

# JONESBORO

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QUALITY OF LIFE AND CONNECTIVITY MASTER PLAN 2018

JONESBORO, ARKANSAS

## Acknowledgements:

### *Advisory Committee:*

*City of Jonesboro: Derrel Smith, Ed Tanner, Craig Light*

*City Council: Joe Hafner*

*Hytrol: Phillip Poston*

*St. Bernards Andy Shatley*

*Downton Jonesboro: John Freeman*

*Advertising and Promotion: Jerry Morgan*

*ASTATE: Bill Hall*

### *Stakeholders:*

*NEA Baptist: Brad Parsons*

*St. Bernards: Paul Pickens*

*ASTATE: Kelly Damphousse*

*RNR: Heather Bunkley Allen*

*Riceland Foods: Ken Wixson, Allan Bounds*

*Chamber: Shelle Randall*

*ARDOT: Virginia Porter, Kim Sanders*

*MPO: Cecelie Cochran*

*Downtown Jonesboro Association: Lindsey Wingo*

*CWL: Susan Merideth, Troy Snell*

*Gearhead: Ted Herget*

Masterplan Document prepared by:

**Ecological Design Group + Civil Engineering Associates**



QUALITY OF LIFE AND CONNECTIVITY MASTER PLAN 2018

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# JONESBORO

## QUALITY OF LIFE AND CONNECTIVITY MASTER PLAN 2018

### EXECUTIVE SUMMARY

#### Vision

The City of Jonesboro has many positive attributes, which have been championed by community leaders: a thriving college, an extensive healthcare system, a robust industrial and manufacturing sector, and steady population growth. However, compared with national averages, Jonesboro's citizens have a relatively low income and health issues associated with inadequate opportunities for physical activity. The City of Jonesboro is currently vehicular oriented and lacks safe multi-modal active transit access, such as well-defined pathways for pedestrians and cyclists. The Jonesboro Quality of Life and Connectivity Master Plan 2018 proposes a city wide connectivity network which has the potential to create a positive impact on issues currently faced within the community.

#### Goals

It is well documented that bike and pedestrian networks act as catalysts within cities improving citizen's quality of life and connectivity between neighborhoods, major employers, public institutions and parks. The goal of The Jonesboro Quality of Life and Connectivity Master Plan 2018 is to further transform Jonesboro into a destination and desirable city for its citizens, improving health and financial wellbeing for the population. The plan also strives to provide a missing ingredient of alternative transit options to draw younger families and professionals who favor walkable, city core living and amenities to support such lifestyles. With the implementation of this Master Plan the City of Jonesboro has the potential to become a regional hub for cyclist groups connecting to Memphis and other towns and cities in the region.



Source: Gearhead, Jonesboro AR

“...every \$1 investment in trails for physical activity led to \$2.94 in direct medical benefit.”

- A Cost-benefit Analysis of Physical Activity Using Bike/Pedestrian Trails, University of Illinois



Source: Austin Complete Streets



## BENEFITS

A well-integrated active transit network has the potential to dramatically improve the citizens of Jonesboro's quality of life by increasing recreational opportunities, affordable transit access, improving health, and increasing property values. By improving livability there is a greater incentive for relocation within the City of Jonesboro and a potential for greater development and an increased tax base. The proposed network is holistic in nature creating connections between neighborhoods of varying socio-economic demographics throughout the city. Active transit infrastructure is a wonderful example of minimum cost for maximum gain.

“Walkable communities have greater economic output and higher incomes, more highly educated people and more high-tech industries...”

- Wall Street Journal, *The Case for Suburban Renewal*



Source: Gearhead, Jonesboro AR



Memphis discovered a 6,000% increase in average daily cyclists after bike lane installation at one particular intersection.

- Nicholas Oyler, Memphis Bikeway and Pedestrian Manager



Memphis Cyclist



NWA Trails

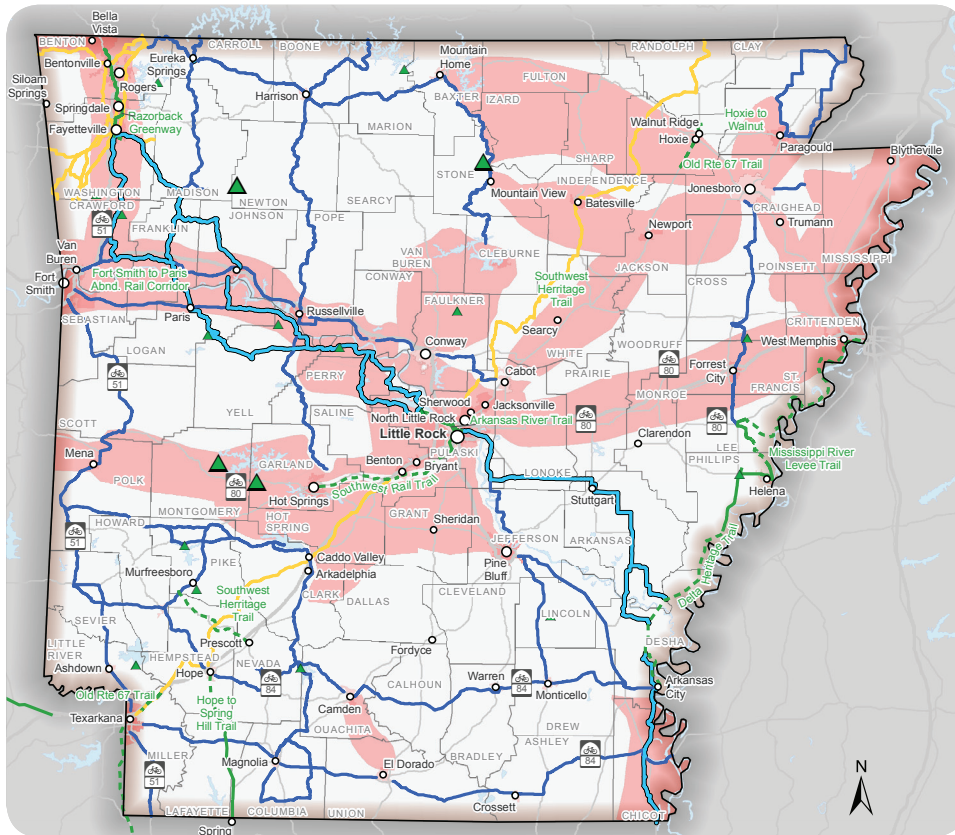
Northwest Arkansas has become home to nearly a dozen annual trails events and races that bring in regional and national participants, contributing to the tourism economy.

- [www.bikenwa.org](http://www.bikenwa.org), [www.visitbentonville.com](http://www.visitbentonville.com), [www.rogerscyclingfestival.com](http://www.rogerscyclingfestival.com), [www.fayetteville-ar.com](http://www.fayetteville-ar.com)



# Regional Examples

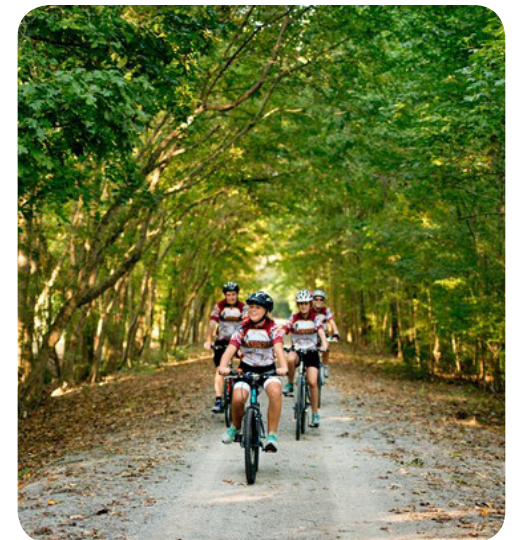
Arkansas has many examples of thriving bicycle networks including Little Rock's Arkansas River Trail, North West Arkansas' Razorback Greenway, and the connection over the Harahan Bridge between West Memphis and Memphis. There is great effort under way to create regional connections for cyclists including further expansion plans for the Mississippi River Levee Trail between West Memphis and Helena, the Delta Heritage Trail between Helena and Arkansas City, and the Southwest Rail Trail between Little Rock and Hot Springs. Jonesboro is positioned to benefit from these state-wide connection efforts and become a regional hub and destination for cyclists.



Arkansas DOT / Arkansas Bike and Pedestrian Plan

The state has a number of other feature trails and trail systems emerging, including the Southwest Rail-Trail linking Little Rock and Hot Springs, the Razorback Greenway in Northwest Arkansas, and the Delta Heritage Trail between Memphis and Arkansas City.

Arkansas Bicycle and Pedestrian Safety Plan,  
Arkansas State Highway and  
Transportation Department



Arkansas State Parks / Delta Heritage Trail



*Jonesboro, 1910*

## BACKGROUND

### Jonesboro Context

The City of Jonesboro (City) was incorporated in 1849 and according to the 2010 Census it has a population of 71,151. The City has been growing at a rate of 12.8% per year to become the state's fifth largest city. As a result of rapid growth, the Jonesboro community has expressed a strong interest in creating a more connected and healthier environment. Jonesboro is located along the eastern side of Crowley's Ridge, a unique geological formation in the Arkansas Delta. Rolling hills to flatlands and tributaries to the Mississippi River define the Jonesboro landscape. The City is a major education, commercial, and agricultural hub of North East Arkansas. These three factors contribute to the growth and success Jonesboro is currently experiencing.

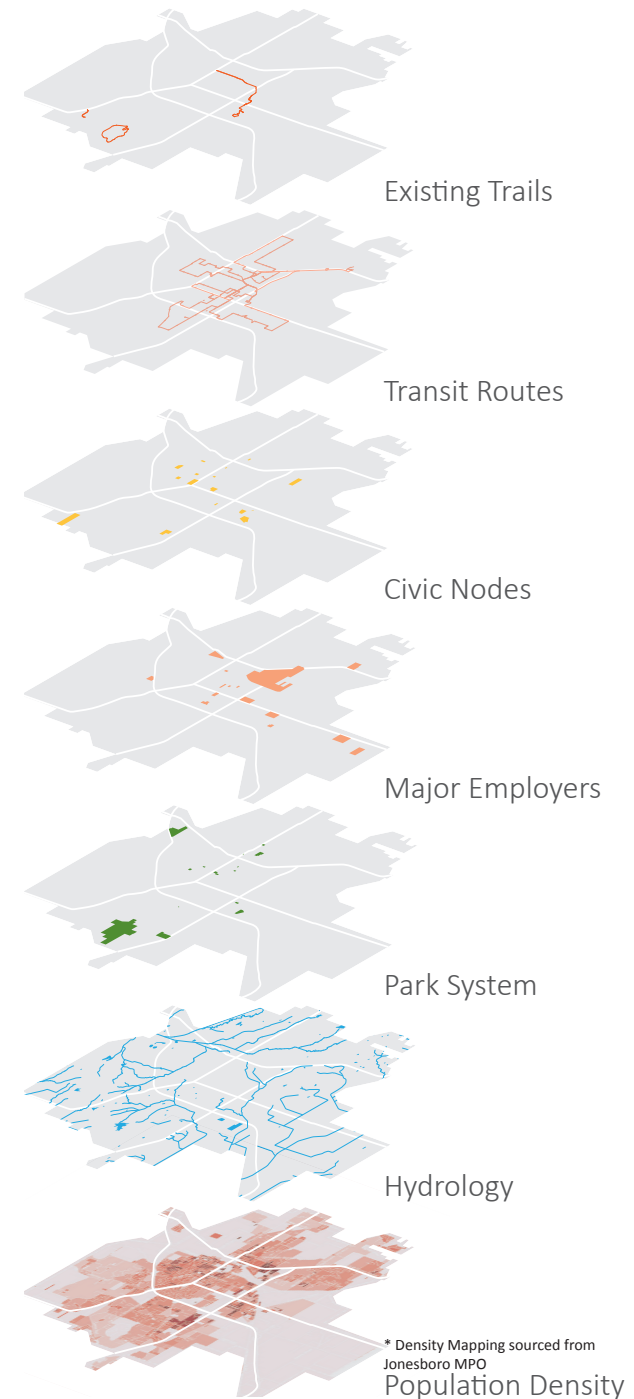
Several City parks and attractions such as Craighead Forest Park, Joe Mack Park and Northside Park, would benefit from improved pedestrian connectivity. Currently these parks are being accessed primarily by vehicular transportation due to limited pedestrian and bicycle infrastructure. Residents have expressed a need and a desire for improving the pedestrian and bicycle infrastructure. In fact, the City has already improved its standard street cross sections in the master street plan and is currently planning new projects to include these types of facilities.

Jonesboro has experienced successes and challenges with the sidewalk, bike infrastructure, and trail system. The City has been proactive and successful in funding its current trail system with grants. However, due to added interest in growing the trail system and creating a connected city the City implemented The Jonesboro Quality of Life and Connectivity Master Plan.

## Previous Studies

The City has engaged in many planning efforts over the past years. The project team reviewed the studies and incorporated elements that further the efforts for improved connections and quality of life. The following studies were referenced:

1. Downtown Jonesboro Pedestrian/Bicycle Safety Study
2. Johnson Avenue Bicycle/Pedestrian Study
3. ASU Campus Bicycle Master Street Plan
4. City of Jonesboro Master Street Plan
5. Regional Active Transportation Plan, Northeast Arkansas Regional Transportation Planning Commission







Sidewalk



Bicycle Boulevard / Sharrow



Advisory Shoulder



Bike Lane



Shared Use Path

Signage Recommendations from  
the Regional Active Transportation Plan  
by MOP

Facility Type  
Recommendations from  
the Regional Active  
Transportation Plan by MOP

the MPO area is currently lacking active transportation infrastructure. Planners and policymakers must devise a strategic approach to increasing the amount of bicycle and pedestrian infrastructure in the area.

Regional Active Transportation Plan - MPO

## Previous Studies (continued)

**Downtown Jonesboro Pedestrian/Bicycle Safety Study:** The Downtown Jonesboro Pedestrian/Bicycle Safety Study plan called for re-directing northbound traffic to Church Street allowing Main Street to become more pedestrian friendly and enable the growth Downtown. This recommendation was a focal point for The Jonesboro Quality of Life and Connectivity Master Plan.

**Johnson Avenue Bicycle/Pedestrian Study:** One of the major highlights of this study is the strong desire and need of the ASU campus and north Jonesboro residents to be connected to Downtown Jonesboro and other commercial areas south of the railroad tracks. The plan identified Aggie Road as major corridor to achieve this. In addition, it identified that closing Bridge Street bridge to vehicular traffic



and utilizing it as a pedestrian bridge would be a viable option to move pedestrians over the existing railroad tracks. In order for the bridge to close the City would have to construct an alternative vehicular bridge.

**ASU Campus Bicycle Master Street Plan:** The ASU plan shows multiple bicycle, pedestrian, and multi-use routes to facilitate each of these modes of transportation. The depicted network also shows that the ASU campus is not connected to other commercial, medical, and public facilities south of the railroad tracks. With ASU serving as the hub of North Jonesboro the need for connections to move students and faculty is critical.



Crosswalk Signals

**Master Street Plan:** The City of Jonesboro Master Street Plan shows typical cross sections of all the different classifications of streets. The plans cross sections show provisions for pedestrian, bicycle, and multi-use facilities that have not been included in previous Master Street Plans. The plans identify the locations of the different classifications of streets. These routes and cross sections were used to help steer the Planning Team to final route selection.

**Regional Active Transportation Plan:** The Regional Active Transportation Plan is a comprehensive plan that provides an overview of existing conditions within the Jonesboro Quality of Life and Connectivity Master Plan 2018 area and surrounding region. It identified where projects and policy could help increase usage of pedestrian and bicycle facilities. The plans main goals were to increase safety, enhance connectivity, promote active transportation regionally, and develop and enforce policy. This plan is a wealth of information for the region's needs. The plan identified a strong desire from residents to increase active transportation facilities and connectivity.

**Conclusion of Existing Plans:** The previous studies provided an extensive basis of knowledge and direction for the development of this mater plan proposal and were referenced continually during the planning process. Essential information was gleaned regarding existing conditions, safety, active transportation priorities, and connectivity needs which shaped the Jonesboro Quality of Life and Connectivity Master Plan 2018.

## OUTREACH

### Stakeholder and Advisory Committee Meetings

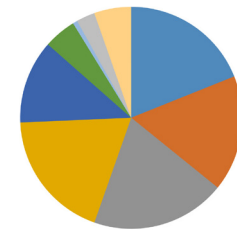
Meetings were held with the Advisory Committee and Stakeholders to collaboratively develop the basis and focus that would guide the plan. A kick-off meeting was held with each group October 19, 2017 to develop the goals and vision of the plan. Progress was reported to the Advisory Committee throughout the process to ensure a continuous feedback loop to the design team, keeping the plan aligned with the set goals.

### Public Meetings and Survey

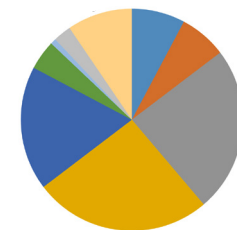
The public was engaged throughout the process and were invited to two meetings to view the presentation and respond with any thoughts and comments. Additionally, a survey was developed focused on identifying barriers to walking and cycling, safety, walking and cycling frequency, and comfort. Survey data and input provided at the public meetings was used to develop the plan.

