



# MAIP ACTIVE TRANSPORTATION CONNECTIVITY MASTER PLAN



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# CHAPTER ONE

# INTRODUCTION TO THE PROJECT

## MidAmerica Industrial Park Active Transportation Connectivity Study

The purpose of the Active Transportation Connectivity Master Plan is to define a park-wide bicycle and pedestrian network to provide safe, efficient, and enjoyable connections throughout MidAmerica Industrial Park (MAIP). The bicycle and pedestrian trails internal to the park will also connect with the trail network proposed for Mayes County. The bicycle and pedestrian network will not only connect the various land uses in the park but also provide direct connections to the strategically developed mountain bike parks and trails within MAIP as well as the proposed residential and commercial developments. The Olsson Active Transportation Team collaborated with MTB Builders to develop a destination active transportation network for MidAmerica Industrial Park.

MAIP's development and management team have several projects underway that, when completed, will transform MidAmerica Industrial Park into one of the country's premiere industrial parks. Their vision to develop residential and commercial land uses, active transportation uses, and improved roadway and rail networks is unique and will set MidAmerica Industrial Park apart from other industrial parks.

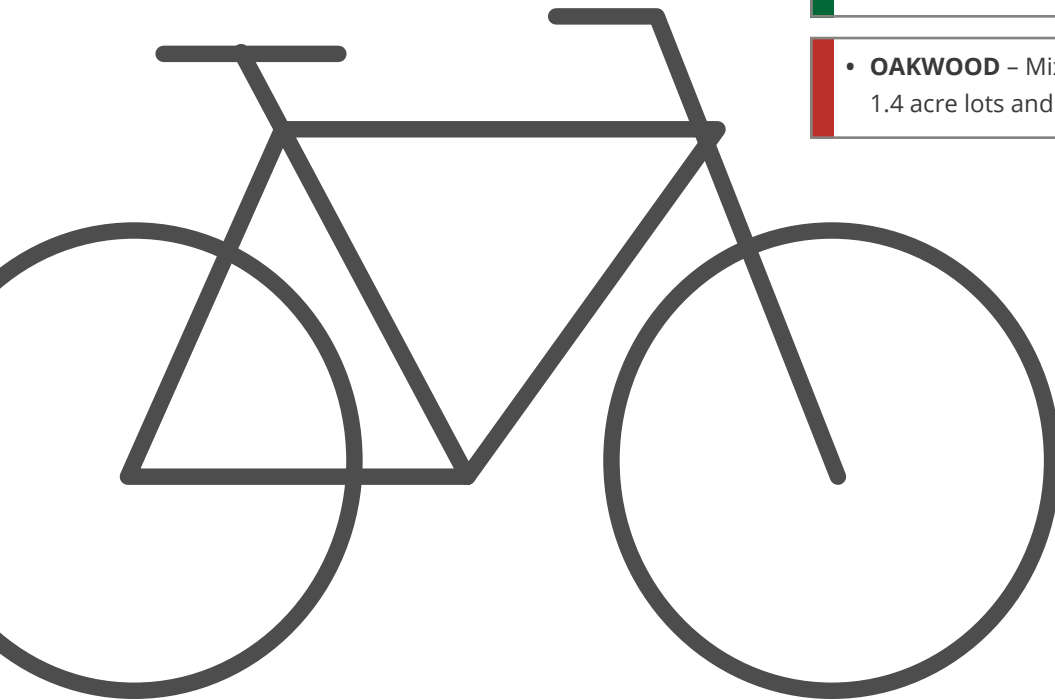


## Active Transportation

Safe and efficient multimodal transportation connections are missing in most cities and regions in America. Areas that have implemented multimodal connections are realizing tremendous economic development impacts and improved quality of life. Communities with multimodal connectivity have become desired places to live, work, learn, and play.

MAIP's desire to provide active transportation connections throughout the park's 9,000 acres is a unique and ambitious goal. To achieve this goal and to respect the industrial land uses and the vehicular traffic generated, bicycle and pedestrian facilities will not be within the curb-to-curb zone of the street network. To insure a safe and efficient active transportation network, bicycle and pedestrian facilities will be located off the streets and in the rights-of-way parallel to the roadways. In undeveloped areas "greenway" trails shall be proposed that will provide "scenic" connections. The bicycle and pedestrian facilities are proposed to be concrete and have a width of 12'.

Since MAIP offers a variety of landforms and natural features, mountain bike trails are also proposed to be constructed to further enhance the variety of active transportation features within MAIP. Due to the varied, natural terrain, mountain bike trails can be developed that offer great riding experiences for the beginner to advanced mountain bike rider.



## Residential and Commercial Master Plans

MAIP is also in the process of designing residential and commercial master plans that will provide a variety of housing and commercial opportunities. The master planned developments include:

- **THE DISTRICT**- A unique 168-acre mixed-use development with residential land uses, commercial/retail land uses, parks and recreational land uses, and commercial/office land uses.
- **RIDGEVIEW** – A 574-acre single-family residential subdivision with ½ to ¾ acre lots. The heavily wooded site offers great ridgeline views of the area and will also feature easy access to the extensive mountain bike trail system that is being developed adjacent and through open spaces within the subdivision.
- **NORTHWOOD ESTATES** – 189-acre estate lot single-family residential subdivision.
- **THE RESIDENCE AT WESTVIEW** – 214-acre single-family residential subdivision with entry level housing and community open space.
- **LAKEVIEW ESTATES**- Single family residential subdivision and RV park.
- **OAKWOOD** – Mixed use residential subdivision with 1.4 acre lots and rental units.



## Roadway Projects

A variety of roadway improvements are occurring throughout the Park. These include:

- Intersection improvement at Zarrow Road and S. Elliott Road
  - Zarrow Road is being shifted west to align with S. Elliott Road and the intersection will have a traffic signal
- 10th Street extension
- 412B/Roundabout/Patrol Road
  - 412B is being widened to three lanes, two travel lanes and a center turn lane. At the intersection of Patrol Road, a roundabout will be constructed and Patrol Road will be improved westward towards the airport.

## Railroad Evaluation and Spur Removal

MAIP has an extensive rail and spur network servicing the various industries in the Park. An evaluation of the rail services is currently underway, and an initial recommendation includes the rail alignment along Patrol Road and the removal of spurs that run north and south from Patrol Road.

# CHAPTER TWO

# CLIENT AND PUBLIC ENGAGEMENT

Olsson conducted two Steering Committee meetings with MAIP leadership and two Public Open Houses.

