.95383867140
1973	1921102024	3267	KALMBACH, RICHARD D	0.97069224364	2035	1930400010	301	CITY UTILITIES	49.83722670830
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1975	1921114057	5032	SLAVENS, CHARLES R	1.96147987755	2037	1930400013	6578	CRAWFORD, NICOLE	5.31201324447
1976	1921201002	301	CITY UTILITIES	51.61945943220	2038	1930400016	6555	THEOBALD, KURT	5.21579404899
1977	1921204010	5201	STATE OF MISSOURI (VETERANS CEMETERY)	58.30919892020	2039	1930400017	6577	SACRED RIVER FELLOWSHIP	6.42571819532
1978	1921302002	2875	SACHS, JACQUES & LUCILLE VAP TR (3/2/15)	68.04058115480	2040	9850500104	0	BURLINGTON NORTHERN & SANTA FE RAILWAY	3.05920440953
1979	1927200162	1032	SWEETSHOE LLC	50.19162247530					
1980	1927300007	3523	TOWERY, JAMES K	9.90400525302					
1001	1037300010	2425	TOWERY DARRAGETR	14 27476705100					

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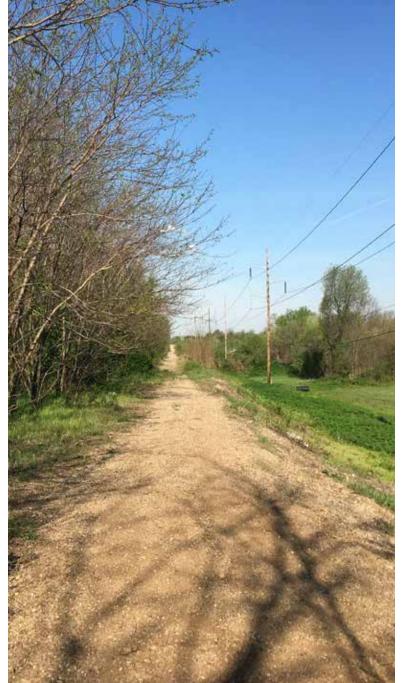
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Ozarks Transportation Organization Bicycle & Pedestrian Trail Investment Study



**Appendix B: BPAC Meeting Minutes** 





# **APPENDIX B: BPAC MEETING MINUTES**

## **Contents**

The Ozark Tranasportation Organization Bicycle and Pedestrian Advisory Committee served as the advisory group to provide guidance during the course of the Trail Investment Study. Each of the seven advisory group meetings during the course of the study was summarized in the study document. Also included in this appendix are comments from the BPAC regarding the prioritization methodology, as well as corresponding responses from and actions taken by the project etam. Minutes for each of these meetings and the summary of prioritization comments and responses are listed on the following pages to provide additional detail:

Meeting 1 - March 1st, 2017
Meeting 2 - April 5th, 2017
Meeting 3 - May 3rd, 2017
Meeting 4 - June 7th, 2017
Meeting 5 - July 26th, 2017
Responses to BPAC Prioritization Comments, August 2017B-12
Meeting 6 - September 6th, 2017
Meeting 7 - October 11th, 2017

# Meeting 1 - March 1st, 2017



142 W. Monroe Avenue Kirkwood, MO 63122 (314) 403-7460



**BPAC/TAP Committee Meeting Memorandum** 

To: Andy Thomason

From: Paul Wojciechowski

Date: March 22, 2017

Attendees: OTO BPAC Meeting #1

Re: 00-2017-076 OTO Bicycle and Pedestrian Trail Investment Study

As the PM for the project, Paul kicked off the meeting with an overview of the scope and schedule for the project with the OTO BPAC and TAC Committees as an agenda item in the regular BPAC meeting agenda. Paul went through much of the initial interview materials since that is what the final scope was based on. Attendees asked questions regarding scope elements and Paul offered examples of work products.

Paul provided information on date that was needed for defining existing conditions for property ownership as well as for environmental investigations.

This initial meeting was the formal kickoff for the project.



# Meeting 2 - April 5th, 2017



142 W. Monroe Avenue Kirkwood, MO 63122 (314) 403-7460



**BPAC/TAP Committee Meeting Memorandum** 

**To:** Andy Thomason **From:** Paul Wojciechowski

**Date:** April 6, 2017

Attendees: OTO BPAC Meeting #2

#### Re: 00-2017-076 OTO Bicycle and Pedestrian Trail Investment Study

Paul kicked off the meeting with an overview of the agenda items for the meeting. Visuals for the agenda were provided in the form of a power point to show status.

1. Project status – Paul noted that CJW was about two weeks delayed in getting the contract signed so we are slightly behind on property ownership map development. Otherwise we are about a week behind but catching up quickly.

Paul wanted to briefly go over the vision and goals of the study that validates the direction for communication to the public and stakeholders at the upcoming meetings. Paul led the group in a discussion of a vision statement. While this is not a formal planning study, a clear vision of what the study will produce is critical. Following a brief discussion the following vision statement was agreed upon:

#### "Create a prioritized plan connecting communities with a regional trails network."

Goals of the study were validated as the following:

- Interconnected Network
- Prioritize Investments
- Define Opportunities, Constraints and Costs
- · Prepare Environmental Documentation
- Transportation Choices
- · New healthy, efficient, and attractive connections
- Collaborative planning
- Support Economic Development
- 2. Summary of Parcel/Ownership Information
  - a. Key Findings Dane noted that they have collected information and are ready to post information for the map book. Property data and details come from a variety of sources for the complete picture. Dane and CJW will continue with gathering information for posting.

#### OTO Bicycle and Pedestrian Trail Investment Study

Charlie LaPage and CFS has gathered a significant amount of data for the PEL analysis. Paul provided the BPAC samples of map book pages with environmental information posted. A majority of date will be posted on map book pages, but some date will be better suited for posting on larger area map either in the form of quadrants of the study area or on the 24" by 36" map. Paul noted that the goal will be clarity of the information.

- b. Fatal Flaws and Opportunities at this point there are no fatal flaws identified. Charlie La Page and CFS will provide information on stream crossing locations that will minimize impacts and grade conducive of meeting ADA guidelines for trail design for the alignment development. Charlie has contours, but there may be interpolated contours that will better inform grade challenges and opportunities.
- 3. High Level Prioritization of Corridors Paul began the discussion of high level evaluation criteria for corridors for use in informing data collection next week, as well as prioritization of corridors. This criteria will be based on the goals defined for the study in order to guide the definition of priorities. As noted in the interview, we will look at a corridor prioritization from a regional perspective, segment perspective, as well as allow updates to priorities from opportunities that come about as they become apparent.

Paul noted that we can evaluate corridors with information that is quantitative, qualitative or a mix of both. All agreed that the mix will work best.

The following were key criteria and relative importance.

Criteria	Notes on Criteria	Importance
Ability of the Corridor to fill a gap in the built network	The corridor or segment of the corridor will connect a currently built segment of trail and provide a connection between destinations	н
Significant effort in progress for property acquisition in the corridor	Property Acquisition or supportive property owners	Н
Demand for the corridor connection	Public, latent, political, future need	Н
Active programmed projects	Programmed projects that can be coordinated with the corridor and segment	н
Key destinations for the corridor to link to other corridors	Other trails, parks (regional, neighborhood), schools (type of school), business districts	М
Environmental or other limiting concerns that restrict implementation	Cultural, bridges, grades, railroads, streams	L

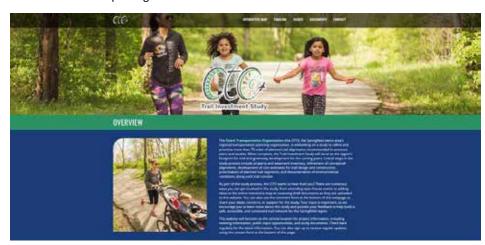
#### **OTO Bicycle and Pedestrian Trail Investment Study**

Existing low-stress on-street network connection that connects the corridor	On street network connection that exists or easy to implement in the short term that could take the place of the trail segment.	L
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Paul offer ideas on how to use this criteria through a numerical means with ratings and weighting of criteria, or use a symbolic means such as the amount of a circle darkened from empty to completely filled in. A suggestion was made to use a numerical method and represent it to the public and in the final study as a symbolic means. This will allow corridors to be compared since we expect things to be close between some corridors, but still be able to tell the minuet differences.

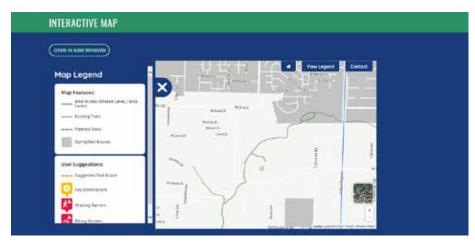
#### 4. Public Engagement

a. Project Webpage – Paul discussed the website that has been created and provided a view of the websites for the BPAC. Comments were focused on the map on the page that will be used for posting comments.



b. Online Mapping Tool - The green for the priority corridors and blue for the on-street bike routes are hard to read on the map. A suggestion was made to leave the built segments of the priority network solid green, but make the segments that are the subject of this study red dashed to bring this to people's attention. The on street network is important but it should be in a contrasting color that is easier to read than the blue on the grey background.

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c. Preview Open Houses – The open house information will be on the website that will go live this week, and will be on April 19 and 20. Paul provided an overview of the open house format.

#### Sign In

Station 1 – Goals and Objectives of the Study

Station 2 – Process

Station 3 – Evaluation Criteria (Corridor and Alignment Specific)

Station 4 – Mapping and Comment (The Big Picture)

Station 5 – Mapping and Comment (Priority Corridor Quadrants)

Station 6 - Property Ownership

Station 7 - Environmental Information and Opportunities

Comment Table

- 5. Alignment Evaluation Criteria
  - Network Connections Existing/Planned trails and bikeways
  - Route Directness
  - Cultural/Natural Resources Connection to schools, parks, conservation areas, historic sites
  - Ownership/Right of Way
  - Environmental Conditions hydraulic, floodplain, topographic, habitat
  - Enhances Biking and Walking
  - Logical Segments
  - User Experience
  - Cost facility type, surface type, structures required (walls, bridges), roadway crossings needed
- 6. Next Steps
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- a. Corridor Alignment Development The Alta team of three two person teams will be in Springfield on Monday to Thursday for alignment investigations.
- b. Stakeholder meetings Paul will meet with the Technical Committee of Ozark Greenways next Tuesday, and a general stakeholder meeting on April 19 of the open house week.

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# Meeting 3 - May 3rd, 2017



142 W. Monroe Avenue Kirkwood, MO 63122 (314) 403-7460



**BPAC/TAP Committee Meeting Memorandum** 

To: Andy Thomason

From: Paul Wojciechowski

**Date:** May 3, 2017

Attendees: OTO BPAC Meeting #3

Re: 00-2017-076 OTO Bicycle and Pedestrian Trail Investment Study

Paul re-emphasized the vision for the study: "Create a prioritized plan connecting communities with a regional trails network."

#### Goals:

- Interconnected Network
- Prioritize Investments
- Define Opportunities, Constraints and Costs
- Prepare Environmental Documentation
- Transportation Choices
- New healthy, efficient, and attractive connections
- Collaborative planning
- · Support Economic Development

#### **Project Status**

- Development of alignments is in full swing and staff is in Springfield walking corridors.
- Property Ownership 500' of the original corridor line work (This works in places and does not in others)
- Utility Information Best Available
- Environmental Mapping
- Secured Archeological Mapping

#### **Preferred Alignments Summary and Discussion**

Paul provided examples of alternatives developed for the Trail of Tears, Fassnight Creek, Ward Branch and Jordan Creek Greenway. This was offered to provide a chance for the committee to comment on the format. All present were supportive of the direction, but wanted to make sure that the figures were specific on the side of the roadway the trail was to be location if it is along a street.

Paul outline the evaluation criteria that will be used for alignment selection of a preferred alignment that will be used for estimating cost and prioritization.

1. Network Connections

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- 2. User Experience
- 3. Enhances Biking and Walking
- 4. Logical Segments
- 5. Cultural/Natural Resources
- 6. Environmental Conditions
- 7. Cost
- 8. Route Directness
- 9. Ownership/Right of Way

The priority of these criteria was provided by open house attendees at the initial round of public meeting. This was provided to the committee.

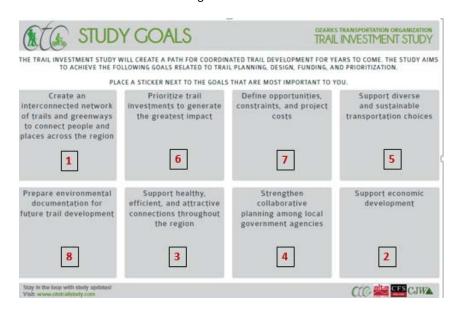
#### **Public Engagement**

**On-Line Engagement Summary** 

- 10 comments on planned priority trails
- 19 votes on existing trails
- 7 suggestions for new trails
- 1 barrier to biking & walking

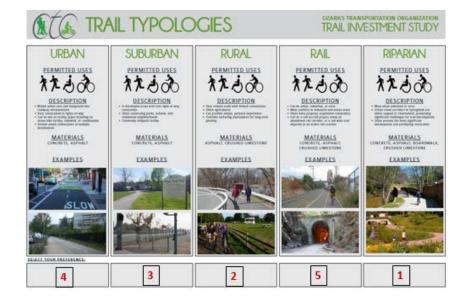
Summary of April Open House #1 – April 19 and 20

- o 6 Attendees on night 1 at Library Station in NW Springfield
- o 13 Attendees on night 2 at the OC in Ozark





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#### **Next Steps**

Complete Alternatives Evaluation & Identify Preferred Alignments Next Steps

- ✓ Finalize Alternatives Evaluation
- ✓ Cost Estimates
- ✓ On Line Information
- ✓ Open House #2 June 21 and 22

# Meeting 4 - June 7th, 2017



142 W. Monroe Avenue Kirkwood, MO 63122 (314) 403-7460



**BPAC/TAP Committee Meeting Memorandum** 

To: Andy Thomason
From: Paul Wojciechowski

**Date:** June 7, 2017

Attendees: OTO BPAC Meeting #4

#### Re: 00-2017-076 OTO Bicycle and Pedestrian Trail Investment Study

Paul kicked off the meeting with an overview of the agenda items for the meeting. Visuals for the agenda were provided in the form of a power point to show status.

1. Project status – Paul noted that we are about a month and a half behind on the project since we have 37 segments to deal with and the alignment analysis and documentation is taking longer than expected. We expect to try and get back on schedule this month with cost estimating being wrapped up by Jun 15, and moving on to corridor prioritization..

Paul re emphasized the vision of the study:

"Create a prioritized plan connecting communities with a regional trails network."

- 2. Summary of Preferred Alignments and Evaluation
  - a. Alignment information was presented. Each alignment segment has two sheet, one having descriptions of the alignment and evaluation matrix, as well as a recommendation of the preferred alignment. The second page has a map the shows the segment along with color coded alignment options shown and the preferred identified. The maps have property and PEL data relevant to the alignment.
  - b. The BPAC was happy with the presentation of the information, however, since they did not have time to look close at the alignment s and information, which still had a few segments missing, they wanted time to review further. June 21 was set as the deadline for comments on the alignments. Paul indicated that he would complete the alignments segments missing and submit the alignments and evaluation next week to end that task. Refinements will be incorporated into final documents.
  - c. One main comment is that we need to be clear about what side of a road or creek is in the recommended alignment.
- 3. Cost Estimates Paul began the discussion of high level description of the estimating process. Paul went through a couple sample segments to discuss elements of the estimates. This task just began and will be completed next week. We will show segment estimates, and roll these up to a corridor estimate for each corridor. Paul stated the CFS is providing a map with details as a backup for estimating over and above the segment mapping in the alignment analysis.

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Paul provided a sample estimate for review. Paul outlined that estimates will be based on a 10 wide concrete path with aggregate base, but cross sections we will include in the study will also include an asphalt surface section, porous asphalt surface (that is thicker and has an open graded base) and a limestone section.

#### 4. Public Engagement

Project Webpage – Paul discussed the website that has been created and provided a graph of hits to the website. There have been 684 views of mapping on the site and 400 plus other views.

- 24 comments on planned priority trails
- 25 votes on existing trails
- 15 suggestions for new trails

Based on suggesting by Andy, Alta w3ill update buttons on the map page to put them at the top of the page. Also, we will make a button for "Comments"

Paul asked about what BPAC members thought would be the best approach to getting people out to the Open Houses on the 21<sup>st</sup> and 22<sup>nd</sup>.

- Send blast to people who visited the site.
- Reach out to HOA's
- Put signs on trails
- Make posters to put in libraries and bikes shops, also micro-breweries.
- Add a scanner code to the flier and on posters, as well as trail signs that provide a link to the website.
- Publicize the open houses at upcoming events, as well as the website.
  - o River Jam in Ozark June 10
  - Hava Blast in Republic on June 30
  - o Queen City Century June 17

For the open house the following were elements we want to have for attendees:

- Slide show with information on the corridors that plays. We can have three projectors going for different areas of the study area.
- Board that Shows Evaluation Criteria for Corridors.
- Large wall maps of taped together corridors to show the full picture.

#### 5. Next Steps

- Complete Alignment document
- Identify Trailhead Locations
- Finalize Cost Estimates
- Corridor Prioritization. Key criteria and relative importance are as follows:

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Criteria	Notes on Criteria	Importance

### OTO Bicycle and Pedestrian Trail Investment Study

Ability of the Corridor to fill a gap in the built network	The corridor or segment of the corridor will connect a currently built segment of trail and provide a connection between destinations	Н
Significant effort in progress for property acquisition in the corridor	Property Acquisition or supportive property owners	н
Demand for the corridor connection	Public, latent, political, future need	Н
Active programmed projects	Programmed projects that can be coordinated with the corridor and segment	н
Key destinations for the corridor to link to other corridors	Other trails, parks (regional, neighborhood), schools (type of school), business districts	М
Environmental or other limiting concerns that restrict implementation	Cultural, bridges, grades, railroads, streams	Ľ
Existing low-stress on-street network connection that connects the corridor	On street network connection that exists or easy to implement in the short term that could take the place of the trail segment.	L

• Final Maps and Work Products

The meeting concluded and Paul noted that there would likely be another BPAC meeting on this study.

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### Trail Investment Study (

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# Meeting 5 - July 26th, 2017



142 W. Monroe Avenue Kirkwood, MO 63122 (314) 403-7460



**BPAC/TAP Committee Meeting Memorandum** 

**To:** Andy Thomason **From:** Paul Wojciechowski

**Date:** July 26, 2017

Attendees: OTO BPAC Meeting #5

Re: 00-2017-076 OTO Bicycle and Pedestrian Trail Investment Study

Paul kicked off the meeting with an overview of the agenda items for the meeting. Visuals for the agenda were provided in the form of a power point to show status.

- 1. Paul went over the agenda then re-emphasized the vision of the study: "Create a prioritized plan connecting communities with a regional trails network."
- 2. Summary of revised alignments and estimating. Paul noted that based on public comments, three alignments were revised. Shuyler Creek and Etheridge were revised based on property owner comments, and the West Wilsons Creek North added an option for consideration. Paul also noted that estimates were revised to add intersection details and changes to estimates resulting from preferred alignment revisions to Shuyler and Etheridge. In discussing the updated estimate tables it was pointed out the totals for corridor do not add up on the community breakdown spreadsheet. Paul noted the problem and the sheet will be revised. Sara Fields, asked why we have the planning level estimate shown if we have detailed estimate. Paul noted that this was a good observation and we can eliminate the planning estimate from the alignment document and spreadsheets to avoid confusion and questions. The discussion of the detailed estimate we developed for the alignments led to the question of what it meant and what went into the estimates. Paul noted that Conceptual Level Detailed Costs was a better description and Charlie noted that while contours and grades were part of the estimation, they are not engineering level of detail for grades and other details, but drainage and grades were considered.

Dave Hutchison mentioned that he had a few comments on the alignments for consideration.

- West Republic Road Dave noted that MoDOT is in progress with design for a roundabout at FR103 in front of the school. The crossing in the alignment is at FR107, which is not likely with the roundabout at FR103. This should be incorporated in the alignment. While we thought we had the crossing at the right place, we did not. We will adjust this.
- North Jordan Creek-Jordan Valley Connector Dave suggested keeping the option for the
  trail on the west side of the rail, to take advantage of property ownership changes. It was
  suggested by the team and confirmed by Dave that the appropriate action would be to show
  this original alignment as an illustrative, long-term project to be pursued in coordination
  with redevelopment of adjacent properties.

#### OTO Bicycle and Pedestrian Trail Investment Study

- South Jordan creek between Downtown and Glenstone, should keep the creek corridor as an illustrative option, again to be pursued in coordination with redevelopment of these adjacent properties.
- North Jordan Creek Greenway Dave noted that the City has been working on the original
  alignment in this corridor and he thinks that it will be preferred by the city. The North Fork
  of Jordan Creek is a stormwater priority and will be addressed through future property
  acquisition and creek daylighting projects intended to alleviate downstream stormwater
  and flooding issues. The project will likely incorporate a trail component, as have other
  projects along South Creek, Jordan Creek, and Fassnight Creek. He will have to check on
  this to determine the city's preferred alignment.
- A concern was noted by King Coltrin about the Rte. 66 corridor needing to be on the north side of Old Rte. 66, due to ROW between MoDOT and the Railroad, as well as connectivity to adjacent properties. This was discussed and concepts developed. Paul noted this would be addressed.

#### 3. Public Engagement

Paul provided a summary of the open house meeting last month and that 18 attendees and 16 attendees attended the meeting on June 21 and 22 respectively. We received good feedback on the Etheridge segment, as well as other segments.

Engagement activities will be compiled in a summary document and included in the final report.

#### 4. Corridor Prioritization

Kevin provided an overview of prioritization criteria and methodology of the process. He also went over the results and discussed observation from the results.

- a. Dave H. noted that he did not see where the ability to acquire ROW easily in a corridor was included in the criteria. The criteria included was availability of public lanes but David wanted consideration of private lane that could be converted and how that can influence the prioritization if opportunities occur. It is possible to update this element if change occurs? If the rating was zero in available public lands and a change occurs like a property sells and development occurs that can provide land, how can this be considered. Paul noted that in early presentation this was the opportunity based prioritization element. The evaluation can be updated for these type of item, which the subject of the next topic.
- b. In furthering the above comment, there was a recommendation that a check list be developed that cities and counties can use to see what would be needed to enhance the priority of corridors and segments.
- c. Evaluation of schools was a concern. Elementary, middle and high schools should have different evaluation weight. Also, if three schools are on one campus, there is only recognition of one school, not three. Can we address this?
- **d.** A concern was expressed about large corridors without segments being low on the priority listing. Kevin noted that this is a valid concern but evaluation was done in a way that drilled criteria down to a per mile assessment to avoid penalizing big corridors. There are two levels of evaluation, per

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corridor then in the corridor between segments, then we will further drill down to the parameters for funding set by OTO in the \$500,000 to \$800,000 project range.

#### e. Action - The BAC will provide comments on ratings by Friday July 28.

Kevin then talked about another level of "phasing" for items not emphasized enough, or what attendees called fatal flaws of corridors, such as active rail lines. Rail corridors will be off limits entirely until the railroad abandons the property at some point, maybe never, but the corridors are still prime corridors for trails so we cannot lose them from the plan. Most attendees likes this phasing but they did not like the term phasing.

This would follow the criteria evaluation and adjust corridors based on key elements that do not allow action in the corridor into well into the future. One example would be to drop down corridors that are dependent on railroad corridors or similar "anchors" to the bottom of the listing. A key is to make sure the priority corridors in the top 10 are implementable projects and can be successes and not priorities that are not achievable.

The corridors and segments will be divided into two general pools – those implementable within the next five years, and those not implementable based on critical property, infrastructure, or development factors that limit immediate or near-term viability. Among those corridors implementable within the next five years, the top ten corridors will be further analyzed and dissected into \$500,000-\$800,000 segments for consideration by local agencies. No additional ranking or ordering of these projects will be necessary. It is important to consider that the ultimate outcome of this study is not to determine a rigid order for trail system development, but to build regional consensus for priority trail segments and highlight trail projects best suited for near-term development and federal funding. There is still a responsibility for local agencies to take action and pursue those trail projects.

Action - Alta will develop a methodology and provide to OTO for distribution tomorrow.

5. PEL documentation – Charlie Lepage of CFS provide a presentation on the status of trail evaluation for critical issues such as Archeological sites, floodways, wetlands, threatened and endangered species.

Charlie also went over lesser issues for corridors such as hazardous materials, environmental issues, farmland and section 4(f) and 6 (f) lands. There are no real impacts on these for corridors that cannot be addressed or were not addressed in alignment development.

- Results of Research shared with Study Team
- Trail alignments were revised with alternative routes
- Revised trail alignments and subsequent revisions were evaluated for same PEL criteria.
- Some obstacles will be encountered (streams, public lands, etc). These issues are being addressed in the PEL Report
- Updated Map Books with Final Alignments with PEL information
- Archeological information except for write-up will not be in public document since this is sensitive information.

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- PEL Questionnaire is about 90% complete will need some review & feedback from Team
- PEL Report is nearly complete will finalize after review and feedback from Study Team
- Spreadsheets will provide detailed supporting data for the PEL document

Charlie noted that he would like to provide the BAC information and the input questionnaire for review and comment. He also would like to send this to agencies for review like SHPO and FHWA, as well as others who OTO would like to involve. There is still team review before this happens but he wants a plan to complete the task.

- 6. Format of the Plan Document Charlie initiated the discussion on the PEL format that led right to the overall plan document format. Charlie state he could weed this down to an 8.5" by 11" format if needed. Paul indicated to go with the previous document prepared, an 11" by 17" format would be best. Sara Fields and all were in agreement on the 11 by 17 format if it works best. Charlie stated it would work for him.
- 7. Other Jeremy Parsons noted that it will be critical to provide action steps for communities that guide cities in what to do for moving corridors in the process and the needs from elected officials to advance corridors.