#### IMPEDEMENTS TO:

##### WALKING:



##### BIKING:



- No sidewalks
- Sidewalks in poor condition
- Unsafe intersections, crossings or roadways
- Automobile traffic
- Personal safety concerns
- Visually unappealing surroundings
- I do not have time
- I travel with small children

Credit: CEA Jonesboro Biking and Walking Survey

# Improvements that would increase the frequency of biking and walking:

Jonesboro Biking and Walking Survey - CEA

bicycle lanes: **27%**



amenities: **19%**



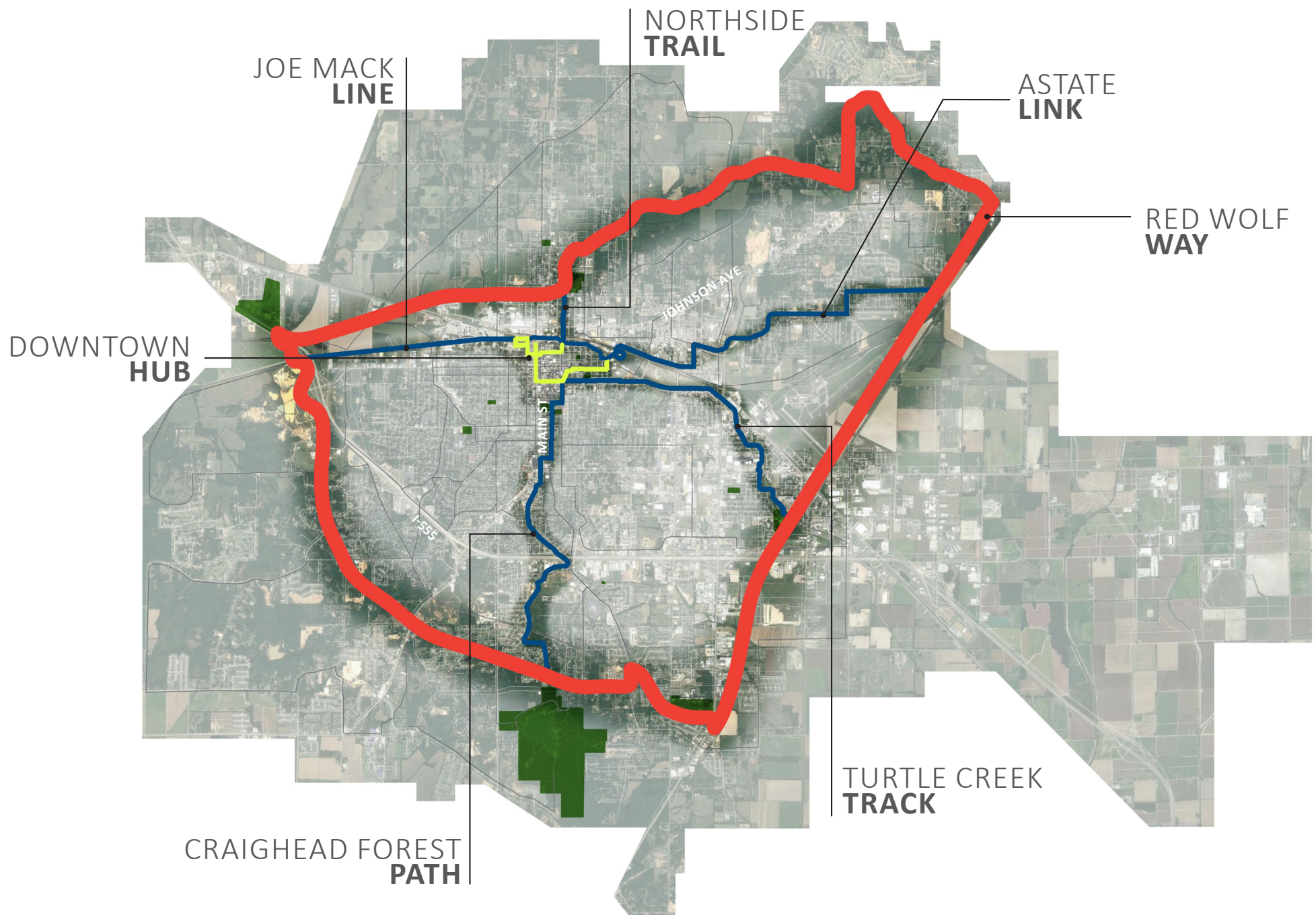
connected sidewalks: **21%**



multi-use trails: **33%**









## RECOMMENDATIONS

### ① Connected Network

The Jonesboro Quality of Life and Connectivity Master Plan 2018 calls for an active transit network which builds off of existing trails and past studies and plans. The network consists of five main connective corridors which radiate from the Downtown Hub towards public parks and a regional loop trail called Red Wolf Way creating a unified and connected system improving access to safe multi-modal active transit city-wide.

### ② Red Wolf Way

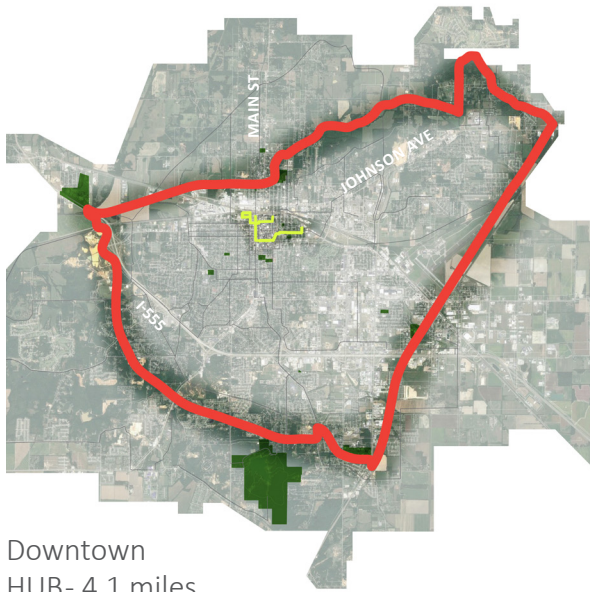
A regional twenty six mile loop trail, which utilizes existing rail and utility right of ways, is proposed to encircle Jonesboro and transects four main public parks including: Northside Park to the north, Allen Park to the southeast, Craighead Forest Park to the south, and Joe Mack Campbell Park to the northwest. Gateways at the intersections of the corridors and the regional loop trail occur close to the park systems providing potential entry and exit points with recreational opportunities and parking.



Red Wolf  
WAY- 26 miles



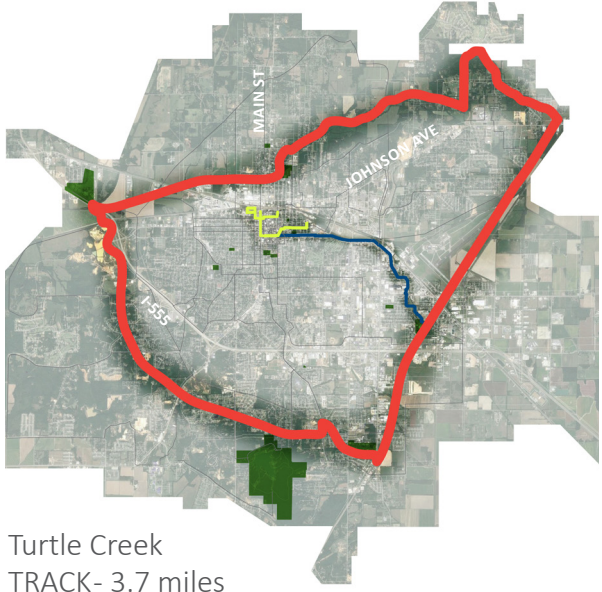
Source: Gearhead, Jonesboro AR



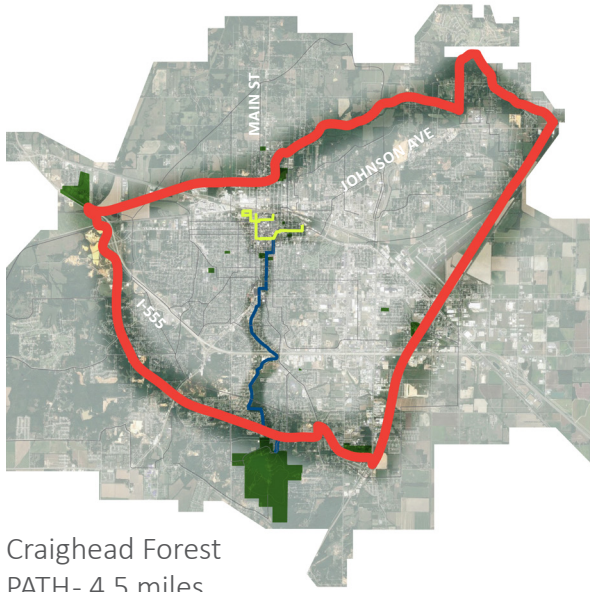
Downtown  
HUB- 4.1 miles



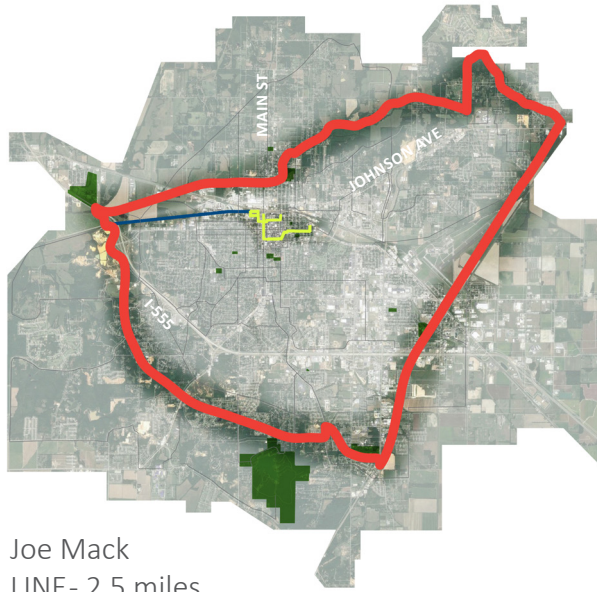
ASTATE  
LINK- 4.8 miles



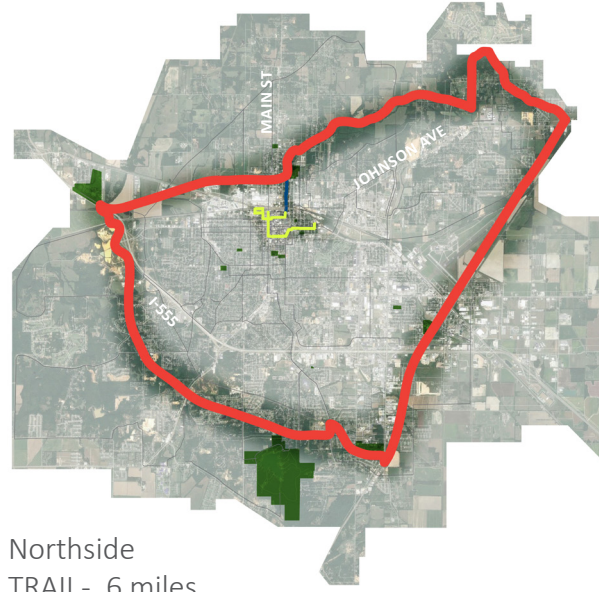
Turtle Creek  
TRACK- 3.7 miles



Craighead Forest  
PATH- 4.5 miles



Joe Mack  
LINE- 2.5 miles



Northside  
TRAIL- .6 miles



## ③ Downtown Hub

Jonesboro's downtown core is well situated to become the hub for the proposed active transit network building off existing infrastructure with some reorganization of existing vehicular traffic and additional green space. Additional study regarding vehicular circulation vs. pedestrians and bikes is needed for the Downtown Hub section of the plan. Districts shall be developed with unique architectural standards for each.

## ④ Corridors

Five corridors radiate off the Downtown Hub and lead to recreation and civic destinations: ASU Link, Turtle Creek Track, Craighead Forest Path, Joe Mack Line, and Northside Trail.

## ⑤ Elevated Crossings

In certain instances it will be necessary to create elevated crossings over busy roadways or railroads. These crossings are designed to provide safe passage ways for citizens and iconic landmarks for the transit network and city.

## ⑥ Wayfinding

A wayfinding system of directional, destination, and mile markers are proposed to be placed along the trails to help guide and orient citizens along the Red Wolf Way, Downtown Hub and each of the five main Corridors.

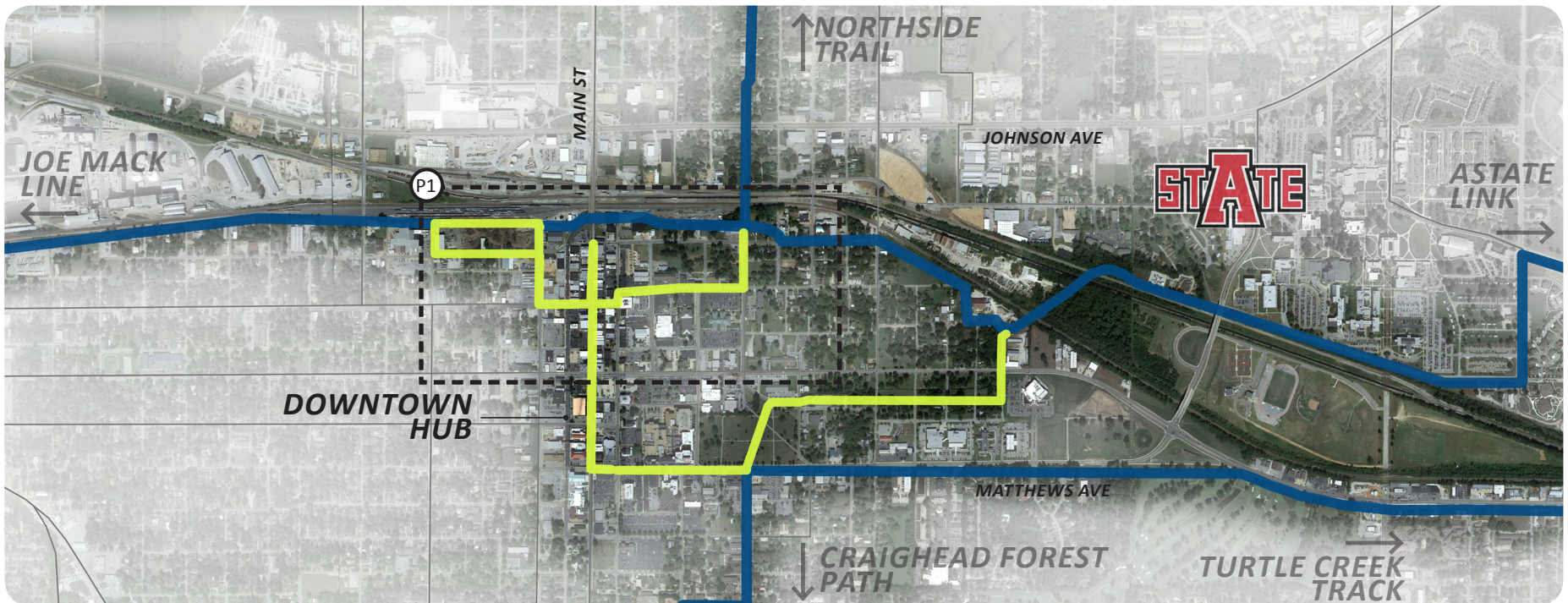
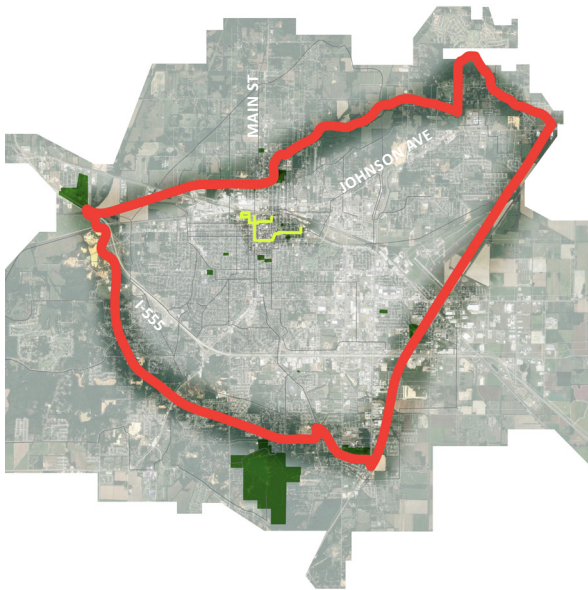
## ⑦ Amenities

Active transit networks within this climatic region would benefit from critically placed rest stops with drinking fountains, emergency call centers, seating, and shade. There is the potential for these rest stops to occur in association with public transit bus stops to help integrate the two systems.

## CONNECTIONS

### Downtown Hub

Utilizing Jonesboro's downtown, The Jonesboro Quality of Life and Connectivity Master Plan 2018 proposes to create a central hub from which five spoke corridors radiate off towards specific destinations along the regional loop trail. The downtown hub functions as the starting point for the corridors and itself functions as an urban pedestrian and bicycle system. In order to improve the experience of the Downtown area, a traffic study needs to be performed to show potential routing. One potential routing idea is to reroute one-way traffic north along Main Street to an adjacent street. This would help improve pedestrian flow while maintaining traffic flow through the area. Additional studies are recommended to identify public space development, district identity and establish architectural guidelines to ensure continued growth and economic impact of the downtown district.







\*Creath Avenue: First project to utilize TAP grant funding awarded

#### MAP KEY

— DOWNTOWN HUB  
CORRIDORS

— SECONDARY  
ROUTES



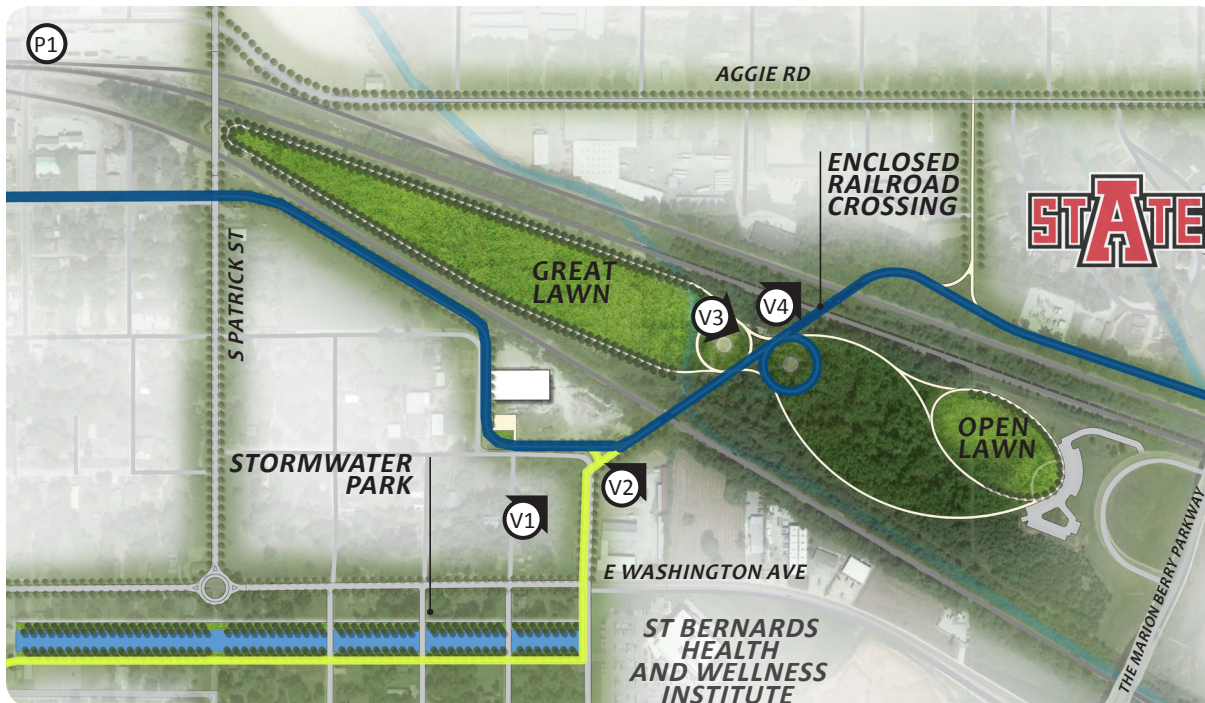
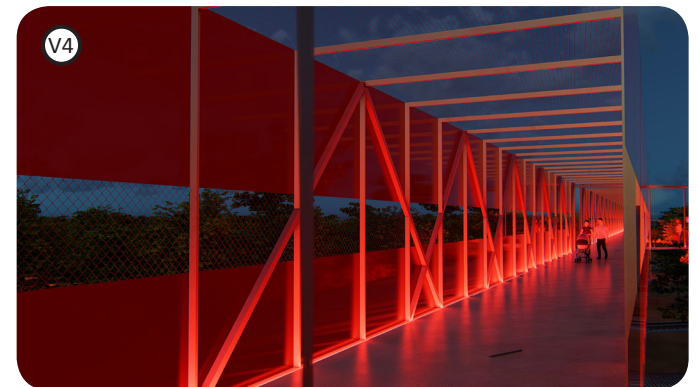
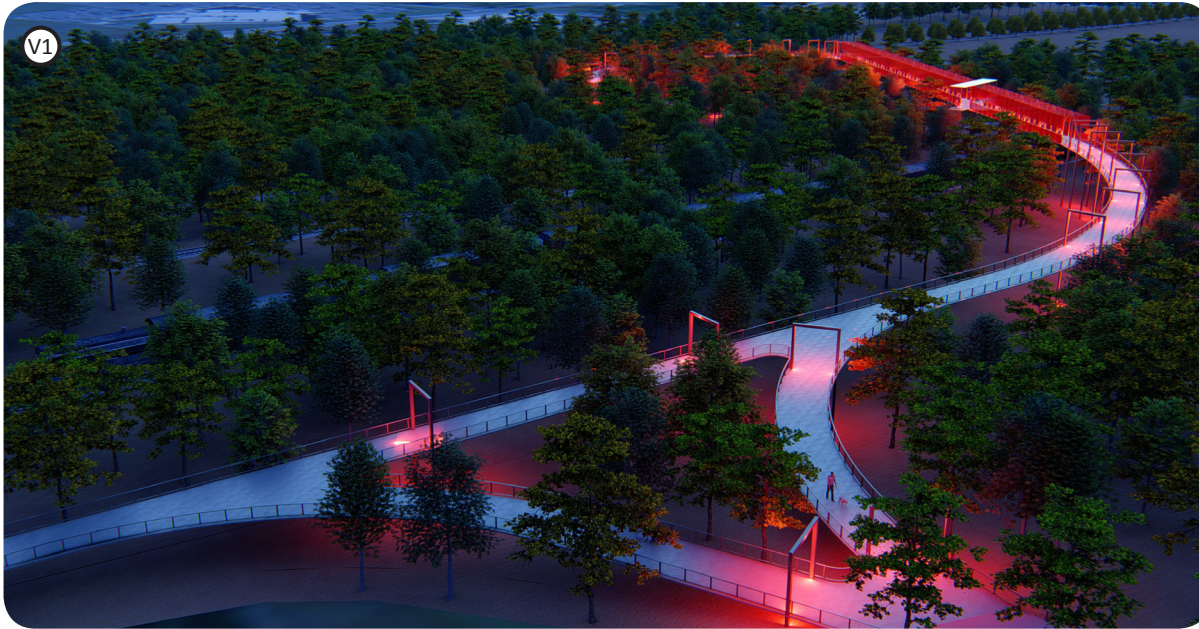


## ASTATE LINK

The Arkansas State University (ASTATE) campus is located directly to the northeast of the downtown core, however a safe and designated path for pedestrians and cyclists from the downtown core to the campus is lacking. The railyard is a current obstacle, yet is an important historical aspect for the community. The Jonesboro Quality of Life and Connectivity Master Plan 2018 proposes to transform this space into a much needed connective link between two of the main elements of Jonesboro's urban fabric: the ASTATE campus and the downtown core. A public park and elevated crossing over the existing rail line are proposed to transform this once divided area into a destination and link.