## Summary of Kick-Off Meeting and Charrette

A Steering Committee Kick-Off Meeting and Charrette was conducted on August 8, 2022. Attendees included MAIP leadership and Olsson staff. A power point presentation gave an overview of facility types for bicycle and pedestrian facilities as well as mountain bike facilities. All agreed that the preferred bicycle and pedestrian facility should be located off-street, such as side-paths or multi-use trail systems. As much separation from roadway as feasible was also preferred due to heavy truck traffic and peak traffic characteristics.

## TRAIL TYPOLOGIES



### ADJACENT TO ROADWAY

### OFFROAD

#### WIDE SHARED-USE TRAIL

##### PERMITTED USES



##### DESCRIPTION

Paved surface primary trail adjacent to roadways, provides safe arterial connectivity.

##### TRAIL MATERIALS

Asphalt or concrete paving.

##### SHOULDER MATERIALS

Decomposed granite or similar permeable material.

##### EXAMPLES



#### NARROW SHARED-USE TRAIL

##### PERMITTED USES



##### DESCRIPTION

Non-hardened surface trail adjacent to roadways, typically used along roads with constrained right-of-way or topographical challenges.

##### TRAIL MATERIALS

Decomposed granite or similar permeable material.

##### EXAMPLE



#### WIDE SHARED-USE TRAIL

##### PERMITTED USES



##### DESCRIPTION

Paved surface trail in gently sloping areas and utility easements.

##### TRAIL MATERIALS

Asphalt or concrete paving.

##### SHOULDER MATERIALS

Decomposed granite or similar permeable material.

##### EXAMPLES



#### WIDE SHARED-USE TRAIL (NON-HARDENED SURFACE)

##### PERMITTED USES



##### DESCRIPTION

Non-hardened surface trail in gently sloping areas and utility easements.

##### TRAIL MATERIALS

Decomposed granite or similar permeable material.

##### EXAMPLES

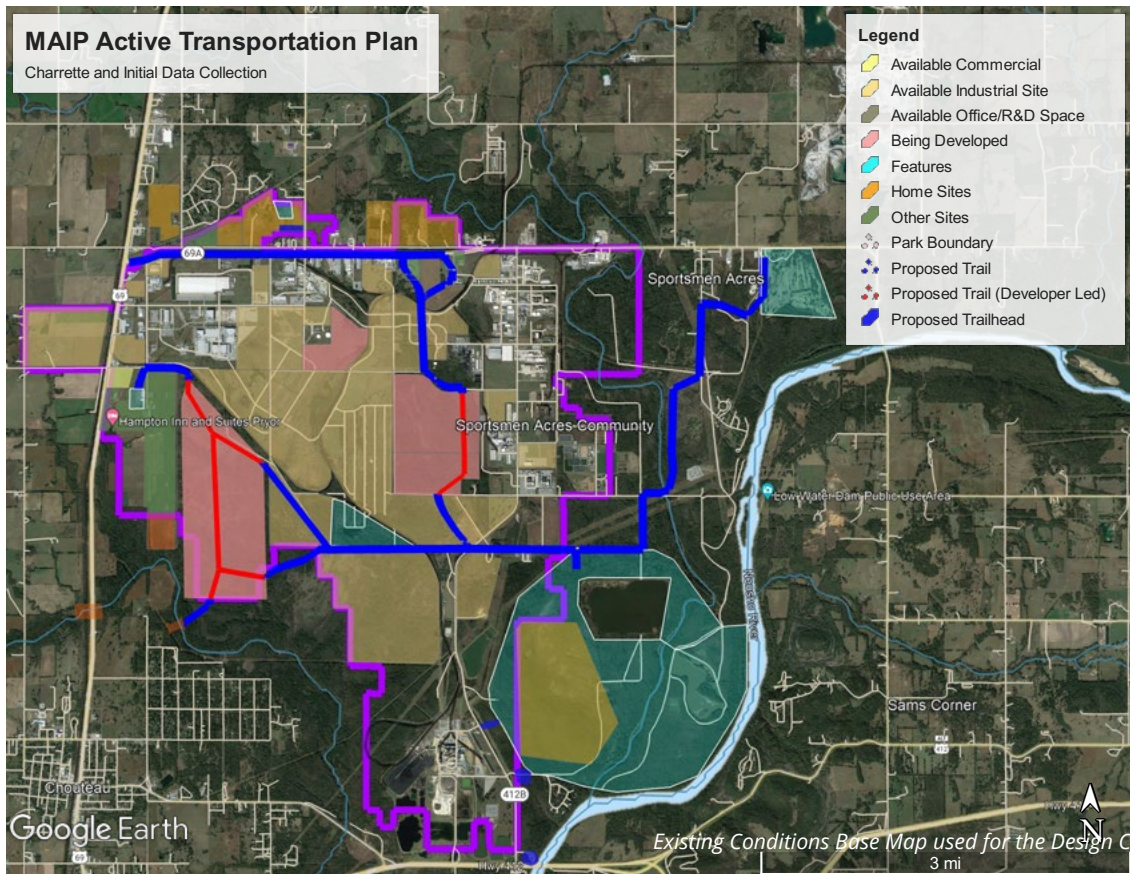


## Project Goals as Defined in Design Charrette

1. Define right-of-way needed for key roadways to accommodate current & future traffic needs, drainage features, multi-use trail facilities
2. Provide connectivity plan for key areas identified in Charette discussion including, but not limited to, the following:
  - BMX Track on west side of property (near airport),
  - Residential areas to the northwest, northeast, southwest, and future properties to the southeast,
  - Pryor Creek Golf course to the northeast,
  - Developable Land
3. The Active Transportation Plan should align with and compliment the residential and commercial Master Plans
4. The mountain bike trail network should be large enough and diverse enough to be considered a regional draw. The trail network should be connected through the site with the multi-use trail system.

## Steering Committee Meeting #2

A second Steering Committee Meeting occurred on October 6, 2022. The purpose of the second Steering Committee Meeting was to review the preliminary alignments of the proposed Multiuse trails throughout the MAIP and to discuss the timing for the first Public Open House to present the Preliminary Master Plan options to the public and receive their input. The preliminary alignments were finalized during the meeting and November 3, 2022, was selected for the first open house.







## Public Open House #1

In advance of the open house, announcement fliers were prepared and distributed to the industrial residents of MAIP, the City of Pryor, the City of Choteau, the Mayes County Trail Alliance, the Cherokee Nation, MC Hope, and other social agencies. The open house was held at the MidAmerica Welcome Center from 4 pm to 6 pm. The Open House had 35 attendees.