#### 8. Next Steps

- Update Alignment document
- Identify Trailhead Locations
- Finalize Cost Estimates
- Finalize Corridor Prioritization.
- Final Maps and Work Products

# Responses to BPAC Prioritization Comments, August 2017

Prioritization Methodology Question Assessment				
Comment	Provided By	Action Taken	Action Taken	
In the scoring categories, there are links noted in the Data sources. Not sure if these are needed for us to justify the methodology. Also, if this is in the final report, I would think we need the data source info in it and not a link?	Cameron Smith, City of Ozark	Explanation provided	Data sources provided only for methodology justification and reference for OTO and BPAC	
In some cases, scores are calculated on a per mile basis. Is it safe to assume that in the final scoring and if a short section is less than a mile, then it would be calculated with a decimal and not give credit as a full mile?	Cameron Smith, City of Ozark	Explanation provided	Some scores are calculated on a permile basis in order to minimize the impact of a corridor's length on scoring.	
2.1 Connecting Communities: It seems like the score on this particular measure depends much on what particular segment of the trail is being considered, and that it might not always reflect the connectivity the trail provides between communities. For example, a trail connecting Battlefield and Republic scores higher than one going from Springfield to Greene County – yet, both may be part of the connection between Springfield and Republic. Another segment might be entirely located in unincorporated Christian County, but be the final trail connection between Springfield, Nixa and Ozark. Perhaps one way to look at this would be to identify our "trail arterials" that will connect communities and award points if the trail segment is on that corridor. Or, maybe something else would work better.	Frank Miller, MoDOT	Explanation provided	The purpose of the data-driven prioritization process is to examine and compare corridors against one another, rather than segments within each corridor. Examination of individual segments will have greater bearing in Step 3 and Step 4 of the full prioritization methodology.	
2.2 notes about people per acre. Maybe I am missing something or not thinking about it correctly, but the breakdown seems low on the middle to upper end. Does it need a broader range for when it is in a denser part of a City? Is it only considering a residential density and not a commercial type density?	Cameron Smith, City of Ozark	Explanation provided	Category breaks correspond roughly to 1/3 each.	
3.2 on schools. Is it considering a credit given per school and not per campus? I would think that consideration should be given by groups of elementary, middle school and high school. If the three buildings share a common location, then each should be given a credit and not just one. Also, if the case is found where the groups share one building such as more rural area (not sure this is the case anymore), then they should be given the appropriate credit for each group. My thought is if a trail connects more to a school campus, then the credit should be higher than just connecting to one of the three.	Cameron Smith, City of Ozark	Explanation provided	If multiple schools on a single campus, each school is counted.	
4.1 similar concern on the per mile consideration and if section is less than a mile. Will the scoring for sections shorter than a mile be skewed?	Cameron Smith, City of Ozark		For segments of less than one mile, the raw score will be divided by a fraction, resulting in an increased score. For example, if there are 2 schools within a half-mile of a trail corridor that is 0.5 miles long, then the per-mile score is 4.	
5.1 gives higher score if intersecting more streams or riparian corridors, then 1.2 gives a higher score if there are less crossings. Seems like these two contradict one another.	Cameron Smith, City of Ozark	Explanation provided	1.2 refers specifically to roadway crossings and the conflict each presents between trail users and motorized traffic.	

Similar to above, 5.1 gives higher score if intersecting more streams or riparian corridors, then 6.1	Cameron Smith,	Explanation provided	5.1 uses riparian corridors as a proxy
gives a lesser score the more wetland areas you are near. Seems like these two could contradict one another.	City of Ozark		for natural resources because these corridors are often habitats for many of the flora and fauna native to the area. 6.1 stresses the potential impacts of trail development on wetland, which represent a sensitive natural resource. While there may be some overlap, they do not directly contradict one another.
5.2 Is the definition for score 0 or 1 saying the same thing? 0 is no historic sites and 1 is less than one historic site.	Cameron Smith, City of Ozark	Explanation provided	A score of 0 would mean that there are no historic sites or districts within a half mile of the entire trail corridor. A score of "less than one" would mean that there are historic sites or districts along the corridor, but still fewer than one per mile.
6.1 I am not sure that in all cases wetlands should result in a negative impact to the scoring.	Cameron Smith, City of Ozark	Explanation provided	Trail development through wetlands may provide opportunities for educational programming and other positive elements. However, for the purposes of this prioritization process, we are focusing on the permitting and design requirements of trail development within designated wetlands.
6.1 Wetlands: We will have a lot of trails go near wetlands. I would like to know more about trail impacts on wetlands. I can see wanting to avoid taking a trail directly through a wetland, but a ¼ mile buffer for a trail seems like a lot when there may be other developed features (roads, housing, etc.) that will have a far greater impact on the wetland than the trail. I'm just wanting to learn more about this one.		Methodology updated	Buffer reduced to 50 feet on each side of the trail alignment.
6.2 similar to comments of wetlands. Also, seems to contradict some scorings in regards to streams. Is a trail in a floodplain a big negative?	Cameron Smith, City of Ozark	Explanation provided	See comments above regarding wetlands.

8.1 and 2.2 are similar items, is there a potential that the scoring would contradict one another?	Cameron Smith, City of Ozark	Explanation provided	2.2 captures residential population, while 8.1 captures employment population. These two metrics are complimentary rather than contradictory. Some areas have high residential and employment populations, and some have low populations of residents and employees.
Attached are some renderings and layout for the new Delp roadside park located on Route 66 just east of City Hall in Strafford. This park is under construction now and should be completed by this fall. This new park and the new streetscape have plenty of parking for a trail head on the Strafford to Springfield Trail.	River Engineering	Information incorporated into data-driven prioritization process	
On the employees within ½ mile of the trail. Ben Jones with CU said there are 2600 employees in the PIC east and with the trucking companies and other businesses along the trail there should be at least 3000 total employees conservatively.	King Coltrin, Great River Engineering on behalf of City of Strafford	Information incorporated into data-driven prioritization process	
The entire [Route 66 / Strafford] trail is along Historic Route 66	King Coltrin, Great River Engineering on behalf of City of Strafford	Information incorporated into data-driven prioritization process	

# Meeting 6 - September 6th, 2017



142 West Monroe Avenue Kirkwood, MO 63122 Office: 314-403-7462 www.altaplanning.com **Meeting Memorandum** 

**To:** Andy Thomason, Ozark Transportation Organization

From: Paul Wojciechowski, AICP, P.E.

Date: September 6, 2017

Copy: Charlie LePage

Re: OTO Bicycle and Pedestrian Trail Investment Study BPAC Meeting 6

Paul got to the meeting late so Charlie began the meeting with item 2.

Paul began his section of the meeting with noting that alignment information has been updated and will be posted on the website. A question came up on the Rte. 66 corridor and the side of the road the trail east of Strafford was on. Natasha stated the King in the past noted the trail on the south side west of Strafford to reach the ballpark. Paul noted that our alignment stopped at the City State Rte. 125, but certainly go west further.

- 1. Corridor Prioritization (Presentation/Discussion)
  - a. Methodology Paul went through the methodology for prioritization including the data driven evaluation and criteria used. He noted the updates made based on comments received by BPAC representatives. All comments were added to a spreadsheet and how comments were addressed noted. This was step two of the process. Step 3 involve items not included in the data driven analysis that could impact priorities, such as active rail corridors. Other items were possible stormwater mitigation and stream daylighting projects, planned and programmed infrastructure improvements in a city or corridor, potential for private development or redevelopment, and regional equity. The discussion included the fact that active rail corridors, while rated high, are not going to move forward, so they were shown in red as tabled for the time being. Dave Hutchinson ask what tabled meant since these corridors are important and high priorities. Paul stated that these still hold their rating, they are just set aside unless the rail issue changes. Paul noted that the use of "Red" will be updated to yellow as a caution sign. Paul highlights the remaining 10 highest priorities in green and the others with no shading that indicated longer term grouping of corridors. Alta will segment out the top ten approved by the BPAC.
  - b. Prioritized Corridors and Segments Based on a discussion on priorities, a concern was raise if there was an additional criteria used in the data driven analysis, like a wild card rating. Paul noted that Step 3 was intended to accomplish the wild card factor. David stated that from a Springfield perspective, Lower Jordan Creek was a funding priority and priority for corridor implementation by Springfield and should be prioritized over the Fassnight corridor. A discussion ensued with Paul station that this was acceptable to make this adjustment and it is in the realm envisions by this methodology.



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- c. Next Step to finalize task In finalizing this task a motion was made and approved by the BPAC with Fassnight being dropped as a top ten corridor and replaced with Lower Jordan Creek. Sarah suggested that the prioritization chapter be separate from the rest of the report since it is going to be a living document used by the OTO and BPAC. It is not a document set in stone since as things change in the region priorities may very well change, and the process needs to reflect those updates, such as the railroad abandoning a rail line that could raise a corridor to its' original priority rating. All agreed with this path forward.
- 2. PEL Documentation (Presentation/Discussion)
  - a. Overview Charlie provided an overview of information included in the PEL Questionnaire, as well as the PEL report. Charlie talked about assumptions and use of the document as a set up task to further environmental documentation that will follow as projects are programmed and move forward. Archeological information was secured through AMEC and areas in red and Green should be avoided if possible due to there being a good chance of artifacts in those areas. While avoidance is preferred, and alignments should be adjusted if possible, it just adds additional environmental sensitivity if the site is disturbed.

Charlie asked for comments on the report and questionnaire by next Friday.

Paul noted that Alta will provide Charlie a shape file for the alignments that have been updated to include in the PEL Map Book information.

3. Final Plan Report Submittal – Paul concluded the meeting stating trailheads will be noted on the final mapping, and a report document prepared to complete the project

# Meeting 7 - October 11th, 2017



142 West Monroe Avenue Kirkwood, MO 63122 Office: 314-403-7462 www.altaplanning.com **Meeting Memorandum** 

**To:** Andy Thomason, Ozark Transportation Organization

From: Paul Wojciechowski, AICP, P.E.

**Date:** October 11, 2017 **Copy:** Charlie LePage

Re: OTO Bicycle and Pedestrian Trail Investment Study BPAC Meeting 7 (Notes from OTO and E-

Mails provided by membership of the BPAC)

\_\_\_\_\_

Alta did not attend this meeting but the following comments are noted based on notes taken by Natasha Longpine and other e-mail details following the meeting.

The costs are thought to be possibly high. King from Strafford commented that he thought the costs were high too. The other relevant comments related to that the description of the trail locations in the narrative might be convoluted. Some committee members stated that it may take several reads to get a feel as to where the narrative is describing.

David Hutchison - While the list does appear as the committee voted last meeting, there is one mile of trail corridor not included that would achieve a great deal of connectivity. That is extension of Fassnight Creek Trail one-quarter mile west to Fort Avenue and 3/4 mile east to National Avenue. The remainder of Fassnight Creek Trail is not a high priority and would be difficult to build. This mile of trail is more likely to be constructed and provides better connectivity than the Nathanael Greene Park to Jim Ewing Park segment of Cherokee Trail of Tears and some other segments in the segment list.

kOther comments weren't tied to Alta's work, but what is next for TAP funding after the study concludes.

B-16









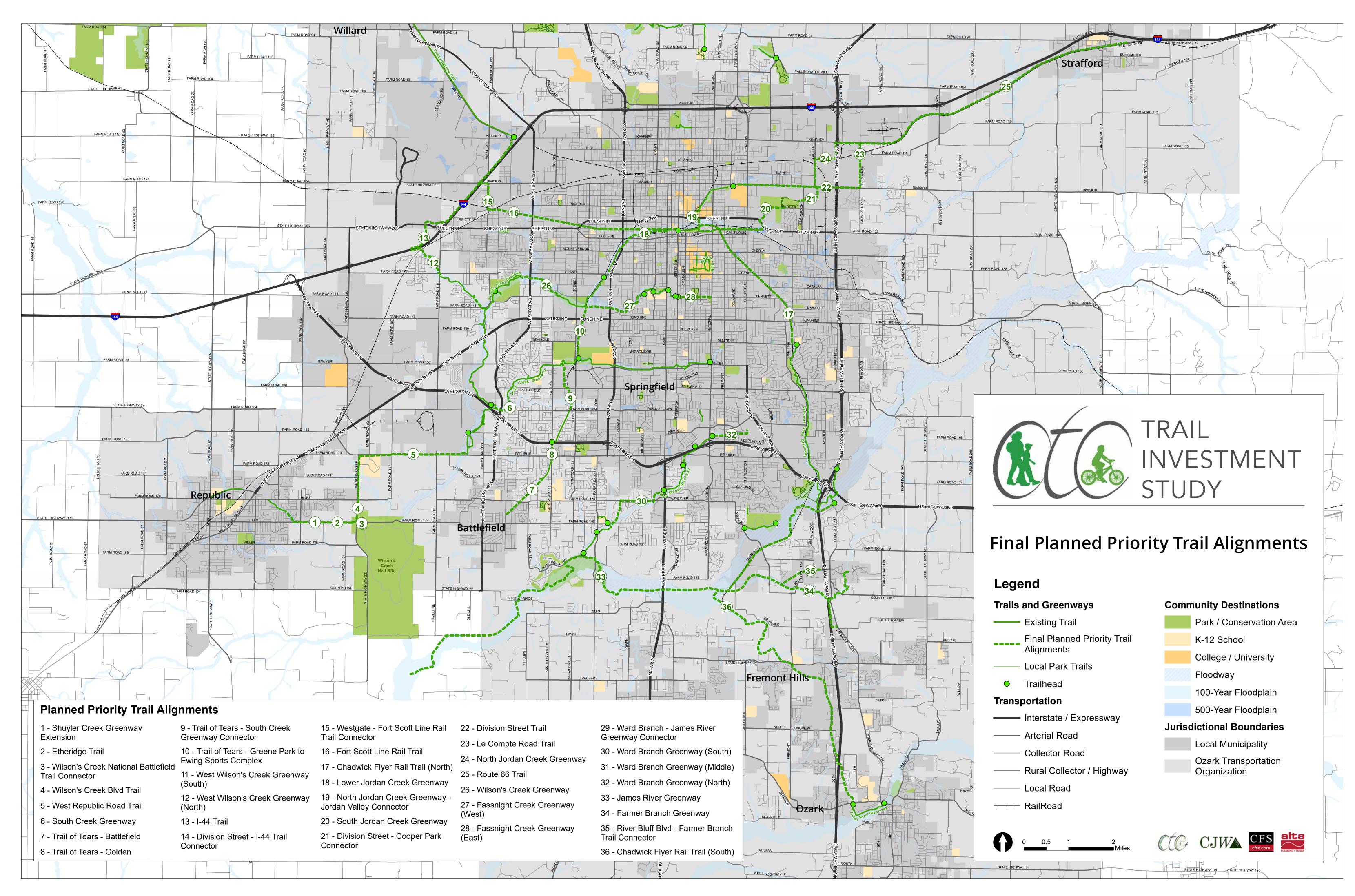
Ozarks Transportation Organization
Bicycle & Pedestrian Trail Investment Study



Appendix C: Final Alignments Map



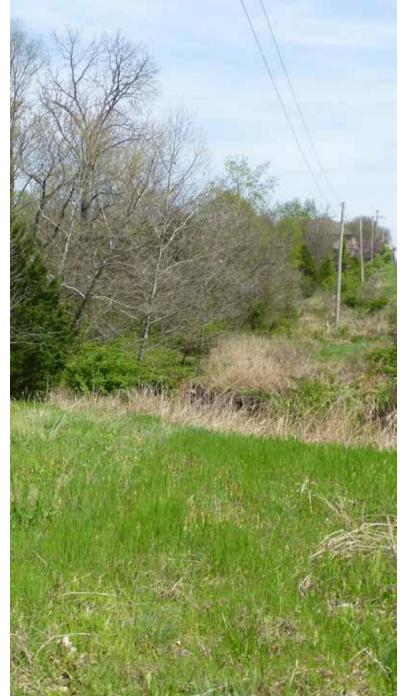




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Ozarks Transportation Organization Bicycle & Pedestrian Trail Investment Study



**Appendix D: Trail Types and Typical Sections** 





# APPENDIX D: TRAIL TYPES AND TYPICAL SECTIONS

## Introduction

Like most transportation facilities, one size does not fit all. Development of trails and greenways is no different. From single-track hiking and mountain biking trails to crushed limestone shared-use paths to paved urban greenways, trails are designed with specific users in mind and with great attention to the surrounding environment in which they are located. This study focuses specifically on linear shared-use paths. Unlike a trail located entirely within a park, a linear shared-use path serves as a link between destinations, not just a recreational amenity within a single site. As such, linear shared-use paths can serve both recreation and transportation purposes, and connectivity is critical to and from destinations.

The section of the appendix describes and illustrates the five trail types that were used as part of the public engagement efforts to learn more about local preferences and desires for future trail development. Each of the five trail types represents a distinct context for trail development: urban, suburban, rural, rail-with-trail or rail-to-trail, and riparian. The section includes cross sections that serve as trail design references for local agencies as they pursue individual trail projects. The section concludes with general trail design practice and design guidance for various trail contexts.

# **Trail Types**

The existing and planned shared-use trails in the Springfield region can be divided into five general trail types. These types reflect the character of the trail facility itself, as well as the context and surrounding environment. These trail types are not meant to be mutually exclusive. Some trails may exhibit charcateristics from more than one of these trail types. For example, a suburban trail may also travel along a stream or extend into a more rural setting.

Examples of trail projects from communities across the country, including Indianapolis, Indiana, Chesterfield, Missouri, and San Francisco, California.







### **Urban Trails**

Urban trails are located within the urban core and are often integrated into the roadway infrastructure. These trails are often placed within constricted rights-of-way, and their design may change from one segment to the next to address varying right-of-way widths or other conflicts with existing infrastructure or land uses.

An urban trail can take the shape of a shared-use path that accommodates all trail users, or a combination of a sidewalk and a separate bike facility like bicyle lanes on the roadway or a two-way cycle track. The latter design, as shown in the middle image to the right, is not programmed as the preferred design option for any of the planned priority trails considered for this study, but may be considered for other trail projects.

While their proximity to motor vehicle traffic may discourage some people from using the facility, these urban greenways include ample connections to nearby destinations and serve a valuable function in the walking and bicycling networks.



These examples of urban greenways show how creative re-use of valuable urban spaces can increase walking and bicyling opportunities. Urban trails like the Cultural Trail in Indianapolis, Indiana (shown in the bottom right) have functioned as economic development catalysts, leading to redevelopment of adjacent properties, increased spending and tourism activities, and increased tax revenue.







### Trail Investment Study (







### **Suburban Trails**

Suburban trails are located in less dense areas of the region and are characterized by less right-of-way constraints and fewer interactions with motor vehicles than urban trails. Suburban trails can be located alongside major roadways, through subdivision common ground, and through public properties like schools, parks, and utility corridors. Suburban trails also provide connectivity to local destinations like schools, parks, or local commercial destinations.

Like urban trails, surburban trails use a concrete or asphalt surface to support a diversity of trail users, from people bicycling and walking, to people using mobility assistance devices like wheelchairs or walkers.



Surburban trails adapt to and blend in with their surroundings, taking advantage of roadways, subdivision common grounds, utility corridors, and other opportunities to create valuable corridors for active transportation and recreation.

### **Rural Trails**

Rural trails provide a unique user experience within the regional trail sytsem by offering a more remote and pastoral setting than most other trail types. These trails are often surrounded by agricultural lands and offer very few connections to surrounding land uses.

Rural trail surfaces can be asphalt or crushed limestone, depending on intended user composition and projected volumes. In some cases, trails may be first developed with a crushed limestone or aggregate surface, and later paved as additional funding becomes available or as the surrounding land uses transition to more dense use types.



While rural trails may lack a variety of destinations, they often serve as valuable links between communities. In addition, their pastoral character can offer visitors a different trail experience from those found in urban and suburban settings.

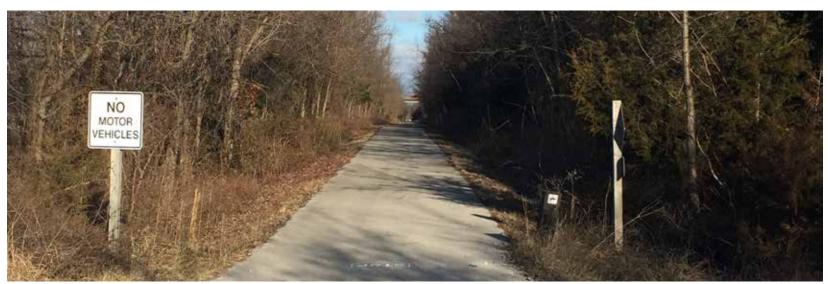






### Trail Investment Study (





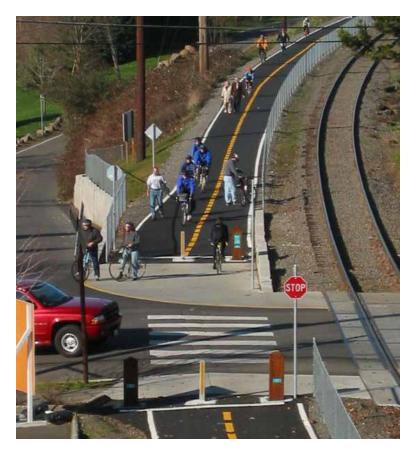


### **Rail Trails**

Rail trails are located within existing or abandoned railroad rights-of-way and can be found in urban, suburban, or rural environments. While rail trails generally provide long, uninterrupted corridors for bicycling and walking, they can experience greater conflicts within urban and industrial areas.

There are two types of rail trail projects. Rail-to-Trail projects convert abandoned railroads into exclusive trail corridors. Rail-with-Trail projects provide a shared-use path adjacent to an active railroad.

Trail surface may vary for rail trail projects depending on intended use types and volumes, as well as the surrounding context. Rail trails in more rural contexts, like the Frisco Highline Trail, may have a crushed limestone surface, while rail trails in more populated areas may have a concrete or asphalt surface.



These examples of rail trail projects, including the Frisco Highline Trail (right middle), show how both active and abandoned rail corridors can be transformed into valuable recreation and transportation corridors for walking and bicyling

### **Riparian Trails**

Most often located in urban or suburban settings, riparian trails parallel creeks, rivers, and other waterways to provide a unique, natural environment for bicycling and walking. Many trails in the Springfield region can be classified as riparian trails, including the Fassnight Creek Greenway, the Galloway Creek Greenway, the South Creek Greenway, and the Wilson's Creek Greenway.

These desirable riparian trails often face the most significant development and permitting constraints given their proximity to waterways, floodplains, and other environmentally sensitive areas. However, the benefits they provide in terms of recreation, transportation, and connections to the natural environment outweigh these challenges.



Riparian trails are a significant part of the regional trail network. Above: Fassnight Creek Greenway. Top right: Galloway Creek Greenway (photo courtesy of Ozark Greenways). Middle right: Wilson's Creek Greenway. Bottom right: James River Greenway Trail of Honor (photo courtesy of Ozark Greenways)





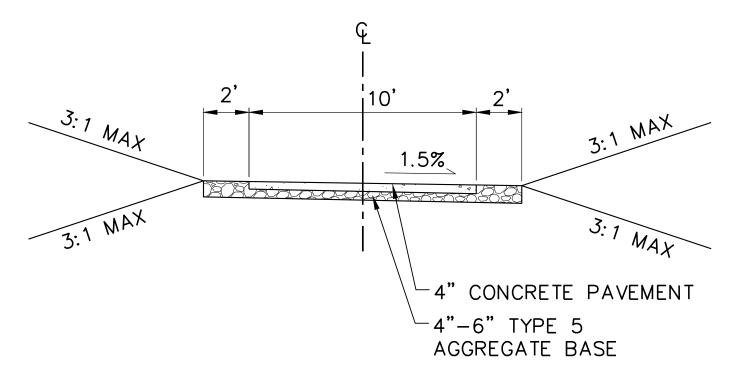


### **Typical Trail Sections**

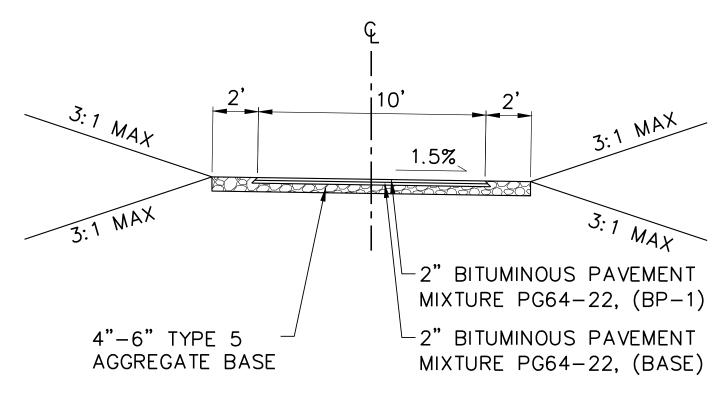
Typical trail cross sections have been developed as part of this trail study to offer local agencies additional guidance for subsequent project development and trail design. These cross sections can serve as the basis for discussions with property owners, project engineers and landscape architects, and other project stakeholders to develop a shared understanding of typical trail design elements. Additional trail design resources should be referenced in preliminary and final design phases.