#### MAP KEY

- RED WOLF WAY
- DOWNTOWN HUB
- CORRIDORS







## TURTLE CREEK TRACK

The existing Turtle Creek Track provides a necessary route but is lacking in quality and connections to the rest of the City. The Jonesboro Quality of Life and Connectivity Master Plan 2018 proposes a change in amenities to the existing path system. In order to improve connectivity a small extension will be required for this link to connect to the proposed Red Wolf Way and Industrial Park.

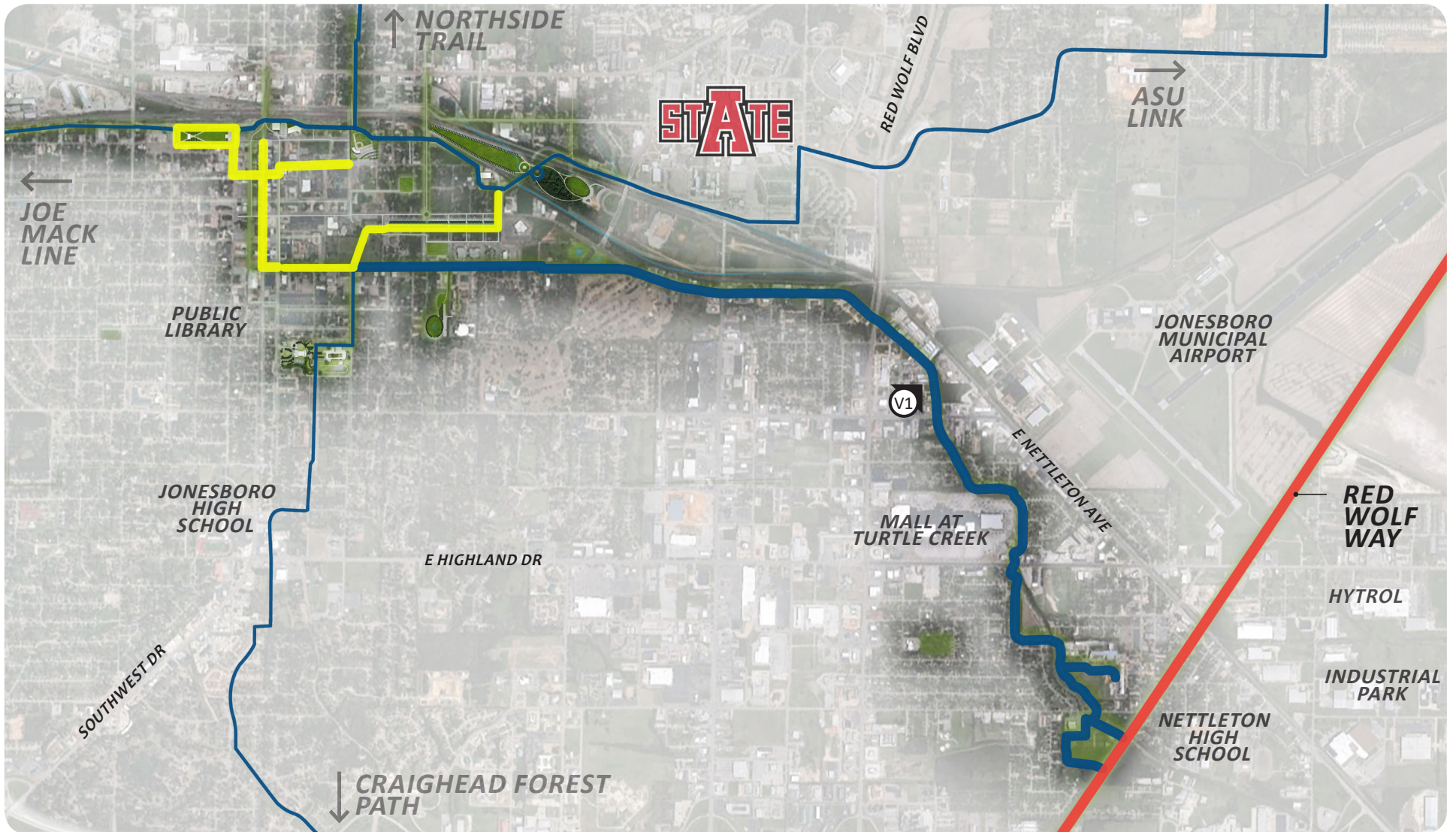


EXISTING TRAIL ALONG EAST MATTHEWS STREET



PROPOSED TURTLE CREEK TRACK ALONG EAST MATTHEWS STREET





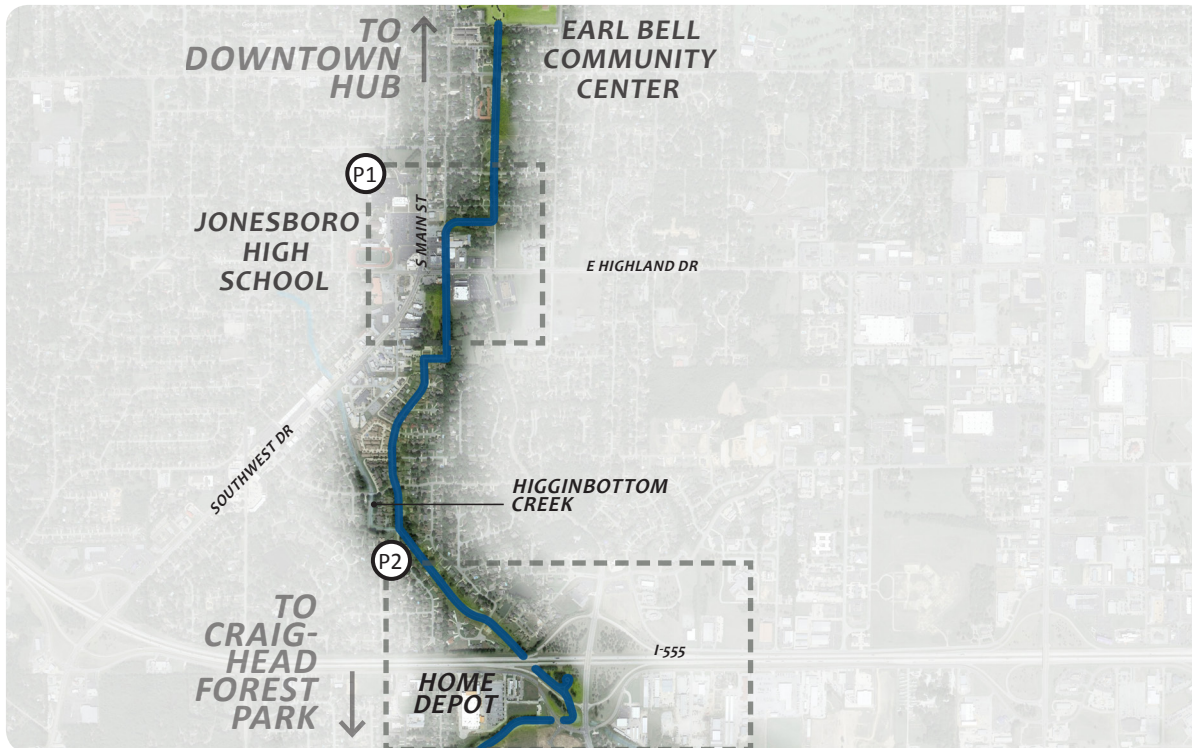
**MAP KEY**

	RED WOLF WAY		SECONDARY ROUTES
	DOWNTOWN HUB		
	CORRIDORS		

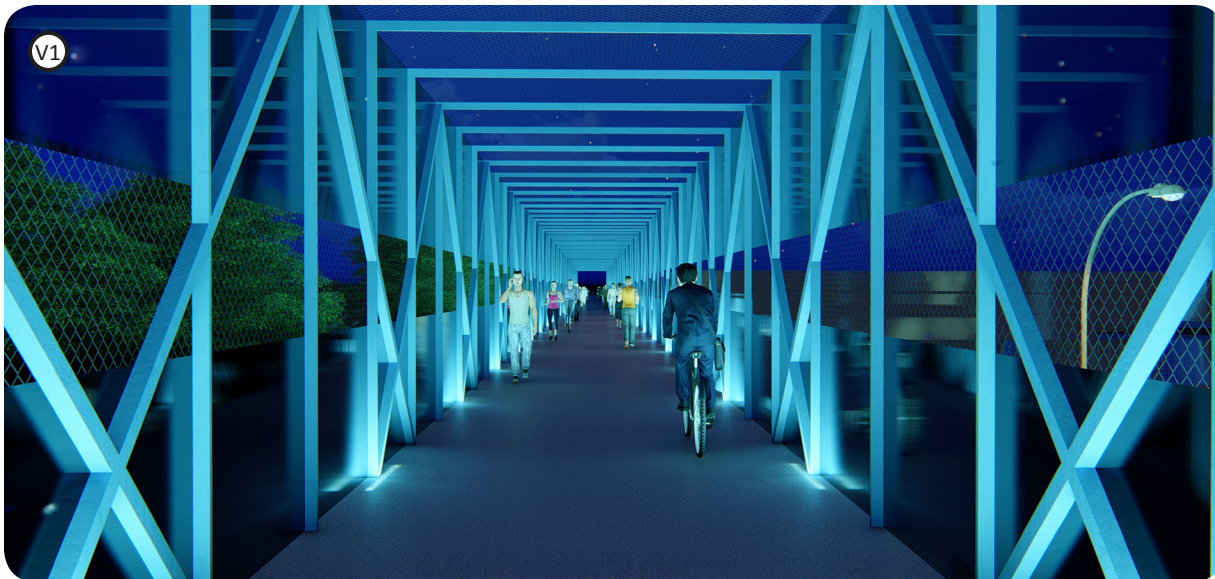
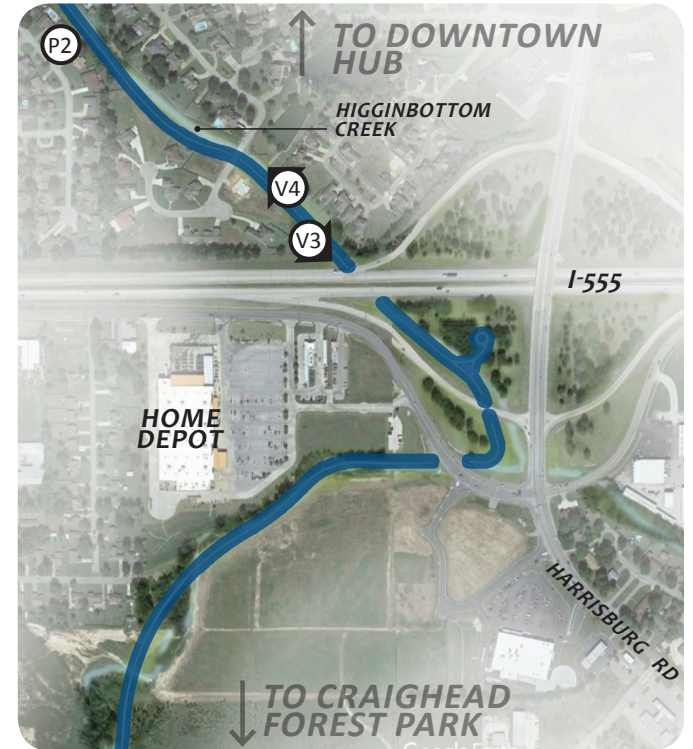
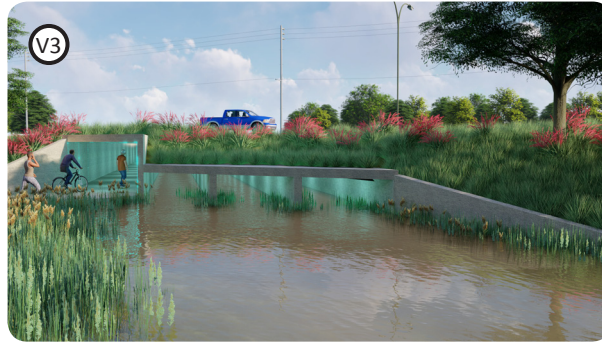


## CRAIGHEAD FOREST PATH

Craighead Forest Park is directly south of the downtown core and is an important destination for the citizens of Jonesboro. The Jonesboro High School also lies south of the downtown and will be adjacent to the path, creating safe active transit opportunities for students. The path to the park has two major east-west vehicular route obstacles: E Highland Drive and I-555. This plan proposes an elevated crossing at E Highland Drive and a connection under I-555 utilizing new culverts installed adjacent to the existing culverts.








**MAP KEY**

	RED WOLF WAY		SECONDARY ROUTES
	DOWNTOWN HUB		
	CORRIDORS		







## JOE MACK LINE

Located to the northwest of the downtown core, Joe Mack Campbell Park, is a recreation and sports destination for the City's citizens. A corridor is proposed to run east-west along the southern edge of an existing railroad right of way.

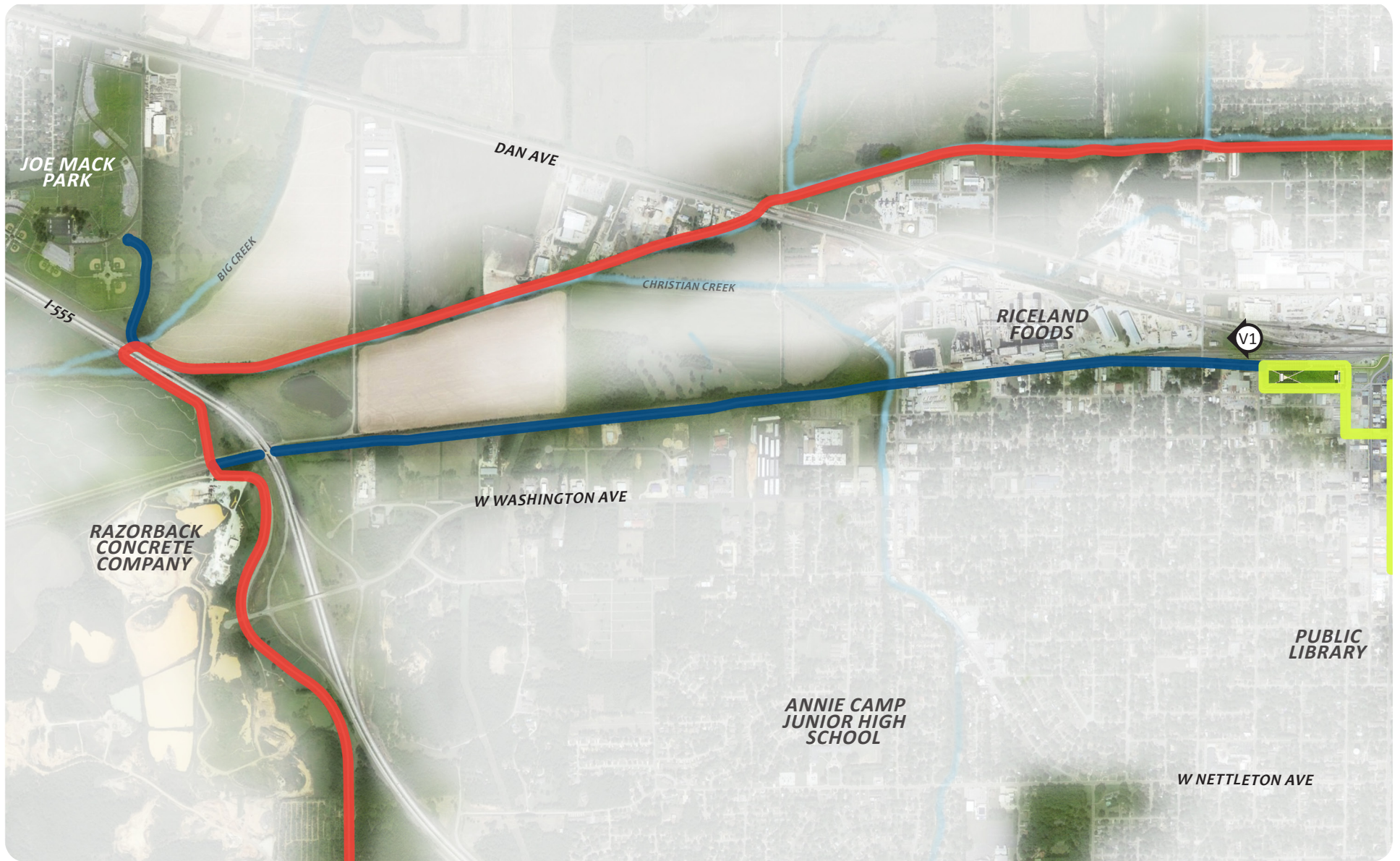


EXISTING RAILWAY NEAR GEE STREET



PROPOSED JOE MACK LINE ALONG RAILROAD ROW



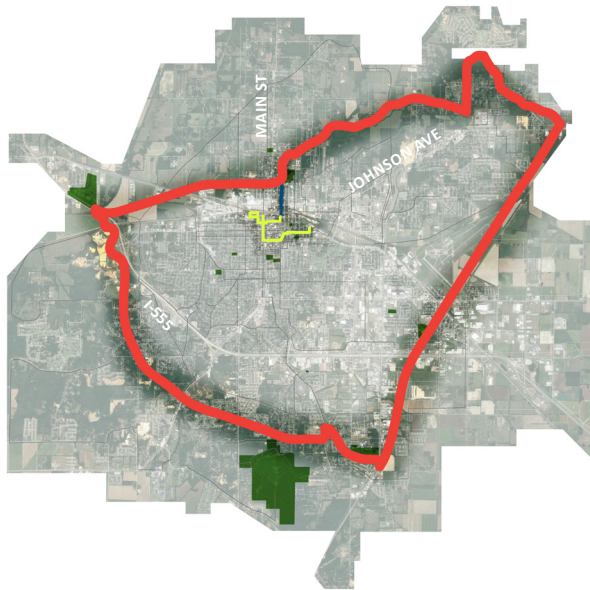


**MAP KEY**

- RED WOLF WAY
- DOWNTOWN HUB
- CORRIDORS
- SECONDARY ROUTES







## NORTHSIDE TRAIL

In close proximity to the downtown core lies Northside Park. The Northside Trail will connect the Downtown Hub to Northside Park along Bridge Street. This plan proposes the closure of Bridge Street to vehicular traffic and conversion into a pedestrian and bicycle only route through to Johnson Street once another flyover is constructed.