**ACTIVE TRANSPORTATION  
CONNECTIVITY MASTER PLAN**

**PUBLIC INFORMATION  
& OPEN HOUSE**

When: November 3, 2022  
Where: MAIP Welcome Center  
Time: 4pm to 6pm

Visit anytime and provide comments about the proposed biking, walking and mountain bike trails.

For additional information, please contact  
Denny Blind at dblind@olsson.com

**olsson**

**MidAmerica**  
WORLD CLASS  
BUSINESS COMMUNITY

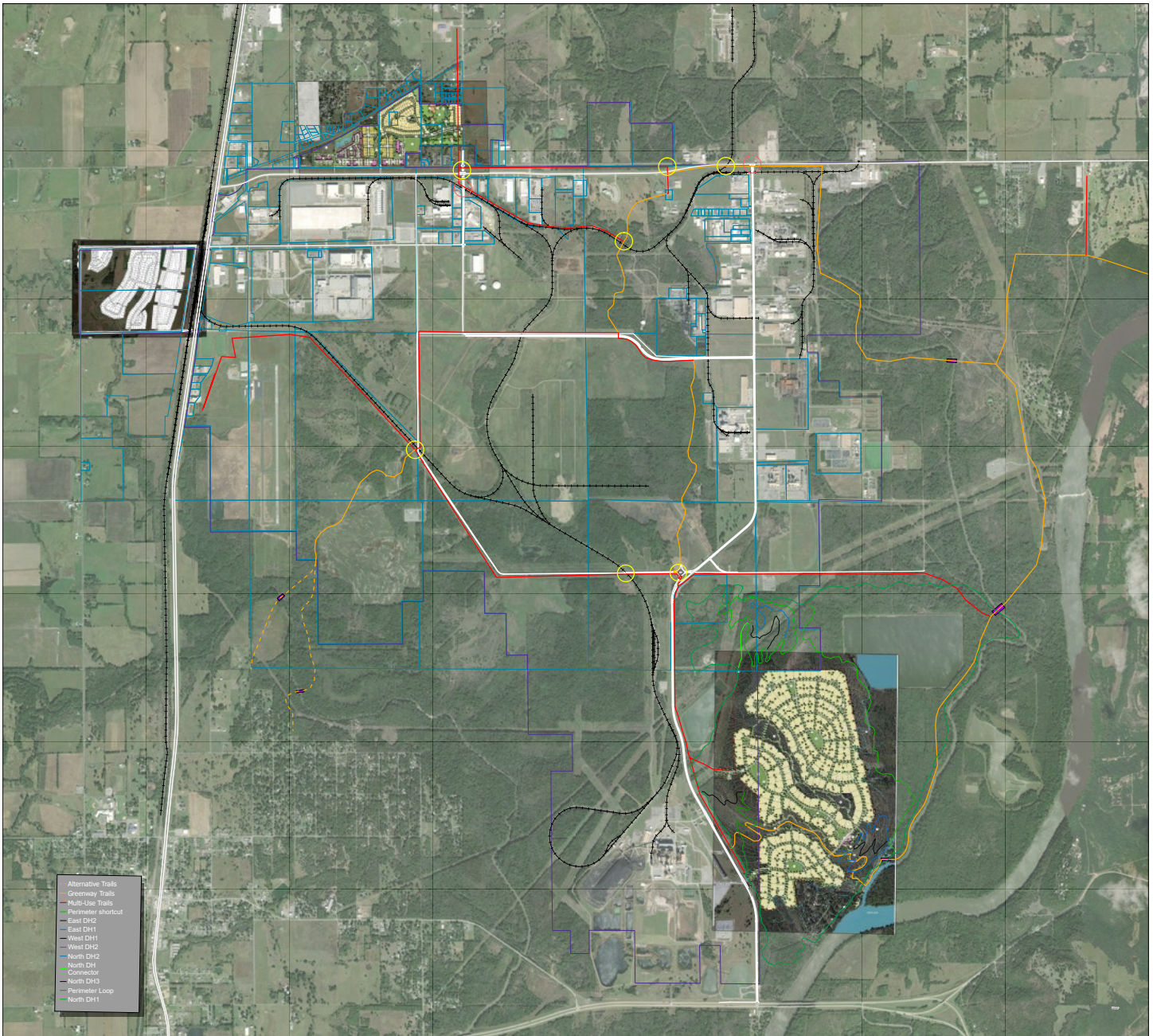
## COMMENTS

1. Equestrian trails – the area has a growing number of equestrian trails and would like to see that extend into MAIP
2. Can there be more Mountain Biking Trails?
  - West of GRDA Power Plant
  - Confirm with Corps of Engineers
3. Want trails to follow the river more and show going east to the proposed restaurant just south of the Pryor Golf Course
  - Confirm with C.O.E
4. Provide Trails to connect to “The District”
5. Pryor’s Trail Plans/Connections to Pryor
6. Add trail south of the S. Elliott/Zarrow intersection
  - Utilize proposed traffic signal at Zarrow/S. Elliott
7. Add Trailhead locations/Restroom facilities
8. Move 10th street trail to southside of roadway
9. Cemetery is a trail conflict
10. Spur to connect to the northern MTB trails and Ridge View development
11. Dog Park or similar amenity near MTB trails and Ridge View development

**Everyone in attendance at the Open House was in favor of the proposed multiuse trails and were asking, “How soon can this get constructed?”**

# PRELIMINARY MASTER PLAN

The Preliminary Master Plan was presented at Public Open House #1. Driven by the Project Goals as defined by the Steering Committee during the Design Charrette, the multiuse trail alignments “connected” MAIP’s major industries and Master Planned residential and commercial developments. The alignments also had direct connection to trails that have been planned in the Mayes County Trail Master Plan (S. Elliott Trail).