The following typical sections are provided:

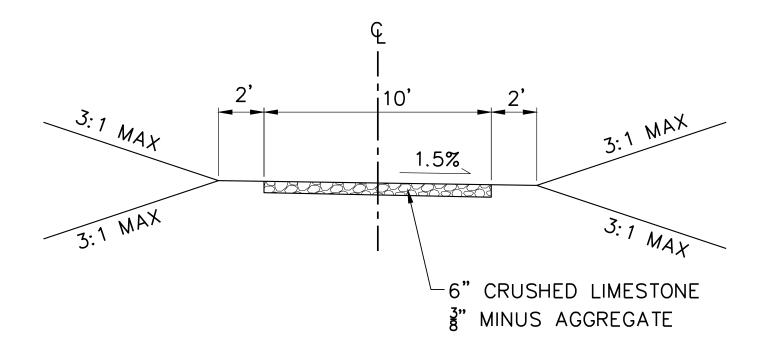
- Concrete Shared-Use Path
- Asphalt Shared-Use Path
- Gravel Shared-Use Path
- Porous Asphalt Shared-Use Path
- Asphalt Two-Way Cycle Track
- Cycle Track Buffer Options



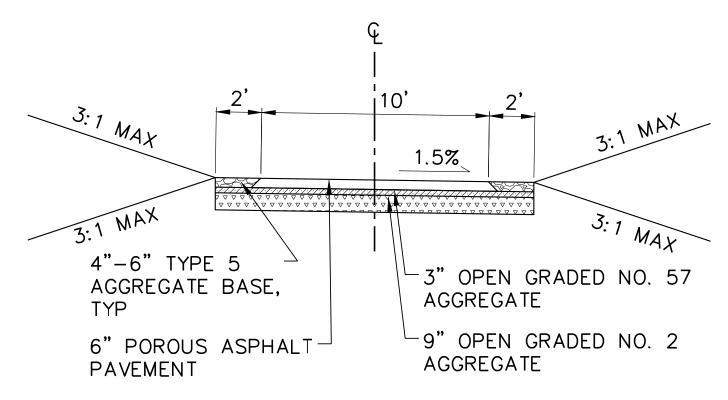
### TYPICAL SECTION - CONCRETE SHARED USE PATH



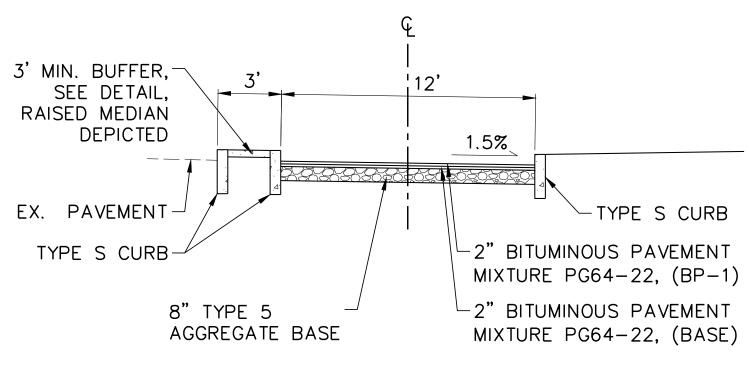
TYPICAL SECTION - ASPHALT SHARED USE PATH



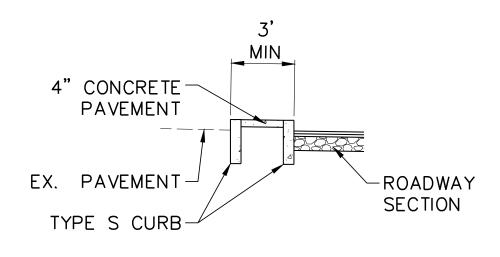
### TYPICAL SECTION - GRAVEL SHARED USE PATH

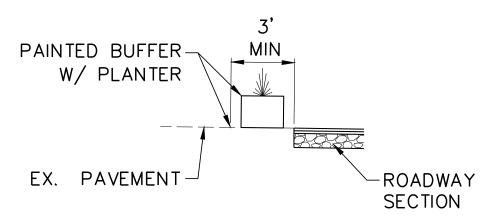


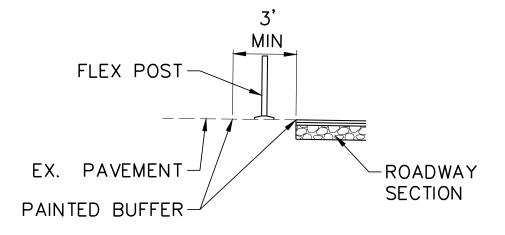
TYPICAL SECTION - POROUS ASPHALT SHARED USE PATH



TYPICAL SECTION - ASPHALT TWO-WAY CYCLE TRACK







TYPICAL SECTION - CYCLE TRACK BUFFER OPTIONS

### **Shared Use Paths and Off-Street Facilities**

A shared use path allows for two-way, off-street bicycle use and also may be used by pedestrians, skaters, wheelchair users, joggers and other non-motorized users. These facilities are frequently found in parks, along rivers, beaches, and in greenbelts or utility corridors where there are few conflicts with motorized vehicles. Path facilities can also include amenities such as lighting, signage, and fencing (where appropriate).

Key features of shared use paths include:

- Frequent access points from the local road network.
- Directional signs to direct users to and from the path.
- A limited number of at-grade crossings with streets or driveways.
- Terminating the path where it is easily accessible to and from the street system.
- Separate treads for pedestrians and bicyclists when heavy use is expected.

### **General Design Practices**

### Description

Shared use paths can provide a desirable facility, particularly for recreation, and users of all skill levels preferring separation from traffic. Bicycle paths should generally provide directional travel opportunities not provided by existing roadways.

### Guidance

### Width

- 8 feet is the minimum allowed for a two-way bicycle path and is only recommended for low traffic situations
- 10 feet is recommended in most situations and will be adequate for moderate to heavy use.
- 12 feet is recommended for heavy use situations with high concentrations of multiple users. A separate track (5' minimum) can be provided for pedestrian use.

### **Lateral Clearance**

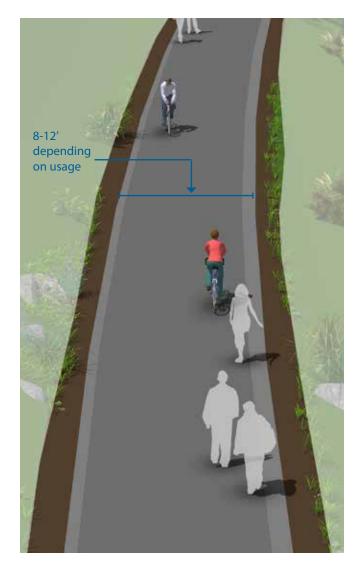
- A 2 foot or greater shoulder on both sides of the path should be provided. An additional foot of lateral clearance (total of 3') is required by the MUTCD for the installation of signage or other furnishings.
- If bollards are used at intersections and access points, they should be colored brightly and/or supplemented with reflective materials to be visible at night.

### **Overhead Clearance**

 Clearance to overhead obstructions should be 8 feet minimum, with 10 feet recommended.

### Striping

- When striping is required, use a 4 inch dashed yellow centerline stripe with 4 inch solid white edge lines.
- Solid centerlines can be provided on tight or blind corners, and on the approaches to roadway crossings.



### **Discussion**

Terminate the path where it is easily accessible to and from the street system, preferably at a controlled intersection or at the beginning of a dead-end street.

### **Additional References and Guidelines**

AASHTO. Guide for the Development of Bicycle Facilities. 2012. FHWA. Manual on Uniform Traffic Control Devices. 2009. Flink, C. Greenways: A Guide To Planning Design And Development. 1993.

### **Materials and Maintenance**

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

### Description

Commonly referred to as Rails-to-Trails or Rail-Trails, these projects convert vacated rail corridors into off-street paths. Rail corridors offer several advantages, including relatively direct routes between major destinations and generally flat terrain.

In some cases, rail owners may rail-bank their corridors as an alternative to a complete abandonment of the line, thus preserving the rail corridor for possible future use.

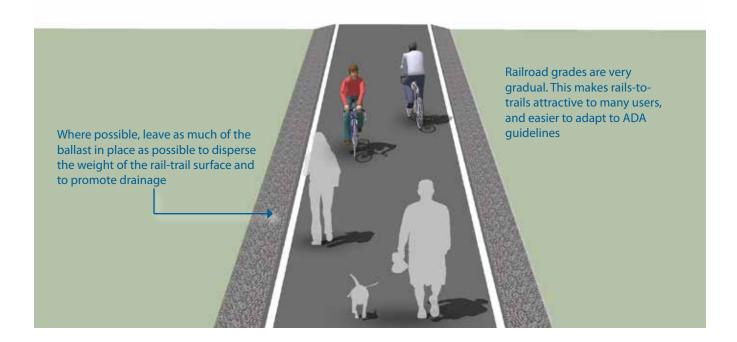
The railroad may form an agreement with any person, public or private, who would like to use the banked rail line as a trail or linear park until it is again needed for rail use. Municipalities should acquire abandoned rail rights-of-way whenever possible to preserve the opportunity for trail development.

### Guidance

Shared use paths in abandoned rail corridors should meet or exceed general design practices. If additional width allows, wider paths, and landscaping are desirable.

In full conversions of abandoned rail corridors, the subbase, superstructure, drainage, bridges, and crossings are already established. Design becomes a matter of working with the existing infrastructure to meet the needs of a rail-trail

If converting a rail bed adjacent to an active rail line, see Shared Use Paths in Active Rail Corridors.



### **Discussion**

It is often impractical and costly to add material to existing railroad bed fill slopes. This results in trails that meet minimum path widths, but often lack preferred shoulder and lateral clearance widths.

Rail-to-trails can involve many challenges including the acquisition of the right of way, cleanup and removal of toxic substances, and rehabilitation of tunnels, trestles and culverts. A structural engineer should evaluate existing railroad bridges for structural integrity to ensure they are capable of carrying the appropriate design loads.

### **Additional References and Guidelines**

AASHTO. Guide for the Development of Bicycle Facilities. 2012. FHWA. Manual on Uniform Traffic Control Devices. 2009. Flink, C. Greenways: A Guide To Planning Design And Development. 1993.

### **Materials and Maintenance**

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

### **Shared Use Paths in Active Rail Corridors**

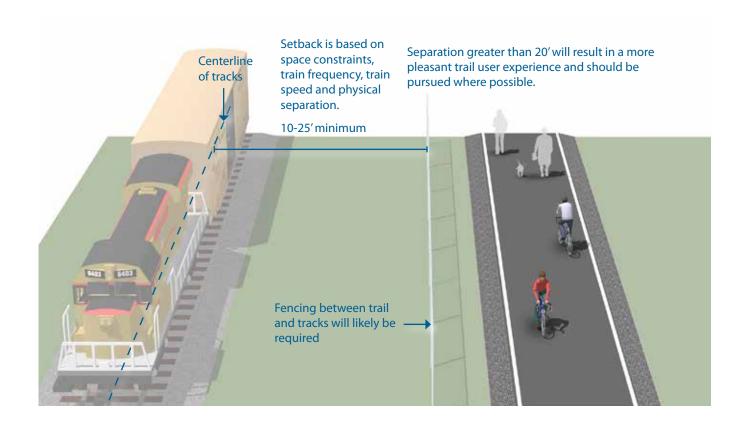
### Description

Rails-with-Trails projects typically consist of paths adjacent to active railroads. It should be noted that some constraints could impact the feasibility of rail-with-trail projects. In some cases, space needs to be preserved for future planned freight, transit or commuter rail service. In other cases, limited right-of-way width, inadequate setbacks, concerns about safety/trespassing, and numerous crossings may affect a project's feasibility.

### Guidance

Shared use paths in utility corridors should meet or exceed general design standards. If additional width allows, wider paths, and landscaping are desirable.

If required, fencing should be a minimum of 5 feet in height with higher fencing than usual next to sensitive areas such as switching yards. Setbacks from the active rail line will vary depending on the speed and frequency of trains, and available right-of-way.



### Discussion

Railroads may require fencing with rail-with-trail projects. Concerns with trespassing and security can vary with the volume and speed of train traffic on the adjacent rail line and the setting of the shared use path, i.e. whether the section of track is in an urban or rural setting.

### **Additional References and Guidelines**

AASHTO. Guide for the Development of Bicycle Facilities. 2012. FHWA. Manual on Uniform Traffic Control Devices. 2009. FHWA. Rails-with-Trails: Lessons Learned. 2002.

### **Materials and Maintenance**

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

### **Shared Use Paths in River and Utility Corridors**

### Description

Utility and waterway corridors often offer excellent shared use path development and bikeway gap closure opportunities. Utility corridors typically include powerline and sewer corridors, while waterway corridors include canals, drainage ditches, rivers, and beaches. These corridors offer excellent transportation and recreation opportunities for bicyclists of all ages and skills.

### Guidance

Shared use paths in utility corridors should meet or exceed general design practices. If additional width allows, wider paths, and landscaping are desirable.

### **Access Points**

Any access point to the path should be well-defined with appropriate signage designating the pathway as a bicycle facility and prohibiting motor vehicles.

### **Path Closure**

Public access to the shared use path may be prohibited during the following events:

Canal/flood control channel or other utility maintenance activities



### **Discussion**

Similar to railroads, public access to flood control channels or canals may be undesirable. Hazardous materials, deep water or swift current, steep, slippery slopes, and debris all may constitute risks for public access. Appropriate fencing may be desired to keep path users within the designated travel way. Creative design of fencing is encouraged to make the path facility feel welcoming to the user.

### **Additional References and Guidelines**

AASHTO. Guide for the Development of Bicycle Facilities. 2012. FHWA. Manual on Uniform Traffic Control Devices. 2009. Flink, C. Greenways: A Guide To Planning Design And Development. 1993.

### **Materials and Maintenance**

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

### **Shared-Use Paths Along Roadways**

### **Description**

Shared Use Paths along roadways, also called Sidepaths, are a type of path that run adjacent to a street.

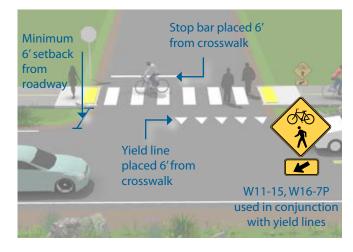
Because of operational concerns it is generally preferable to place paths within independent rights-of-way away from roadways. However, there are situations where existing roads provide the only corridors available.

Along roadways, these facilities create a situation where a portion of the bicycle traffic rides against the normal flow of motor vehicle traffic and can result in wrong-way riding where bicyclists enter or leave the path.

The AASHTO Guide for the Development of Bicycle Facilities cautions practitioners of the use of two-way sidepaths on urban or suburban streets with many driveways and street crossings.

In general, there are two approaches to crossings: adjacent crossings and setback crossings, illustrated below.

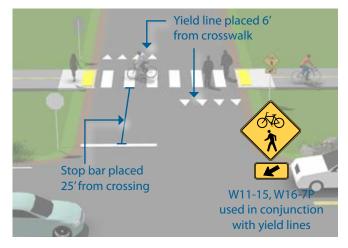
**Adjacent Crossing** - A separation of 6 feet emphasizes the conspicuity of riders at the approach to the crossing.



### Guidance

- Guidance for sidepaths should follow that for general design practises of shared use paths.
- A high number of driveway crossings and intersections create potential conflicts with turning traffic. Consider alternatives to sidepaths on streets with a high frequency of intersections or heavily used driveways.
- Where a sidepath terminates special consideration should be given to transitions so as not to encourage unsafe wrong-way riding by bicyclists.
- Crossing design should emphasize visibility of users and clarity of expected yielding behavior. Crossings may be STOP or YIELD controlled depending on sight lines and bicycle motor vehicle volumes and speeds.

**Setback Crossing** - A set back of 25 feet separates the path crossing from merging/turning movements that may be competing for a driver's attention.



### **Discussion**

The provision of a shared use path adjacent to a road is not a substitute for the provision of on-road accommodation such as paved shoulders or bike lanes, but may be considered in some locations in addition to on-road bicycle facilities.

To reduce potential conflicts in some situations, it may be better to place one-way sidepaths on both sides of the street.

### **Additional References and Guidelines**

AASHTO. *Guide for the Development of Bicycle Facilities*. 2012. NACTO. *Urban Bikeway Design Guide*. See entry on Raised Cycle Tracks. 2012.

### **Materials and Maintenance**

Asphalt is the most common surface for bicycle paths.
The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

### **Local Neighborhood Accessways**

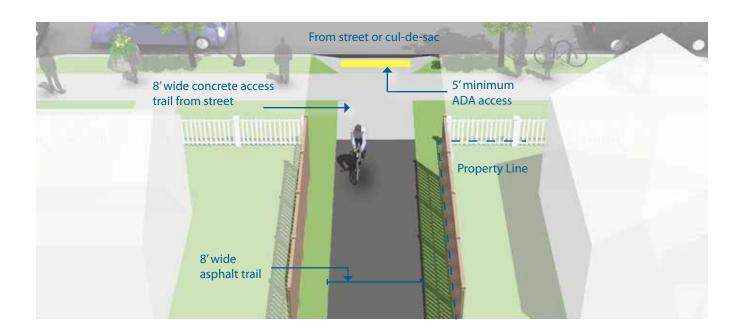
### Description

Neighborhood accessways provide residential areas with direct bicycle and pedestrian access to parks, trails, greenspaces, and other recreational areas. They most often serve as small trail connections to and from the larger trail network, typically having their own rights-of-way and easements.

Additionally, these smaller trails can be used to provide bicycle and pedestrian connections between dead-end streets, cul-de-sacs, and access to nearby destinations not provided by the street network.

### Guidance

- Neighborhood accessways should remain open to the public.
- Trail pavement shall be at least 8' wide to accommodate emergency and maintenance vehicles, meet ADA requirements and be considered suitable for multi-use.
- Trail widths should be designed to be less than 8' wide only when necessary to protect large mature native trees over 18" in caliper, wetlands or other ecologically sensitive areas.
- Access trails should slightly meander whenever possible.



### **Discussion**

Neighborhood accessways should be designed into new subdivisions at every opportunity and should be required by City/County subdivision regulations.

For existing subdivisions, Neighborhood and homeowner association groups are encouraged to identify locations where such connects would be desirable. Nearby residents and adjacent property owners should be invited to provide landscape design input.

### **Additional References and Guidelines**

AASHTO. Guide for the Development of Bicycle Facilities. 2012. FHWA. Manual on Uniform Traffic Control Devices. 2009. FHWA. Federal Highway Administration University Course on Bicycle and Pedestrian Transportation. Lesson 19: Greenways and Shared Use Paths.

NACTO. Urban Street Design Guide. 2013.

### **Materials and Maintenance**

Asphalt is the most common surface for bicycle paths. The use of concrete for paths has proven to be more durable over the long term. Saw cut concrete joints rather than troweled improve the experience of path users.

### **Natural Surface Trails**

### Description

Sometimes referred to as footpaths or hiking trails, the natural surface trail is used along corridors that are environmentally-sensitive but can support bare earth, wood chip, or boardwalk trails. Natural surface trails are a low-impact solution and found in areas with limited development or where a more primitive experience is

Guidance presented in this section does not include considerations for bicycles. Natural surface trails designed for bicycles are typically known as single track trails.

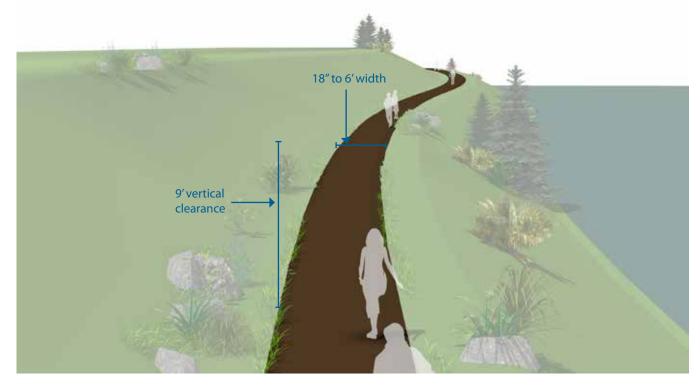
### Guidance

Trails can vary in width from 18 inches to 6 feet or greater; vertical clearance should be maintained at nine-feet above

Base preparation varies from machine-worked surfaces to those worn only by usage.

Trail surface can be made of dirt, rock, soil, forest litter, or other native materials. Some trails use crushed stone (a.k.a. "crush and run") that contains about 4% fines by weight, and compacts with use.

Provide positive drainage for trail tread without extensive removal of existing vegetation; maximum slope is five percent (typical).



### Discussion

Trail erosion control measures include edging along the low side of the trail, steps and terraces to contain surface material, and water bars to direct surface water off the trail; use bedrock surface where possible to reduce erosion.

### **Additional References and Guidelines**

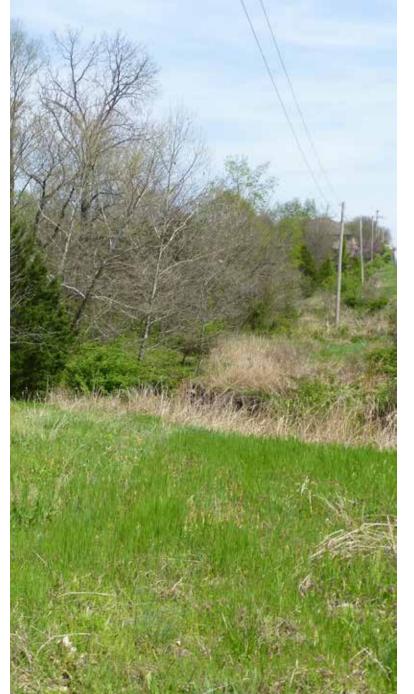
Flink, C. Greenways: A Guide To Planning Design And Development. 1993

### **Materials and Maintenance**

Consider implications for accessibility when weighing options for surface treatments.

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Ozarks Transportation Organization Bicycle & Pedestrian Trail Investment Study



**Appendix E: Locations for Future Trailheads** 



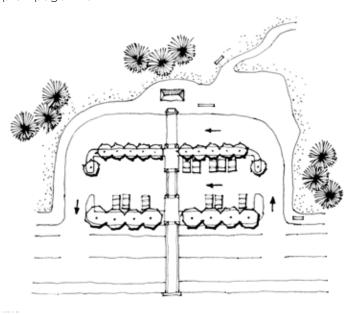


### APPENDIX E: LOCATIONS FOR FUTURE TRAILHEADS

### Introduction

Good access to the regional trail system is a key element for its success. Trailheads serve the local and regional population arriving to the path system by car, transit, bicycle or other modes. Trailheads provide essential access to the shared use path system and include information and amenities for trail user comfort. Trailheads and trail access points can be located at the beginning or end of a trail, periodically along the length of a trail, or at the intersection of two or more trails.

As part of the Trail Investment Study, potential trailhead locations have been identified to highlight opportunities to increase access to the regional trail system. For the purposes of this study, trailheads and trail access points are divided into three categories that correspond to the level of amenities provided and their context within both the trail corridor they serve and the larger trail network. Each of these categories is described in this section, and existing and future trailhead and trail access points for the network of existing and planned priority trails are shown on in the Final Planned Priority Trail Alignments and Proposed Trailhead Locations Map on page D-3.



This sample layout of a major trailhead site, complete with parking, shelter, information kiosk, and site access.

### **Major Trailheads**

Major Trailheads are highly visible, easily accessible, and amenity-rich destinations along the trail system. While their primary purpose is to serve as a beginning, ending, or access point for trail users, they contribute to the character and sense of place of the trail itself by providing trail users with a variety of amenities, from vehicle parking, bicycle parking, wayfinding maps, and information kiosks to restrooms, shelters, drinking fountains, and picnic tables. The recently constructed Tal's Trailhead on the Wilson's Creek Greenway is an example of local Major Trailhead.

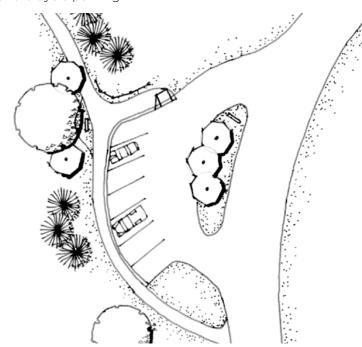
Major Trailheads can be co-located in parks or next to commercial developments, transit centers, or other popular destinations to increase their visibility and take advantage of high volumes of traffic generated by adjacent sites. Major Trailheads should also be designed to provide emergency and maintenance vehicle access and turnaround. Accessible parking spaces should be provided at a rate of one accessible space per 25 standard spaces.



Constructed in 2016, Tal's Trailhead is the newest major trailhead addition to the regional trail network. The trailhead directly serves Wilson's Creek Greenway and offers an on-street connection to South Creek Greenway.

### **Minor Trailheads**

Similar to Major Trailheads, Minor Trailheads serve a vital function of providing access to and information about the trail or trail system they serve, while also enhancing the trail's character and identity. Minor Trailheads are smaller in scale and often less visible than Major Trailheads. They are often located at locally known spots, such as parks and residential developments. Typical design features at a Minor Trailhead include a small parking lot for up to ten passenger vehicles, an information and map kiosk, benches, trash receptacles, and bicycle parking.



This sample layout of a minor trailhead site showing vehicle access, parking, and information kiosk.

### **Trail Access Points**

Trail access points provide residents and visitors entry to the trail from public rights-of-way or even private developments. Typical locations include roadway crossings, residential neighborhood access points, and access points from adjacent commercial developments. Unlike trailheads, trail access points usually provide little to no amenities except for trail identification signage and possibly wayfinding signage to destinations along the trail. In some cases, trail access points can be complemented with additional gateway features or branding to highlight the trail it serves, particularly at major road crossings and other high-visibility areas.





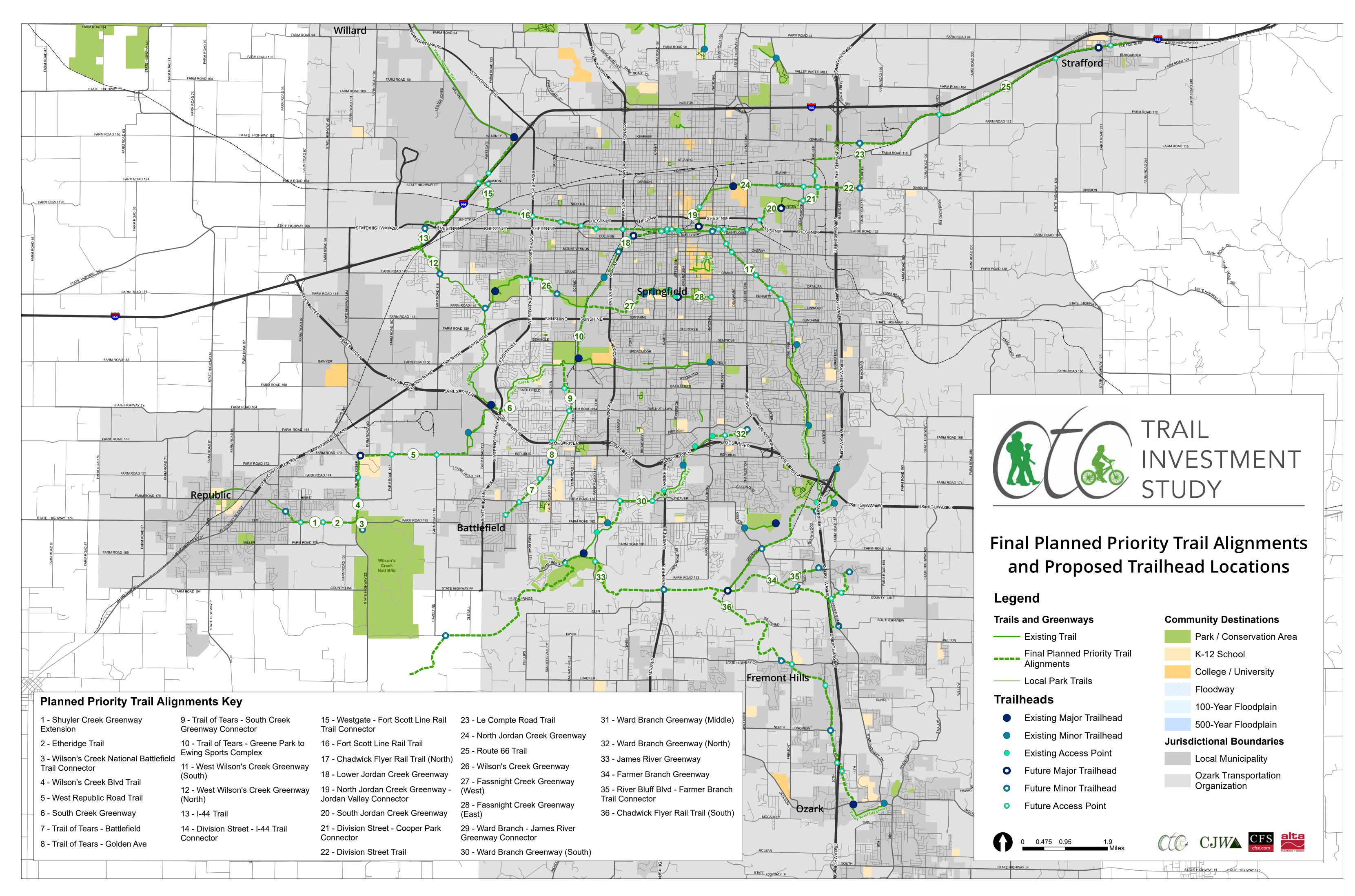


Trailheads vary in terms of size, amenities and character depending on site conditions and their context within the regional trail network.