#### MAP KEY

- RED WOLF WAY
- DOWNTOWN HUB
- CORRIDORS
- SECONDARY ROUTES





DAYTIME

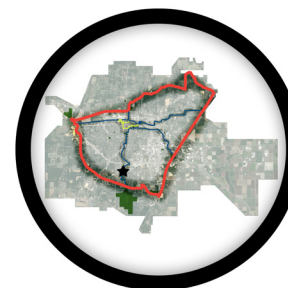


NIGHTTIME



## WAYFINDING

The Jonesboro Quality of Life and Connectivity Plan 2018 proposes the implementation of a wayfinding system with consistent design and content to allow the public to clearly understand the scope of trail system in terms of distances, destinations, and managing potential user conflicts. Three primary signage types have been identified and include: Mile Markers, Decision Signs, and Destination Signs. The signs will include physical properties, such as color-coding to designate trails. The Downtown Hub signage will be coded with the color yellow, corridor signs with the color blue, and the Red Wolf Way signs with the color red. The design of the signs will be simple, clear, and flexible to accommodate different information for different placements along the trail. Lights will enhance night time



YOU ARE HERE  
ATTACHMENT



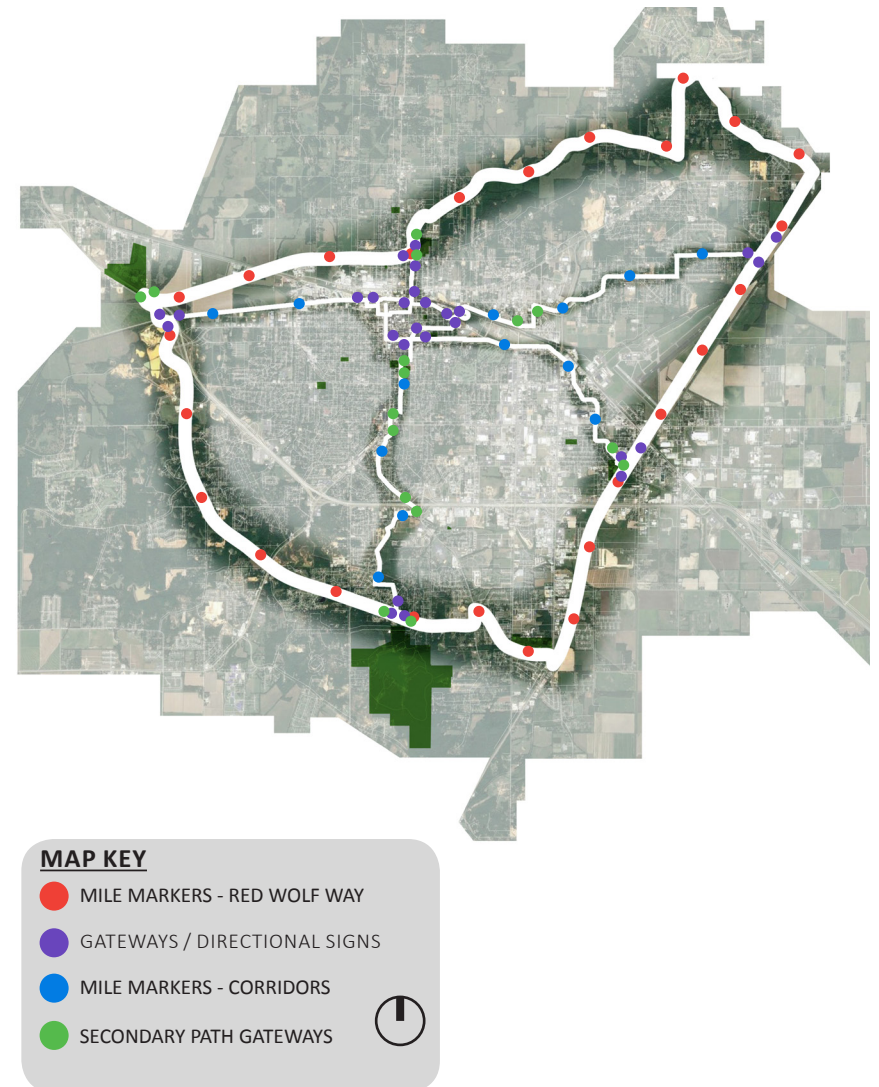
MILE MARKER  
ATTACHMENT



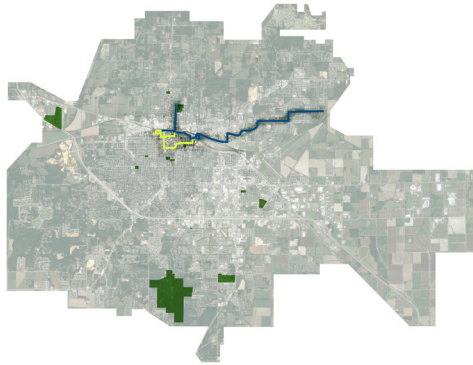
DIRECTIONAL  
ATTACHEMENT



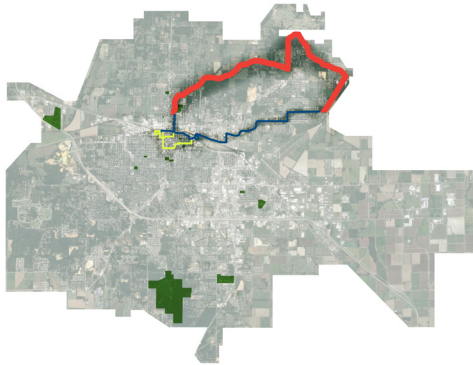
use and contribute to safety. Mile Marker signs can double as trail confirmation signs to let the users know which trail they are on. Every 5 miles, a “you are here” map can be placed for extra wayfinding guidance. Additional information can be placed on the signs, such as reminders to clean up after your dog, to give warning when passing, and to pass on the left. Directional Signs can warn users of upcoming trail junctions where a turn may need to be made. They could be placed at the appropriate distance to give the user time to react and make a decision, and could be located on all trail approaches to a junction. Destination Signs will designate key destinations in the city, such as libraries, neighborhoods, schools, parks, and hospitals. They can be placed along the trails with a directional arrow, as well as on access points as users depart from the trail.



PHASE 01

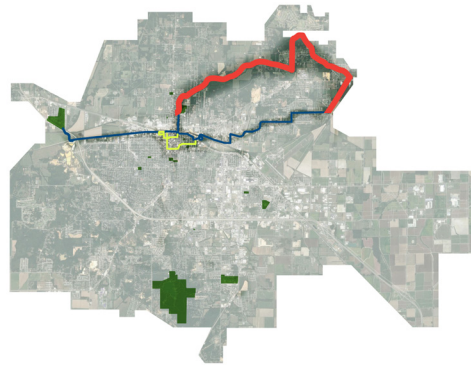


YEAR 1-2: ASTATE LINK + NORTHSIDE TRAIL

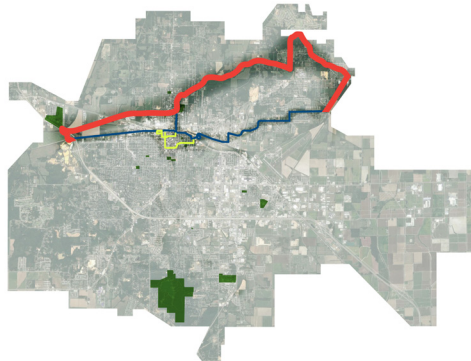


+ RED WOLF WAY NE SEGMENT

PHASE 02

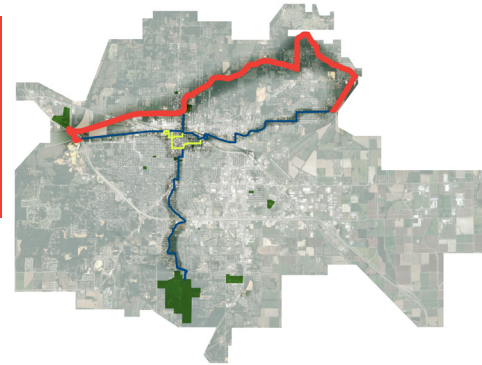


YEAR 3-4: JOE MACK LINE



+ RED WOLF WAY NW SEGMENT

PHASE 03



YEAR 5-6: CRAIGHEAD FOREST PATH



+ RED WOLF WAY SW SEGMENT

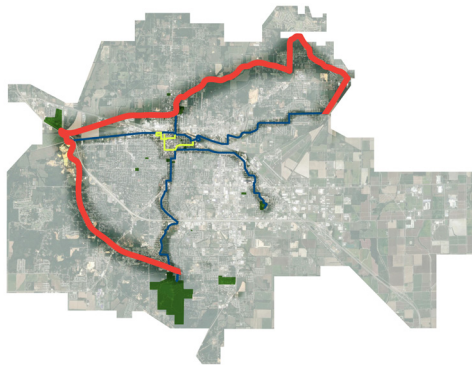
## MOVING FORWARD

### Phasing - 10 Year Plan

The Active Transit Priority Scoring data results showed that the Downtown Hub had the highest prioritization score (see A-5). The Downtown Hub is an important aspect of the plan and deserves additional attention, as mentioned previously. During the phasing design process, logistics as well as priority scoring for all corridors were taken into account. The proposed process will begin in 2019 with one year of organizing, planning and securing funding and complete by 2029. Phase One consists of the construction of the ASTATE LINK and Northside Trail and the segment of Red Wolf Way which connects the two. Phase Two consists of the construction of Joe Mack LINE and the segment of Red



PHASE 04



YEAR 7-10: TURTLE CREEK TRACK



+ RED WOLF WAY SE SEGMENT A



+ RED WOLF WAY SE SEGMENT B

Wolf Way which connects the Northside TRAIL and Joe Mack LINE. Phase Three consists of the construction of Craighead Forest PATH and the segment of Red Wolf Way which connects Joe Mack LINE and Craighead Forest PATH. Phase Four consists of the construction of Turtle Creek TRACK and the two final segments of Red Wolf Way which will connect the entire bike and pedestrian regional transit network. Funding opportunities are estimated to include: the City of Jonesboro, Local Organizations, and Foundations and Grants.

**TOTAL PROJECT COST: \$44,974,700**

### PHASE ONE (Year 1 + 2)

ASTATE LINK:	\$6,457,125
Northside TRAIL:	\$1,130,450
Red Wolf Way NE Segment:	\$7,105,893

### PHASE TWO (Year 3 + 4)

Joe Mack LINE:	\$2,986,375
Red Wolf Way NW Segment	\$3,552,947

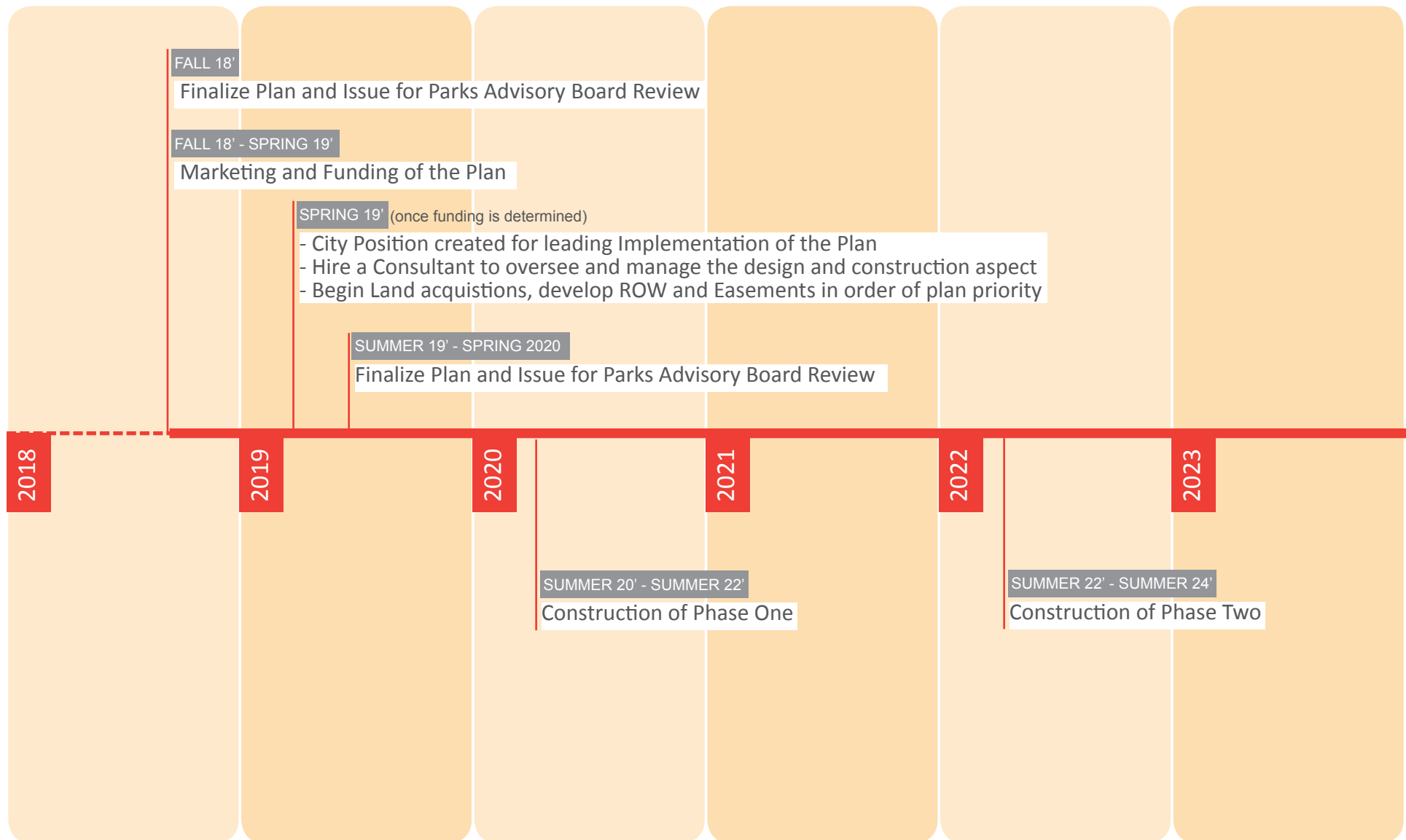
### PHASE THREE (Year 5 + 6)

Craighead Forest PATH:	\$8,575,875
Red Wolf Way SW Segment	\$7,105,893

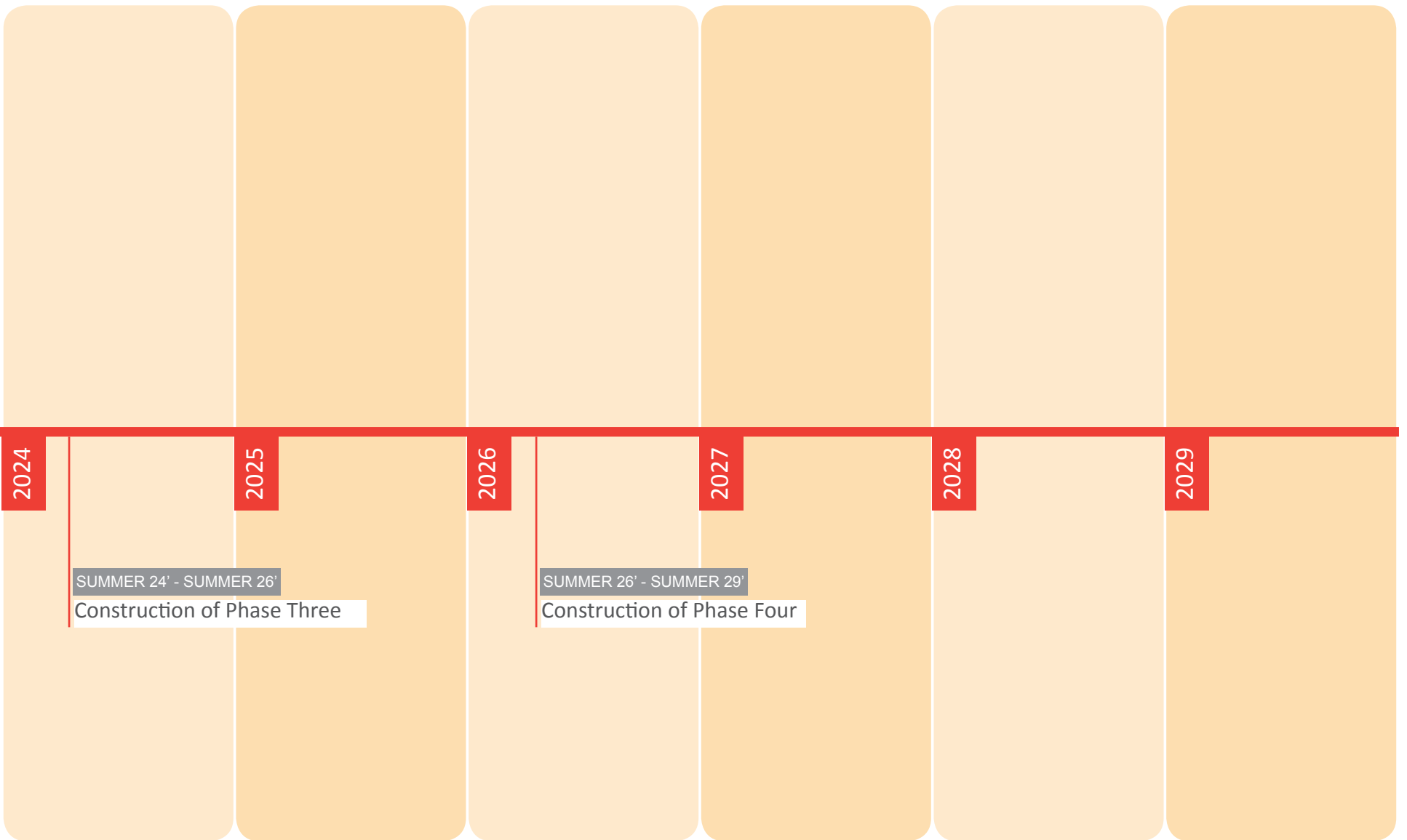
### PHASE FOUR (Year 7 + 10)

Turtle Creek TRACK:	\$954,250
Red Wolf Way SE Segment A	\$3,552,946
Red Wolf Way SE Segment B	\$3,552,946