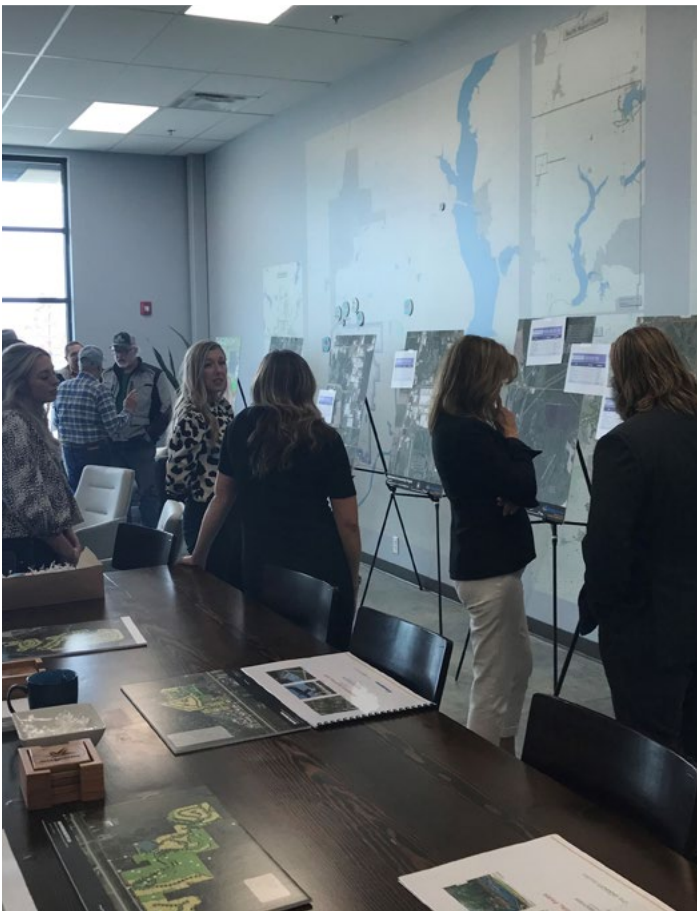
## Active Transportation Connectivity Master Plan

Preliminary  
MidAmerica Industrial Park / Mayes County, Oklahoma  
November 3rd, 2022 / 022-03792



## Public Open House #2

A second open house was held on April 6th, 2023.



## CHAPTER THREE

# CONNECTIVITY PLAN

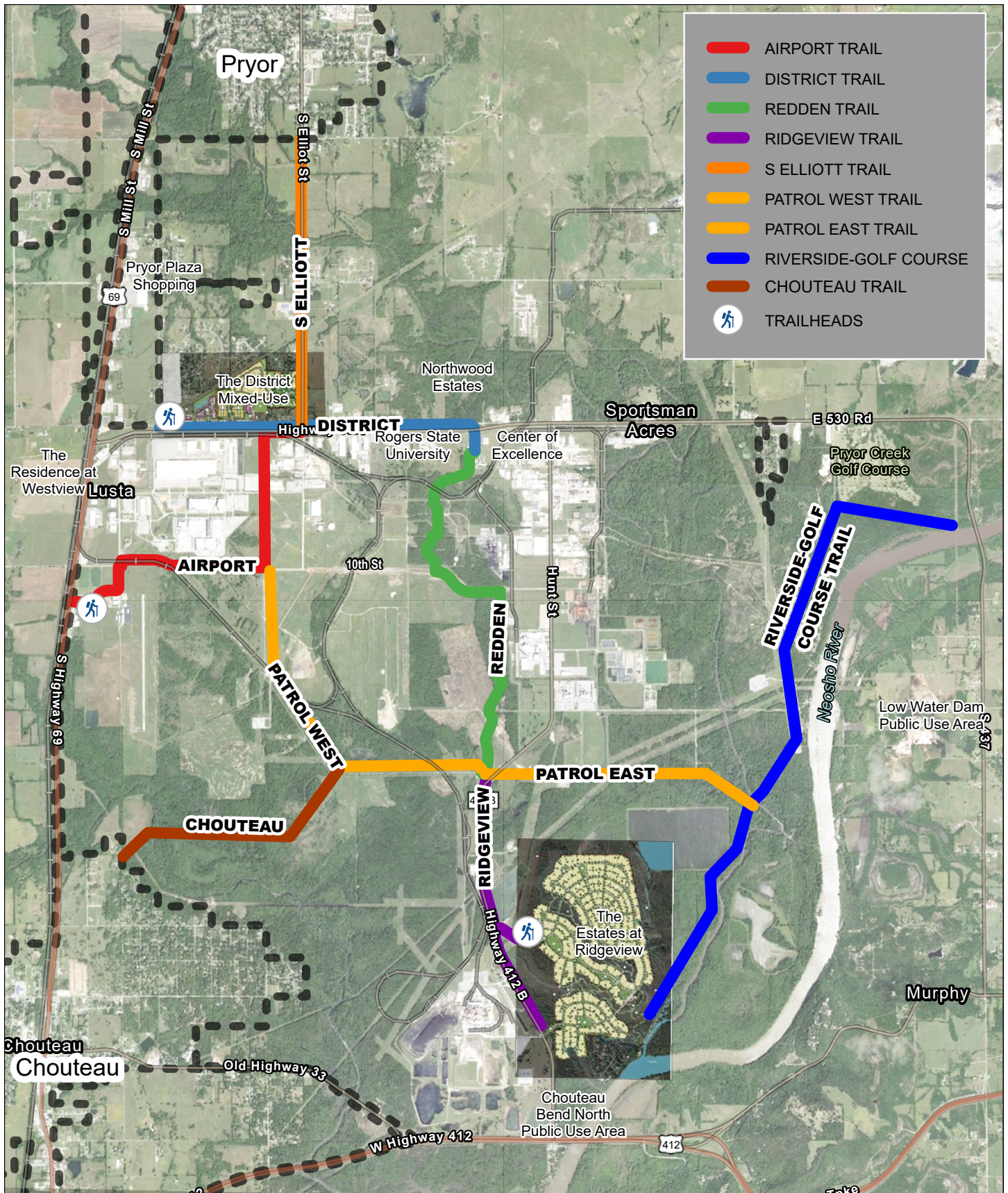
Based on all the input received during the Client and Public Engagement process were incorporated in the final plan.

## BICYCLE AND PEDESTRIAN FACILITIES

Since the preferred bicycle and pedestrian facility was multiuse trails, the proposed trail network will safety and efficiently accommodate both cyclists and walkers. With a 12' wide cross section, the concrete trails are well able to accommodate both active modes. The master plan identifies over 25 miles of multiuse trails and each trail segment is described in this section. The multiuse trails are generally in of the following types of trails

1. **GREENWAY TRAIL** – trails in MAIP that go “cross country” and are not adjacent to a roadway.
2. **SIDEPATH TRAILS** – trails that are parallel to an existing or proposed road.