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Ozarks Transportation Organization Bicycle & Pedestrian Trail Investment Study







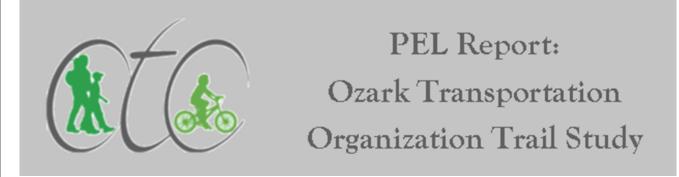


### **APPENDIX F: PEL REPORT EXHIBITS**

### **Appendix F Contents**

Exhibit 1: Threatened and Endangered Species and Critical Habitats	. F-3
Exhibit 2: Proximity to Parks, Recreational Facilities and Historic Properties	.F-5
Exhibit 3: Proximity to Brownfields, Hazardous Waste and Storage Tanks	. F-7
Exhibit 4: Proximity to Schools, Churches and Cemeteries	.F-11
Exhibit 5: Cultural Resources Review	F-14
Exhibit 6: Potential Archaeological Sites to Avoid	F-25
Exhibit 7: Floodplain, Floodway and Wetland Impacts	F-27

### Planning & Environmental Linkages Report Appendices & Exhibits



### **APPENDICES EXHIBITS**





### PEL Report:

Ozark Transportation

Organization Trail Study

# EXHIBIT 1 THREATENED AND ENDANGERED SPECIES AND CRITICAL HABITAT

### **Ozark Cavefish**

Amblyopsis rosae



STATUS

Threatened; A species likely to become endangered within the foreseeable future

throughout all or a significant portion of its range.

DESCRIPTION

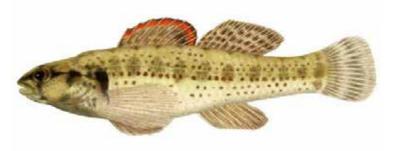
The Ozark Cavefish is a small 2-1/4 inch long, blind, pinkish-white fish. Due to the dark environments in which it resides, sight is unnecessary and the cavefish has no eyes.

CRITICAL

No critical habitat has been designated for this species.

HABITAT

### Niangua Darter Etheostoma nianguae



STATUS

Threatened; A species likely to become endangered within the foreseeable future

throughout all or a significant portion of its range.

CRITICAL HABITAT There is a **final** <u>critical habitat</u> designated for this species. Your location is outside the

designated critical habitat.

### **Gray Bat**

Myotis grisescens



STATUS

Endangered; A species in danger of extinction throughout all or a significant portion of its

DESCRIPTION

Long, glossy fur, light brown to brown. Ears dark, usually black; longer than in any other myotis; when laid forward extend 1/4 cm (7 mm) beyond nose. Tragus long and thin.

Calcar keeled.

CRITICAL HABITAT

No critical habitat has been designated for this species.

### **Indiana Bat**

Myotis sodalis



STATUS

Endangered; A species in danger of extinction throughout all or a significant portion of its

range.

The Indiana bat is a medium-sized Myotis, closely resembling the little brown bat (Myotis lucifugus) but differing in coloration. Its fur is a dull grayish chestnut rather than bronze, with the basal portion of the hairs on the back a dull-lead color. This bat's underparts are pinkish to cinnamon, and its hind feet are smaller and more delicate than in M. lucifugus.

DESCRIPTION

There is a **final** <u>critical habitat</u> designated for this species. Your location is outside the

The calcar (heel of the foot) is strongly keeled.

HABITAT

designated critical habitat

### **Northern Long-eared Bat**

Myotis septentrionalis



STATUS

Threatened; A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

The northern long-eared bat is a medium-sized bat about 3 to 3.7 inches in length but with a wingspan of 9 to 10 inches. As its name suggests, this bat is distinguished by its long ears, particularly as compared to other bats in its genus, Myotis, which are actually bats noted for their small ears (Myotis means mouse-eared). The northern long-eared bat is found across much of the eastern and north central United States and all Canadian provinces from the Atlantic coast west to the southern Northwest Territories and eastern British Columbia. The species range includes 37 states. White-nose syndrome, a fungal disease known to affect bats, is currently the predominant threat to this bat, especially throughout the Northeast where the species has declined by up to 99 percent from pre-white-nose syndrome levels at many hibernation sites. Although the disease has not yet spread throughout the northern

long-eared bat 2 entire range (white-nose syndrome is currently found in at least 25 of 37 states where the northern long-eared bat occurs), it continues to spread. Experts expect that

ESCRIPTION

CRITICAL HABITAT

No critical habitat has been designated for this species

where it spreads, it will have the same impact as seen in the Northeast.

F-4

### Missouri Bladderpod Physaria filiformis

STATUS

Threatened; A species likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

CRITICAL

No critical habitat has been designated for this species

HABITAT

### Virginia Sneezeweed Helenium virginicum

STATUS

Threatened; A species likely to become endangered within the foreseeable future

throughout all or a significant portion of its range.

The Virginia sneezeweed was first discovered in 1936. It is a rare perennial wildflower

found only in Virginia. This herbaceous plant has yellow flowers and can reach a height of

3.5 feet.

CRITICAL HABITAT

No critical habitat has been designated for this species.



PEL Report:
Ozark Transportation
Organization Trail Study

# PROXIMITY TO PARKS, RECREATIONAL FACILITIES AND HISTORIC PROPERTY

F-6

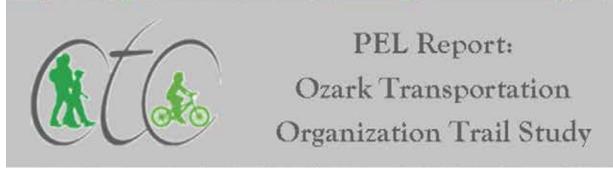
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ower Jordan Creek Greenway	Section 4(1) Property	Section 6(1) Property	Within 500 Buller?
tower Jordan Greek Greenway	Founders Park		
	Zagonyi Park (1800ft W.)		
North Jordan Creek Greenway - Jordan Valley Connector			
connector	Silver Springs Park		Y
	Jordan Valley Park (to the South, connection		· ·
	with trail)		Υ
South Jordan Creek Greenway			
	Killian Softball (Connection via 'Division - Cooper Park Connector')		Y
	Cooper Park (Connection via 'Division - Cooper		
	Park Connector')	Cooper Park	Y
	GLENWOOD PARK		
	Lake Country Soccer East  Lake Country Soccer		Y
Fassnight Creek Greenway (West)	Lake Country Soccer		,
assingit creek dieenway (west)	James Ewing Sports Complex	James Ewing Sports Complex	
	Springfield Skate Park (Trail passes near Skate	Junes Lwing Sports complex	
	Park)	Secretary Book	Y
	Fassnight Park (Connecting Trail)	Fassnight Park	Y
Fassnight Creek Greenway (East)	Fassnight Park (Connecting Trail)	Fassnight Park	
	Phelps Grove Park	i daariigiit Fdi N	Y
Ethridge Trail	i neipa drove raik		1
Shuyler Creek Greenway Extension			
	Miller Park (6300ft SW)		
Chadwick Flyer Rail Trail (South)			
	Ozark Heights Homeowners Assoc. Park - Ozark		
	(3200ft W.)		
Route 66 / Strafford Trail			
	Howard Smith Community Park - Strafford		
	(3500ft S.)		
Farmer Branch Greenway			
	Millwood Golf Club (NOT A PARK)		Y
Wilson's Creek National Battlefield Trail Connector			
	Wilson's Creek National Battlefield		Y
e Compte Road Trail			
North Jordan Creek Greenway			
	Smith Park		Y
ames River Greenway			
	Rivercut Golf Course		Y
	Lake Springfield Park (On the north side of Lake		
Wall Miles II Could Council (Co. 11)	Springfield)		
West Wilson's Creek Greenway (South)			
	Rutledge-Wilson Farm Park (Connection to Trail		Υ
West Wilson's Creek Greenway (North)	that goes to park)		1
	Deer Lake Golf Course (PRIVATE FACILITY)		Y
-44 Trail	- 11. Zane con course (Fritanti Friedrit)		
	Deer Lake Golf Course (PRIVATE FACILITY)		Y
Wilson's Creek Greenway			
,	Rutledge-Wilson Rarm Park (Connection to Trail		
	that goes to park)		Y
	Overhilll Park		Y
	Roundtree Park		Y
	James Ewing West Park		Υ
Fort Scott Line Rail Trail			
	Zagonyi Park (2600ft S.)		+
Short State on Patrick (1997)			
Chadwick Flyer Rail Trail (North)	Jordan Valloy Park		V
	Jordan Valley Park Miles Park (2900ft NE)		Y
	Oak Grove Park (800ft E)		+
	Kirkwood Park (3000ft W)		1
West Republic Road			
Wilsons Creek Blvd			
	Wilson's Creek National Battlefield		Y

TRAIL MAME Section 4(f) Property Section 6(f) Property Within 500' Buffer?  Rivercut Park Y Ward Branch Greenway (North)  Ward Branch Greenway (Middle)  Cherokee School Park (4000ft SE) Wanda Gray Park (600ft W)  Riverbluff Blvd - Farmer Branch Trail Connector  Millwood Golf Club (PRIVATE FACILITY) South Creek Greenway (Wilson's Creek Greenway (Wilson's Creek School-Park (1800ft SE) Wilson's Creek School-Park (1800ft SE) Wilson's Creek School-Park (1200ft SE) Trail of Tears - Battlefield  McBride School-Park (1200ft SE) Wilson's Creek School-Park (2700ft W) Trail of Tears - South Creek Greenway Connector  Nathanael Greene Park Horton Smith Golf Course Trail of Tears - Greene Park to Ewing Sports Complex  Nathanael Greene Park Horton Smith Golf Course James Ewing Sports Complex  Westgate - Fort Scott Line Rail Trail Connector  Division Street - 1-44 Connector  Division Street - 1-44 Connector	OTO TRAILS - PEL STUDY - PARK IMPACTS				
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Trail of Tears - South Creek Greenway Connector  Nathanael Greene Park Horton Smith Golf Course Y  Trail of Tears - Greene Park to Ewing Sports Complex  Nathanael Greene Park Horton Smith Golf Course James Ewing Sports Complex  Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector  Division Street	Trail of Tears - Golden				
Connector  Nathanael Greene Park Horton Smith Golf Course Y  Trail of Tears - Greene Park to Ewing Sports Complex  Nathanael Greene Park Nathanael Greene Park Horton Smith Golf Course James Ewing Sports Complex  Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector		Chesterfield Park (2700ft E)			
Horton Smith Golf Course  Trail of Tears - Greene Park to Ewing Sports Complex  Nathanael Greene Park Nathanael Greene Park Nathanael Greene Park Nathanael Greene Park Y Horton Smith Golf Course James Ewing Sports Complex Y  Westgate - Fort Scott Line Rail Trail Connector Division Street - I-44 Connector Division Street					
Trail of Tears - Greene Park to Ewing Sports Complex  Nathanael Greene Park Nathanael Greene Park Nathanael Greene Park Y Horton Smith Golf Course James Ewing Sports Complex  Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector  Division Street		Nathanael Greene Park			
Complex  Nathanael Greene Park Nathanael Greene Park V Horton Smith Golf Course James Ewing Sports Complex V Westgate - Fort Scott Line Rail Trail Connector Division Street - I-44 Connector Division Street		Horton Smith Golf Course		Υ	
Complex  Nathanael Greene Park Nathanael Greene Park Porton Smith Golf Course James Ewing Sports Complex  Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector  Division Street	Trail of Tears - Greene Park to Ewing Sports				
Horton Smith Golf Course  James Ewing Sports Complex  Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector  Division Street					
James Ewing Sports Complex  Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector  Division Street		Nathanael Greene Park	Nathanael Greene Park	у	
Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector  Division Street		Horton Smith Golf Course		·	
Westgate - Fort Scott Line Rail Trail Connector  Division Street - I-44 Connector  Division Street		James Ewing Sports Complex		Υ	
Division Street - I-44 Connector  Division Street					
Division Street - I-44 Connector Division Street	Westgate - Fort Scott Line Rail Trail Connector				
Division Street					
	Division Street - I-44 Connector				
Division Street - Cooper Park Connector	Division Street				
Division Street - Cooper Park Connector					
	Division Street - Cooper Park Connector				
Killian Softball		Killian Softball			
Cooper Park Cooper Park Y		Cooper Park	Cooper Park	Y	
Lake Country Soccer East Y		Lake Country Soccer East		Υ	

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	OTO TRAILS - PEL STUDY - HISTORIO	C PROPERTY IN	1PACTS	
TRAIL	HISTORIC SITE	Within 500' Buffer?	HISTORIC DISTRICT	Within 500' Buffer?
Lower Jordan Creek Greenway	Frisco Passenger Depot (State)	Y	Springfield Warehouse & Industrial Historic District	Y
	Springfield Seed Co Building (National)		Finkbiner Building	Y
	Mulhollan Furniture Building (State)		Springfield Public Square Historic District	
North Jordan Creek Greenway - Jordan Valley Connector	Finkbinder Buildings	Υ		
	LINCOLN SCHOOL (National)	Υ	Mid-Town Historic District	Y
	Washington Ave Baptisit Church (State)  Gibson Chapel Presbyterian Church (State)			
South Jordan Creek Greenway	disson enaper ressysteman enarch (state)			
The stable Court Court of (Mars)				
Fassnight Creek Greenway (West)	Elfindale (State)	Y		
	, ,			
Fassnight Creek Greenway (East)				
Ethridge Trail				
Shuyler Creek Greenway Extension			Wilson's Creek Battlefield	Y
Situyier Greek Greenway Extension				
Chadwick Flyer Rail Trail (South)				
Route 66 / Strafford Trail				
Farmer Branch Greenway				
ranner Branch Greenway				
Wilson's Creek National Battlefield Trail Connector	Wilson's Creek National Pattlefield (Netional)	V	Wilson's Crook Battlefield	v
Le Compte Road Trail	Wilson's Creek National Battlefield (National)	Y	Wilson's Creek Battlefield	Y
North Jordan Creek Greenway				
James River Greenway				
West Wilson's Creek Greenway (South)				
West Wilson's Creek Greenway (North)				
I-44 Trail				
Wilson's Creek Greenway				
Wilson's Creek Greenway				
Fort Scott Line Rail Trail				
	Frisco Passenger Depot (State) Springfield Seed Co Building (National)	Y	Springfield Warehouse & Industrial Historic District Finkbiner Building	Y
Chadwick Flyer Rail Trail (North)				
	King Manufacturing Co Building (National) Sease House (State)	Y	Walnut Street Historic District	Y
	Dogwood Tree, Pink (State)	Y		
Wast Papublis Paad				
West Republic Road				
Wilsons Creek Blvd	Miles Is Const National Publication (N		Miles In Const Barrie Cald	
Ward Branch - James River Greenway Connector	Wilson's Creek National Battlefield (National)	Υ	Wilson's Creek Battlefield	Y
Ward Branch Greenway (North)				
Ward Branch Greenway (Middle)				
Ward Branch Greenway (South)				
Riverbluff Blvd - Farmer Branch Trail Connector				
South Creek Greenway (Wilson's Creek Greenway Connector)				
Trail of Tears - Batttlefield				
Trail of Tears - Golden				
Itali oi Teats - Goldell				
Trail of Tears - South Creek Greenway Connector				
Trail of Tears - Greene Park to Ewing Sports Complex				
Westgate - Fort Scott Line Rail Trail Connector				
Division Street - I-44 Connector				
Division Street				
Division Street - Cooper Park Connector				

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# PROXIMITY TO BROWNFIELDS, HAZARDOUS WASTE & STORAGE TANKS

		rownfields	140'11.
FRAIL	Description	Location	Within 500' Buffe
Lower Jordan Creek Greenway	NAREMCO, INC.	1724 WEST MOUNT VERNON STREET, Springfield	Y
	CONNELLY PLUMBING AND CONNELLY MECHANICAL	1719 WEST MOUNT VERNON STREET, Springfield	Y
	WILSON TIRE CO.	1610 WEST MOUNT VERNON STREET, Springfield	Y
	TRAILS END TRUST	555 SOUTH KANSAS EXPRESSWAY, Springfield	Y
	BADE PROPERTY	411 S. NETTETON AVENUE, Springfield	Y
	MR. WILBUR TEAL	221 NORTH FORT AVENUE, Springfield	Y
	JORDAN VALLEY WEST MEADOWS SITE 2	309 N. MAIN AVE, Springfield	Y
	JORDAN VALLEY WEST MEADOWS SITE 3	309 N. MAIN AVE, Springfield	Y
	JORDAN VALLEY WEST MEADOWS SITE #4	309 N. MAIN AVE, Springfield	Y
	A-JACK'S ROOFING	344 N. MAIN, Springfield	Y
	FENTON PROPERTY	328 N. MAIN, Springfield	Y
	FORMER MANUFACTURED GAS PLANT (MGP)	320 N. MAIN AVENUE, Springfield	Y
	MILL STREET LEASING	353 N. CAMPBELL, Springfield	
	Wommack Monument Co.	1524 WEST WALNUT STREET, Springfield	Y
	P G Walker/Air Products Chemicals Inc	1405 W WALNUT, Springfield	Y
	Betty F. Newman, Etal	1315 WEST COLLEGE STREET, Springfield	Y
	Former Springfield Brewery	1201 WEST COLLEGE, Springfield	Y
	Mccoy Metal Recycling	321 N. FORT AVENUE, Springfield	Y
	Melvin Painting	923 W. OLIVE STREET, Springfield	Y
	JORDAN VALLEY WEST MEADOWS SITE #1	309 N. MAIN ST, Springfield	Y
	JORDAN VALLEY WEST MEADOWS SITE 8	308 N. MAIN ST, Springfield	Y
	520 W Olive St	520 W Olive St, Springfield	Y
	Finkbiner Property (Former Owner)	509 W. OLIVE STREET, Springfield	Y
	West Meadows Of Jordan Valley Park	600 W. OLIVE STREET, Springfield	Y
	333 N. Campbell	333 N. Campbell, Springfield	Y
	Le Enterprises, Llc	1432 WEST COLLEGE STREET, Springfield	Y
	1432 WEST COLLEGE STREET	1432 WEST COLLEGE STREET, Springfield	Y
	Davis	1435 W. COLLEGE, Springfield	Y
	Stone Effects	1420 WEST COLLEGE STREET, Springfield	Y
	Roling Property	299 N. HAYDEN, Springfield	· ·
	South Rail Yard	300 BLOCK NORTH MAIN AVENUE, Springfield	
	College Station (Aka Market Avenue Redevelopment)	OLIVE, COLLEGE, MARKET, COLLEGE, STREETS, Springfield	Y
	Ice House (Brick City)	305 W. MILL STREET, Springfield	Y
North Jordan Creek Greenway - ordan Valley Connector			
	OZARKS TECHNICAL COMMUNITY COLLEGE	800 EAST CENTRAL STREET, Springfield	Y
	GRACE CABINETS	435 NORTH SHERMAN, Springfield	Y
	Buck Construction	819 E. PHELPS STREET, Springfield	Y
South Jordan Creek Greenway			
	FEDEROW PROPERTY-WEST PARCEL	1661 EAST TRAFFICWAY, Springfield	Y
	PINNACLE SIGN	505 N. GLENSTONE, Springfield	Y
	FEDEROW PROPERTY	1661 EAST TRAFFICWAY, Springfield	Y
	EARL SCHIEB	1940 EAST TRAFFICWAY, Springfield	Y
	TRIPP RENTALS LP	2040 EAST TRAFFICWAY , Springfield	Y
assnight Creek Greenway (West			
	EUTICALS INC.	2460 W BENNETT ST., SPRINGFIELD	
Fassnight Creek Greenway (East)			
Ethridge Trail			
Shuyler Creek Greenway			
Extension			
Chadwick Flyer Rail Trail (South)			
Sind Willer Hall Hall (South)	FASCO ABANDONED LAGOON	SE Corner of 1550 West Jackson St. Property, Ozark	Y
Route 66 / Strafford Trail	THE CONTRACTOR ENGINEER	Se come of 2000 Westsuckson out Hoperty, Clark	·
ioute oo', strumera man	Old Bumgarner Station	117 E OLD ROUTE 66, Strafford	Y
Farmer Branch Greenway			
· · · · · · · · · · · · · · · · · · ·			
Wilson's Creek National Battlefield Trail Connector			
e Compte Road Trail			
North Jordan Creek Greenway			
	James E. Smith Park	1536 E. Division St., Springfield	Y
ames River Greenway			
West Wilson's Creek Greenway			
South)			
			1
West Wilson's Creek Greenway			
West Wilson's Creek Greenway North)			
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OTO TRAILS - PEL SUDY - PROXIMITY TO BROWNFIELDS				
		Brownfields		
TRAIL	Description	Location	Within 500' Buffer?	
I-44 Trail				
Wilson's Creek Greenway				
Wilson's Creek Greenway				
Fort Scott Line Rail Trail				
TOTE SCOTE LINE Rail Trail	SAFETY-KLEEN SYSTEMS, INC.	734 N.W. BYPASS, Springfield	Y	
	3126 W. CHESTNUT ST	754 N.W. B117655, Springheid	+ .	
	Mccoy Metal Recycling	321 N. FORT AVENUE, Springfield	Υ	
	Mill Street Leasing	353 N. CAMPBELL, Springfield	Y	
	333 N. Campbell	333 N. Campbell, Springfield	Y	
	Ice House (Brick City)	305 W. MILL STREET, Springfield	Y	
	A-JACK'S ROOFING	344 N. MAIN, Springfield	Y	
	FORMER MANUFACTURED GAS PLANT (MGP)	320 N. MAIN AVENUE, Springfield	Y	
	FENTON PROPERTY	328 N. MAIN, Springfield	Y	
	Jvic Willowbrook Storage	525 N. JEFFERSON, Springfield	<del>                                     </del>	
	JORDAN VALLEY WEST MEADOWS SITE #1	309 N. MAIN ST, Springfield	Y	
	JORDAN VALLEY WEST MEADOWS SITE 8	308 N. MAIN ST, Springfield	Y	
	JORDAN VALLEY WEST MEADOWS SITE 2	309 N. MAIN ST, Springfield	Y	
	JORDAN VALLEY WEST MEADOWS SITE 3	309 N. MAIN ST, Springfield	Y	
	JORDAN VALLEY WEST MEADOWS SITE #4		Y	
		309 N. MAIN ST, Springfield 405 N. JEFFERSON, Springfield	Y	
	Willow Brook Foods Inc.		Y	
	Bunselmeyer	428 N. JEFFERSON, Springfield	Y	
	Caplan	500 N. JEFFERSON, Springfield	Y	
Chadwiel Floor Bell Tool (No. 11)				
Chadwick Flyer Rail Trail (North)	CDACE CADINETS	AGE N. CHERMANN CRRINGETERS		
	GRACE CABINETS	435 N. SHERMAN, SPRINGFIELD	Y	
	Dennis Oil Company	545 NORTH NATIONAL AVENUE, Springfield	Y	
	Carter Mill	610 N. NATIONAL	+	
	Quarry	INTERSECTION OF East Trafficway & National, Springfield	Y	
West Republic Road				
Wilsons Creek Blvd				
Ward Branch Greenway				
Ward Branch - James River				
Greenway Connector				
Ward Branch Greenway (North)				
Ward Branch Greenway (Middle)				
Ward Branch Greenway (South)				
Riverbluff Blvd - Farmer Branch				
Trail Connector				
South Creek Greenway (Wilson's				
Creek Greenway Connector)				
,				
Trail of Tears - Batttlefield				
Trail of Tears - Golden				
Trail of Tears - South Creek				
Greenway Connector				
.,				
Trail of Tears - Greene Park to				
Ewing Sports Complex				
g aparta at inpice.				
Westgate - Fort Scott Line Rail				
Trail Connector				
Division Street - I-44 Connector				
Division Street - I-44 Connector				
Division Stroot				
Division Street				
			+	
Division Street - Cooper Park				
Connector				