# Next Steps

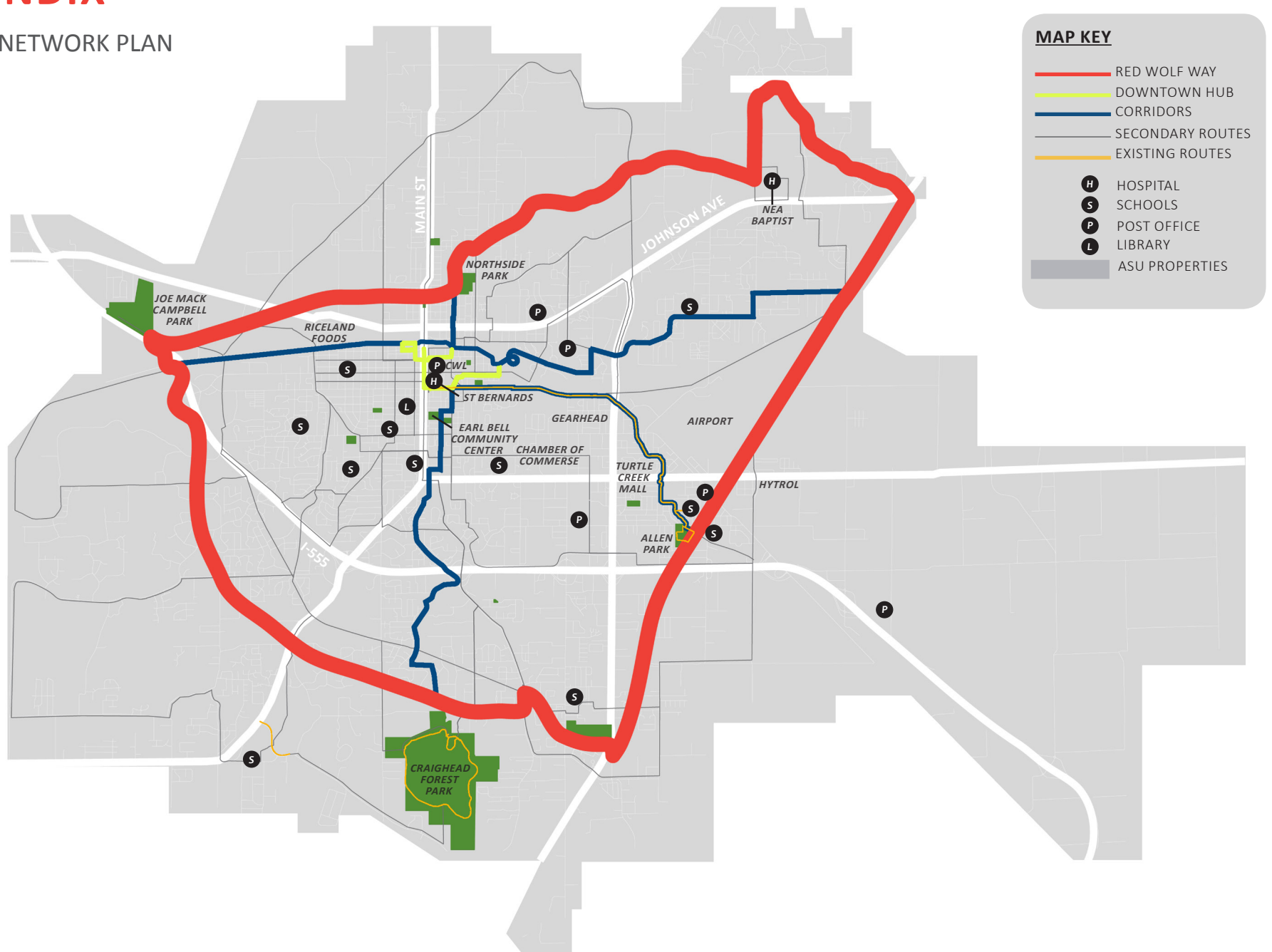






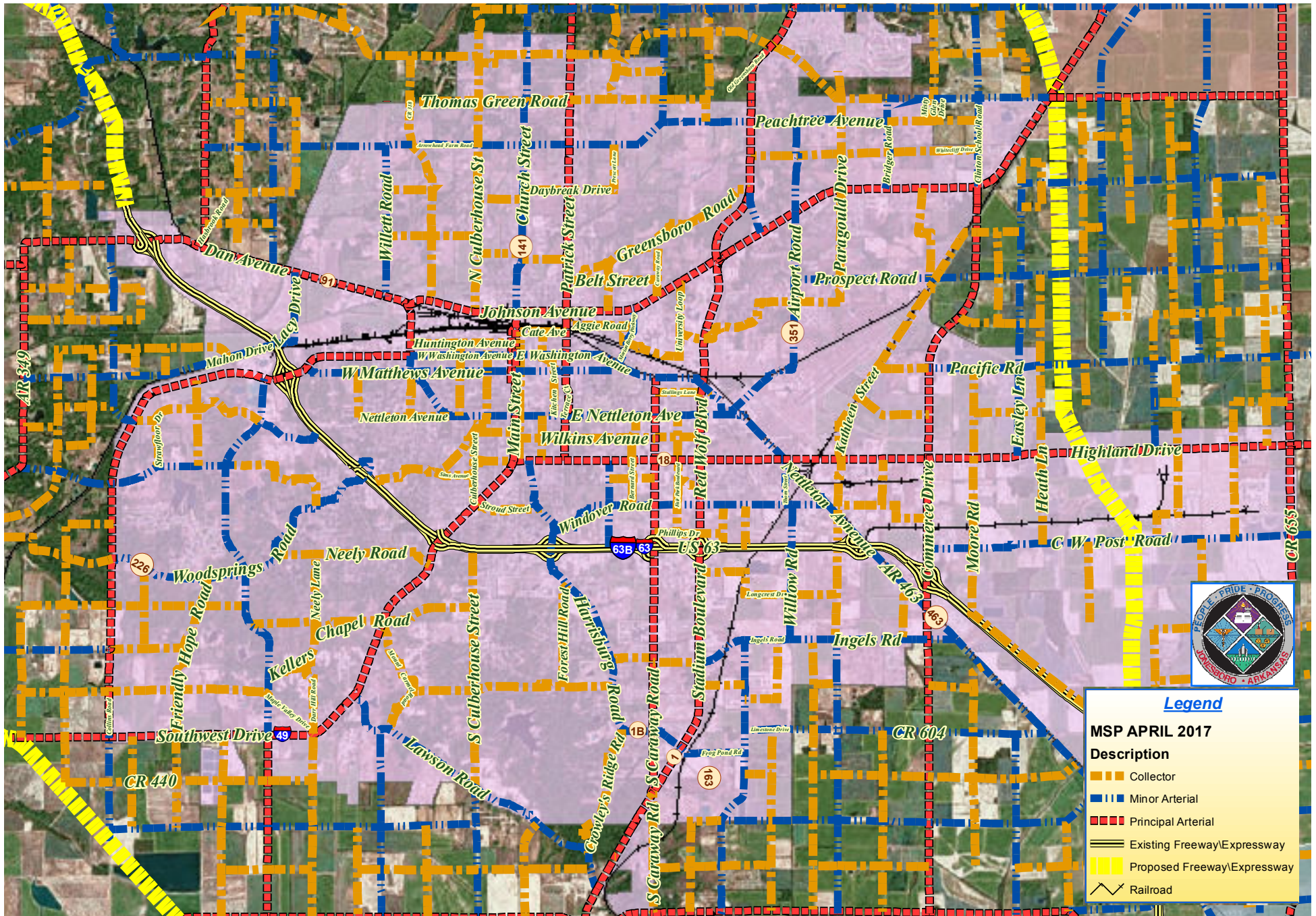
# APPENDIX

## A-1 - NETWORK PLAN

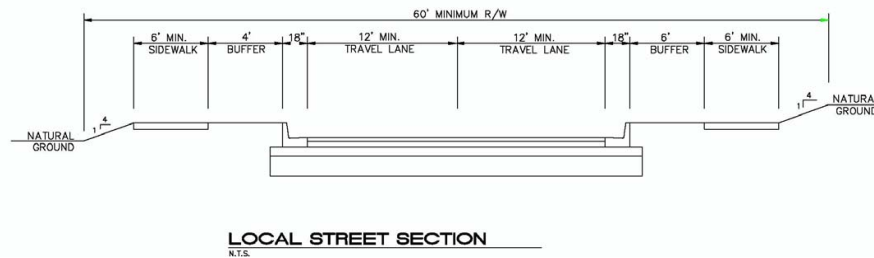
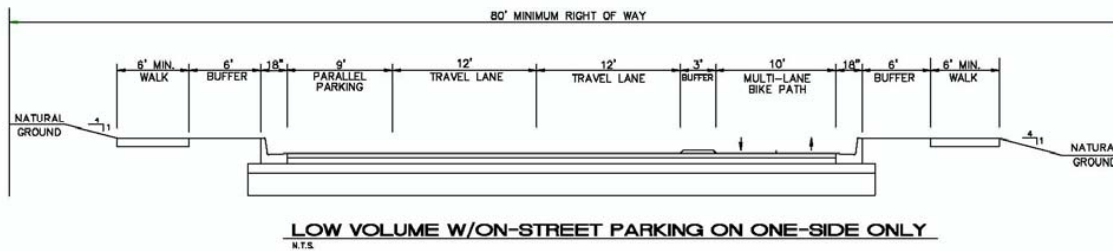
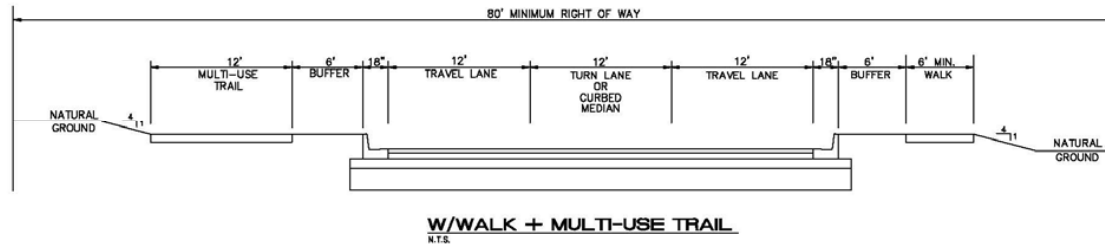
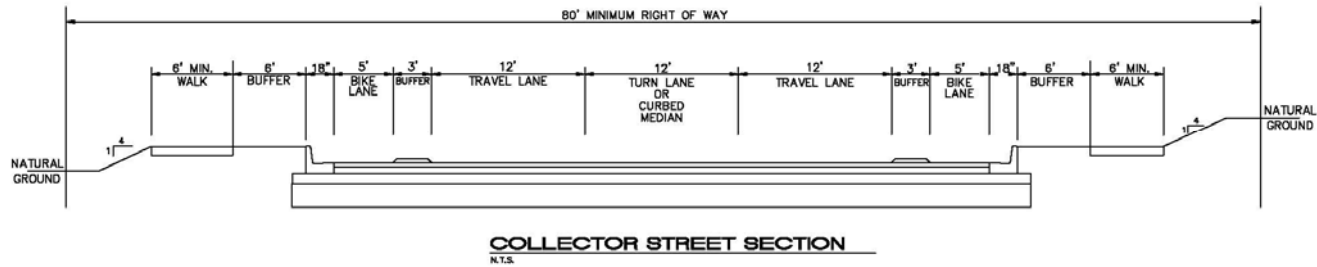




# A-2 - MASTER STREET PLAN - APRIL 2017

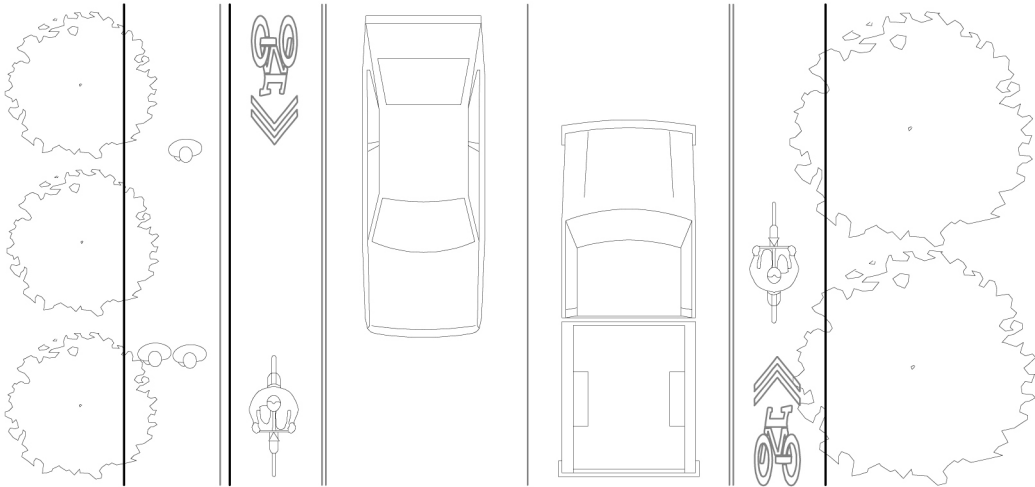
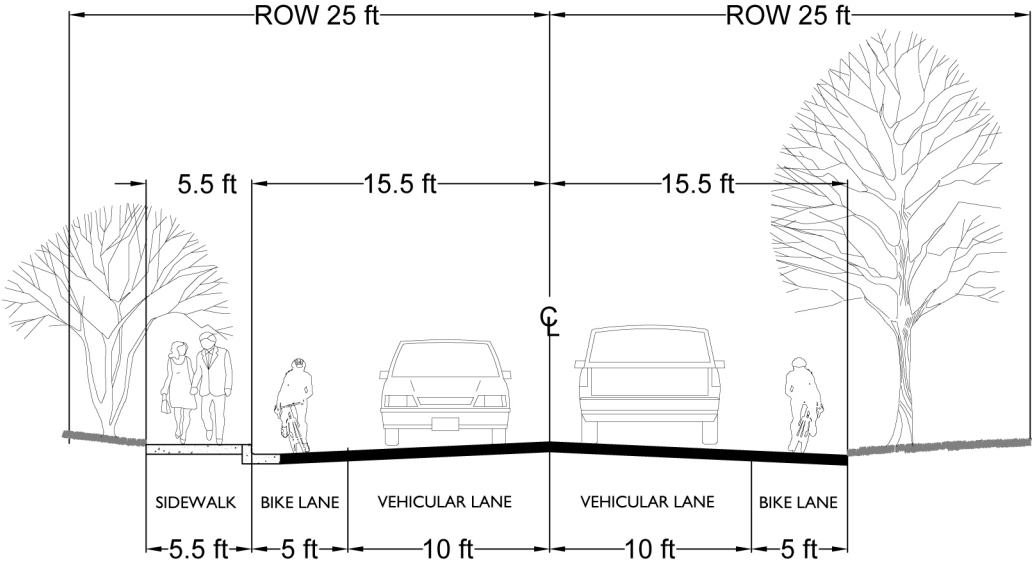


## A-3 - MASTER STREET PLAN SECTIONS

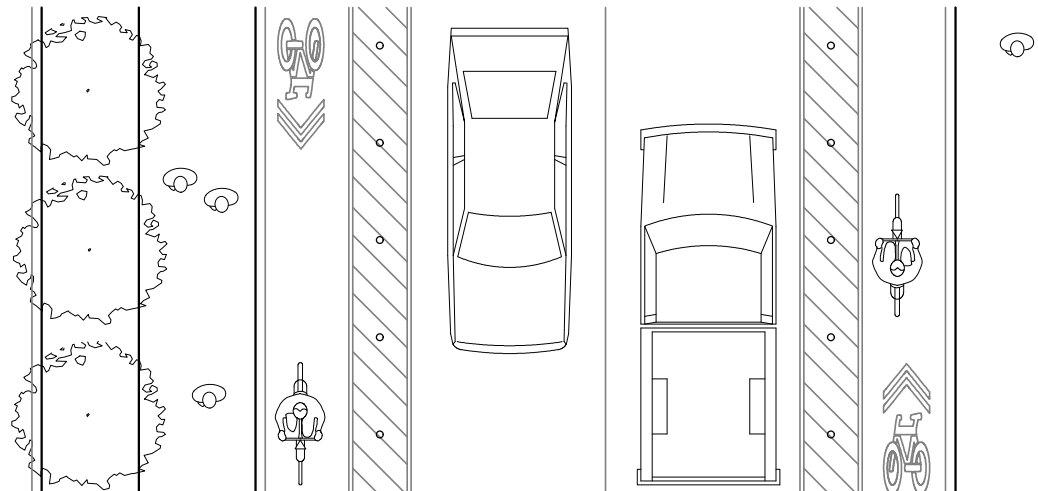
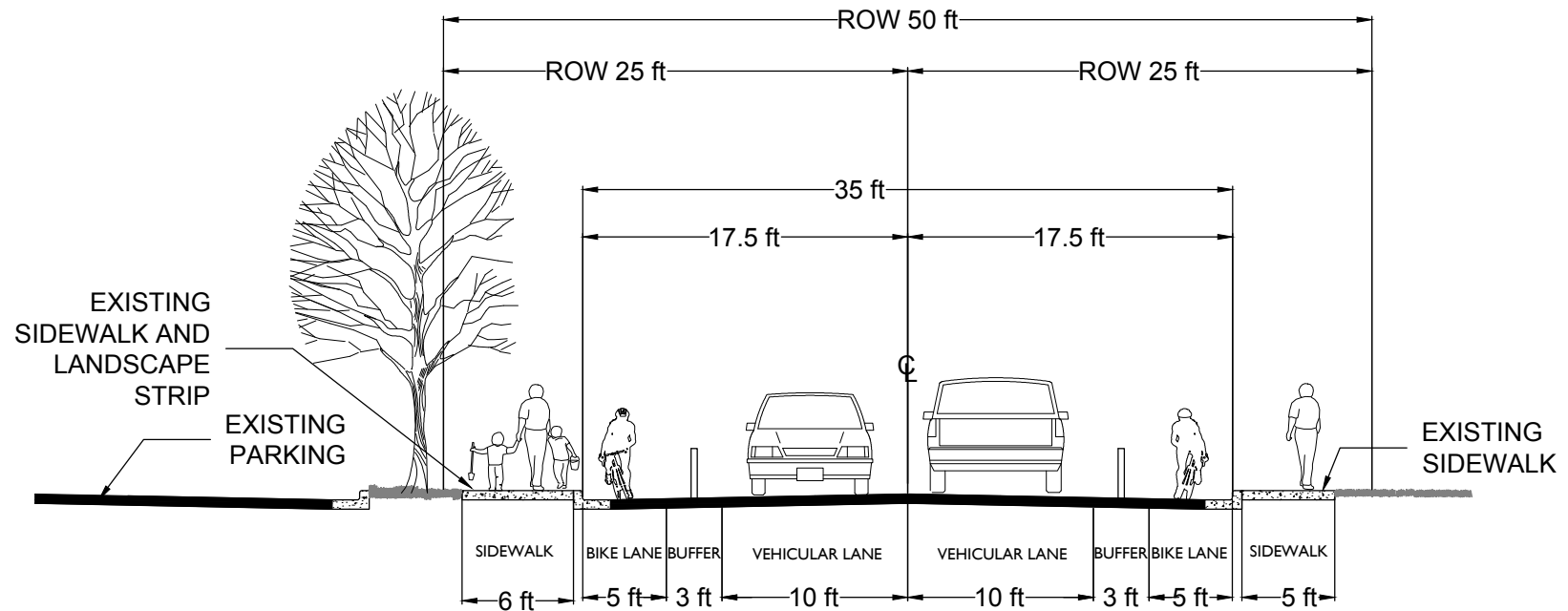