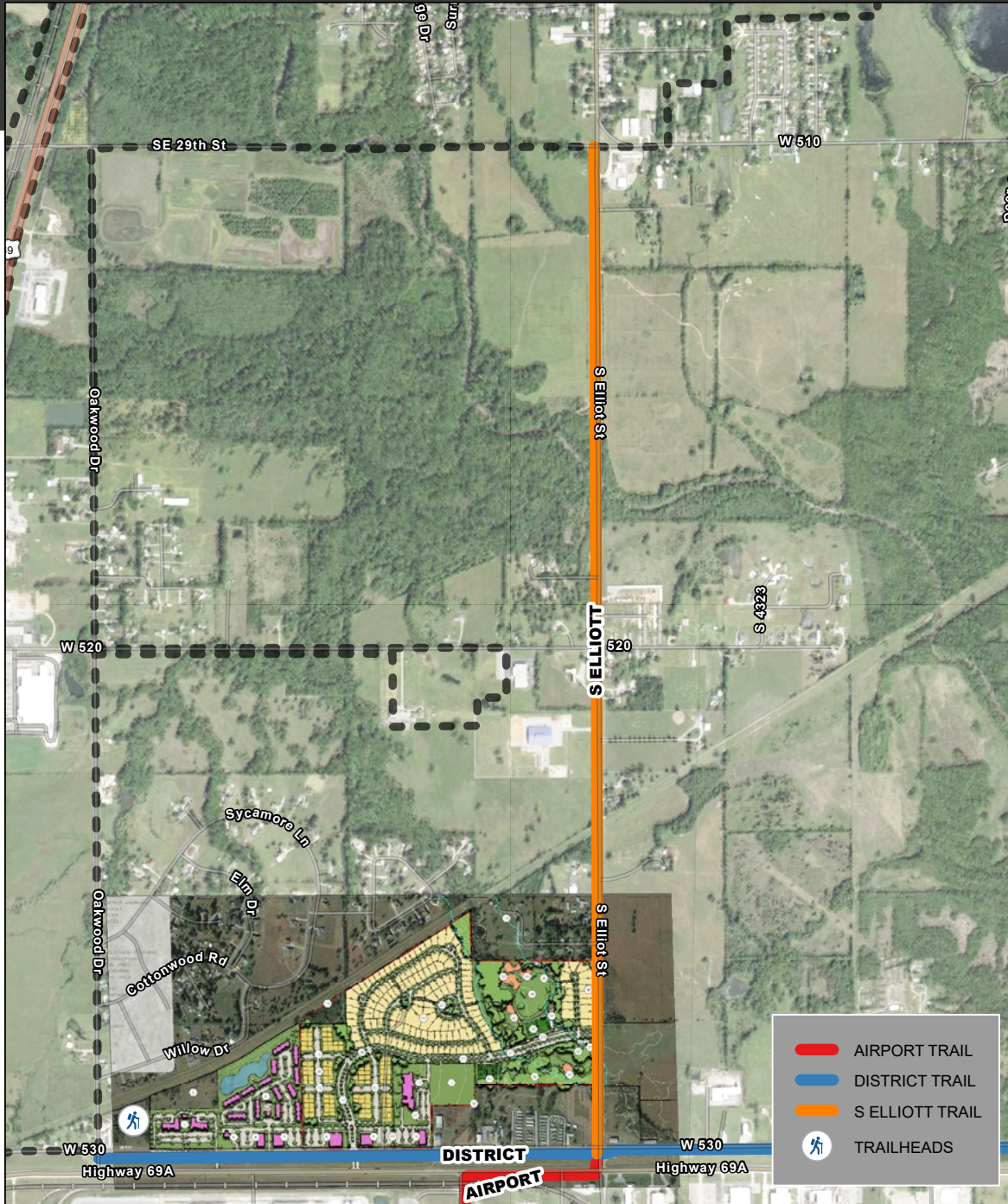


- AIRPORT TRAIL
- DISTRICT TRAIL
- REDDEN TRAIL
- RIDGEVIEW TRAIL
- S ELLIOTT TRAIL
- PATROL WEST TRAIL
- PATROL EAST TRAIL
- RIVERSIDE-GOLF COURSE
- CHOUTEAU TRAIL
- TRAILHEADS

**Active Transportation Connectivity Master Plan**  
 Proposed Trails and Trailheads  
 MidAmerica Industrial Park / Mayes County, Oklahoma  
 April 6th, 2023 / 022-06924

# SOUTH ELLIOTT TRAIL

This two-mile multiuse trail plays a crucial role connecting Pryor to MAIP. The northern endpoint starts at the city of Pryor's boundary, crosses Pryor Creek, runs adjacent to the future Cherokee Nation Early Child Learning Center being built near the intersection of S. Elliott and County Road W530, and crosses US69A at a proposed signaled improved intersection. S. Elliott trail impacts C.O.E. managed land at Pryor Creek.