F-8

	Hazardous W	aste Disposal Sites (Program)		With
RAIL	Description	Status	Location	500' Bu
ower Jordan Creek Greenway				
,	P.G Walker & Sons	Long-Term Stewardship	1404 College Street, Springfield	Y
	West Meadows: West Meadows-Site 8	Active	400 N. Fort, Springfield	Y
	Union Pacific Rail Yard	Completed	400 N Fort, Springfield	Y
	West Meadows: West Meadows-Site 7	Active	N. of College between Olive and Fort	Y
	West Meadows: West Meadows-Site 6	Active	N. of College between Olive and Fort	Y
	West Meadows: West Meadows-Site 5	Active	N. of College between Olive and Fort	Y
	West Meadows: West Meadows-Site 4	Active	N. of College between Olive and Fort	Y
	West Meadows: West Meadows-Site 3			Y
	West Meadows: West Meadows-Site 3 West Meadows: West Meadows-Site 2	Long-Term Stewardship	N. of College between Olive and Fort	Y
		Long-Term Stewardship	N. of College between Olive and Fort	
	West Meadows: West Meadows-Site 1	Long-Term Stewardship	725 W. Olive, Springfield	Y
	Jordan Creek Realignment Project	Active	Various, Springfield	Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP	Active	400 Block N. Main, Springfield	Y
	Springfield FMGP: Springfield FMGP - Subsite #3	Active	320 N. Main Ave., Springfield	Y
	Ehlers Property (former)	Completed	1420 W. College St., Springfield	Y
	West Meadows: West Meadows - Tracts 1 and 2	Active	309 N. Main, Springfield	Y
	Universal Paint	Active	319 N. Main, Springfield	Y
orth Jordan Creek Greenway - ordan Valley Connector				
outh Jordan Creek Greenway		6.00		
	Federow Property	Brownfield Assessment	1661 EAST TRAFFICWAY, Springfield	Y
	Federow Property	Active	1661 EAST TRAFFICWAY, Springfield	Y
assnight Creek Greenway (West)				
	EUTICALS INC (ARCHIMICA)	Active	2460 W BENNETT ST, Springfield	Y
	Syntex - Springfield	Long-Term Stewardship	2460 W BENNETT ST, Springfield	Y
	Cornerstone Church (former)	Completed	1701 S. Fort Ave., Springfield	Υ
assnight Creek Greenway (East)				
J (2031)				
thridge Trail				
timage from				
Shoules Coool Cooperation				
Shuyler Creek Greenway Extension				
Chadwick Flyer Rail Trail (South)				
	FASCO	Completed	1600 West Jackson, Ozark	
	Fasco Abandoned Lagoon	Brownfield Assessment	SE Corner of 1550 West Jackson St. Property, Ozark	Υ
	Wise Sign Company	Completed	Intersection of N 21st St. & Air Park Rd, Ozark	
Route 66 / Strafford Trail				
	Old Bumgarner Station	Brownfield Assessment	117 E OLD ROUTE 66, Strafford	Y
armer Branch Greenway				
Wilson's Creek National				
Battlefield Trail Connector				
e Compte Road Trail				
·				
North Jordan Creek Greenway				
,	James E. Smith Park	Brownfield Assessment	1536 E. Division St., Springfield	Y
ames River Greenway	Junes E. Simai Funk	Brownield / Issessment	1556 E. Bivision St., Springheid	
ames liver Greenway				
Vest Wilson's Creek Greenway				
South)				
Vest Wilson's Creek Greenway				
North)				
-44 Trail				
Vilson's Creek Greenway				
ort Scott Line Rail Trail				
ort scott tille Kall ITall	SAFETY KLEEN SPRINGFIELD	Active	734 N.W. BYPASS, Springfield	Y
ort scott tille Kall ITall		Inactive VCP (Terminated)	2821 W. Chestnut Expressway, Springfield	Y
ort scott Eine Kan Han	Aaron's Automotive Products, Inc. (former)		400 Block N. Main, Springfield	
ort scott Line Kan 11 an	Aaron's Automotive Products, Inc. (former) Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP	Active		Y
ort scott tille Nall Hall		Active Brownfield Assessment	( 37°12'43.63"N, 93°17'38.18"W), Springfield	
ort Scott Line Nan 11an	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project	Brownfield Assessment		Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3	Brownfield Assessment Active	320 N. Main Ave., Springfield	_
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2	Brownfield Assessment Active Active	320 N. Main Ave., Springfield 309 N. Main, Springfield	Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint	Brownfield Assessment Active Active Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield	Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1	Brownfield Assessment Active Active Active Active Long-Term Stewardship	320 N. Main Ave., Springfield 300 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield	Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project	Brownfield Assessment Active Active Active Long-Term Stewardship Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield	Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8	Brownfield Assessment Active Active Active Long-Term Stewardship Active Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield	Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7	Brownfield Assessment Active Active Active Long-Term Stewardship Active Active Active Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort	Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 7	Brownfield Assessment Active Active Active Long-Term Stewardship Active Active Active Active	320 N. Main Ave., Springfield 399 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort N. of College between Olive and Fort	Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5	Brownfield Assessment Active Active Active Long-Term Stewardship Active Active Active Active Active Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort N. of College between Olive and Fort N. of College between Olive and Fort	Y Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 5	Brownfield Assessment Active Active Active Long-Term Stewardship Active Active Active Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort	Y Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 3	Brownfield Assessment Active Active Active Long-Term Stewardship Active Active Active Active Active Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort	Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 5	Brownfield Assessment Active Active Active Active Long-Term Stewardship Active Active Active Active Active Active Active Active	320 N. Main Ave., Springfield 390 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort	Y Y Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 3	Brownfield Assessment Active Active Active Active Long-Term Stewardship Active Active Active Active Active Active Active Long-Term Stewardship	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort	Y Y Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 3	Brownfield Assessment Active Action Active	320 N. Main Ave., Springfield 390 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort	Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 3 West Meadows: West Meadows-Site 2 Crescent Feed Company , Inc.	Brownfield Assessment Active Active Active Long-Term Stewardship Active Active Active Active Active Active Long-Term Stewardship Long-Term Stewardship Long-Term Stewardship	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort 1022 and 1100 West Phelps Street	Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 3 West Meadows: West Meadows-Site 2 Crescent Feed Company , Inc.	Brownfield Assessment Active Action Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort 1022 and 1100 West Phelps Street	Y Y Y Y Y Y Y
	Jordan Creek Realignment Project: Jordan Creek Realignment Project-FMGP Jordan Creek Realignment Project: Jordan Creek Corps of Engineers Project Springfield FMGP: Springfield FMGP - Subsite #3 West Meadows: West Meadows - Tracts 1 and 2 Universal Paint West Meadows: West Meadows-Site 1 Jordan Creek Realignment Project West Meadows: West Meadows-Site 8 West Meadows: West Meadows-Site 7 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 6 West Meadows: West Meadows-Site 5 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 4 West Meadows: West Meadows-Site 3 West Meadows: West Meadows-Site 2 Crescent Feed Company , Inc.	Brownfield Assessment Active Action Active	320 N. Main Ave., Springfield 309 N. Main, Springfield 319 N. Main, Springfield 725 W. Olive, Springfield Various, Springfield 400 N. Fort, Springfield N. of College between Olive and Fort 1022 and 1100 West Phelps Street	) ) ) ) ) ) ) ) ) ) )

### Trail Investment Study (

	Hazardous Was	ste Disposal Sites (Progr	am)	Within
RAIL	Description	Status	Location	500' Buffer?
	Ash Grove Quarry: Ash Grove Quarry Tract 2	Completed	INTERSECTION OF East Trafficway & National, Springfield	Y
Vest Republic Road				
Vilsons Creek Blvd				
/ard Branch Greenway				
	Southern Star Central Gas Pipeline IncSouthern Area Site: Ozark, MO T.B.	Completed	Near Weaver Rd & Campbell Ave., Springfield	
	Southern Star Central Gas Pipeline IncSouthern Area Site: East T.B. Keene (aka C	Completed	Near Weaver Rd & Campbell Ave., Springfield	
Vard Branch - James River				
reenway Connector				
/ard Branch Greenway (North)				
(and Daniel Consumo (Maidale)				
/ard Branch Greenway (Middle)				
/ard Branch Greenway (South)				
raru Branch Greenway (30uth)				
iverbluff Blvd - Farmer Branch				
rail Connector				
Tall Confector				
outh Creek Greenway (Wilson's				
reek Greenway Connector)				
reek dreemway connectory				
rail of Tears - Batttlefield				
rail of Tears - Golden				
rail of Tears - South Creek				
reenway Connector				
· · · · · · · · · · · · · · · · · · ·				
rail of Tears - Greene Park to				
wing Sports Complex				
/estgate - Fort Scott Line Rail				
rail Connector				
ivision Street - I-44 Connector				
Division Street				
Division Street - Cooper Park				
onnector				

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		Storage Tanks	Within	Distance
RAIL	Description	Status Location	500' Buffer?	Trail
ower Jordan Creek Greenway	College Street Railyard	Other - Administrative Closure 400 N Fort Ave, Springfield	Y	130
	BREWERY SPRING	Other - Investigation/Corrective Action is Ongoing or Incomplete 1000-1200 W College St., Springfield		130
	A-JACK'S ROOFING SUPPLY OF SPFG	Former - No Further Action Letter Issued with Restrictio 344 N MAIN, Springfield	Y	100
	ECONOLODGE	No Further Action Letter Issued Prior to 2004 Tanks RBCA 37°12'17.11"N, 93°18'45.73"W	Y	310
	SMITH STARTER FORMER GREEN SEED FACILITY	No Further Action Letter Issued with Restriction 1420 WEST COLLEGE, Springfield  Former - No Further Action Letter Issued without Restriction Intersection of GRANT AND OLIVE ST, Springfi	γ	100 550
	SPRINGFIELD READY MIX CO	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 333 N MAIN ST, Springfield	Υ	100
	CITY UTIL GAS OPERATIONS	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 320 N MAIN, Springfield	Y	150
	VACANT	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 505 OLIVE ST, Springfield	Y	350
	VACANT	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 501 OLIVE ST, Springfield	Y	350
	QUEEN CITY OIL CO, INC LOVELAND TRANSMISSION	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1801 E TRAFFICWAY, Springfield  Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 225 N STEWART, Springfield	Y	300 500
Jorth Jordan Creek Greenway -	LOVELAND TRAINSIVIISSION	Former - No Further Action Letter issued Prior to 2004 Taliks NBCA 225 N 31EWAKT, Springheid		300
ordan Valley Connector				
	SPRINGFIELD PETROLEUM CO	Other - Administrative Closure 819 E PHELPS, Springfield	Υ	500
	HARRY COOPER SUPPLY COMPANY	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 605 N SHERMAN PARKWAY, Springfield	Y	500
	MORGAN BUS & TRUCK REPAIR DR PEPPER BOTTLING COMPANY	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 435 N SHERMAN, Springfield  Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 835 E CENTRAL, Springfield	Y	200
outh Jordan Creek Greenway	DKTETTER BOTTEING COMPANY	To mer - No Farther Action Letter issued Finor to 2004 fains No.A 535 E CENTIAL, Springheid		201
,	TRAFFICWAY PROPERTIES	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1401 E TRAFFICWAY, Springfield	Y	28
	BALL SUPPLY CO, INC	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1450 E TRAFFICWAY, Springfield	Υ	400
	FORMER QUEEN CITY OIL CITE	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1835 E TRAFFICWAY, Springfield	Y	20
	EARL SCHEIB AUTO PAINT FINISHES MFA PLANT FOODS	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1940 E TRAFFICWAY, Springfield  Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1947 E TRAFFICWAY, Springfield	Y	15 15
	BOLIVAR INSULATION	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 2050 E TRAFFICWAY, Springfield	Y	38
	REYCO INDUSTRIES	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 2000 E TRAFFICWAY, Springfield  Former - No Further Action Letter Issued without Restriction 1315 E TRAFFICWAY, Springfield	Y	18
		2325 E Trou i Zerriti, Springretti		
assnight Creek Greenway (West)				
	WASTE CORPORATION OF MISSOURI	Operating - No Further Action Letter Issued Prior to 2004 Tanks RBCA 2120 W BENNETT ST, Springfield		60
	RAPID ROBERTS #124	Operating - Operating UST Facilities with No Known Release 1655 S KANSAS EXPRESSWAY, Springfield	Y	33
assnight Creek Greenway (East)				
thridge Trail				
	WILSON'S CREEK NATIONAL BATTLEFIELD	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA (37.1158,-93.4223), Republic	Y	35
huyler Creek Greenway xtension				
hadwick Flyer Rail Trail (South)				
	CASEYS GENERAL STORE #3448 DICK HILL HELICOPTERS	Operating - Operating UST Facilities with No Known Release 3064 WEST STATE HIGHWAY CC, Ozark Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA (37° 3'28.50"N, 93°13'56.93"W), Ozark	Y	28
oute 66 / Strafford Trail	DICK HILL HELICOPTERS	rollies No Futther Action Letter issued Filor to 2004 Talks NBCA (37° 3 28.50 N, 93°13 56.93 W), Ozark		34
	J.V. CARROLL	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 4050 E KEARNEY, Springfield	Y	26
	MID MISSOURI MOTORSPORTS	Former - No Further Action Letter Issued without Restriction HWY OO & MULROY RD, Strafford	Y	9
	CENTRAL TRANSPORT	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 6363 E HWY OO, Strafford	Y	31
	TCSI/TRANSLAND INC	Operating - Operating UST Facilities with No Known Release 1321 WEST OLD ROUTE 66, Strafford	Y	28
	VINTON PROPERTY STRAFFORD MAINT LOT	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 3/4 MI W HWY 125 - N SIDE 00, Strafford  Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA HWY 00, Strafford	Y	9
	STRAFFORD FAMILY RESTAURANT	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 301 E HWY OO, Strafford	Y	2
	THE BERRY STORE	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 501 E HWY OO, Strafford	Y	2
	GOFF FEED STORE	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 303 WASHINGTON AVE, Strafford	Υ	17
	FORMER GAS STATION	Operating - Operating UST Facilities with No Known Release 106 EAST PINE ST, Strafford	Y	1:
	MCDOWELL MOTOR CO - FORMERLY	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA HWY 125 AND MADISON ST, Strafford  Operating - Operating UST Facilities with No Known Release 125 S INTERCHANGE EXRESSWAY, Strafford	Y	1:
	KUM & GO #486 CUMMINS MID-AMERICA INC	Operating - Operating UST Facilities with No Known Release 125 S INTERCHANGE EXRESSWAY, Strafford Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 3637 E KEARNEY, Springfield	Y	9
	ROADWAY EXPRESS, INC	Former - No Further Action Letter Issued with Restriction 5575 E HWY OO, Strafford	Y	2
armer Branch Greenway				
/ilson's Creek National attlefield Trail Connector				
attiened Trail Connector	WILSON'S CREEK NATIONAL BATTLEFIELD	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA (37.1158,-93.4223), Republic		7
Compte Road Trail				
	ACTION SALES & RENTAL INC	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 2238 N LECOMPTE RD, Springfield	Y	5
orth Jordan Creek Greenway	MIDTOWN 66 - LOUIS NEWMAN	Former - No Further Action Letter Issued Prior to 2004 Tanks PDCA	Y	
	CASEYS GENERAL STORE #3013	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1503 N GLENSTONE, Springfield  Operating - No Further Action Letter Issued without Restriction 1510 N GLENSTONE, Springfield	Y	7
	MONTGOMERY	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1537 N GLENSTONE, Springfield	Y	3:
	KUM & GO #556	Operating - No Further Action Letter Issued without Restriction 1550 N GLENSTONE, Springfield	Y	1
	OZARKS COCA COLA/DR PEPPER BOTTLING	Operating - Operating UST Facilities with No Known Release 1777 N PACKER RD, Springfield		6
2: 0	KUM & GO #467	Operating - No Further Action Letter Issued with Restriction 2963 E DIVISION, Springfield	Y	1.
mes River Greenway	JAMES RIVER LIFT STATION	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 5915 S WEST, Springfield	Y	
	JAMES RIVER EIFT STATION JAMES RIVER POWER STATION	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 5915 S WEST, Springfield 5701 S KISSICK RD, Springfield		3:
est Wilson's Creek Greenway				
outh)				
/+ \46  - C   C				
/est Wilson's Creek Greenway North)				
44 Trail				
filson's Crook Grander				
/ilson's Creek Greenway	WIL FISHER DISTRIBUTING	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1151 W BY-PASS (3539 W FARM RD 142), S	pringfield	54
ort Scott Line Rail Trail	The sister of state o	1131 W DI-FRSS (3339 W FARM RD 142), S	mgrieiu	34
	JOHN DRENNON & SONS CO INC	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 353 N NETTLETON ST, Springfield	Y	5
	A-JACK'S ROOFING SUPPLY OF SPFG	Former - No Further Action Letter Issued without Restriction 344 N MAIN, Springfield		
	MIDWEST ALUMINUM MFG CO, INC	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 3357 WADDILL, Springfield	Y	2
	SAFETY-KLEEN CORP (6-193-02)	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 734 N.W. BYPASS, Springfield	Y	2:
	HOCKER OIL CO GAS PLUS CASEYS GENERAL STORE #3012	Operating - Operating UST Facilities with No Known Release 2745 W CHESTNUT EXPRESSWAY, Springfield Operating - Operating UST Facilities with No Known Release 2715 W CHESTNUT EXPRESSWAY, Springfield	Y	31
	PAUL MUELLER COMPANY	Operating - Operating UST Facilities with No Known Release 2715 W CHESTNUT EXPRESSWAY, Springfield Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 1734 W WATER ST, Springfield	Y	12
	PAUL MUELLER COMPANY	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 2306 W PHELPS, Springfield	Y	2
	FACILITY SOLD TO DORAN TURNER	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA 318 N KANSAS, Springfield	Y	3

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### OTO TRAILS - PEL STUDY - PROXIMITY TO STORAGE TANKS Storage Tanks

		Storage Tanks		Within	Distance from
TRAIL	Description	Storage ranks	Location	500' Buffer?	Trail (ft)
IRAIL	WILLOWBROOK FOODS			y v	450
		Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	501 N MAIN AVE, Springfield		
	CITY UTIL MAIN STORE ROOM	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	609 WALL, Springfield	Y	270
	SPRINGFIELD READY MIX CO	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	333 N MAIN AVE, Springfield	Y	285
	CITY UTIL GAS OPERATIONS	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	320 N MAIN, Springfield	Y	360
	HUDSON FOODS	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	405 N JEFFERSON, Springfield	Y	250
Chadwick Flyer Rail Trail (North)					
	CONCRETE CO OF SPRINGFIELD	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	510 SHERMAN, Springfield	Υ	110
	REYCO INDUSTRIES	Former - No Further Action Letter Issued without Restriction	1315 E TRAFFICWAY, Springfield	Y	180
	PIPER SERVICE STATION	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	1437 CHERRY, Springfield	Y	215
	GLENSTONE BLOCK	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	928 S GLENSTONE, Springfield	Y	200
	HERRMAN LUMBER CO	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	Near Crutcher Ave. & Belmont St., Springfield	Y	170
	WEBSTER OIL COMPANY	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA		Y	215
			2400 E BENNETT, Springfield		
	BEVERLY WEATHERWAX	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	1502 S ENTERPRISE, Springfield	Y	360
	HARDEES	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	2604 E SUNSHINE, Springfield	Y	175
	MORRIS OIL COMPANY	Former - Investigation/Corrective Action is Ongoing or Incomplete	500 N NATIONAL, Springfield	Y	170
	KRUEGER PROPERTY	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	1407 ST LOUIS ST, Springfield		580
	MR. KLEEN CAR WASH	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	800 S GLENSTONE, Springfield	Y	270
	FIRESTONE STORE #4441/016292	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	814 S GLENSTONE, Springfield	Y	270
	SOUTHERN HILLS 66	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	2620 E SUNSHINE, Springfield	Y	330
	MORGAN BUS & TRUCK REPAIR	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	435 N SHERMAN, Springfield	Y	250
West Republic Road		The second secon			230
uri o lall					
Wilsons Creek Blvd					
	<u> </u>				
Ward Branch Greenway					
Ward Branch - James River					
Greenway Connector					
	JAMES RIVER LIFT STATION	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	5915 S WEST, Springfield	Y	50
Ward Branch Greenway (North)					
ward branch Greenway (North)	MACADOODLES	Operating - Operating UST Facilities with No Known Release			550
	WACADOODLES	Operating - Operating OST Facilities with NO Known Release	1455 E INDEPENDENCE, Springfield		550
Ward Branch Greenway (Middle)					
Ward Branch Greenway (South)					
Riverbluff Blvd - Farmer Branch					
Trail Connector					
5 11 5 1 5 1 5 1 1					
South Creek Greenway (Wilson's					
Creek Greenway Connector)					
Trail of Tears - Batttlefield					
Trail of Tears - Golden					
	CASEYS GENERAL STORE #2679	Operating - Operating UST Facilities with No Known Release	3173 W SANTA FE LANE, Springfield	Υ	100
Trail of Tears - South Creek					
Greenway Connector					
	ALLIED MFG CO INC	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	3100 S GLENN, Springfield	Y	350
Trail of Tears - Greene Park to		The second secon	January opinignatu		330
Ewing Sports Complex					
carrie aporta complex	BILL'S MUFFLER	Former No Further Action Letter Issued Brief to 2004 Table BBCA	2420 W CUNCURNE Code-6-14	Y	450
		Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	2429 W SUNSHINE, Springfield		
	KUM & GO #485	Operating - Operating UST Facilities with No Known Release	2650 WEST SUNSHINE, Springfield	Y	500
	KELTNER ENTERPRISES, INC.	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	2410 S SCENIC, Springfield	Y	500
Westgate - Fort Scott Line Rail					
Trail Connector					
Division Street - I-44 Connector					
Division Street					
oranion direct	VIIIA 9, CO #467	Operating No Eurther Action Letter Issued with Restriction	2002 E DIVIGION C-4-6-14	Y	120
	KUM & GO #467	Operating - No Further Action Letter Issued with Restriction	2963 E DIVISION, Springfield	Y	120
	ASSOCIATED WHOLESALE GROCERS, INC	Operating - No Further Action Letter Issued with Restriction	3201 E DIVISION ST, Springfield	Y	160
Division Street - Cooper Park					
Connector					
	SPRINGFIELD FREIGHTLINER SALES INC	Former - No Further Action Letter Issued Prior to 2004 Tanks RBCA	3020 E DIVISION ST, Springfield	Y	200
	KUM & GO #467	Operating - No Further Action Letter Issued with Restriction	2963 E DIVISION, Springfield	Y	120