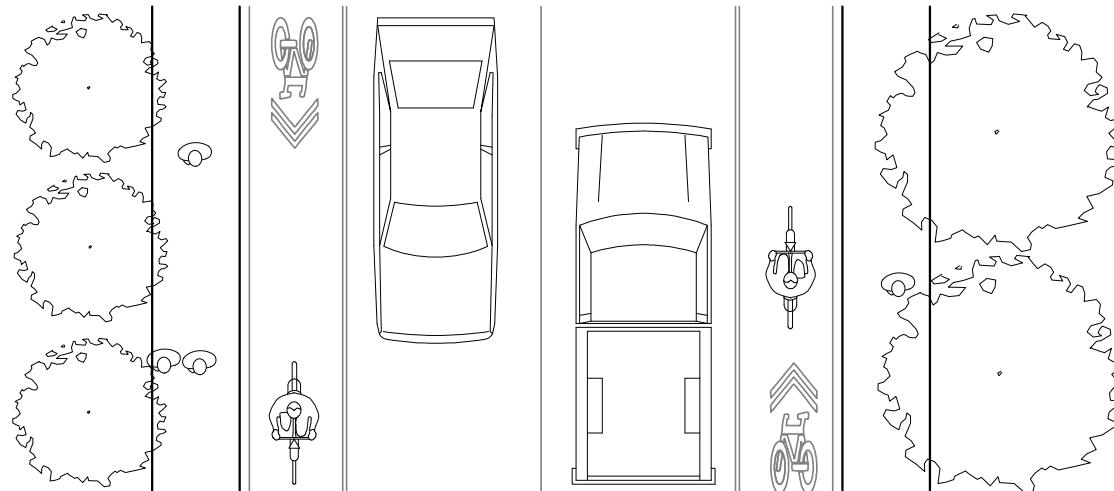
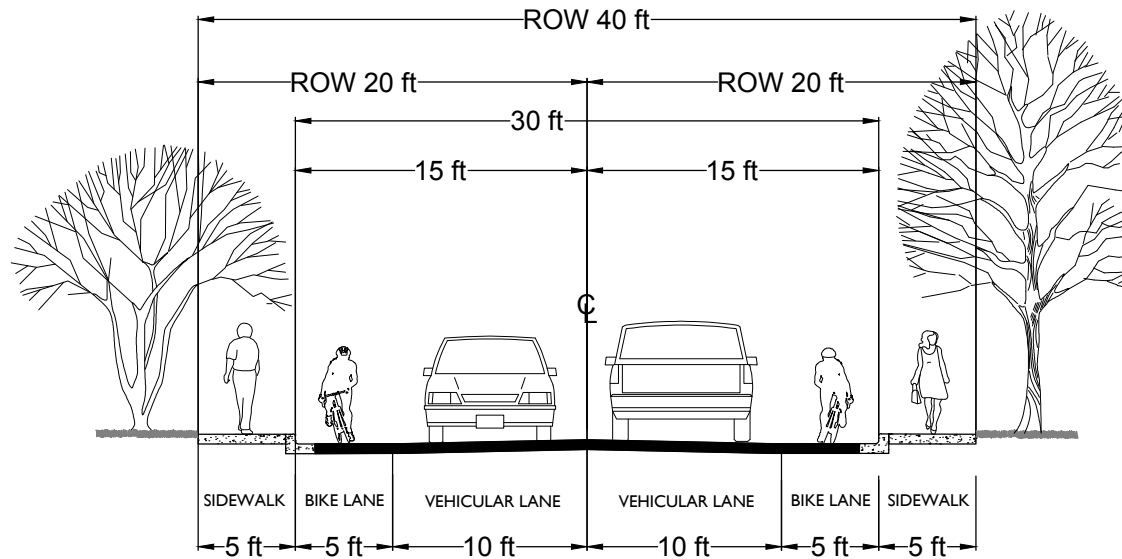
A-4 - PROPOSED NETWORK SECTIONS



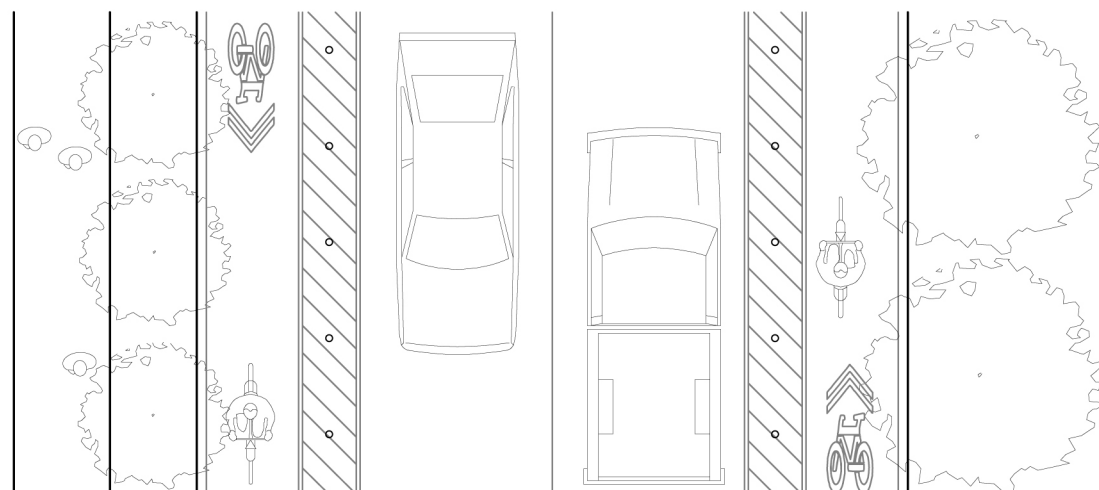
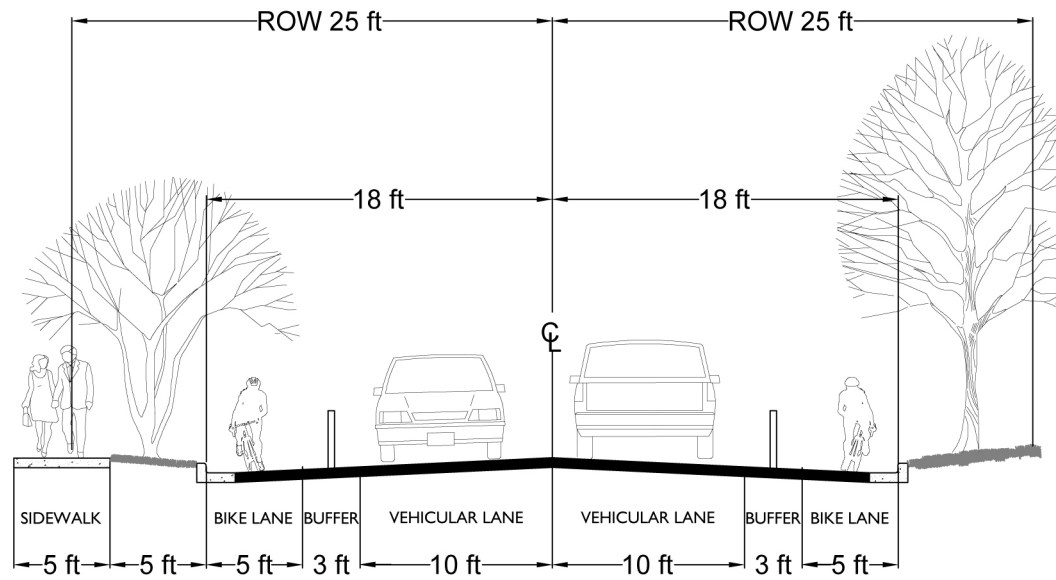
BRIDGE STREET (NORTH OF JOHNSON)  
NORTHSIDE TRAIL





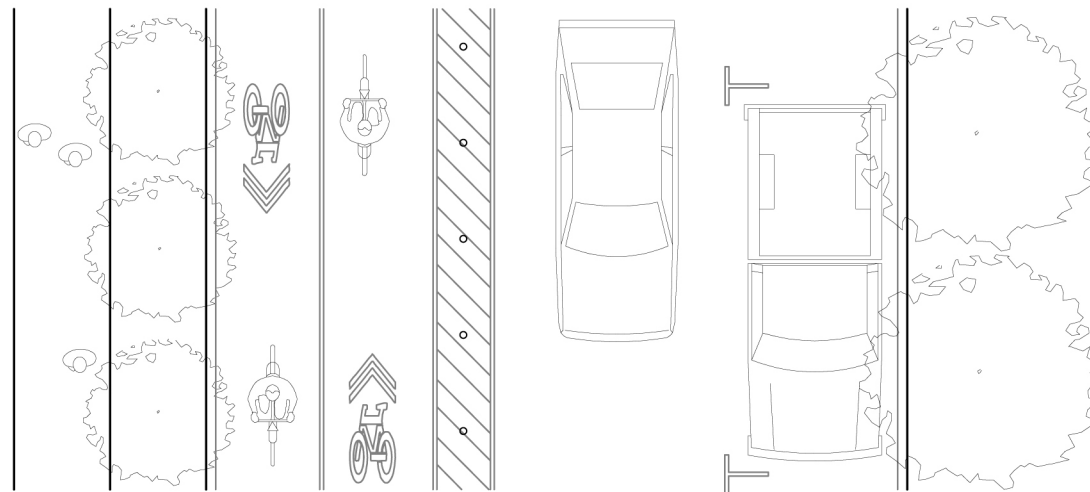
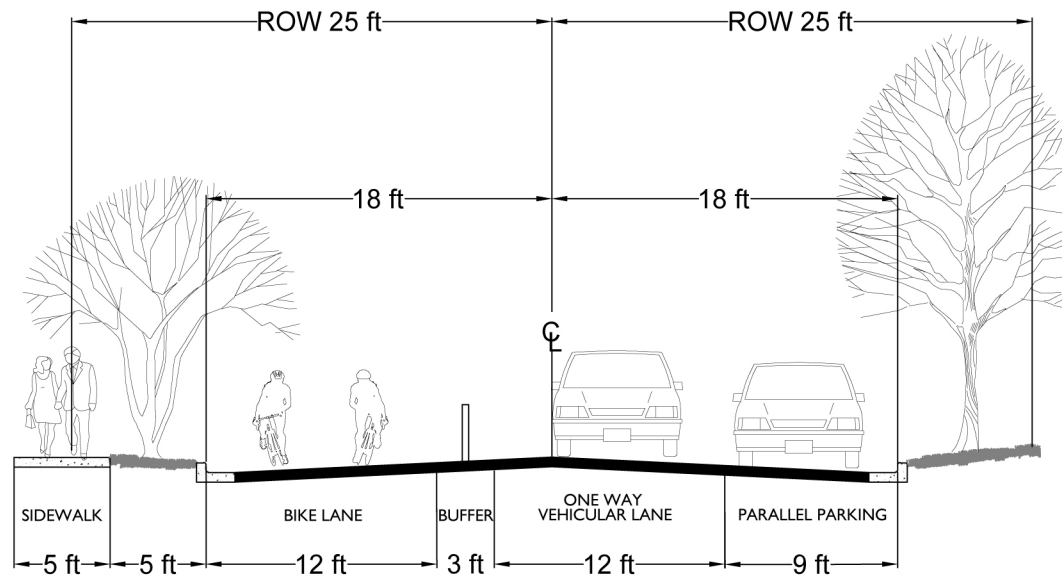


CREATH AVENUE (PATRICK - BRIDGE)  
DOWNTOWN HUB

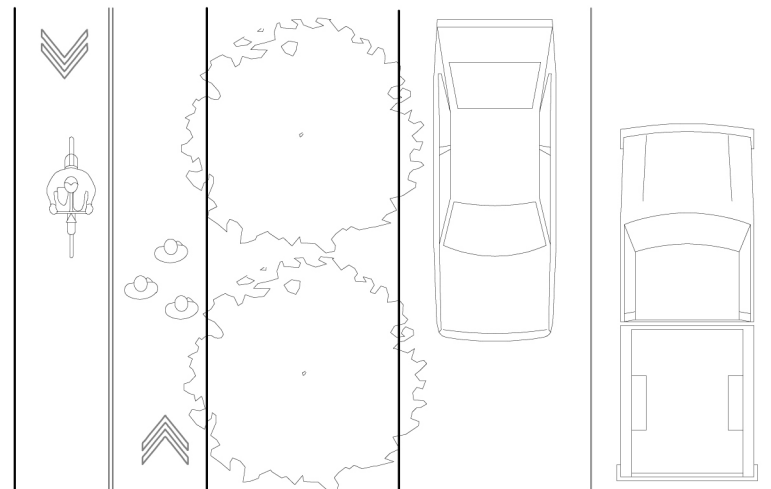
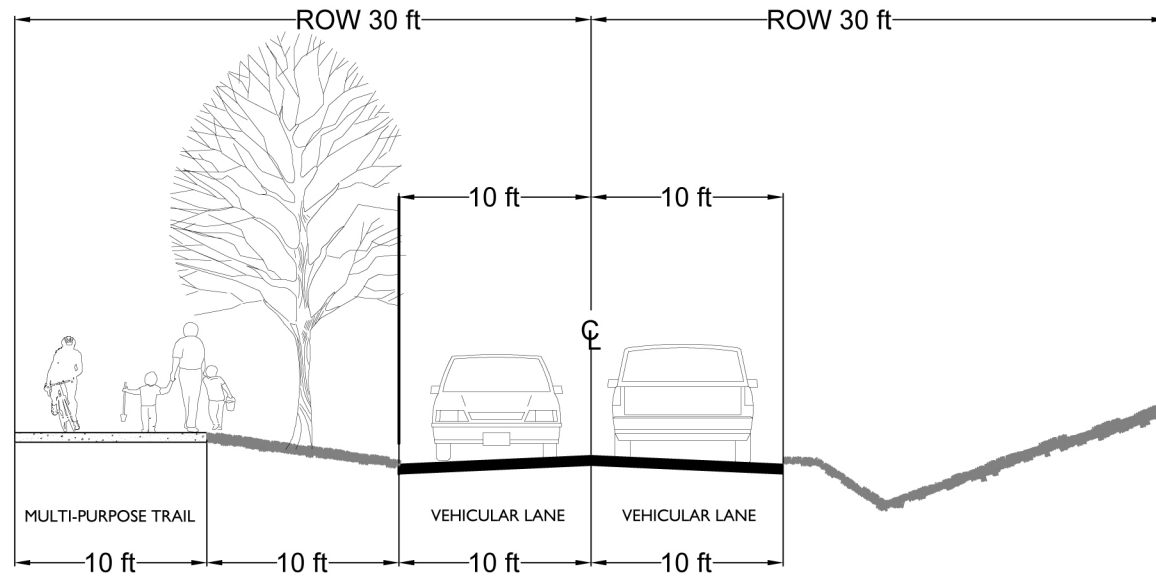


CATE AVENUE (PATRICK - BRIDGE) PHASE ONE  
DOWNTOWN HUB



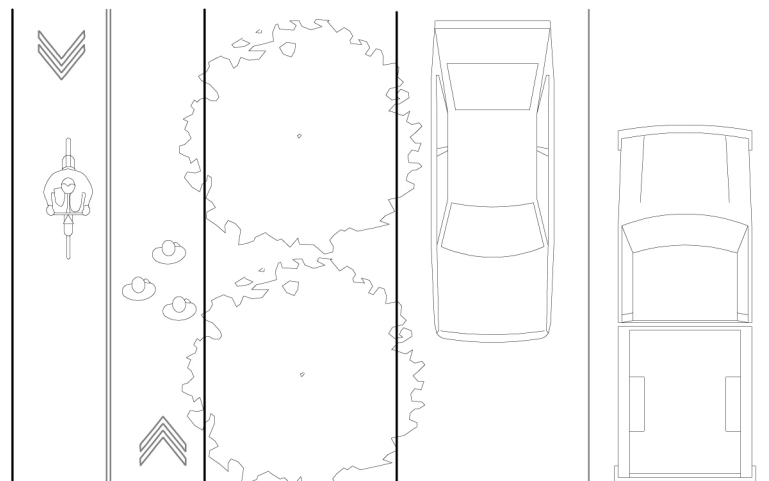
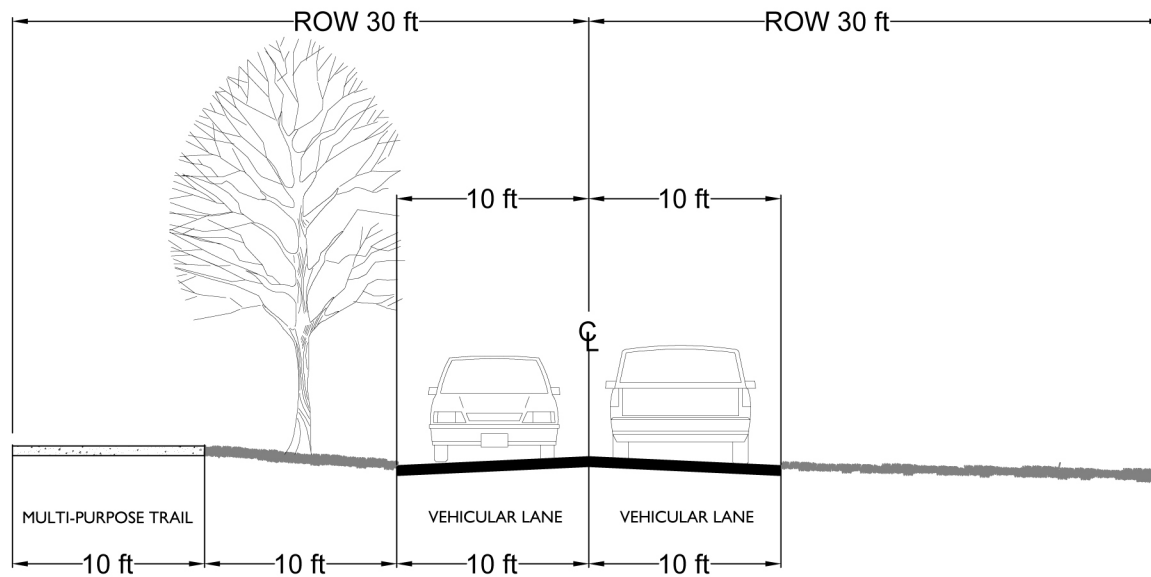