## Active Transportation Connectivity Master Plan

S Elliott Trail  
MidAmerica Industrial Park / Mayes County, Oklahoma

April 6th, 2023 / 022-06924



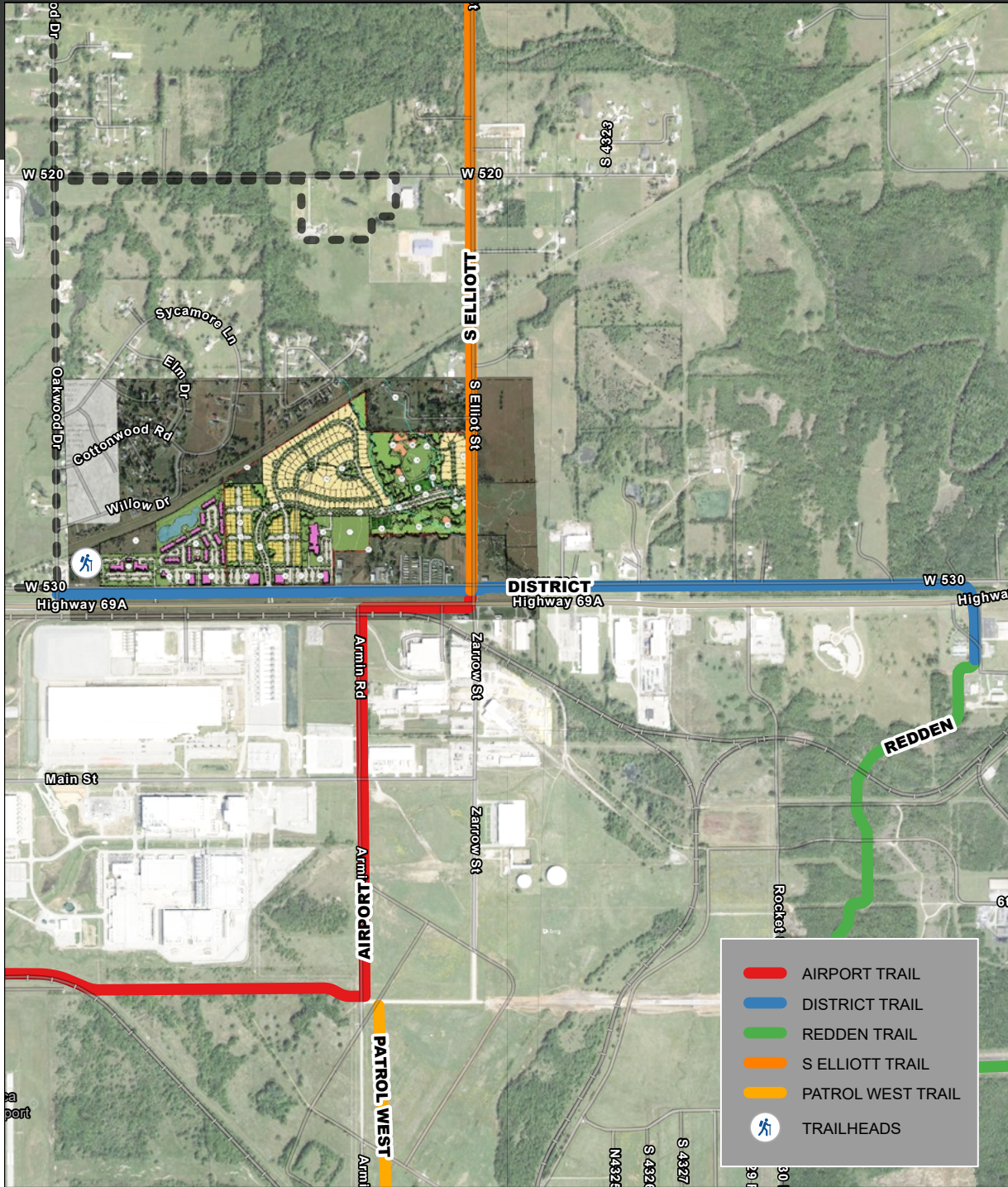
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# THE DISTRICT TRAIL

The District Trail is a two and one third mile trail located in the “greenspace” ROW between Hwy 69A and County Road 530. This east-west trail connects The District, a mixed-use center with residential, entertainment, and other commercial uses to the Redden Trail. The District Trail includes an improved trail crossing of US69A.



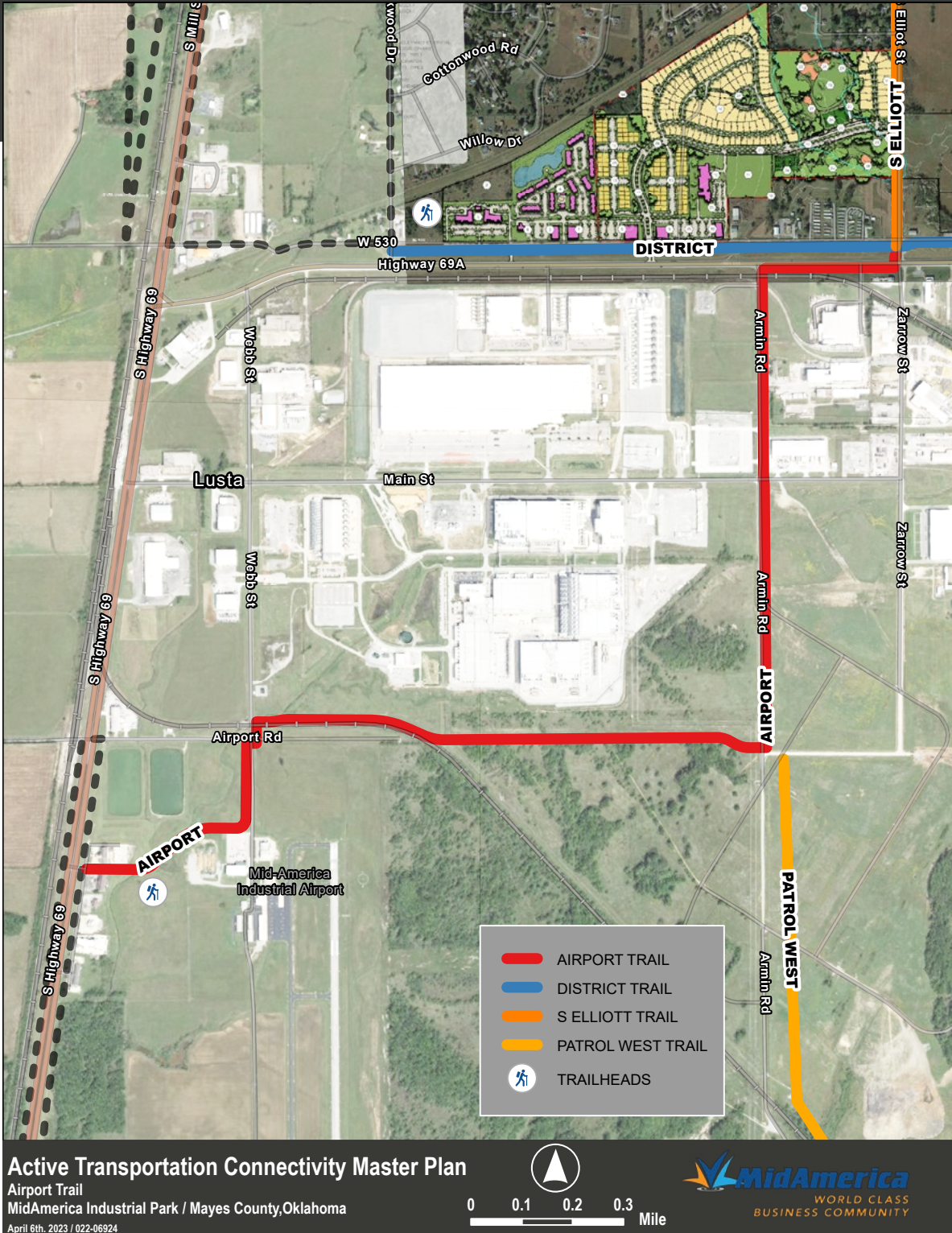
	AIRPORT TRAIL
	DISTRICT TRAIL
	REDDEN TRAIL
	S ELLIOTT TRAIL
	PATROL WEST TRAIL
	TRAILHEADS

**Active Transportation Connectivity Master Plan**  
 District Trail  
 MidAmerica Industrial Park / Mayes County, Oklahoma  
 April 6th, 2023 / 022-06924