## PEL Report: Ozark Transportation Organization Trail Study

## EXHIBIT 4 PROXIMITY TO SCHOOLS, CHURCHES AND CEMETERIES

### Trail Investment Study (

North Creek Greenway Jordan Valley Connector  Service Microbian Creek Greenway Jordan Valley Connector  Service Microbian Creek Greenway  Service Greenway (Med)  Service Might School  Service Might		OTO TRAILS - PEL STUDY - PROXIMITY TO SCHOOLS			
North Creek Greenway Jordan Valley Connector  Service Microbian Creek Greenway Jordan Valley Connector  Service Microbian Creek Greenway  Service Greenway (Med)  Service Might School  Service Might	CRAII	Name		Within 500' Buffer?	
North Jordan Creek Greenway Jordan Valley Connector  Our I Technical Community Callege Dry Vinversity Don't Sender Creek Greenway South Jordan Creek Greenway South Jordan Creek Greenway South Jordan Creek Greenway (Neet)  Particles High School JSS W Meadownere, Springfield, MO 65802 Y David High School JSS W Meadownere, Springfield, MO 65802 Y South Jordan Creek Greenway (Neet)  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65807  Particles High School JSS W Meadownere, Springfield, MO 65802  Particles High School JSS W Meadownere, Springfield, MO 65802  Particles High School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial School JSS W Meadownere, Springfield, MO 65802  Weller Benerial S		, wante	, teal 633	Within 300 Bullet?	
Dan's Protection Community Calego Dan's December Bay, Carpellation, Mol 64802 Y Dan's University Dan's Stored Creek Greenway Cartaria (aph 5chool 42 E Central St, Springfeld, Mol 64802 Y Danish Ardan Creek Greenway Passinght Creek Greenway (West) Particles High School 515 W. Meadouwnere, Springfeld, Mol 64802 Y Danish Creek Greenway (West) Particles High School 515 W. Meadouwnere, Springfeld, Mol 64802 Y Danish Creek Greenway (Rest) Danish Chadwick Piyer Rail Trail (South) Danish Creek Greenway Extension Chadwick Piyer Rail Trail (South) Danish High School 1350 W Meadouwnere, Springfeld, Mol 64802 Y Danish High School 1350 W Meadouwnere, Springfeld, Mo	·				
Daily University (Central Right School School Assessment School	North Jordan Creek Greenway - Jordan Valley Connector	Out Tubulul 6	4004 5 Chartan 5 and 5 an	, , , , , , , , , , , , , , , , , , ,	
Scort large School portan Creek Greenway  Fasonight Creek Greenway (West)  Fasonight Creek Greenway (West)  Fasonight Creek Greenway (Rest)  West Wilson's Creek Greenway (Rest)  West Response (Rest)  West Response (Response (Rest)  West Response (Response (Rest)  West Response (Response (				Y v	
South Indian Creek Greenway (West) Parkingth Creek Greenway (West) Parkingth Creek Greenway (Kest) Parkingth Creek Greenway (Kest) Parkingth Creek Greenway (Sest) Parkingth Creek Greenway Extension Chadwisk Flyer Rail Trail (South) Parkingth Creek Greenway Extension Chadwisk Flyer Rail Trail (South) Parkingth Creek Greenway Extension Chadwisk Flyer Rail Trail (South) Parkingth Creek Greenway Extension Parkingth Creek Greenway (South) Parkingth Creek Greenway (South) Parkingth Creek Greenway (Wision's Creek Greenway (South) Parkingth Creek Greenway (South) Parkingth Creek Greenway (Wision's Creek Greenway (South) Parkingth Creek Greenway (Wision's Creek				<u>'</u>	
Fascinglist Creek Greenway (East)  Particle High School  S16 W. Meedownere, Springfield, MO 65807  Particle High School  S16 W. Meedownere, Springfield, MO 65807  Strindings Trail  Supplier Creek Greenway Extension  Chaldwick Flyer Rail Trail (South)  Chaldwick Flyer Rail Trail (South)  Charl Lamer High School  S15 W. Meedownere, Springfield, MO 65721  Strafford High School  S15 W. Blurd Dr., Ozark, MO 65721  Strafford High School  Strafford High High School  Strafford High High School  Strafford Hig	outh Jordan Creek Greenway				
Fascinglist Creek Greenway (East)  Particle High School  S16 W. Meedownere, Springfield, MO 65807  Particle High School  S16 W. Meedownere, Springfield, MO 65807  Strindings Trail  Supplier Creek Greenway Extension  Chaldwick Flyer Rail Trail (South)  Chaldwick Flyer Rail Trail (South)  Charl Lamer High School  S15 W. Meedownere, Springfield, MO 65721  Strafford High School  S15 W. Blurd Dr., Ozark, MO 65721  Strafford High School  Strafford High High School  Strafford High High School  Strafford Hig					
Particies High School Stevensor (Springfield, MD 05807 Sheek Greenway (Edwinge Trail South)  Chadwick Flyer Rail Trail (South)  Chadwick Flyer Rail Trail (S	assnight Creek Greenway (West)	Parkview High School	516 W Meadowmere Springfield MO 65907		
Parview High School S16 W. Mesdowmere, Springfield, MD 63827  Charles Free Free Free Free Free Free Free Fr	assnight Creek Greenway (East)	Parview High School	310 W. Meadowniere, Springheid, MO 03807		
Shugher Creek Greenway (Exercision Chadwick Payer Rail Trail (South)  Ozark Junior High School  Ozark High School  Strafford High School  School	, , ,	Parkview High School	516 W. Meadowmere, Springfield, MO 65807		
Shugher Creek Greenway (Exercision Chadwick Payer Rail Trail (South)  Ozark Junior High School  Ozark High School  Strafford High School  School					
Chadwick Fiyer Rail Trail (South)  Ozark Junior High School  Dark Junior High School  Dark Junior High School  Dark Junior High School  Strafford Trail  Strafford High School  Strafford High School  Strafford High School  201 W McCabe St, Strafford, IMO 65721  Strafford High School  201 W McCabe St, Strafford, IMO 65757  Strafford Bementary School  310 W McCabe St, Strafford, IMO 65757  Strafford Bementary School  Strafford High School  201 W McCabe St, Strafford, IMO 65757  Strafford Bementary School  310 W McCabe St, Strafford, IMO 65757  Strafford Bementary School  310 W McCabe St, Strafford, IMO 65757  Willon's Creek National Battlefield Trail Connector  Le Compte Road Trail  Willon's Creek Streemway  Exangel University  Weller Elementary School  Shady Dell Early Childhood Center  275 TE Division St, Springfield, IMO 65802  West Wilson's Creek Greenway (South)  Willard Orchard Hills Elementary School  Willard Orchard Hills Elementary School  Willard South Elementary School  Willard South Elementary School  ASSS W Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSS W Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSS W Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSS W Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSS W Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSS W Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSS W Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSO V Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSO V Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSO V Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSO V Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSO V Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSO V Farm Rd 140, Springfield, IMO 65802  Willard South Elementary School  ASSO V Farm Rd 140,	thridge Trail				
Ozark Junior High School   11:09 W Jackson St, Ozark, MO 65721   13:00 W Blaff Dr., Ozark, MO 65721   13:00 W McCabe St, Strafford, MO 65757   13:00 W McCabe St, Strafford, MO 65802   13:00 W McCabe St, Strafford, MO 65803   13:00 W McCabe St, Strafford, MO 65803   13:00 W McCabe St, Strafford, MO 65802   13:00 W McCabe St, Straffor	Shuyler Creek Greenway Extension				
Dark Junor High School   11.09 W Jackson St, Ozark, MO 65721   1250 W Bluff Dr., Ozark, MO 65757   1250 W McCabe St, Strafford, MO 65802   1250 W W W W W W W W W W W W W W W W W W W					
Ozark High School  Dark High School  Strafford Trail  Strafford High School  Strafford High School  Strafford High School  Strafford Elementary School  Strafford	hadwick Flyer Rail Trail (South)				
Route 66 / Strafford Trail  Strafford High School  Strafford High School  Strafford Elementary School  Strafford Elementary School  Strafford Elementary School  Strafford Elementary School  Wilson's Creek National Battlefield Trail Connector  Le Compte Road Trail  North Jordan Creek Greenway  Wilson's Creek Greenway  Weller Elementary School  Shady Dell Early Chidhood Center  Willard Orchard Hills Elementary School  Willard Orchard Hills Elementary School  Willard Orchard Hills Elementary School  Willard South Elementary School  At 151 W Division St, Springfield, MO 65802  Willard South Elementary School  At 151 W Division St, Springfield, MO 65802  Willard South Elementary School  At 151 W Division St, Springfield, MO 65802  Willard School  Willard South Elementary School  At 151 W Division St, Springfield, MO 65802  Willard School  Study Middle School  At 151 W Division St, Springfield, MO 65802  Willard School  At 151 W Division St, Springfield, MO 65802  Willard School  At 151 W Division St, Springfield, MO 65802  Willard School  At 151 W Division St, Springfield, MO 65802  Week Republic Road  Republic High School  At 270 Republic, MO 65738  Y  Willard School  At 270 Republic, MO 65738  Y  Ward Branch James River Greenway Connector  Ward Branch Ferenway (Middle)  Ward Branch Greenway (Middle)  Ward Branch Greenway (Middle)  Ward Branch Greenway (Middle)  Ward Branch Greenway (Wildle)					
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Ward Branch - James River Greenway Connector  Ward Branch Greenway (North)  Ward Branch Greenway (Middle)  Ward Branch Greenway (South)  Gray Elementary School  Zi01 W Farm Rd 182, Springfield, MO  Riverbluff Blvd - Farmer Branch Trail Connector  South Creek Greenway (Wilson's Creek Greenway Connector)	FISCH CITY	Republic High School	4370 Repmo Dr, Republic, MO 65738	Y	
Ward Branch Greenway (Middle)  Ward Branch Greenway (South)  Gray Elementary School  2101 W Farm Rd 182, Springfield, MO  South Creek Greenway (Wilson's Creek Greenway Connector)	Nard Branch - James River Greenway Connector				
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Trail of Tears - South Creek Greenway Connector Sherwood Elementary School 2524 S Golden Ave, Springfield, MO 65807 Y	rail of Tears - South Creek Greenway Connector	Share deliment of the	arak Caldar Ara Caldar A transcript		

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## OTO TRAILS - PEL STUDY - PROXIMITY TO SCHOOLS School TRAIL Name Address Within 500' Buffer? Trail of Tears - Greene Park to Ewing Sports Complex Westgate - Fort Scott Line Rail Trail Connector Willard South Elementary School Division Street - I-44 Connector Willard South Elementary School Division Street Division Street - Cooper Park Connector

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### OTO TRAILS - PEL STUDY -PROXIMITY TO CEMETERIES Within 500' Buffer? Lower Jordan Creek Greenway North Jordan Creek Greenway - Jordan Valley Connector South Jordan Creek Greenway 2244 E Pythian St, Springfield, MO 65802 astlawn Cemetery Fassnight Creek Greenway (West) Fassnight Creek Greenway (East) Ethridge Trail Shuyler Creek Greenway Extension Chadwick Flyer Rail Trail (South) Chapman Cemetery Ozark, MO 65721 Route 66 / Strafford Trail Potter Family Cemetery E State Hwy OO, Strafford, MO 65757 Farmer Branch Greenway Wilson's Creek National Battlefield Trail Connector Le Compte Road Trail North Jordan Creek Greenway James River Greenway Missouri Veterans Cemetery 5201 S Southwood Rd, Springfield, MO 65804 West Wilson's Creek Greenway (South) West Wilson's Creek Greenway (North) I-44 Trail Wilson's Creek Greenway Fort Scott Line Rail Trail Chadwick Flyer Rail Trail (North) West Republic Road Wilsons Creek Blvd Ward Branch - James River Greenway Connector Ward Branch Greenway (North) Ward Branch Greenway (Middle) Ward Branch Greenway (South) Riverbluff Blvd - Farmer Branch Trail Connector South Creek Greenway (Wilson's Creek Greenway Connector)

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# OTO TRAILS - PEL STUDY -PROXIMITY TO CEMETERIES Cemetery TRAIL Name Address Within 500' Buffer? Trail of Tears - Batttlefield Trail of Tears - Golden Trail of Tears - South Creek Greenway Connector Trail of Tears - Greene Park to Ewing Sports Complex Westgate - Fort Scott Line Rail Trail Connector Division Street - I-44 Connector Division Street Division Street - Cooper Park Connector

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### Trail Investment Study (

ОТС	TRAILS - PEL STUDY - PROXIMIT	AILS - PEL STUDY - PROXIMITY TO CHURCHES			
TRAIL	Name	Church Address	Within 500' Buffer?		
Lower Jordan Creek Greenway			Within 500 Buller:		
North Jordan Creek Greenway - Jordan Valley Connector	Vineyard Church	634 W Wall St, Springfield, MO 65806	Y		
voi ti i Jordan Creek Greenway - Jordan Valley Connector					
South Jordan Creek Greenway					
Facewight Crook Crooming (Mach)	Faith Christian Fellowship	1535 E St Louis St, Springfield, MO 65802			
Fassnight Creek Greenway (West)	Cornerstone Church	1701 S Fort Ave, Springfield, MO 65807	Y		
Fassnight Creek Greenway (East)	Trinity Luthovan Church	1415 C Holland Ave Cavingfield MO C5907	Y		
	Trinity Lutheran Church  National Ave Christian Church	1415 S Holland Ave, Springfield, MO 65807 1515 S National Ave, Springfield, MO 65804	1		
Ethridge Trail					
Shuyler Creek Greenway Extension					
Chadwick Flyer Rail Trail (South)	Cassidy Methodist Church	5151 Fremont Rd, Nixa, MO 65714	Y		
	First Baptist Chruch of Ozark	1400 W Jackson St, Ozark, MO 65721			
	New Life Church South Gate Baptist Church	776 W Farm Rd 186, Springfield, MO 65810 5701 S Farm Rd 157, Springfield, MO 65810			
Route 66 / Strafford Trail					
	First Baptist Church-Strafford	400 S Madison St, Strafford, MO 65757 111 S Redwood Dr, Strafford, MO 65757			
	Church of Christ Strafford First Assembly	1113 W. Historic Route 66, Strafford, MO 65757	Y		
	Strafford United Methodist Church	200 E Chestnut St, Strafford, MO 65757	Y		
Farmer Branch Greenway					
Wilson's Creek National Battlefield Trail Connector					
La Campta Dand Trail					
Le Compte Road Trail					
North Jordan Creek Greenway					
	Islamic Center of Springfield	2151 E Division St, Springfield, MO 65803	Y		
James River Greenway					
West Wilson's Creek Greenway (South)					
West Wilson's Creek Greenway (North)					
west wilson's creek dreenway (North)					
l-44 Trail					
Wilson's Creek Greenway					
Fort Scott Line Rail Trail	Springfield Vineyard Church	634 W Wall St, Springfield, MO 65806			
Chadwick Flyer Rail Trail (North)					
West Republic Road	Cavalry Chapel of Springfield	2440 E Seminole St, Springfield, MO 65804			
west republic road	Christ Community Church	4224 S Farm Rd 115, Brookline, MO 65619	Y		
	Gateway Christian Church	3600 W Republic Rd, Springfield, MO 65807			
Wilsons Creek Blvd					
Ward Branch - James River Greenway Connector					
Ward Branch Greenway (North)					
	Immaculate Conception Church	3555 S Fremont Ave, Springfield, MO 65804			
Ward Branch Greenway (Middle)					
Ward Branch Greenway (South)					
Riverbluff Blvd - Farmer Branch Trail Connector					
Miverbian biva - Fairner branch frail Connector					
South Creek Greenway (Wilson's Creek Greenway Connector)		2000 5 20 1400 6 1 6 14 140 65007			
Trail of Tears - Batttlefield	Unity Spiritual Center	3233 Farm Rd 123, Springfield, MO 65807			
Trail of Tears - Golden	South Creek Church	3145 W Republic Rd, Springfield, MO 65807	Y		
	Jehovah's Witnesses	3886 S Golden Ave, Springfield, MO 65807	'		
Trail of Tears - South Creek Greenway Connector	Abundant Life Covenant Church	2521 C Conje Avo Covingfield NAC C5907			
Trail of Tears - Greene Park to Ewing Sports Complex	Abundant Life Covenant Church	3531 S Scenic Ave, Springfield, MO 65807			
Westgate - Fort Scott Line Rail Trail Connector					

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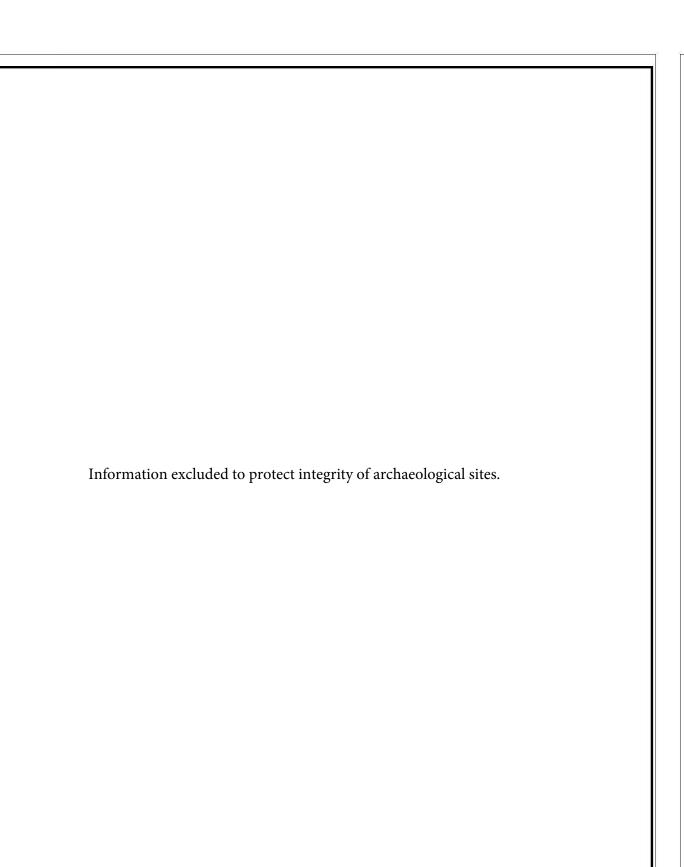
F-13

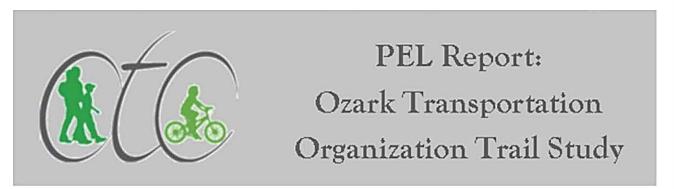
OTO TRAILS - PEL STUDY - PROXIMITY TO CHURCHES				
		Church		
TRAIL	Name	Address	Within 500' Buffer?	
Division Street - I-44 Connector				
Division Street				
Division Street - Cooper Park Connector				

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## EXHIBIT 5 CULTURAL RESOURCE REVIEW ARCHAEOLOGICAL SITES AND SURVEYS





## EXHIBIT 6 POTENTIAL ARCHAEOLOGICAL SITES TO AVOID

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Ozark Transportation
Organization Trail Study

## EXHIBIT 7 FLOODPLAIN, FLOODWAY AND WETLAND IMPACTS

Information excluded to protect integrity of archaeological sites.

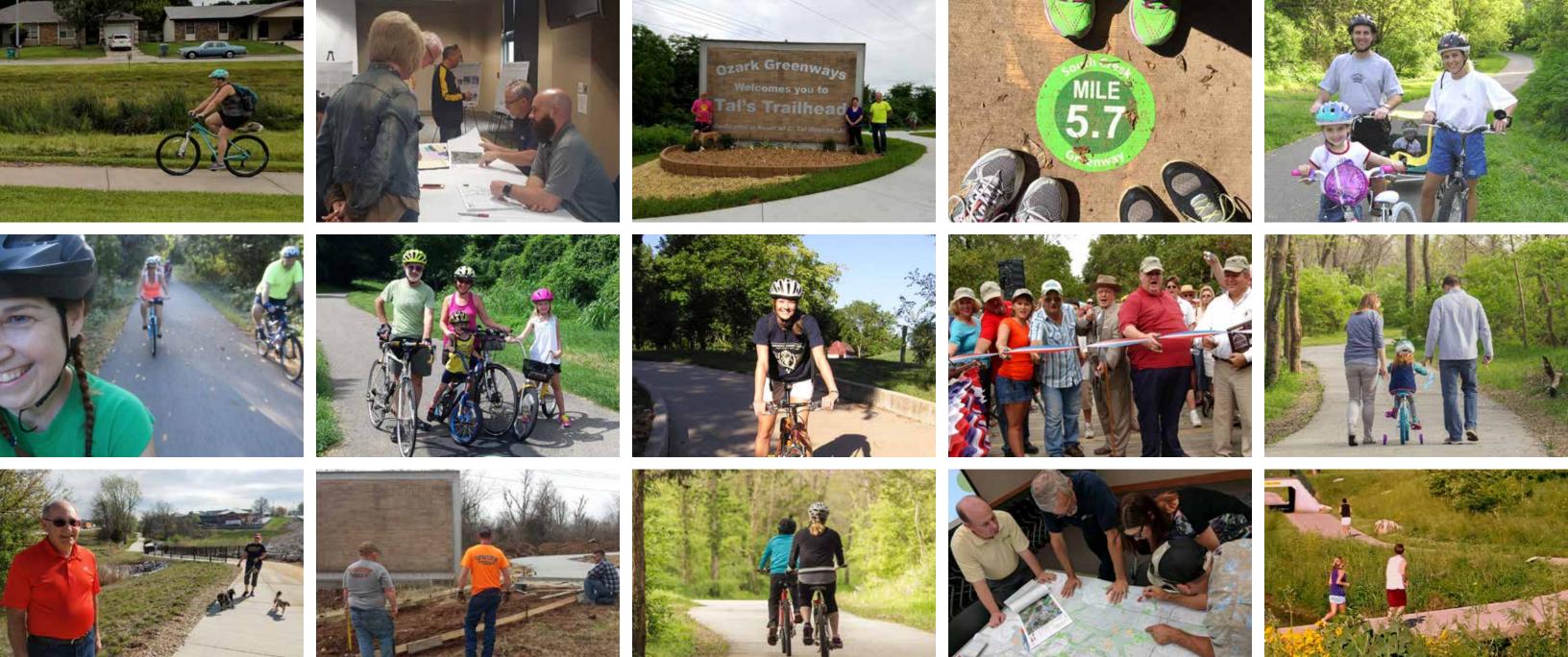
Trail Name	Within 100 year Floodplain	Within	Location	Comment
Shuyler Creek Greenway Extension				
	Y	Υ	Elm to Kentwood	No increase in fill, requires stream crossing
Wilsons Creek Blvd				
	Y	N	Near Republic High School	No increase in fill
West Republic Road				
	Y	Υ	0.3 Mi W/O FR 123	No increase in fill, requires stream crossing
South Creek Greenway (Wilson's Creek Greenway Connector)				
	Y	Υ	Most of route	No increase in fill, requires stream crossing
Trail of Tears - South Creek Greenway Connector				
Connector	Υ	Υ	At each end of trail	Bridge over floodway & floodplain
West Wilson's Creek Greenway (South)		'	At each end of trail	Bridge over noodway & noodplain
west wilson's creek dicenway (south)	Y	Υ	Entirety	Zero net fill, elevate above floodway or realign
West Wilson's Creek Greenway (North)	l l	'	Littlety	Zero net mi, elevate above noodway or realign
West Wilson's Creek Greenway (North)	Y	Y	Entiroty	No increase in fill, requires stroom crossing
Fort Scott Line Pail Trail	T	T	Entirety	No increase in fill, requires stream crossing
Fort Scott Line Rail Trail	V	N.	West of West Dungs & Main to Leffe	Dridge over floodings Q floodings
	Y	N	West of West Bypass & Main to Jefferson	Bridge over floodway & floodplain
Lower Jordan Creek Greenway			NAt Vernen to Fast - Flanding - Father	
	Y	Υ	Mt. Vernon to Fort – Floodway, Entirety – Floodplain	No increase in fill, avoidable on roadway
North Jordan Creek Greenway - Jordan			. iosapia	indicase in imparatualic on roduita,
Valley Connector				
	Υ	N	Phelps to Central	Υ
South Jordan Creek Greenway				
	Υ	Υ	Glenstone to Chestnut	Zero net fill, elevate above floodway or realign
Route 66 / Strafford Trail				
	Υ	N	0.8 Mi west of Route 125	No increase in fill
Wilson's Creek Greenway		1		
•	Υ	Υ	Entirety	Zero net fill, elevate above floodway or realign
Fassnight Creek Greenway (West)		1	,	, , ,
, , , , , , , , , , , , , , , , , , , ,	Υ	Υ	Multiple Crossings	Zero net fill, elevate above floodway or realign
Ward Branch - James River Greenway				
Connector				
	Y	N	Entirety	No increase in fill
Ward Branch Greenway (South)				
	Υ	Υ	Vicinity of FR 182 & W/O Campbell	No increase in fill, requires stream crossings
Ward Branch Greenway (Middle)				
	Maybe	N	South end	No increase in fill, avoidable
Ward Branch Greenway (North)				
	Υ	N	Along Independence	No increase in fill
ames River Greenway		·		
,	Y	Υ	Numerous Locations Throughout	Zero net fill, elevate above floodway or realign
Farmer Branch Greenway				
			E/O Crenshaw, S/O Ridgecrest & FR 169 to	
	Y	N	Millwood	Zero net fill, bridge over where crossing
Farmer Branch Greenway (US 65 South Extension)				
	Y	N	At intersection with Farmers Branch	bridge over where crossing
Riverbluff Blvd - Farmer Branch Trail Connector				
	Υ	Υ	At intersection with Farmers Branch	bridge over where crossing
Chadwick Flyer Rail Trail (South)				
	Y	N	James River to 22nd & At Jackson	No increase in fill
Chadwick Flyer Rail Trail (North)				
, ,	Y	N	At Sherman	

	WETLANDS		
TRAIL	TYPE	LOCATION	Within 500' Buffer?
ower Jordan Creek Greenway			
	Riverine	( 37°12'22.29"N, 93°18'44.16"W), Springfield	Y
	Freshwater Pond	( 37°12'35.22"N, 93°18'29.49"W), Springfield	Y
North Jordan Creek Greenway - Jordan Valley Connector			
South Jordan Creek Greenway			
,	Freshwater Forested/Shrub Wetland	( 37°12'59.50"N, 93°15'15.10"W), Springfield	Y
Fassnight Creek Greenway (West)			
,,,,,	Freshwater Pond	( 37°11'17.00"N, 93°19'28.47"W), Springfield	Y
	Freshwater Pond	( 37°11'18.83"N, 93°19'26.74"W), Springfield	Y
	Freshwater Forested/Shrub Wetland	( 37°11'16.90"N, 93°19'21.97"W), Springfield	Y
Fassnight Creek Greenway (East)			
Ethridge Trail	Freshwater Pond	( 27°06'45 02"N 02°25'49 14"N/) Springfield	V
	Freshwater Pond	( 37°06'45.02"N, 93°25'48.14"W), Springfield ( 37°06'55.54"N, 93°25'47.22"W), Springfield	Y
	Freshwater Pond	( 37°06'58.96"N, 93°25'29.84"W), Springfield	Y
Shuyler Creek Greenway Extension	resnwater rond	(37 00 30.30 N, 33 23 23.04 W), Springheid	1
may to creek dicenway Extension	Freshwater Pond	( 37°07'09.18"N, 93°26'51.13"W), Springfield	Y
	Freshwater Pond	( 37°07'06.83"N, 93°26'49.78"W), Springfield	Y
	Freshwater Pond	( 37°06'57.61"N, 93°26'42.38"W), Springfield	Y
	Freshwater Forested/Shrub Wetland	( 37°07'00.75"N, 93°26'36.84"W), Springfield	Y
	Freshwater Pond	( 37°07'00.10"N, 93°26'34.75"W), Springfield	Υ
	Freshwater Pond	( 37°07'02.98"N, 93°26'29.25"W), Springfield	Υ
	Freshwater Pond	( 37°06'56.65"N, 93°26'15.55"W), Springfield	Y
	Freshwater Pond	( 37°06'56.70"N, 93°26'08.07"W), Springfield	Y
Chadwick Flyer Rail Trail (South)			
	Freshwater Pond	( 37°05'31.87"N, 93°16'18.09"W), Springfield	Y
	Freshwater Pond	( 37°05'01.08"N, 93°15'38.02"W), Springfield	Υ
	Freshwater Pond	( 37°05'05.36"N, 93°15'23.08"W), Springfield	Y
	Freshwater Pond	( 37°05'34.45"N, 93°15'16.83"W), Springfield	Y
	Freshwater Pond	( 37°03'58.37"N, 93°14'22.92"W), Springfield	Y
	Freshwater Pond	( 37°03'49.58"N, 93°13'59.67"W), Springfield	Y
	Freshwater Pond	( 37°03'49.58"N, 93°13'59.67"W), Springfield	Y
	Freshwater Pond	( 37°03'24.11"N, 93°13'46.46"W), Springfield	Y
	Freshwater Pond	( 37°03'10.13"N, 93°13'44.58"W), Springfield	Y
	Freshwater Pond	( 37°02'58.89"N, 93°13'39.77"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°02'11.44"N, 93°13'29.47"W), Springfield	Y
	Freshwater Pond	(37°02'09.18"N, 93°13'29.20"W), Springfield	Y
Route 66 / Strafford Trail	Freshwater Pond	( 37°01'26.39"N, 93°13'22.77"W), Springfield	Y
Toute 00 / Stranord Trail	Freshwater Pond	( 37°14'14.84"N, 93°13'04.39"W), Springfield	Y
	Freshwater Pond	(37°14'36.31"N, 93°11'40.21"W), Springfield	Y
	Freshwater Pond	(37°14'41.28"N, 93°11'33.09"W), Springfield	Y
	Freshwater Pond	(37°14'45.54"N, 93°10'59.22"W), Springfield	Y
	Freshwater Pond	( 37°14'54.32"N, 93°10'52.14"W), Springfield	Y
	Freshwater Pond	( 37°14'47.00"N, 93°10'45.04"W), Springfield	Y
	Freshwater Pond	( 37°16'01.05"N, 93°07'07.05"W), Springfield	Y
	Freshwater Pond	( 37°16'06.14"N, 93°06'51.62"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°16'06.66"N, 93°06'47.37"W), Springfield	Y
	Freshwater Pond	( 37°16'03.98"N, 93°06'49.05"W), Springfield	Y
	Freshwater Pond	( 37°16'14.27"N, 93°06'33.14"W), Springfield	Y
	Freshwater Pond	( 37°16'18.57"N, 93°05'59.75"W), Springfield	Υ
	Freshwater Pond	( 37°16'18.31"N, 93°05'56.83"W), Springfield	Υ
	Freshwater Pond	( 37°16'17.99"N, 93°05'54.75"W), Springfield	Y
	Freshwater Pond	( 37°16'16.42"N, 93°05'50.41"W), Springfield	Y
	Freshwater Pond	( 37°16'16.90"N, 93°05'25.12"W), Springfield	Y
	Freshwater Pond	( 37°16'09.24"N, 93°05'17.32"W), Springfield	Υ