CATE AVENUE (PATRICK - BRIDGE) PHASE TWO  
DOWNTOWN HUB

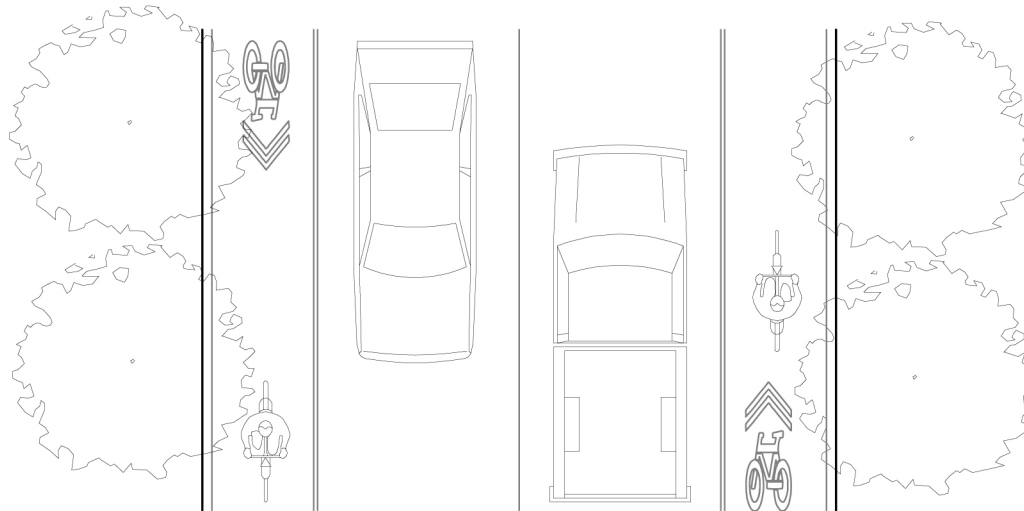
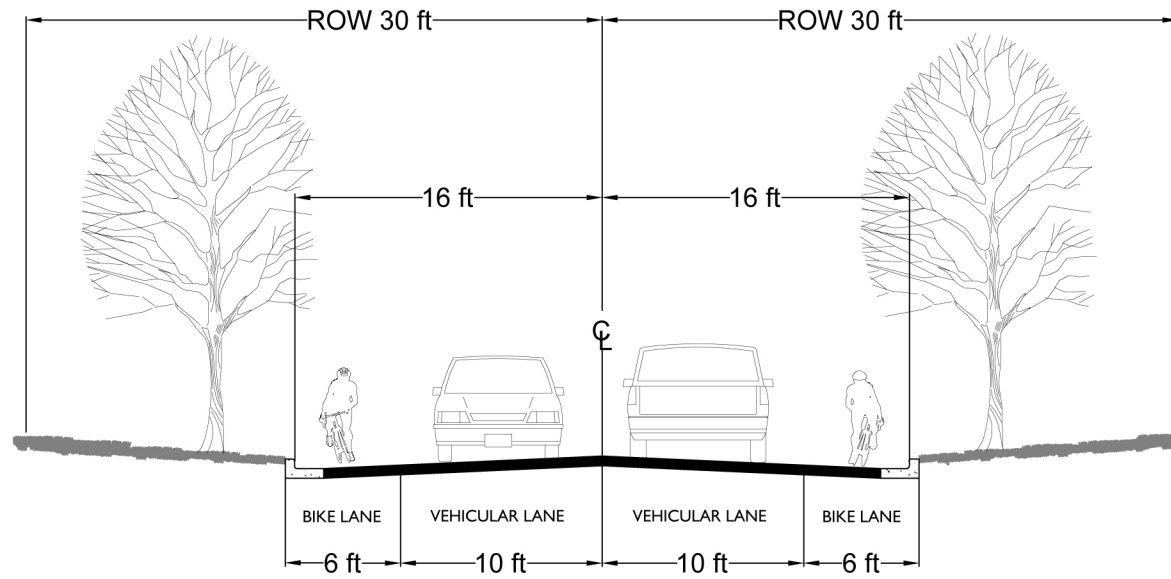


WOFFARD STREET (HIGHLAND - CAMPUS)  
CRAIGHEAD FOREST PATH



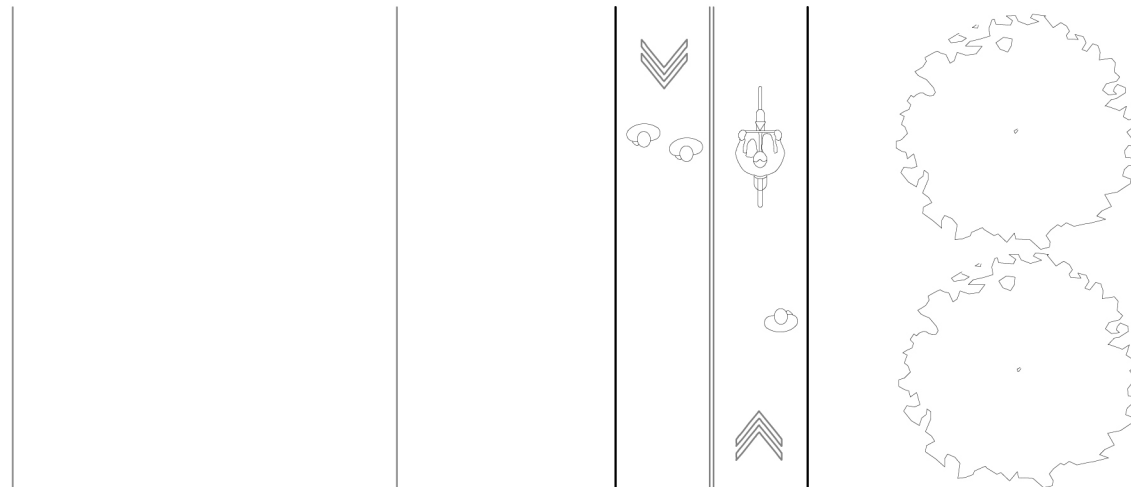
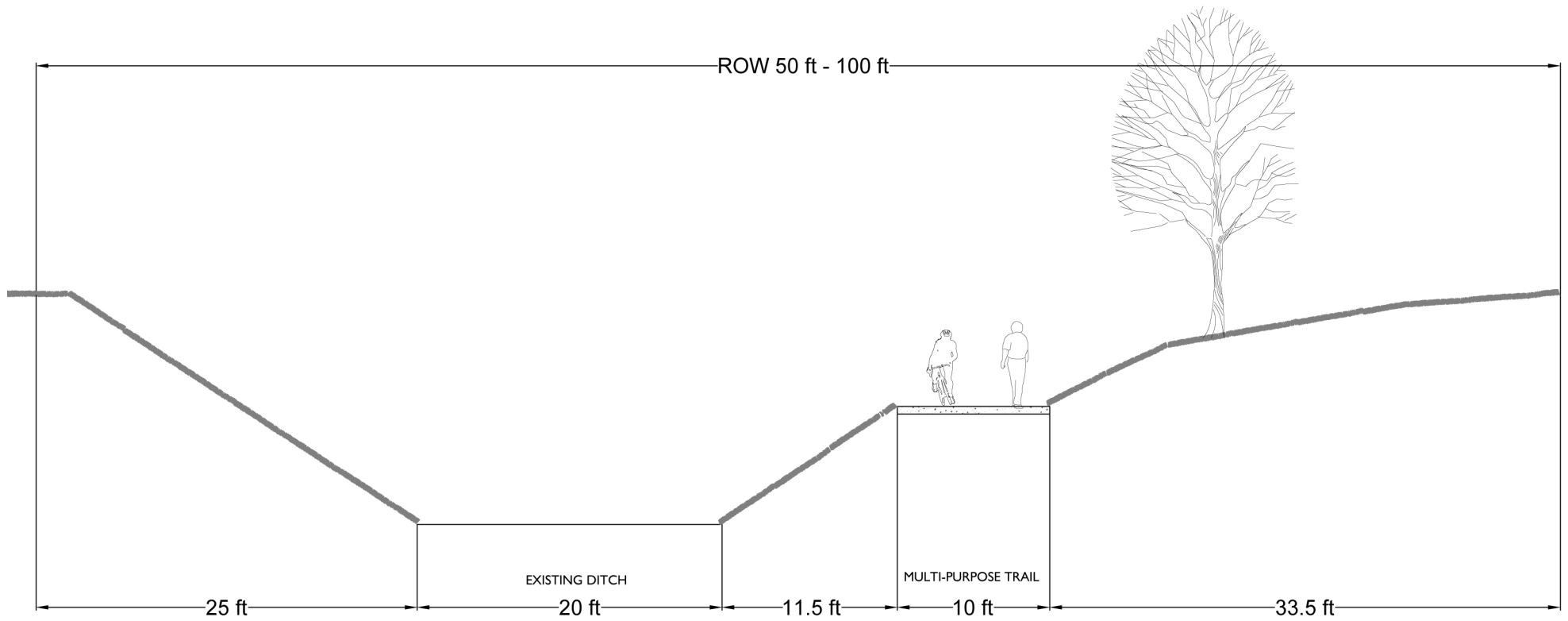


WOFFARD STREET (CAMPUS - WILKINS)  
CRAIGHEAD FOREST PATH

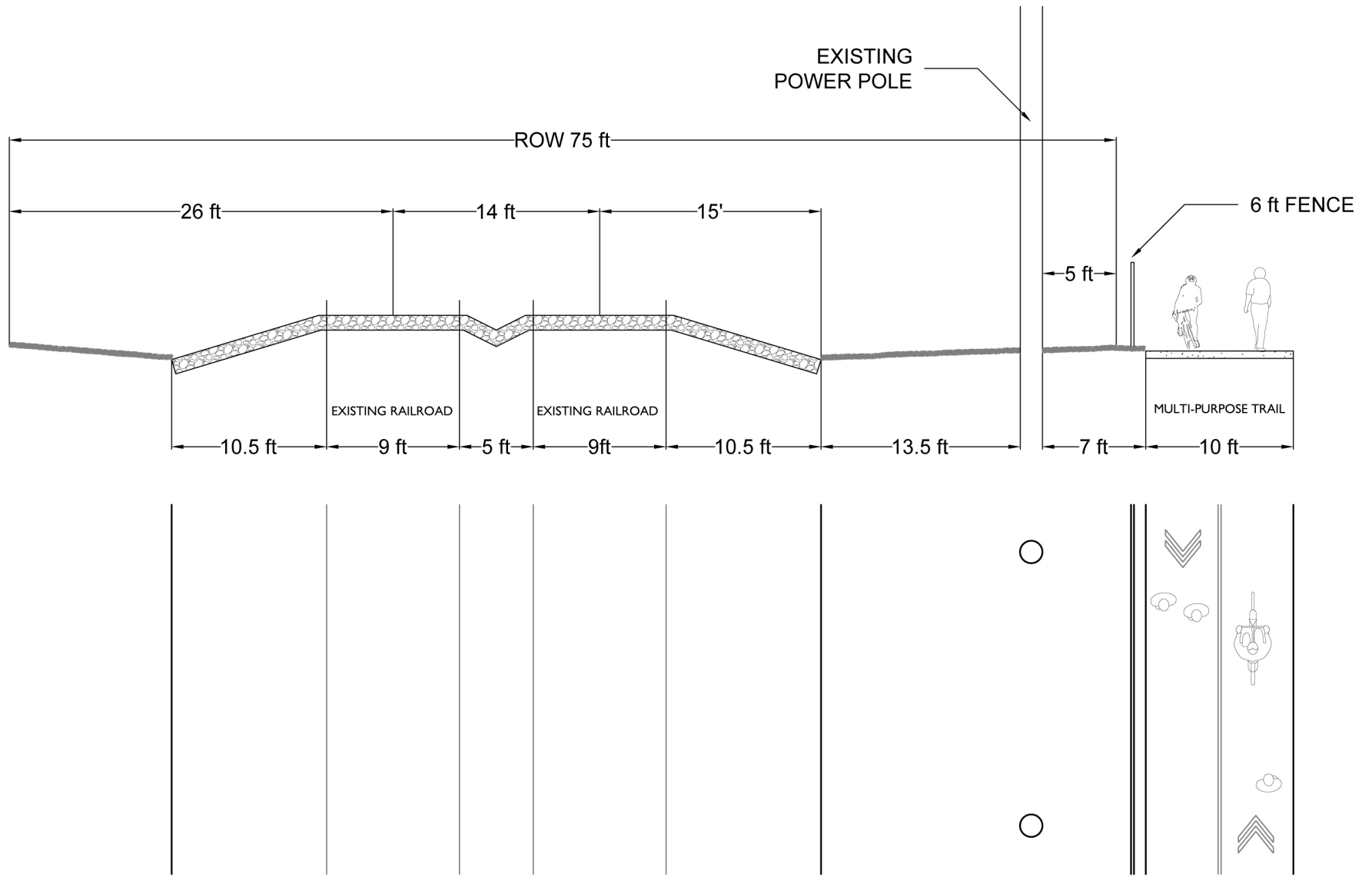


GREENBRIER DRIVE  
CRAIGHEAD FOREST PATH



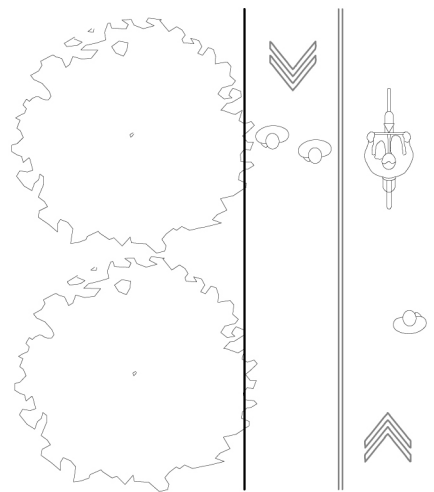
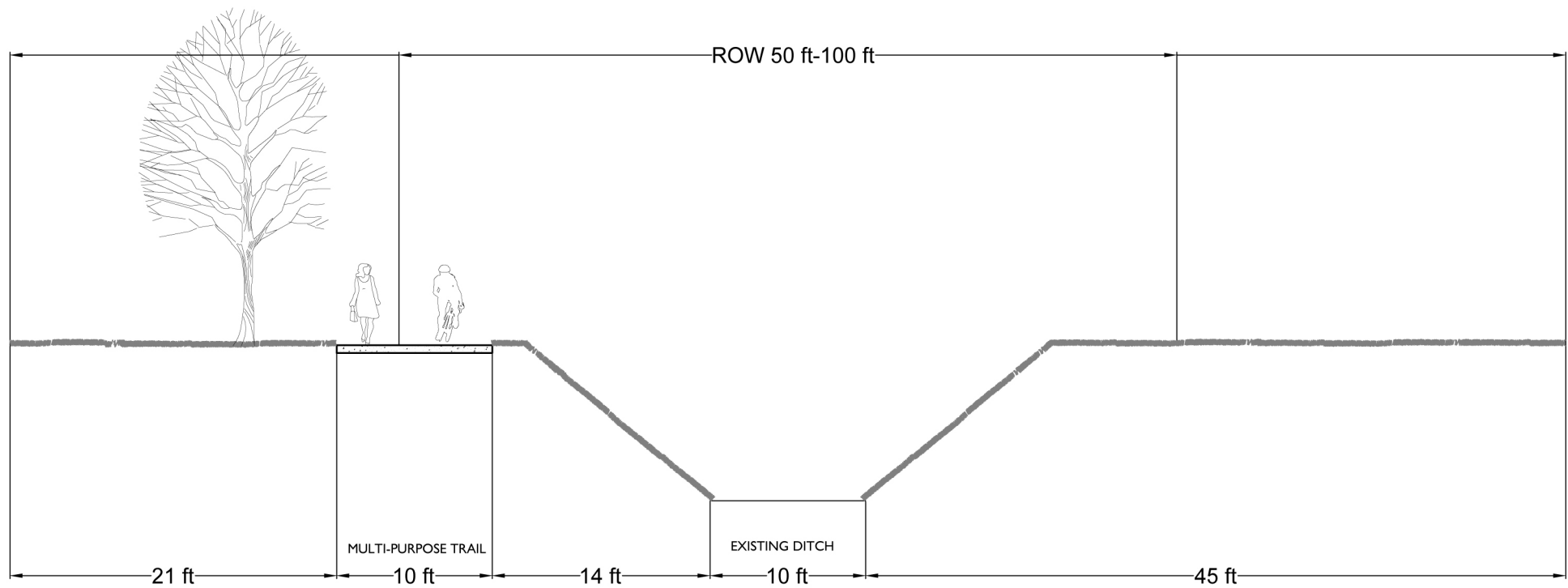