# AIRPORT TRAIL

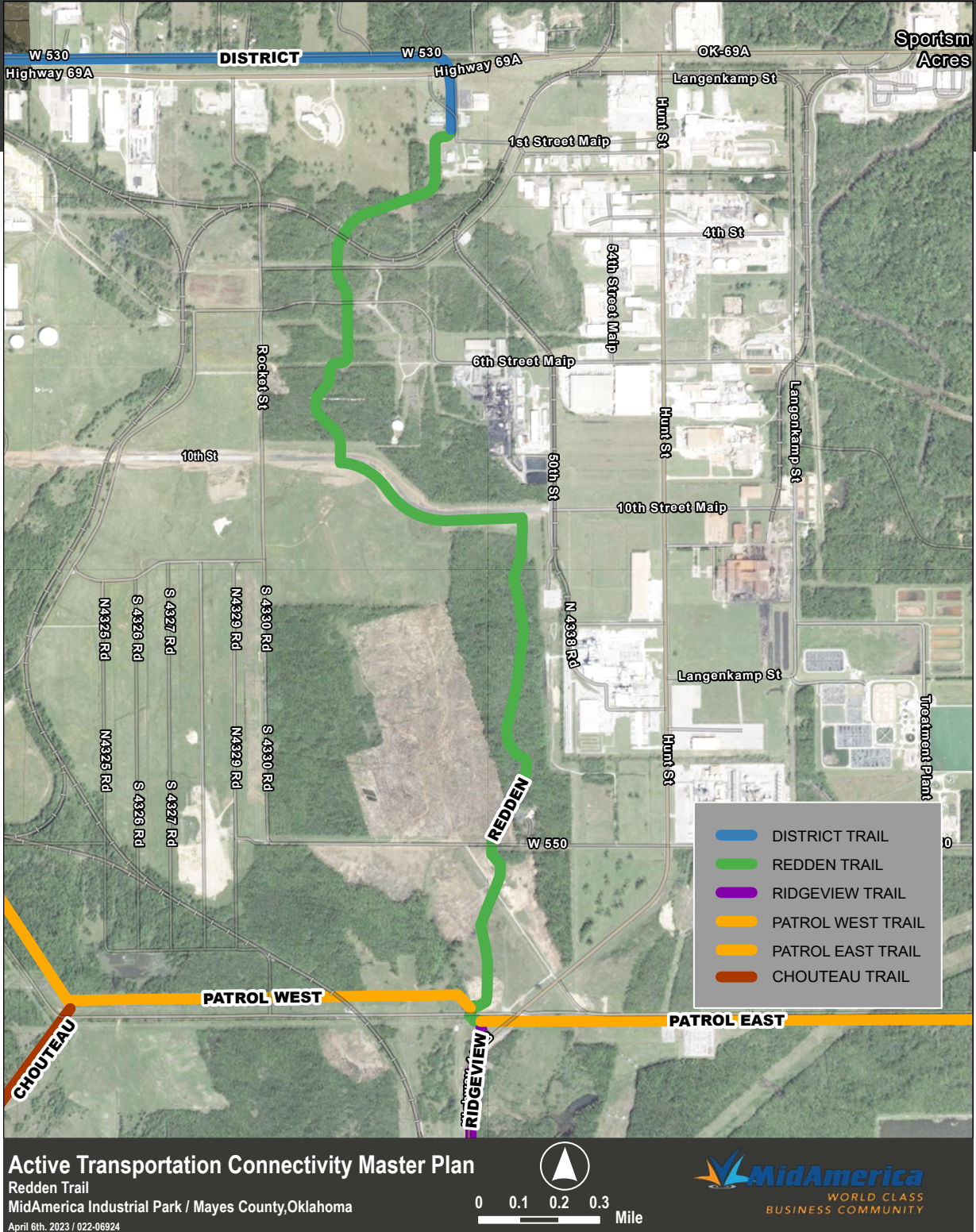
Roughly a two-and-a-half-mile trail, the Airport Trail connects the S Elliott Trail to the MAIP Airport, Hotels, and BMX park. The trail also provides direct access to the Head Start facility along Armin Rd. and extends down the east side of Hwy 69 to connect to the residential area in Choteau at the intersection of Hwy 69 and Hwy 412.