	OTO TRAILS - PEL ST	UDY - WETLAND IMPACTS	
Farmer Branch Greenway			
	Freshwater Pond	( 37°05'31.70"N, 93°16'18.16"W), Springfield	Y
	Freshwater Pond	( 37°05'41.37"N, 93°16'03.47"W), Springfield	Y
	Freshwater Pond	( 37°05'41.41"N, 93°15'50.82"W), Springfield	Y
	Freshwater Pond	( 37°05'54.34"N, 93°15'45.25"W), Springfield	Y
	Freshwater Pond	( 37°05'50.38"N, 93°15'43.68"W), Springfield	Y
	Freshwater Pond	( 37°05'32.17"N, 93°14'30.61"W), Springfield	Y
Wilson's Creek National Battlefield Trail Connector			
	Freshwater Pond	( 37°06'58.96"N, 93°25'29.84"W), Springfield	Y
Le Compte Road Trail			
	Freshwater Pond	( 37°14'15.10"N, 93°13'04.53"W), Springfield	Y
	Freshwater Pond	( 37°13'30.88"N, 93°13'00.86"W), Springfield	Y
North Jordan Creek Greenway			
	Freshwater Pond	( 37°13'44.88"N, 93°14'34.37"W), Springfield	Y
	Freshwater Pond	( 37°13'44.71"N, 93°13'59.44"W), Springfield	Y
	Freshwater Pond	(37°13'43.29"N, 93°13'59.23"W), Springfield	Y
	Freshwater Pond	( 37°13'42.10"N, 93°14'00.63"W), Springfield	Y
B: 6	Freshwater Pond	( 37°13'39.10"N, 93°13'58.85"W), Springfield	Y
ames River Greenway	Diversity	Alamatha malamba af tha tag	.,
	Riverine	Along the majority of the trail	Y
	Freshwater Forested/Shrub Wetland	Pockets in and around Riverine, near trail	Y
	Freshwater Emergent Wetland	(37°04'39.76"N, 93°22'10.04"W), Springfield	Y
	Freshwater Emergent Wetland	(37°04'59.80"N, 93°21'35.61"W), Springfield	Y
	Freshwater Pond	(37°05'30.80"N, 93°20'51.56"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°06'06.13"N, 93°19'16.53"W), Springfield	Y
	Freshwater Pond	( 37°06'10.98"N, 93°19'12.13"W), Springfield	Y
	Lake (Lake Springfield)	( 37°06'37.49"N, 93°15'09.50"W), Springfield	Y
West Wilson's Creek Greenway (South)			
, , ,			
West Wilson's Creek Greenway (North)			
	Freshwater Pond	( 37°12'17.24"N, 93°23'46.13"W), Springfield	Y
	Freshwater Forested/Shrub Wetland	( 37°12'12.02"N, 93°23'28.09"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°12'02.73"N, 93°23'20.63"W), Springfield	Y
-44 Trail			
	Freshwater Emergent Wetland	( 37°14'31.25"N, 93°21'26.93"W), Springfield	Y
	Freshwater Pond	( 37°14'20.17"N, 93°21'27.55"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°13'26.82"N, 93°22'31.24"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°13'19.90"N, 93°22'31.92"W), Springfield	Y
	Freshwater Pond	( 37°12'53.86"N, 93°23'01.94"W), Springfield	Y
	Freshwater Pond	( 37°12'37.35"N, 93°23'38.05"W), Springfield	Y
	Freshwater Pond	( 37°12'30.54"N, 93°23'36.58"W), Springfield	Y
Wilson's Creek Greenway			
	Freshwater Emergent Wetland	( 37°11'50.37"N, 93°21'14.13"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°11'47.00"N, 93°21'08.78"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°11'41.86"N, 93°20'50.10"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°11'40.40"N, 93°20'45.87"W), Springfield	Y
	Freshwater Pond	( 37°11'46.78"N, 93°20'44.15"W), Springfield	Y
Fort Scott Line Rail Trail			
	Freshwater Pond	( 37°13'06.64"N, 93°21'51.89"W), Springfield	Y
	Freshwater Pond	( 37°13'01.02"N, 93°21'04.37"W), Springfield	Y
Chadwick Flyer Rail Trail (North)			
	Freshwater Forested/Shrub Wetland	( 37°11'33.27"N, 93°15'09.11"W), Springfield	Y
	Freshwater Forested/Shrub Wetland	( 37°11'30.95"N, 93°15'08.71"W), Springfield	Y
West Republic Road			
	Freshwater Emergent Wetland	( 37°08'27.31"N, 93°24'45.07"W), Springfield	Y
	Freshwater Forested/Shrub Wetland	( 37°08'23.28"N, 93°24'21.67"W), Springfield	Y
Wilsons Creek Blvd			
	Freshwater Emergent Wetland	( 37°07'56.93"N, 93°25'08.67"W), Springfield	Υ
	Freshwater Pond	( 37°07'55.65"N, 93°25'12.40"W), Springfield	Y
Ward Branch - James River Greenway Connector			

### Trail Investment Study (

Ward Branch Greenway (North)			
	Freshwater Pond	( 37°08'41.98"N, 93°16'30.86"W), Springfield	Y
	Freshwater Pond	( 37°08'39.44"N, 93°16'17.12"W), Springfield	Y
Ward Branch Greenway (Middle)			
	Freshwater Pond	( 37°08'13.88"N, 93°17'11.52"W), Springfield	Y
Ward Branch Greenway (South)			
Riverbluff Blvd - Farmer Branch Trail			
Connector			
	Freshwater Pond	( 37°05'50.53"N, 93°14'54.32"W), Springfield	Y
	Freshwater Pond	( 37°05'52.60"N, 93°14'33.10"W), Springfield	Y
	Freshwater Pond	( 37°06'04.64"N, 93°14'12.56"W), Springfield	Y
South Creek Greenway (Wilson's Creek Greenway Connector)		, , , , , , ,	
Frail of Tears - Batttlefield			
S. Todio Buttieriera	Freshwater Pond	( 37°07'27.17"N, 93°21'15.55"W), Springfield	Y
Frail of Tears - Golden	Treshwater Fond	(37 07 27:17 N, 33 21 13:33 W), 3pringheid	,
Tall of Tears Colucti	Freshwater Pond	( 37°08'21.30"N, 93°20'26.47"W), Springfield	Y
	Freshwater Emergent Wetland	( 37°08'22.61"N, 93°20'23.25"W), Springfield	· Y
	Freshwater Pond	( 37°08'16.92"N, 93°20'28.74"W), Springfield	Y
Trail of Tears - South Creek Greenway Connector	- Committee - Committee	(V) so lost was to to the way opinion	
	Freshwater Pond	( 37°09'18.71"N, 93°20'02.92"W), Springfield	Y
	Freshwater Pond	( 37°09'17.78"N, 93°20'00.45"W), Springfield	Y
Trail of Tears - Greene Park to Ewing Sports Complex			
	Freshwater Pond	( 37°11'05.45"N, 93°19'39.38"W), Springfield	Y
Westgate - Fort Scott Line Rail Trail Connector			
	Freshwater Emergent Wetland	( 37°13'35.28"N, 93°21'56.97"W), Springfield	Y
	Freshwater Forested/Shrub Wetland	( 37°13'33.97"N, 93°21'57.74"W), Springfield	Y
	Freshwater Pond	( 37°13'24.90"N, 93°21'57.86"W), Springfield	Y
Division Street - I-44 Connector			
	Freshwater Emergent Wetland	( 37°13'35.28"N, 93°21'56.97"W), Springfield	Y
	Freshwater Forested/Shrub Wetland	( 37°13'33.97"N, 93°21'57.74"W), Springfield	Y
Division Street			
	Freshwater Pond	( 37°13'30.89"N, 93°13'00.09"W), Springfield	Y
Division Street - Cooper Park Connector			
•	Freshwater Pond	( 37°13'16.68"N, 93°14'01.02"W), Springfield	Y

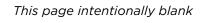


Ozarks Transportation Organization
Bicycle & Pedestrian Trail Investment Study



Sample Prioritization & Phasing Reflecting Conditions in October 2017





# **ACKNOWLEDGEMENTS**

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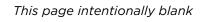






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# SAMPLE CORRIDOR PRIORITIZATION AND PROJECT PHASING

# Introduction

The prioritization of planned priority trail corridors is essential to rational and orderly growth of the regional trail system. The project team has developed a suggested set of measurable prioritization criteria to score each planned priority trail corridor. The sample prioritization criteria reflect the needs and aspirations of the community as expressed through the public engagement process and includes additional factors critical to project phasing and network development, such as availability of public lands, maintenance resources and capacities, and planned infrastructure investments.

This sample prioritization and phasing document is a component of the Ozark Transportation Organization's Trail Investment Study. The purpose of the Trail Investment Study is to better position the Ozarks Transportation Organization (the OTO) and local agencies to undertake local trail projects that best support regional trail network growth. The study includes multiple components designed to advance this purpose, including the refinement of over 75 miles of planned priority trails, environmental documentation utilizing the Federal Highway Administration's Planning + Environmental Linkages guidance and questionnaire, cost estimates for each trail project, and the prioritization and phasing process described herein.

This sample corridor prioritization and project phasing document is separate from the other study components listed above to reflect the evolving nature of the prioritization process, which will inevitably change over time to reflect changing development and demographic trends and take advantage of opportunities as they arise. The prioritization process described in this document can be replicated in the coming years with the latest data, and therefore serves as a valuable tool for the OTO and its local partners in the continued development of a world-class trail system that contributes to the region's character, identity, and quality of life.

The document begins with an introduction to and explanation of the criteria used to measure the effectiveness of each corridor, then summarizes the results of the prioritization exercise. The memorandum concludes with a further examination of ten planned priority trail corridors to identify projects that can be developed within the limited financial resources available in each of the corridors. Another consideration that we must take into account in this process goes beyond just prioritization, and to phasing based on the ability for corridors to move forward, such as corridors with active rail lines.

# Sample Prioritization Methodology

This multi-part sample prioritization methodology is grounded in the project needs established at the onset of the project and has been refined to reflect input from the public and from the OTO Bicycle and Pedestrian Advisory Committee. The process consists of four main components:

- 1. Data-driven, value-based scoring of corridors
- 2. Refinement of scoring based on BPAC and OTO staff input
- 3. Incorporation of critical factors identified by the project team. OTO staff, and BPAC members.
- 4. Grouping of corridors into those implementable within a five-year time frame, and those dependent on external critical factors and/or projects.

# **Step 1: Data-Driven Corridor Scoring**

The data-driven scoring process applies 20 criteria to all 18 priority trail corridors to capture the full value of each corridor based on eight important themes, which include safe connections, regional coordination/impact, connectivity, and project readiness. This process is objective in nature and is dependent on spatial analysis of GIS-based data to assign value to each corridor. The methodology for this data-driven, value-based scoring process is described below.

#### 1. Safe Connections

#### 1.1. GAP CLOSURE

This sample prioritization criterion reflects the ability of a corridor to address trail system gaps.

#### 1.1: Gap Closure Scoring

- O Does not connect to any existing trail segments
- Connects to one existing trail segment, but does not link two existing/separate segments
- Connects to two or more separate trail segments and closes a gap in the regional trail system

#### 1.2. NEED FOR CROSSING IMPROVEMENTS

This sample prioritization criterion is based on required number of at-grade intersection and mid-block crossings. Fewer at-grade crossings of roadways creates fewer conflict points between trail users and motor vehicles. Scores are calculated on a per-mile basis.

## 1.2: Need for Crossing Improvements Scoring

- More than 1.5 crossings per mile
- Between 1 and 1.5 crossings per mile
- Less than 1 crossing per mile

# 2. Regional Coordination/Regional Impact

## 2.1. CONNECTING COMMUNITIES

This category highlights the importance of connecting local communities throughout the region and is calculated based on the number of municipalities and/or counties through which a trail corridor passes. This category is weighted more heavily than others, reflecting the importance of regional connectivity as communicated by area residents and stakeholders.

#### 2.1: Connecting Communities Scoring

- Trail is entirely within a single jurisdiction
- Trail is extends outside of a single municipality and into unincorporated county/counties
- Trail extends into two or more municipalities

#### 2.2. POPULATION SERVED

Population density within 1/2-mile of the trail corridor provides a relative scoring system to measure the number of people that can benefit from nearby access to trails.

# 2.2: Population Served Scoring

- Less than one person per acre
- Between one and three persons per acre
- More than three persons per acre

# 3. Connectivity

#### 3.1. PROXIMITY TO PARKS

For people bicycling and walking, trails can serve as vital connectors to and between local and regional parks. This scoring category measures the acres of parks that intersect a 1/2-mile buffer around the trail corridor (not limited only to park land within the half-mile buffer) and groups them into three categories as shown below.

# 3.1: Proximity to Parks Scoring

- Less than 5 acres per mile
- 5 to 100 acres per mile
- More than 100 acres per mile.

#### 3.2. PROXIMITY TO SCHOOLS

Trails can also provide needed access to schools for children and families. This category measures the number of K-12 schools, colleges, and universities within 1/2-mile of each trail corridor. The scores are calculated on a per-mile basis in order to account for the varying lengths of the corridors.

## 3.1: Proximity to Schools Scoring

- Zero schools per mile
- Between zero and two schools per mile
- More than two schools per mile

# 3.3. CONNECTIVITY TO OTHER TRANSPORTATION MODES

Trails can serve as valuable transportation corridors to access nearby and regional destinations. On-street bike routes and transit can increase trail users' ability to bike and walk for transportation purposes. This trail prioritization category measures the number of intersecting bike and transit routes within 1/2-mile of each trail corridor, calculated on a per-mile basis.

# 3.1: Connectivity to Other Transportation Modes Scoring

- Less than one on-street bike route or transit route per mile
- One to two routes per mile
- More than two routes per mile

# 4. Project Readiness

#### 4.1. COST

Cost can be a major factor for the development of trail projects. This category rates each corridor based on estimated cost.

## 4.1: Corridor Cost Scoring

- More than \$1.5M
- \$1.0M \$1.5M
- Less than \$1.0M

#### 4.2. AVAILABLE PUBLIC LANDS

The availability of public lands may lessen the need to acquire additional property or easements for future trail development. This scoring category measures the percentage of a corridor alignment located within public road right-of-way or publicly-owned land

## 4.2: Available Public Lands Scoring

- Less than 20% of corridor within public road rightof-way or publicly-owned land
- Between 20% and 60% of corridor
- 60% or more

# 5. Scenic / Historic Value

#### **5.1. PROXIMITY TO NATURAL RESOURCES**

Through the public input process, community members expressed their desire for trail types that provided access to natural resources, in particular riparian (stream/river) corridors, which support biodiversity. This category uses proximity to streams and rivers to develop a natural resources score for each trail corridor.

## 5.1: Proximity to Natural Resources Scoring

- No creeks, streams, or rivers within 1/2-mile of trail corridor
- Trail corridor intersects one to two creeks, streams, or rivers
- Trail corridor intersects more than two creeks, streams, or rivers, or parallels riparian corridor

#### 5.2. ACCESS TO HISTORIC DISTRICTS AND SITES

This category measures the number of historic districts and sites within 1/2-mile of each trail corridor and calculates scores on a per-mile basis. If the entire corridor is an historic byway, road or trail, then it receives the highest possible score.

## 5.2: Access to Historic Districts and Sites Scoring

- O No historic districts and sites within 1/2-mile of trail corridor
- Less than one per mile
- More than one per mile, or if the corridor is on a historic byway, road or trail

## 6. Environmental Impacts

## 6.1. WETLANDS

While wetlands can provide a unique user experience, trail development can have lasting impacts on these sensitive natural resources. This category scores each trail corridor based on the number of acres of wetlands per mile within 50 feet of the corridor.

## 6.1: Wetlands Scoring

- More than 1 acres of wetlands per mile
- 1/2 to 1 acres of wetlands per mile
- Less than 1/2 acres of wetlands per mile

#### 6.2. 100-YEAR FLOODPLAIN

Similar to wetlands, floodplains serve a vital environmental function. Trail development through floodplains requires extra documentation and permitting to ensure the floodplain's continued functionality as a buffer between riparian corridors and adjacent land and buildings.

## 6.2: Floodplains Scoring

- O More than 50% of trail corridor within 100-year floodplain
- Less than 50% of trail corridor within 100-year floodplain
- 0% of trail corridor within 100-year floodplain

# 7. Community Value

#### 7.1. TRAIL ACCESS

Trailheads and access points increase the permeability of trails and provide multiple locations for adjacent residents, nearby employees, and area visitors to get on and off the trail. This category measures the number of existing and future trailheads, potential trail access points, and parking facilities, calculated on a per-mile basis.

# 7.1: Trail Access Scoring

- C Less than one trailhead or access point per mile
- One to two trailheads or trail access points per mile
- More than two trailheads or trail access points per mile

# 7.2. PUBLIC SUPPORT

This prioritization criterion scores each corridor based on feedback from community residents during the course of the study by measuring the number of comments in support of each trail corridor received through online mapping and comment forms, and at open house meetings.

# 3.1: Public Support Scoring

- No public support
- Some public support (1-3 supportive comments)
- Most public support (4 or more supportive comments)

# 8. Economic Impact Potential

## **8.1. EMPLOYMENT CENTERS**

Connecting trails to employment centers can create opportunities for walking and bicycling to work, as well as provide adjacent businesses and employees with healthy, accessible recreation options. This prioritization criterion measures the number of employees within 1/2-mile of each trail corridor, calculated on a per-mile basis.

## 8.1: Employment Centers Scoring

- Less than 300 employees per mile of trail corridor
- 300 to 1500 employees per mile of trail corridor
- More than 1500 employees per mile of trail corridor

#### **8.2. PROXIMITY TO COMMERCIAL DISTRICTS**

By connecting trails to commercial districts, people can choose to walk and bike to local businesses. For many commercial areas, trail development can serve as an economic booster by providing a valuable amenity that attracts people to the area. This prioritization criterion measures the number of commercial districts within 1/2-mile of each trail corridor, calculated on a per-mile basis.

#### 8.1: Proximity to Commercial Districts Scoring

- No business districts within 1/2-mile of trail corridor
- Less than one business district per two miles of trail corridor
- More than one business district per two miles of trail corridor

# **Step 2: Refinement of Data-Driven Scores**

Because the initial scoring process described above is purely objective and relies solely on GIS-based spatial data analysis, the results may reflect data that is out-of-date or inaccurate. In order to address these data quality short-comings, OTO staff and BPAC members have provided input regarding amenities, resources, infrastructure, and other data-related information impacting the scoring process to address and rectify inaccurate scoring results. The input provided by BPAC members will be summarized in the final sample prioritization process and provided in full at the end of this appendix of the study.

# **Step 3: Incorporation of Critical Factors**

Development of many of the trail corridors under consideration in this trail investment study will be dependent on external critical factors. These critical factors include active rail lines, stormwater mitigation and stream daylighting projects, planned and programmed infrastructure improvements, potential for private development or redevelopment, and regional equity. Input from OTO staff and BPAC regarding these critical factors will be summarized in this section of the prioritization process and documented in full in the appendix of this study. The documentation of these critical factors will assist local agencies in addressing issues and needs in the early stages of project development. These critical factors will change over time, and this step will need to be repeated with changing conditions.

# **Step 4: Corridor Grouping**

Based on the previous prioritization steps described above, the 18 priority trail corridors will be grouped into two categories: short-term, implementable trail corridors, and long-term trail corridors. The short-term, implementable corridors represent the ten projects with the highest refined datadriven, value-based scores and few to no negative critical factors impacting trail development. The remaining corridors consist of lower-scoring projects, and project whose development is severely constrained by external critical factors as of October 2017.

# **Sample Prioritization Results**

# **Steps 1 & 2: Sample Data-Driven Scoring and Refinement**

Table 1 displays the results of the sample data-driven scoring process in October of 2017. Following an initial review by the by OTO staff and members of the BPAC, certain data (including parks, schools, and other destinations) were updated to better reflect current conditions, and minor adjustments were made to a number of prioritization criteria development. These updates helped to enhance the final scores by incorporating up-to-date data points (schools, parks, etc.), creating minor adjustments to scoring methodology for individual categories, and applying weights to one category to increase its value.

This sample prioritization is indicative of a process that might be used as a starting process in scoring project proposals.

**Table 1: Sample Data-Driven Scoring Results - October 2017** 

Trail Corridor	Total Score	Ranking		fe ections	Coord	ional ination pact	Con	necti	vity		ject liness		nic/ oric lue	me	iron- ntal acts	Comn	ity & nunity lue		omic act ntial
	Score		1.1	1.2	2.1	2.2	3.1	3.2	3.3	4.1	4.2	5.1	5.2	6.1	6.2	7.1	7.2	8.1	8.2
Maximum Possible Score	37	N/A	2	2	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Trail of Tears	27	1	2	0	5	2	1	2	1	2	1	0	2	2	1	2	1	1	2
North Jordan	24	2	1	1	0	1	1	1	2	1	2	2	2	2	1	2	1	2	2
Ward Branch	24	2	1	2	3	1	2	1	1	0	1	2	0	2	1	2	1	2	2
Fassnight	23	3	2	0	0	2	1	2	2	2	1	2	0	1	1	2	1	2	2
Chadwick North	22	4	2	0	0	2	1	1	2	0	0	1	2	2	1	2	2	2	2
Chadwick South	22	4	1	2	5	0	0	1	0	1	1	1	1	2	1	1	2	1	2
Fort Scott	22	4	1	0	3	1	1	1	2	0	1	0	2	2	1	2	1	2	2
Lower Jordan	22	4	2	0	0	2	1	2	2	0	2	2	2	0	0	2	1	2	2
Wilson's Creek-Battlefield	21	5	1	1	5	0	2	1	0	0	2	1	1	2	1	1	2	0	1
Route 66	20	7	0	1	5	0	0	1	0	1	2	0	2	2	1	1	2	1	1
South Jordan	20	7	1	0	0	1	1	1	1	0	2	1	2	2	1	2	1	2	2
Wilson's Creek	20	6	2	2	3	1	2	0	1	0	1	2	0	0	0	1	2	1	2
Republic- Battlefield	19	8	1	1	3	1	2	0	0	1	2	1	1	2	1	1	2	0	0
South Creek	19	8	2	2	3	1	0	0	2	1	0	2	0	2	0	2	2	0	0
Farmers Branch	17	9	0	1	5	0	0	0	0	2	1	2	0	2	1	1	0	0	2
1-44	17	9	1	1	3	0	0	0	0	1	2	0	0	2	2	1	2	1	1
James River	12	10	0	2	3	0	1	0	0	1	1	2	0	0	0	0	1	0	1
West Wilson's Creek	10	11	1	1	0	0	2	0	0	0	1	2	0	1	0	1	1	0	0

# Steps 3 & 4: Incorporation of Critical Factors and Corridor Grouping

The final steps in a prioritization process might incorporate factors critical to trail development process and separate the corridors into two distinct groups: those implementable within the short-term period of 5, and those whose project development is severely constrained by external factors.

#### **Critical Factors**

Critical external factors can influence trail project timing and development. The presence of the following external factors along trail corridors were considered in this examination:

- Active railroad lines
- Potential creek and stormwater daylighting projects
- Planned and programmed roadway projects

#### **ACTIVE RAILROAD LINES**

A number of planned priority trail alignments utilize, either in part or in full, active railroad corridors. The BNSF Railway

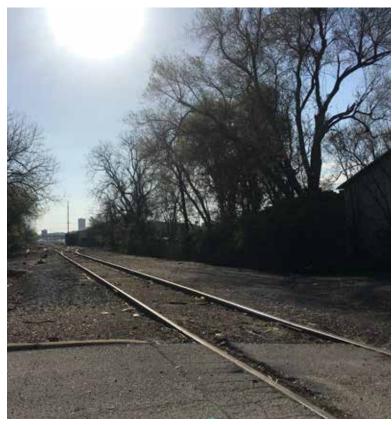
The Trail of Tears segment between Nathaniel Greene Park and Ewing Sports Complex travels along the MNA Railroad.

Company's current policy prohibits trails parallel to railroad tracks and outlines other requirements:

"The Railroad does not allow Trails parallel to the track on Railroad right-of-way and does not permit the use of Railroad Access Roads for trail use. Railroad bridges can not be used to serve Trail traffic or support a structure serving Trail traffic. Fences or barriers such as vegetation, ditches, and/or berms shall separate Trails that are outside the Railroad right-of-way and running parallel to the track to stop trespassers from entering the Railroad right-of- way."

Three potential conditions may arise which reduce or eliminate significant constraints for trail development along these corridors:

- The BNSF Railway Company changes its policy to allow trail development parallel to active railroad tracks within BNSF right-of-way.
- 2. The railroad abandons a rail line on which a planned priority trail alignment is proposed.



The entire Chadwick Flyer Rail Trail North travels along the active BNSF Spur from Jordan Valley Park to the Galloway Creek Greenway.

3. A local agency chooses to develop a trail alignment on properties adjacent to the active railroad line, which may require higher average property acquisition or right-ofway costs and negotiations with considerably more property owners.

Planned priority trail corridors that include one or more segments along an active railroad line include the Chadwick Rail Trail North (full corridor), the Fort Scott Rail Trail (majority), the Trail of Tears (partial), and the Lower Jordan Creek Greenway (partial).

#### CREEK AND STORMWATER DAYLIGHTING PROJECTS

Many planned priority trail corridors are positioned alongside rivers, streams, and stormwater channels. These natural corridors perform a vital function for collecting and channeling stormwater. As development in the region has increased, active management of these corridors became necessary to better control increasing volumes of stormwater runoff and reduce flooding. Over the years, continued land development, more severe storm events, and aging stormwater infrastructure have required local agencies to plan for and



The Fassnight Park Waterway Improvements included the design and construction of the Fassnight Greenway trail.

develop stormwater management approaches and infrastructure that better meet current challenges and needs.

Recent projects by the City of Springfield exhibit this new approach to stormwater management that brings added value to these riparian corridors by re-introducing natural elements and creating recreational opportunities in the form of trail development. Projects like the Jordan Creek North Branch Daylighting Project, the Fassnight Park Waterway Improvements, and the Ward Branch Channel Stabilization & Trail Development Project showcase the possibilities for trail development in coordination with stormwater capital improvements.

While not necessarily a constraint to trail development, stormwater capital improvement projects like those described above can offer cost savings to trail development projects by producing economies of scale for planning, design, mobilization, traffic management, and other project costs. As such, trail development along these corridors should be coordinated with stormwater capital improvements to the greatest extent possible.