MARTINBROOK DRIVE DITCH  
CRAIGHEAD FOREST PATH

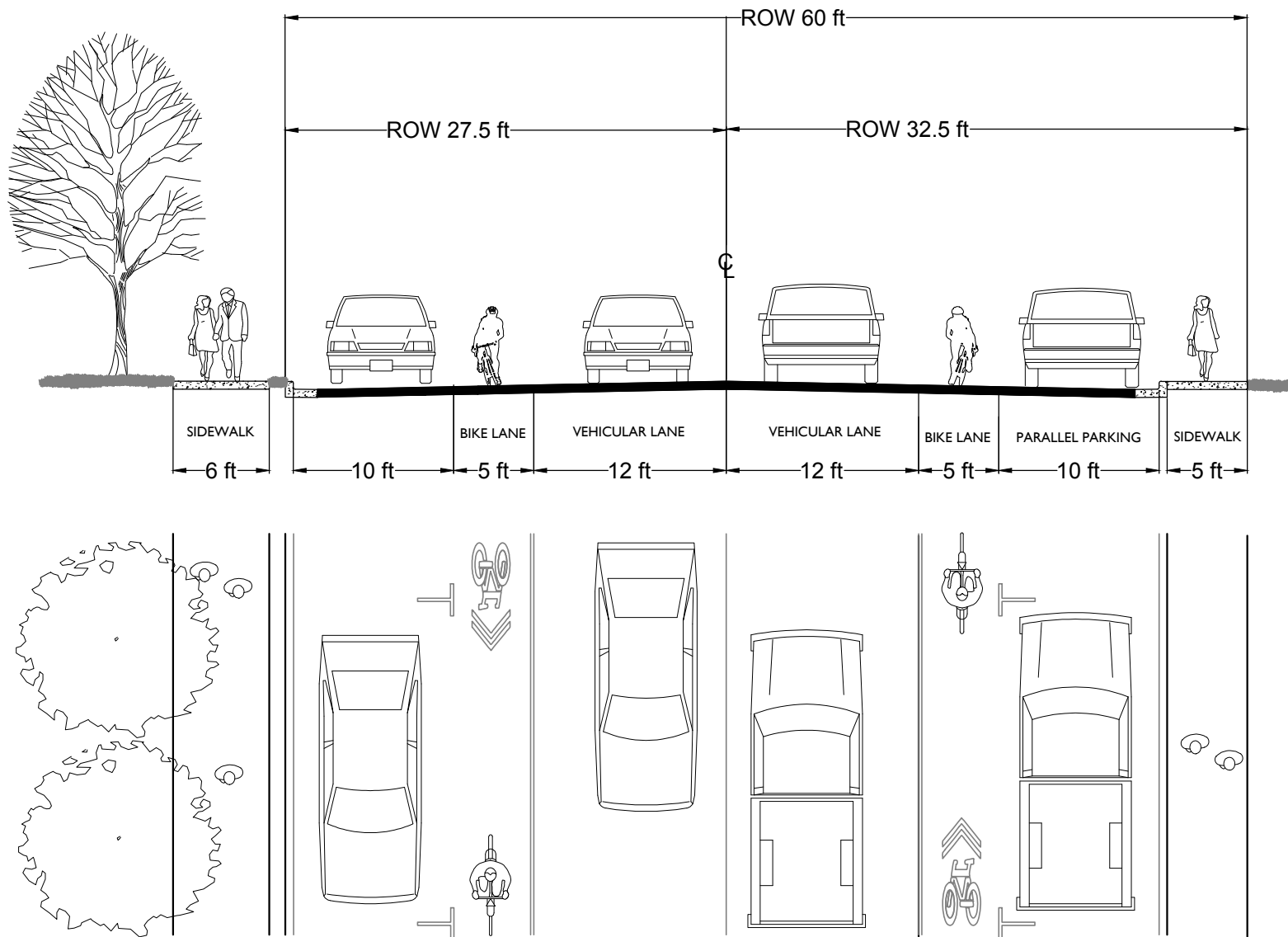


RAILROAD SPUR  
JOE MACK LINE



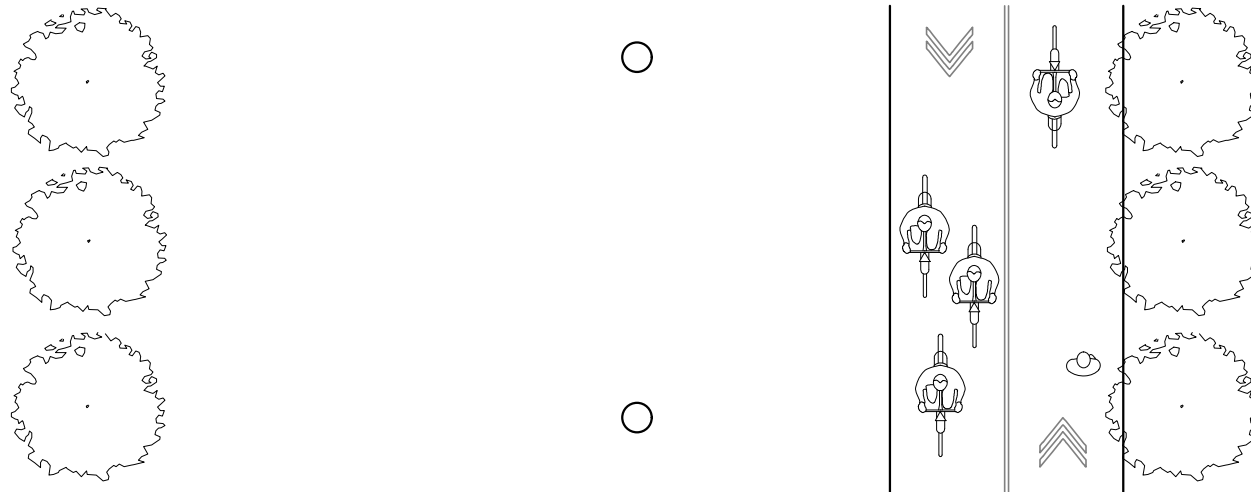
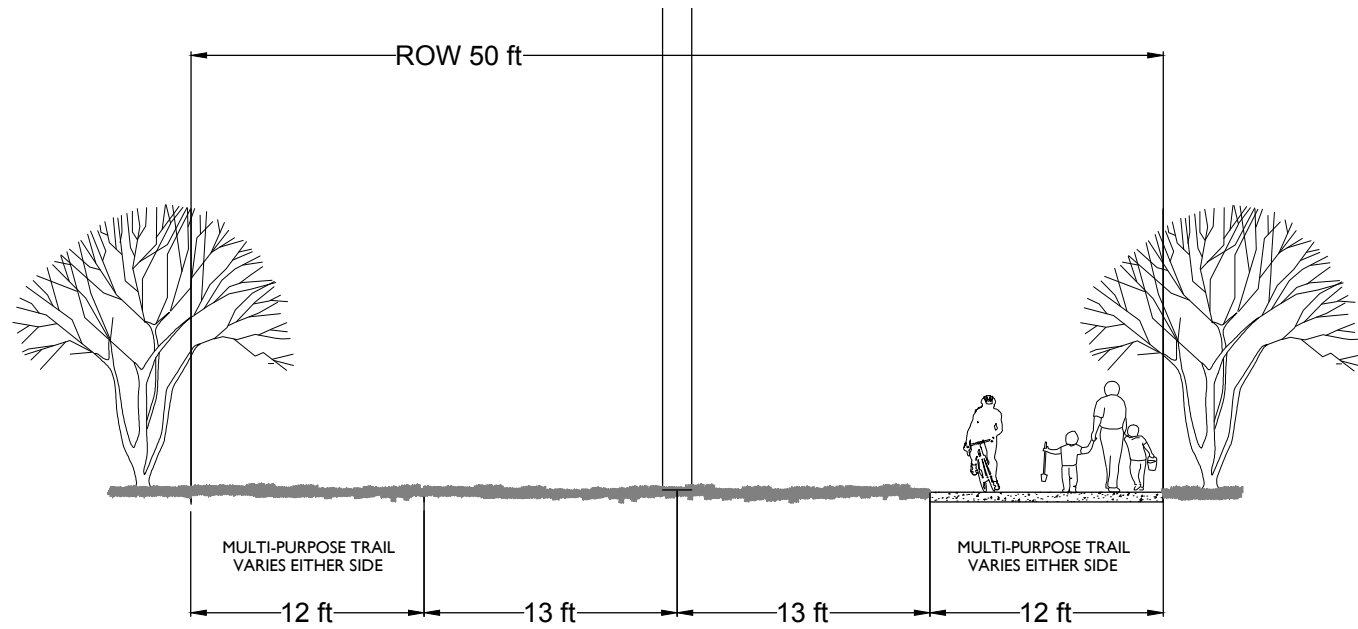


NETTLETON DITCH  
TURTLE CREEK TRACK



AGGIE ROAD





ELECTRICAL EASEMENT  
RED WOLF WAY

# A-5 - PRIORITY SCORE

## CITY OF JONESBORO QUALITY OF LIFE AND CONNECTIVITY PLAN

### ActiveTrans Methodology

#### I. SUMMARY

In order to prioritize the individual trail, bicycle, and pedestrian corridors contained within the project, the ActiveTrans Priority Tool (APT) was used. This method allowed the planning team to rank potential projects impartially and provide a path for the greatest community impact. For more information about APT, see [www.pedbikeinfo.org/planning/tools\\_apr.cfm](http://www.pedbikeinfo.org/planning/tools_apr.cfm).

The APT has been successful in other communities in ranking similar infrastructure improvements. The value in the APT is that it allows the planning team a transparent, responsive, and flexible way to provide a prioritization process. APT's flexibility can provide prioritization to both bike and pedestrian infrastructure. The improvement locations ranked in APT can vary from a high-level corridor level all the way to a specific intersection. Due to the APT being utilized the planning team was able to calibrate the planning process to reflect the residents, leaders, and city personnel. The APT was applied to the five corridors outlined in the plan. The corridors identified in this plan were prioritized using the APT tool.

#### II. MAJOR FACTORS

Out of the nine Major Factors provided in APT, four were used. Due to the variation in variables each category was weighted. Each major factor can be varied in weight from 1 to 10. This determines how much impact the final results will have. The Planning Team's methodology for weighting of the four categories can be found below:

- Stakeholders Input-The survey conducted in the public meetings was utilized. This survey asked participants to rank the six corridors in order of desire. The category weight assigned by the planning team was determined from stakeholder input, public comment, and advisory committee's input. **The Category Weight assigned was 6**
- Constraints-Understanding the complexity in implementing different phases of a plan are important to the overall success of a plan. The constraints section looks at the cost of the improvement, right of way available, utility relocation, and other various items that can drain the City's resource. **The Category Weight Assigned was 8**
- Existing Conditions-The conditions of the existing corridor will help identify the complexity of the project along with the need of the project. **The Category Weight Assigned was 6**
- Demand- With one of the main goals of this study was to improve the city-wide network for bicycles and pedestrian. Assessing corridors based on access to City resources, commercial areas, and education location was important to unite the City into one network. **The Category Weight Assigned was 7**
- Connectivity-The locations of the proposed corridors proximity to existing City pedestrian facilities was used to identify proposed improvements greatest impacts to existing infrastructure and improve the city wide network. **The Category Weight Assigned was 7.**



### III. INDIVIDUAL VARIABLES

#### STAKEHOLDER INPUT

- The projects identified during the advisory committee meetings helped create a survey that was collected during the public meetings. The survey identified the project corridors and had survey participants rank the importance of each corridor. This information was placed in the ATP and scored accordingly.

#### CONSTRAINTS

- *Available Right-of-Way*-The availability of existing right-of-way was estimated by taking measurement from the City's GIS mapping, court house records, and preliminary field measurements. From the information obtained, a monetary right of way cost was calculated and inputted into the ATP model. The corridors that showed the least cost associated with right-of-way acquisition scored the most favorable.
- *Utility Relocation*-The ATP model promoted the corridors with the least utility relocations requirements. Existing Utilities were identified from GIS data, street level pictures, and a windshield survey. The corridors were scored from zero to three. The value of the scoring are as follows;
  - 3 points-for implementation ready.
  - 2 points-for minor utility relocation.
  - 1 points-for moderate utility relocation.
  - 0 points- for major utility relocation.
- *Order of Magnitude Cost*-Each corridor's proposed improvements were assigned a cost estimate. The cost estimate can be found in the following appendices. The ATP model scored the corridor with the least amount of cost associated with it as the most favorable. With funding mechanism becoming less prevalent, identifying the corridors that provide the most economical improvements is critical for success.

#### EXISTING CONDITIONS

- *Average Daily Traffic Count (ADT)*-To improve the safety and experience of the proposed improvements, the ADT were used to identify the low traffic volume corridors. Numerous resources and studies show that pedestrian and bicycle facilities show greater usage in areas that have less vehicle interactions. The ADT's were obtained from Arkansas Department of Transportation.
- *Posted Speed*-The posted speed along the corridors was obtained from windshield surveys. It is important to identify posted speed within project corridors for safety reasons. Typically, the lower the vehicle speed within a corridor the safer the pedestrian and vehicle interaction is.

## **DEMAND**

- *Proximity to retail*-The ATP model analyzed the corridors that showed to have most impact for pedestrian and bicyclist to access commercial and retail properties. The proximity of the commercial and retail space to the proposed corridor was obtained from the City's GIS map and imputed into the ATP mode. The corridors were scored from zero to three. The value of the scoring are as follows;
  - 3 points-for likely used for retail or commercial access.
  - 2 points-for moderates used for retail or commercial access.
  - 1 points-for little used for retail or commercial access.
  - 0 points- for none used for retail or commercial access
- *Proximity to Schools*-The ATP model analyzed the corridors that showed to have most impact for pedestrian and bicyclist to access education facilities. The proximity of the educational facilities to the proposed corridor was obtained from the City's GIS map and imputed into the ATP mode. The corridors were scored from zero to three. The value of the scoring are as follows;
  - 3 points-for likely used for education facility access.
  - 2 points-for moderate used for education facility access.
  - 1 points-for little used for education facility access.
  - 0 points- for none used for education facility access.
- *Proximity to Parks*-The ATP model looked at the corridors that showed to have most impact for pedestrian and bicyclist to access to City Parks. The proximity of the proposed corridor to the City's park system was obtained from the City's GIS map and imputed into the ATP mode. The corridors were scored from zero to three. The value of the scoring are as follows;
  - 3 points-for likely used to access parks.
  - 2 points-for moderately used to access parks.
  - 1 points-for little used to access parks.
  - 0 points- for not being used to access parks.

## **CONNECTIVITY**

- *Existing Facility*-The purpose of this analysis was to identify the corridors that allowed for the most connected network. In order to meet this goal, the ATP model promoted projects that connected to existing sidewalks, bicycle lanes, and trails. Those locations were identified from aerial LIdar and windshield surveys. Each corridor total connections were tallied and placed into the model. Prioritization was given to the corridors that provided the most connected network.

PRIORITIZATION RANK	LOCATION	SCORE
1	DOWNTOWN HUB	153.9
2	ASTATE LINK	142.0
3	CRAIGHEAD FOREST PARK	138.9
4	JOE MACK LINK	138.2
5	NORTHSIDE TRAIL	108.2
6	TURTLE CREEK TRACK	101.3



## A-6 - COST ESTIMATE

jONESboro Connectivity Plan  
Master Planning - Opinion of Cost

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ASTATE LINK		Quantity	Unit Cost	Cost	Subtotal	Total
A	Land - Easement and ROW Acquisition - Trail Only					\$250,000.00
	Trail Easement and ROW	5	acre	\$50,000.00	\$250,000.00	
B	LINK Construction Cost - Trail Only					\$5,397,500.00
	Elevated Trail	1600	lf	\$2,125.00	\$3,400,000.00	
	Trail beneath Railroad Tressel within ROW	100	lf	\$975.00	\$97,500.00	
	3 Form Panels - Architectural Feature (Elevated and Beneath)	1	ls	\$475,000.00	\$475,000.00	
	Trail at Grade	1550	cy	\$375.00	\$581,250.00	
	Fencing along Railroad ROW	3000	lf	\$40.00	\$120,000.00	
	Lighting	135	ea	\$4,250.00	\$573,750.00	
	Cate Street Improvements - Phase One - Bike Lanes	700	lf	\$50.00	\$35,000.00	
	Trees along Trail	200	ea	\$200.00	\$40,000.00	
	Wayfinding Signage and Site Furnishings	1	ls	\$75,000.00	\$75,000.00	
C	Contingency - Due Diligence - Design Drawings-CA	0.15	%	\$809,625.00	\$809,625.00	\$809,625.00
					<b>TOTAL</b>	<b>\$6,457,125.00</b>
	<b>Park Developments (Optional)</b>					
A	Land Acquisition - Park Land Only					\$3,500,000.00
	Park land/Forrest land/Steel/Concrete acquisition (Optional)	35	acre	\$100,000.00	\$3,500,000.00	
B	Park Development					\$3,500,000.00
	Public Park Improvements	35	acre	\$100,000.00	\$3,500,000.00	
C	Contingency - Due Diligence - Design Drawings-CA	0.15	%	\$525,000.00	\$525,000.00	\$525,000.00
					<b>TOTAL</b>	<b>\$7,525,000.00</b>

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<b>CRAIGHEAD FOREST PATH</b>		<b>Quantity</b>	<b>Unit Cost</b>	<b>Cost</b>	<b>Subtotal</b>	<b>Total</b>
<b>A</b>	<b>Land - Easement and ROW Acquisition - Trail Only</b>					<b>\$500,000.00</b>
	Trail Easement and ROW	10	acers	\$50,000.00	\$500,000.00	
<b>B</b>	<b>PATH Construction Cost</b>					<b>\$7,022,500.00</b>
	Elevated Trail	1050	lf	\$2,125.00	\$2,231,250.00	
	Utility Modifications	1	ls	\$695,000.00	\$695,000.00	
	3 Form Panels - Architectural Feature	1	ls	\$350,000.00	\$350,000.00	
	Trail at Grade	4500	cy	\$375.00	\$1,687,500.00	
	Box Culverts beneath Highway (10' wide x 8' tall)	500	lf	\$1,750.00	\$875,000.00	
	Lighting	200	ea	\$4,250.00	\$850,000.00	
	Greenbrier Street	2750	lf	\$35.00	\$96,250.00	
	Trees along Trail	350	ea	\$200.00	\$70,000.00	
	Wayfinding and Site Furnishings	1	ls	\$100,000.00	\$100,000.00	
	Pedestrian Activated Signals and Crosswalks	3	ea	\$22,500.00	\$67,500.00	
<b>C</b>	<b>Contingency - Due Diligence - Design Drawings-CA</b>	0.15	%	\$1,053,375.00	\$1,053,375.00	<b>\$1,053,375.00</b>
					<b>TOTAL</b>	<b>\$8,575,875.00</b>

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JOE MACK LINK		Quantity	Unit Cost	Cost	Subtotal	Total
A	Land - Easement and ROW Acquisition - Trail Only					\$350,000.00
	Trail Easement and ROW	7	acre	\$50,000.00	\$350,000.00	
B	LINK Construction Cost					\$2,292,500.00
	Stream Crossings	300	lf	\$1,875.00	\$562,500.00	
	Trail at Grade	2500	cy	\$375.00	\$937,500.00	
	Lighting	150	ea	\$4,250.00	\$637,500.00	
	Trees along Trail	300	ea	\$200.00	\$60,000.00	
	Wayfinding and Site Furnishings	1	ls	\$50,000.00	\$50,000.00	
	Pedestrian Activated Signals and Crosswalks	2	ea	\$22,500.00	\$45,000.00	
C	Contingency - Due Diligence - Design Drawings-CA	0.15	%	\$343,875.00	\$343,875.00	\$343,875.00
					<b>TOTAL</b>	<b>\$2,986,375.00</b>
	Fencing along ROW at Railroad (not required use as leverage)	13000	lf	\$40.00	\$520,000.00	\$520,000.00



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<b>NORTHSIDE TRAIL</b>		<b>Quantity</b>	<b>Unit Cost</b>	<b>Cost</b>	<b>Subtotal</b>	<b>Total</b>
<b>A</b>	<b>Land - Easement and ROW Acquisition - Trail Only</b>					<b>\$0.00</b>
	Trail Easement and ROW	0	acre	\$50,000.00	\$0.00	
<b>B</b>	<b>TRAIL Construction Cost</b>					<b>\$983,000.00</b>
	Street Closing - Pedestrian Plaza and Trail Improvements	1	ls	\$500,000.00	\$500,000.00	
	Lighting Improvements	50	ea	\$4,250.00	\$212,500.00	
	Trees along Trail + Landscape Improvements	200	ea	\$750.00	\$150,000.00	
	Wayfinding and Site Furnishings	1	ls	\$35,000.00	\$35,000.00	
	Pedestrian Activated Signals and Crosswalks	1	ea	\$22,500.00	\$22,500.00	
	Bridge Street Improvements - Bike Lanes	1800	lf	\$35.00	\$63,000.00	
<b>C</b>	<b>Contingency - Due Diligence - Design Drawings-CA</b>	0.15	%	\$147,450.00	\$147,450.00	<b>\$147,450.00</b>
					<b>TOTAL</b>	<b>\$1,130,450.00</b>

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<b>TURTLE CREEK TRACK</b>		<b>Quantity</b>	<b>Unit Cost</b>	<b>Cost</b>	<b>Subtotal</b>	<b>Total</b>
<b>A</b>	<b>Land - Easement and ROW Acquisition - Trail Only</b>					<b>\$0.00</b>
	Trail Easement and ROW	0	acre	\$50,000.00	\$0.00	
<b>B</b>	<b>LINK Construction Cost</b>					<b>\$867,500.00</b>
	Trail Improvements Gateway Features	8	ea	\$30,000.00	\$240,000.00	
	Lighting Improvements	70	ea	\$4,250.00	\$297,500.00	
	Trees along Trail + Landscape Improvements	325	ea	\$500.00	\$162,500.00	
	Wayfinding and Site Furnishings	1	ls	\$100,000.00	\$100,000.00	
	Pedestrian Activated Signals and Crosswalks	3	ea	\$22,500.00	\$67,500.00	
<b>C</b>	<b>Contingency - Due Diligence - Design Drawings-CA</b>	0.10	%	\$86,750.00	\$86,750.00	<b>\$86,750.00</b>
					<b>TOTAL</b>	<b>\$954,250.00</b>

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<b>RED WOLF WAY</b>	<b>Quantity</b>	<b>Unit Cost</b>	<b>Cost</b>	<b>Subtotal</b>	<b>Total</b>
<b>A Land - Easement and ROW Acquisition - Trail Only</b>					<b>\$3,150,000.00</b>
Trail Easement and ROW	63	acre	\$50,000.00	\$3,150,000.00	
<b>B PATH Construction Cost</b>					<b>\$18,887,500.00</b>
Trail at Grade	30500	cy	\$375.00	\$11,437,500.00	
Box Culverts beneath Highway/Tressel (10' wide x 8' tall)	500	lf	\$1,750.00	\$875,000.00	
Stream Crossings	1200	lf	\$1,875.00	\$2,250,000.00	
Lighting	750	ea	\$4,250.00	\$3,187,500.00	
Trees along Trail	1500	ea	\$200.00	\$300,000.00	
Wayfinding and Site Furnishings	1	ls	\$500,000.00	\$500,000.00	
Pedestrian Activated Signals and Crosswalks	15	ea	\$22,500.00	\$337,500.00	
<b>C Contingency - Due Diligence - Design Drawings-CA</b>	0.15	%	\$2,833,125.00	\$2,833,125.00	<b>\$2,833,125.00</b>
				<b>TOTAL</b>	<b>\$24,870,625.00</b>