Planned priority trail corridors that include one or more segments along riparian corridors that may be subject to future stormwater capital improvement projects include the North Jordan Creek Greenway, the South Jordan Creek Greenway, the Lower Jordan Creek Greenway the Fassnight Creek Greenway, the Ward Branch Greenway, and Republic-Battlefield corridor (Shuyler Creek Greenway extension).

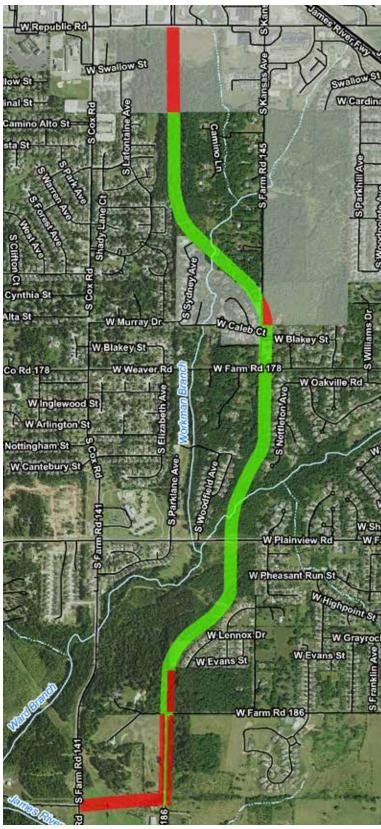
#### PLANNED AND PROGRAMMED ROADWAY PROJECTS

Most roadway projects include bicycle and pedestrian accommodations, which may consist of sidewalks, bike lanes, shared travel lanes, or multi-use trail sidepaths. A number of planned priority trail corridors include segments that travel parallel to or within existing roadway rights-of-way or along future roadway corridors. Similar to stormwater capital improvement projects, roadway construction and reconstruction projects offer opportunities to lessen the cost of trail projects through economies of scale in design, engineering, right-of-way acquisition, and construction costs; however, the timing of project development may be more dependent upon availability of funding for more expensive roadway projects than upon trail development considerations.

Planned priority trail corridors that include segments along planned or programmed roadway projects include the Ward Branch Greenway, the Wilson's Creek-Battlefield corridor, the Farmers Branch Greenway, and the James River Greenway. Many other planned priority trail corridors include segments along existing roadways that will likely be improved over time through future capital projects.



The City of Springfield's Jordan Creek North Branch Daylighting Project included a parallel segment of trail that forms part of the North Jordan Creek Greenway.



A segment of the planned Ward Branch Greenway (South) parallels the future Kansas Expressway Extension between Farm Road 176 and West Plainview Road.

# **Corridor Grouping**

With the previously described critical factors taken into consideration, the planned priority trail corridors were grouped into two categories. The first category includes the ten highest-ranked corridors not negatively impacted by critical factors, as determined by the OTO and vetted by the BPAC in October 2017.

**Table 4.2: Category 1 - Ten Highest-Ranked Corridors** 

Table 4.2. Category 1 Ten ringi		
Trail Corridor	Total Score	Ranking
Maximum Possible Score	37	N/A
Trail of Tears	27	1
North Jordan	24	2
Ward Branch	24	2
Chadwick South	22	4
Lower Jordan	22	4
Wilson's Creek-Battlefield	21	6
Route 66	20	7
South Jordan	20	7
Wilson's Creek	20	7
Republic-Battlefield	19	10

These corridors consist of tangible, developable projects that can increase regional trail access and connectivity. These ten projects should be targeted for development by municipal and county agencies in the next five years. Further in this study, each of these corridors are divided into project segments, each with an average cost between \$500,000 and \$800,000, commensurate with available annual Transportation Alternatives Program funding through the OTO.

The second category of projects consists of the lowest-scoring corridors, as well as those that were relegated to this category as a result of critical factors considerations as determined by the OTO and vetted by the BPAC. Trail corridors that were relegated to this category because of critical factor constraints are highlighted in yellow.

**Table 4.3: Category 2 - Lowest-Ranked Corridors** 

Trail Corridor	Total Score	Ranking
Maximum Possible Score	37	N/A
Fassnight	23	3
Chadwick North	22	4
Fort Scott	22	4
South Creek	19	8
Farmers Branch	17	9
1-44	17	9
James River	12	10
West Wilson's Creek	10	11

The map at the end of this section shows the results of this prioritization process to provide regional context. High priority trail corridors are depicted in red dashed lines, low priority trail corridors are depicted in blue dashed lines, and constrained trail corridors that have been relegated to low priority are depicted in yellow dashed lines.

# **Refined Project Segments**

The refined priority trail corridors range in length from one mile to over seven miles. While shorter trail corridors like the Wilson's Creek Greenway (Rutledge-Wilson Farm Community Park to James Ewing West Park) could be completed as single projects, most trail corridors are likely to be developed in phases, dependent on funding, right-of-way, and other considerations.

In order to assist with project phasing, this section of the study divides each of the ten corridors into segments ranging in cost between \$500,000 and \$800,000. This general cost range corresponds to a combination of federal funding through the OTO's Transportation Alternatives Program, which is set at \$400,000 per year, and a local match of 20 percent (\$100,000) to 50 percent (\$400,000). Some trail segments are outside this cost range as a result of longer or shorter project lengths necessary to access specific properties or logical segment endpoints. Segments for each trail corridor are listed on the following pages.

# **Chadwick Flyer Rail Trail (South)**

Order	Trail Name	Segment Name	Length (miles)	Cost
1	Chadwick Flyer Rail Trail (South)	Ozark Community Center to W Clay St	0.82	\$857,376
2	Chadwick Flyer Rail Trail (South)	W Clay St to Richwood Rd	0.38	\$397,508
3	Chadwick Flyer Rail Trail (South)	Richwood Rd to Longview Rd	0.75	\$789,398
4	Chadwick Flyer Rail Trail (South)	Longview Rd to 22nd St n/o Garton Rd	0.52	\$547,789
5	Chadwick Flyer Rail Trail (South)	22nd St n/o Garton Rd to 750 ft n/o Airpark Rd	0.66	\$696,898
6	Chadwick Flyer Rail Trail (South)	750 ft n/o Airpark Rd to Fremont Rd	0.72	\$760,404
7	Chadwick Flyer Rail Trail (South)	Fremont Rd s/o Hwy CC to Chadwick Flyer alignment	0.36	\$378,907
8	Chadwick Flyer Rail Trail (South)	BN RR parcel south - 11030500000107000	0.35	\$367,216
9	Chadwick Flyer Rail Trail (South)	McDaniel, Prabhakaran, and Graven properties	0.74	\$781,422
10	Chadwick Flyer Rail Trail (South)	Friebe parcel 04093200000000000	0.28	\$295,908
11	Chadwick Flyer Rail Trail (South)	Price, Sebolt, and River Havens Farms properties	0.64	\$672,962
12	Chadwick Flyer Rail Trail (South)	BN RR parcel north - 04093100000026000	0.62	\$651,919
13	Chadwick Flyer Rail Trail (South)	James River Greenway Connector	0.45	\$468,798
		Total	7.29	\$7,666,505

# **Lower Jordan Creek Greenway**

Order	Trail Name	Segment Name	Length (miles)	Cost
1	Lower Jordan Creek Greenway	Mill & Campbell to Main	0.16	\$507,612
2	Lower Jordan Creek Greenway	Main to Fort	0.66	\$2,123,380
3	Lower Jordan Creek Greenway	Fort to College	0.13	\$421,980
4	Lower Jordan Creek Greenway	College to Walnut	0.11	\$353,005
5	Lower Jordan Creek Greenway	Walnut to Mt Vernon	0.27	\$863,094
		Total	1.32	\$4,269,071

# North Jordan Creek Greenway

Order	Trail Name	Segment Name	Length (miles)	Cost
1	North Jordan Creek Greenway - Jordan Valley Connector	Existing trail in Jordan Valley Park to Chestnut	0.21	\$408,917
2	North Jordan Creek Greenway - Jordan Valley Connector	Chestnut to Bob Barker (partially existing)	0.29	\$556,421
3	North Jordan Creek Greenway - Jordan Valley Connector	Bob Barker to Silver Springs Park	0.27	\$522,687
4	North Jordan Creek Greenway	Division - Smith Park to Nias Ave	0.54	\$721,505
5	North Jordan Creek Greenway	Division - Nias Ave to Hayes Ave	0.51	\$684,948
6	North Jordan Creek Greenway	Division - Hayes Ave to Cedarbrook Ave	0.54	\$728,364
7	North Jordan Creek Greenway	Division/Packer - Cedarbrook Ave to Blaine St	0.51	\$682,180
8	North Jordan Creek Greenway	Packer - Blaine St to BNSF Mainline Railroad	0.38	\$507,570
9	North Jordan Creek Greenway	Packer to Kearney	0.80	\$1,082,700
10	North Jordan Creek Greenway	W/O US Hwy 65 to Route 66 Trail	0.33	\$438,624
		Total	4.37	\$6,333,916

# **Republic - Wilson's Creek National Battlefield**

Order	Trail Name	Segment Name	Length (miles)	Cost
1	Shuyler Creek Greenway Extension	Shuyler Greenway Extension to Elm St	0.29	\$537,259
2	Shuyler Creek Greenway Extension	E/O Julie St to FR 97	0.17	\$311,404
3	Shuyler Creek Greenway Extension	FR 97 east for 1,380 ft (Nau Angus Farms West)	0.26	\$480,102
4	Shuyler Creek Greenway Extension	FR 99 west for 1,360 ft (Nau Angus Farms East)	0.26	\$473,032
5	Etheridge Trail	Etheridge Trail West (Owens parcel)	0.18	\$384,847
6	Etheridge Trail	Etheridge Trail Central (Sanders parcel)	0.20	\$434,242
7	Etheridge Trail	Etheridge Trail East (Whitman and Roller parcels)	0.25	\$557,234
8	Wilson's Creek National Battlefield Trail Connector	Roller parcel to Battlefield Visitor Center	0.39	\$797,147
		Total	2.00	\$3,975,267

# Route 66 Trail

Order	Trail Name	Segment Name	Length (miles)	Cost
1	Route 66 Trail	East Limit to City Hall	0.63	\$633,491
2	Route 66 Trail	City Hall to Redwood	0.49	\$488,300
3	Route 66 Trail	Redwood to Peach Tree	0.55	\$547,194
4	Route 66 Trail	Peach Tree to Walker Family Parcel	0.64	\$636,080
5	Route 66 Trail	Walker Family Parcel to GLS Leasing Co Parcel	0.74	\$742,097
6	Route 66 Trail	GLS Leasing Co Parcel to JM&M Investments Parcel	0.65	\$649,695
7	Route 66 Trail	JM&M Investments Parcel to Mulroy	0.90	\$897,811
8	Route 66 Trail	Mulroy to Mustard	0.64	\$638,454
9	Route 66 Trail	Mustard to City Utility RR Spur	0.44	\$437,712
10	Route 66 Trail	City Utility RR Spur to Partnership	0.43	\$428,758
11	Route 66 Trail	Partnership to North Jordan Creek Greenway	0.78	\$775,895
		Total	6.87	\$6,875,487

# **South Jordan Creek Greenway**

Order	Trail Name	Segment Name	Length (miles)	Cost
1	South Jordan Creek Greenway	Lower Jordan Valley Park to National	0.36	\$471,261
2	South Jordan Creek Greenway	National to Weller	0.43	\$569,304
3	South Jordan Creek Greenway	Weller to Glenstone	0.35	\$466,771
4	South Jordan Creek Greenway	Glenstone to Chestnut (NE corner of Fisk Parcel)	0.41	\$536,510
5	South Jordan Creek Greenway	Chestnut (NE corner of Fisk Parcel) to opposite Cooper Park	0.53	\$700,444
6	South Jordan Creek Greenway	Pythian along Cooper Park	0.43	\$567,972
7	Division Street - Cooper Park Connector	Cooper Park to Belcrest	0.50	\$573,963
8	Division Street - Cooper Park Connector	Belcrest to Division & Packer	0.29	\$335,288
9	Division Street Trail	Packer to BNSF RR	0.25	\$590,566
9	Division Street Trail	BNSF RR to US 65	0.18	\$435,519
10	Division Street Trail	US 65 Bridge	0.12	\$274,272
11	Division Street Trail	US 65 to Cooper	0.27	\$635,144
12	Division Street Trail	Cooper to Le Compte	0.19	\$455,326
13	Le Compte Road Trail	Le Compte Road South (Division to Springfield Underground rear entrance)	0.43	\$598,256
14	Le Compte Road Trail	Le Compte Road Middle (Springfield Underground rear entrance to BNSF RR)	0.35	\$488,197
15	Le Compte Road Trail	Le Compte Road North (BNSF RR to Kearney)	0.22	\$315,423
		Total	5.31	\$8,014,216

# **Trail of Tears**

Order	Trail Name	Segment Name	Length (miles)	Cost
1	Trail of Tears - Battlefield	Battlefield Segment	1.18	\$705,762
2	Trail of Tears - Golden Ave	Golden - South - Marcella to Kingsley	0.36	\$596,826
3	Trail of Tears - Golden Ave	Golden North - Kingsley to n/o James River Pkwy	0.17	\$282,332
4	Trail of Tears - South Creek Greenway Connector	South Creek Connector - FR 164 to Battlefield Rd	0.53	\$487,946
5	Trail of Tears - South Creek Greenway Connector	South Creek Connector -Battlefield Rd to SCG	0.65	\$594,879
6	Trail of Tears - Greene Park to Ewing Sports Complex	Trail of Tears - Greene Park to Ewing Sports Complex	0.98	\$992,622
		Total	3.87	\$3,660,367

# **Ward Branch Greenway**

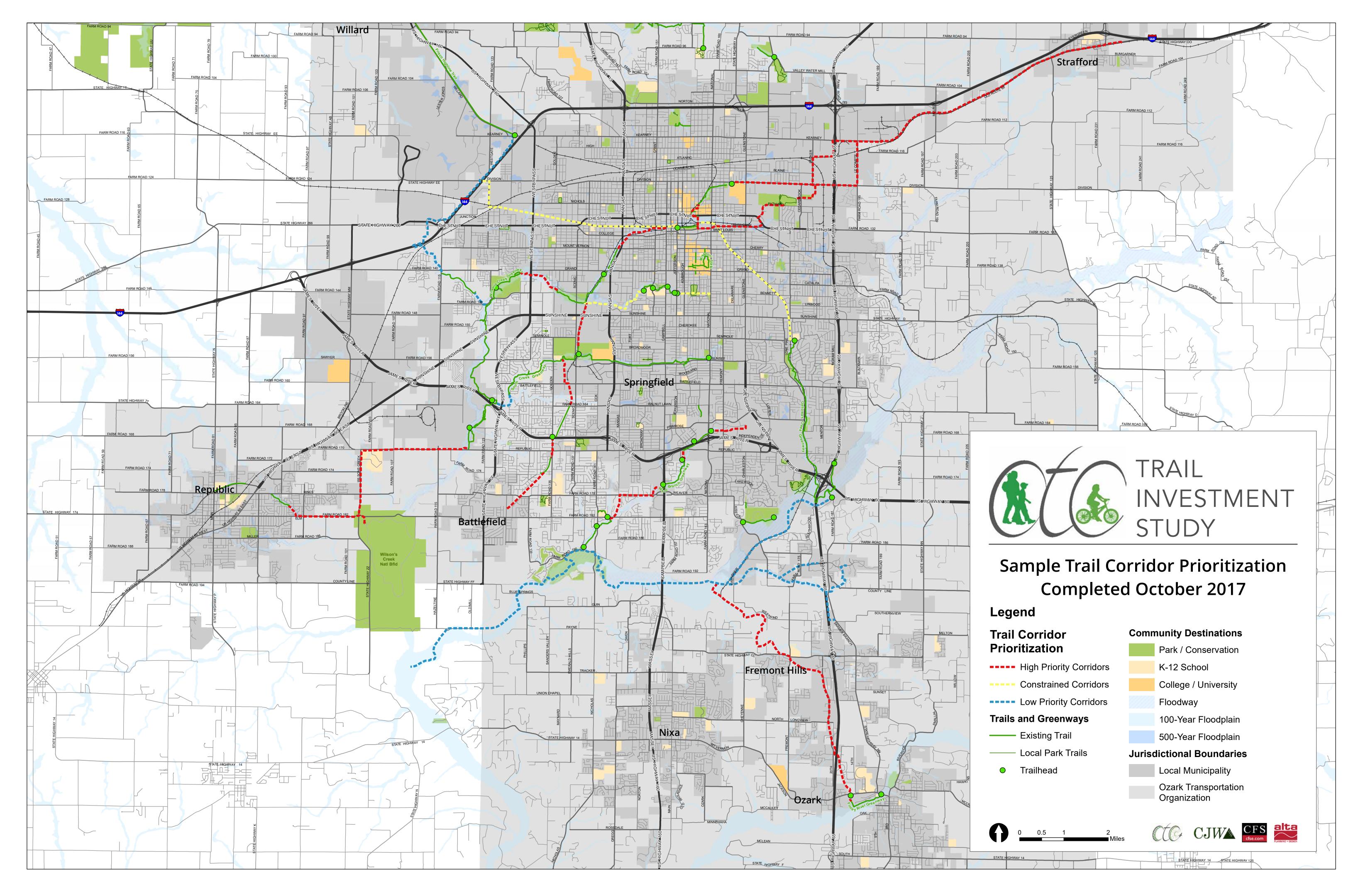
Order	Trail Name	Segment Name	Length (miles)	Cost
1	Ward Branch Greenway (North)	Fremont to Independence	0.28	\$533,138
2	Ward Branch Greenway (North)	Weller to Fremont	0.35	\$673,343
3	Ward Branch Greenway (North)	Weller to Bradford	0.27	\$519,953
4	Ward Branch Greenway (Middle)	Segment completed	0.28	\$566,298
5	Ward Branch Greenway (South)	Campbell to Weaver (E/O Wellington)	0.41	\$757,075
6	Ward Branch Greenway (South)	Weaver (E/O Wellington) to Stone Meadow	0.37	\$687,944
7	Ward Branch Greenway (South)	Stone Meadow to Kansas Extension	0.36	\$654,584
8	Ward Branch Greenway (South)	Kansas Extension	0.63	\$1,162,970
9	Ward Branch - James River Greenway Connector	Ward Branch Trailhead to James River Greenway	0.08	\$278,201
		Total	3.05	\$5,833,506

# Wilson's Creek Greenway

Order	Trail Name	Segment Name	Length (miles)	Cost
1	Wilson's Creek Greenway	James Ewing West Park to Overhill Park	0.40	\$642,448
2	Wilson's Creek Greenway	Overhill Park to West Bypass	0.36	\$580,503
3	Wilson's Creek Greenway	West Bypass to Rutledge Wilson Park	0.28	\$458,220
		Total	1.04	\$1,681,171

# Wilson's Creek - Battlefield

Order	Trail Name	Segment Name	Length (miles)	Cost
1	West Republic Road Trail	Wilson Creek Greenway Connector	0.40	\$514,662
2	West Republic Road Trail	City Util. 1712300003 to Page Parcel, 1712300004	0.54	\$684,569
3	West Republic Road Trail	Wanda Page Parcel, ID 1712300004	0.50	\$632,273
4	West Republic Road Trail	Wanda Page Parcel, ID 1712300004 to Rep HS Parcel	0.52	\$668,381
5	West Republic Road Trail	Republic High School Segment	0.47	\$594,320
6	Wilson's Creek Blvd Trail	Republic High School Entrance to West Republic Rd	0.19	\$396,668
7	Wilson's Creek Blvd Trail	FR 174 to Republic High School Entrance	0.29	\$603,697
8	Wilson's Creek Blvd Trail	North edge of McElhany parcel 1714300006 to FR 174	0.25	\$528,968
9	Wilson's Creek Blvd Trail	FR 178 to north edge of McElhany parcel 1714300006	0.25	\$528,605
10	Wilson's Creek Blvd Trail	USA Parcel 1723200003 to FR 178	0.25	\$521,772
11	Wilson's Creek Blvd Trail	FR 182 to north edge of USA Parcel 1723200003	0.24	\$494,963
		Total	3.89	\$6,168,878



# **BPAC Sample Prioritization Comments and Project Team Responses, August 2017**

#### 8/29/2017 **Prioritization Methodology Question Assessment** Comment **Provided By Action Taken Action Taken** In the scoring categories, there are links noted in the Data sources. Not sure if these are needed for Cameron Smith, Data sources provided only for Explanation provided us to justify the methodology. Also, if this is in the final report, I would think we need the data City of Ozark methodology justification and source info in it and not a link? reference for OTO and BPAC In some cases, scores are calculated on a per mile basis. Is it safe to assume that in the final scoring Explanation provided Some scores are calculated on a per-Cameron Smith, and if a short section is less than a mile, then it would be calculated with a decimal and not give City of Ozark mile basis in order to minimize the credit as a full mile? impact of a corridor's length on scoring. 2.1 Connecting Communities: It seems like the score on this particular measure depends much on Frank Miller, Explanation provided The purpose of the data-driven what particular segment of the trail is being considered, and that it might not always reflect the MoDOT prioritization process is to examine and connectivity the trail provides between communities. For example, a trail connecting Battlefield and compare corridors against one Republic scores higher than one going from Springfield to Greene County – yet, both may be part of another, rather than segments within the connection between Springfield and Republic. Another segment might be entirely located in each corridor. Examination of unincorporated Christian County, but be the final trail connection between Springfield, Nixa and individual segments will have greater bearing in Step 3 and Step 4 of the full Ozark. Perhaps one way to look at this would be to identify our "trail arterials" that will connect communities and award points if the trail segment is on that corridor. Or, maybe something else prioritization methodology. would work better. 2.2 notes about people per acre. Maybe I am missing something or not thinking about it correctly, Category breaks correspond roughly to Cameron Smith, Explanation provided but the breakdown seems low on the middle to upper end. Does it need a broader range for when it City of Ozark 1/3 each. is in a denser part of a City? Is it only considering a residential density and not a commercial type density? 3.2 on schools. Is it considering a credit given per school and not per campus? I would think that Cameron Smith, Explanation provided If multiple schools on a single campus, consideration should be given by groups of elementary, middle school and high school. If the three City of Ozark each school is counted. buildings share a common location, then each should be given a credit and not just one. Also, if the case is found where the groups share one building such as more rural area (not sure this is the case anymore), then they should be given the appropriate credit for each group. My thought is if a trail connects more to a school campus, then the credit should be higher than just connecting to one of the three. 4.1 similar concern on the per mile consideration and if section is less than a mile. Will the scoring Cameron Smith, For segments of less than one mile, the for sections shorter than a mile be skewed? City of Ozark raw score will be divided by a fraction, resulting in an increased score. For example, if there are 2 schools within a half-mile of a trail corridor that is 0.5 miles long, then the per-mile score is 4. 5.1 gives higher score if intersecting more streams or riparian corridors, then 1.2 gives a higher score Cameron Smith, Explanation provided 1.2 refers specifically to roadway if there are less crossings. Seems like these two contradict one another. City of Ozark crossings and the conflict each presents between trail users and motorized traffic.

Similar to above, 5.1 gives higher score if intersecting more streams or riparian corridors, then 6.1	Cameron Smith,	Explanation provided	5.1 uses riparian corridors as a proxy
gives a lesser score the more wetland areas you are near. Seems like these two could contradict one	City of Ozark		for natural resources because these
another.			corridors are often habitats for many
			of the flora and fauna native to the
			area. 6.1 stresses the potential impacts
			of trail development on wetland,
			which represent a sensitive natural
			resource. While there may be some
			overlap, they do not directly contradict
			one another.
5.2 Is the definition for score 0 or 1 saying the same thing? 0 is no historic sites and 1 is less than	Cameron Smith,	Explanation provided	A score of 0 would mean that there are
one historic site.	City of Ozark		no historic sites or districts within a
			half mile of the entire trail corridor. A
			score of "less than one" would mean
			that there are historic sites or districts
			along the corridor, but still fewer than
			one per mile.
6.1 I am not sure that in all cases wetlands should result in a negative impact to the scoring.	Cameron Smith,	Explanation provided	Trail development through wetlands
	City of Ozark		may provide opportunities for
			educational programming and other
			positive elements. However, for the
			purposes of this prioritization process,
			we are focusing on the permitting and
			design requirements of trail
			development within designated
			wetlands.
C 1 Watlands, Wa will have a lot of trails so near watlands. Livevild like to be an exercise at the it	Frank Millor	Mathodology	Duffer reduced to 50 feet an each side
6.1 Wetlands: We will have a lot of trails go near wetlands. I would like to know more about trail impacts on wetlands. I can see wanting to avoid taking a trail directly through a wetland, but a ¼ mile	Frank Miller,	Methodology updated	Buffer reduced to 50 feet on each side of the trail alignment.
buffer for a trail seems like a lot when there may be other developed features (roads, housing, etc.)	IVIODOT		or the trail aligninient.
that will have a far greater impact on the wetland than the trail. I'm just wanting to learn more about			
this one.			
6.2 similar to comments of wetlands. Also, seems to contradict some scorings in regards to streams.	Cameron Smith,	Explanation provided	See comments above regarding
Is a trail in a floodplain a big negative?	City of Ozark		wetlands.

8.1 and 2.2 are similar items, is there a potential that the scoring would contradict one another?	Cameron Smith, City of Ozark	Explanation provided	2.2 captures residential population, while 8.1 captures employment population. These two metrics are complimentary rather than contradictory. Some areas have high residential and employment populations, and some have low populations of residents and employees.
Attached are some renderings and layout for the new Delp roadside park located on Route 66 just east of City Hall in Strafford. This park is under construction now and should be completed by this fall. This new park and the new streetscape have plenty of parking for a trail head on the Strafford to Springfield Trail.	King Coltrin, Great River Engineering on behalf of City of Strafford	Information incorporated into data-driven prioritization process	
On the employees within ½ mile of the trail. Ben Jones with CU said there are 2600 employees in the PIC east and with the trucking companies and other businesses along the trail there should be at least 3000 total employees conservatively.	King Coltrin, Great River Engineering on behalf of City of Strafford	Information incorporated into data-driven prioritization process	
The entire [Route 66 / Strafford] trail is along Historic Route 66	King Coltrin, Great River Engineering on behalf of City of Strafford	Information incorporated into data-driven prioritization process	