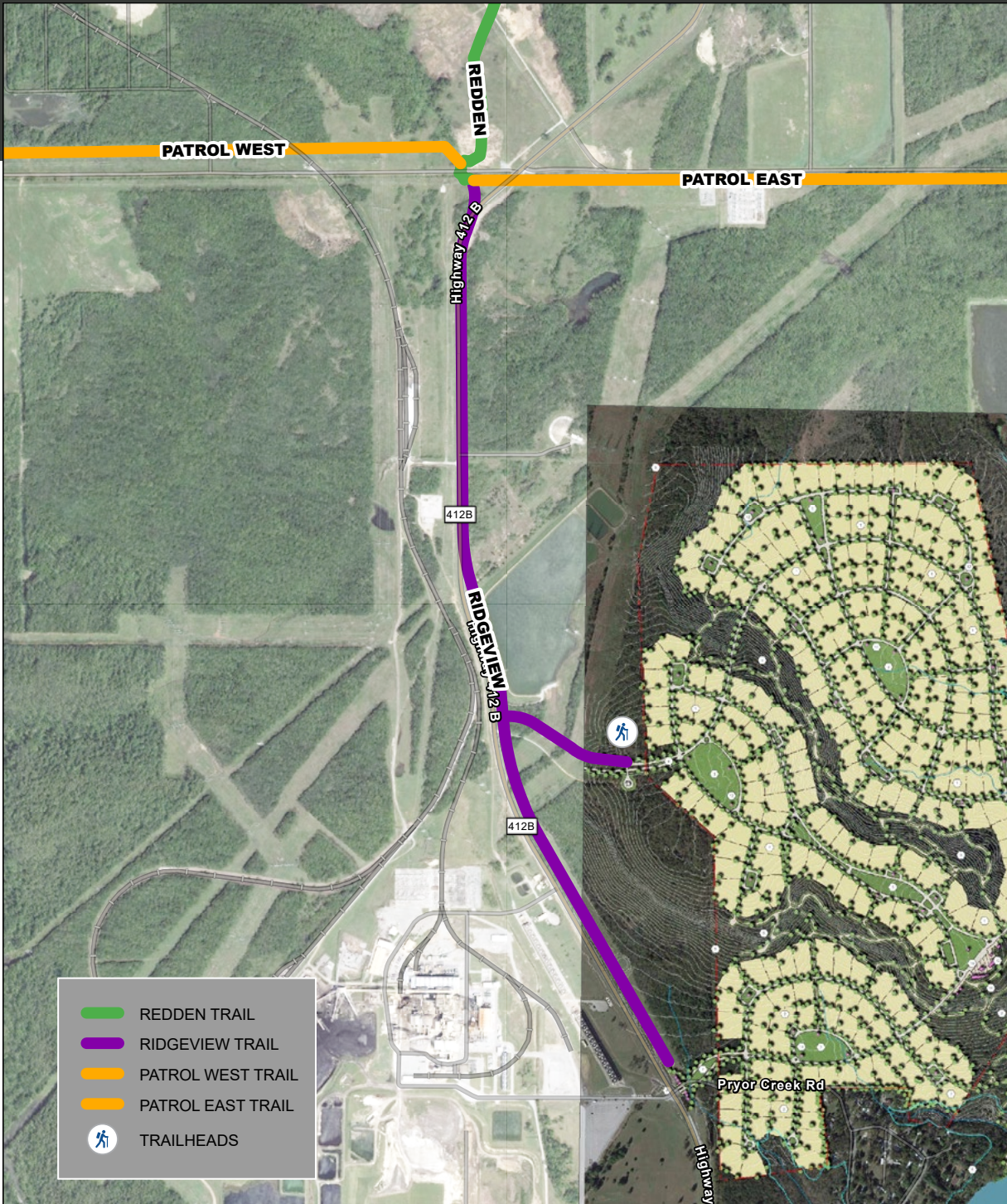
# REDDEN TRAIL

The Redden Trail is a nearly three-mile trail that connects with The District Trail and provides a safe crossing of Hwy 69A with a proposed pedestrian activated crossing signal for cyclists and pedestrians. Redden Trail generally proceeds in a southern direction, crosses 10th Street, and continues south to intersect 412B.



# RIDGEVIEW TRAIL

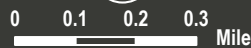
The southernmost trail, Ridgeview Trail, is a two and a quarter mile trail that parallels Hwy 412B south of the ODOT proposed roundabout with EO555 Road. The Ridgeview Trail connects the Ridgeview residential subdivision to the MAIP trail network.



## Active Transportation Connectivity Master Plan

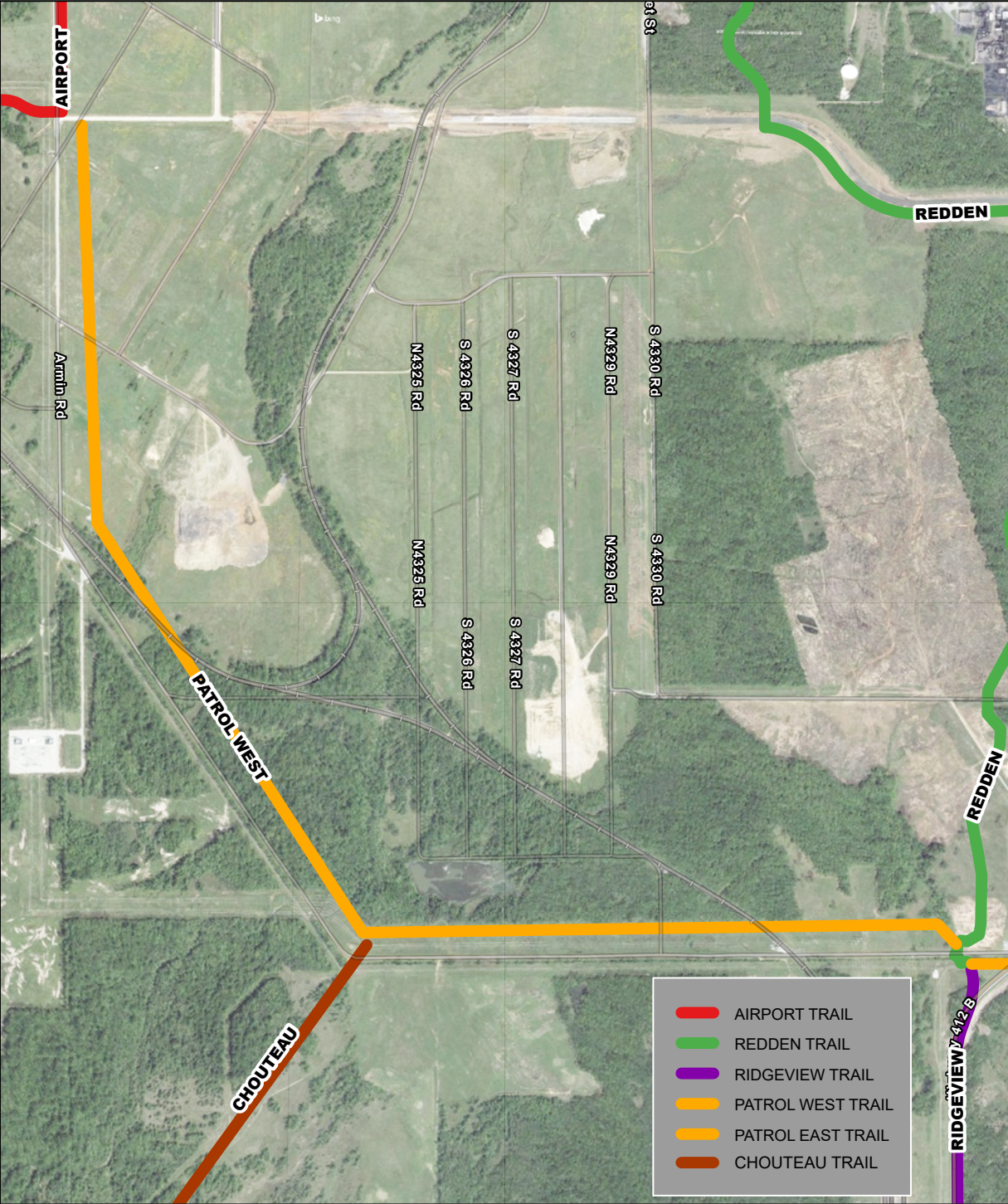
Redden Trail  
MidAmerica Industrial Park / Mayes County, Oklahoma

April 6th, 2023 / 022-06924



# PATROL ROAD WEST

The Roundabout Trail – West intersects the Redden Trail and the Ridgeview Trail at the proposed roundabout to be constructed at Hwy 412B and Patrol Rd. The trail will be a 12' wide concrete sidepath and be located on the north side of Patrol Rd and then turn north to tie into the Airport Trail. This 3.5 mile trail will provide connectivity to the west side of MAIP.

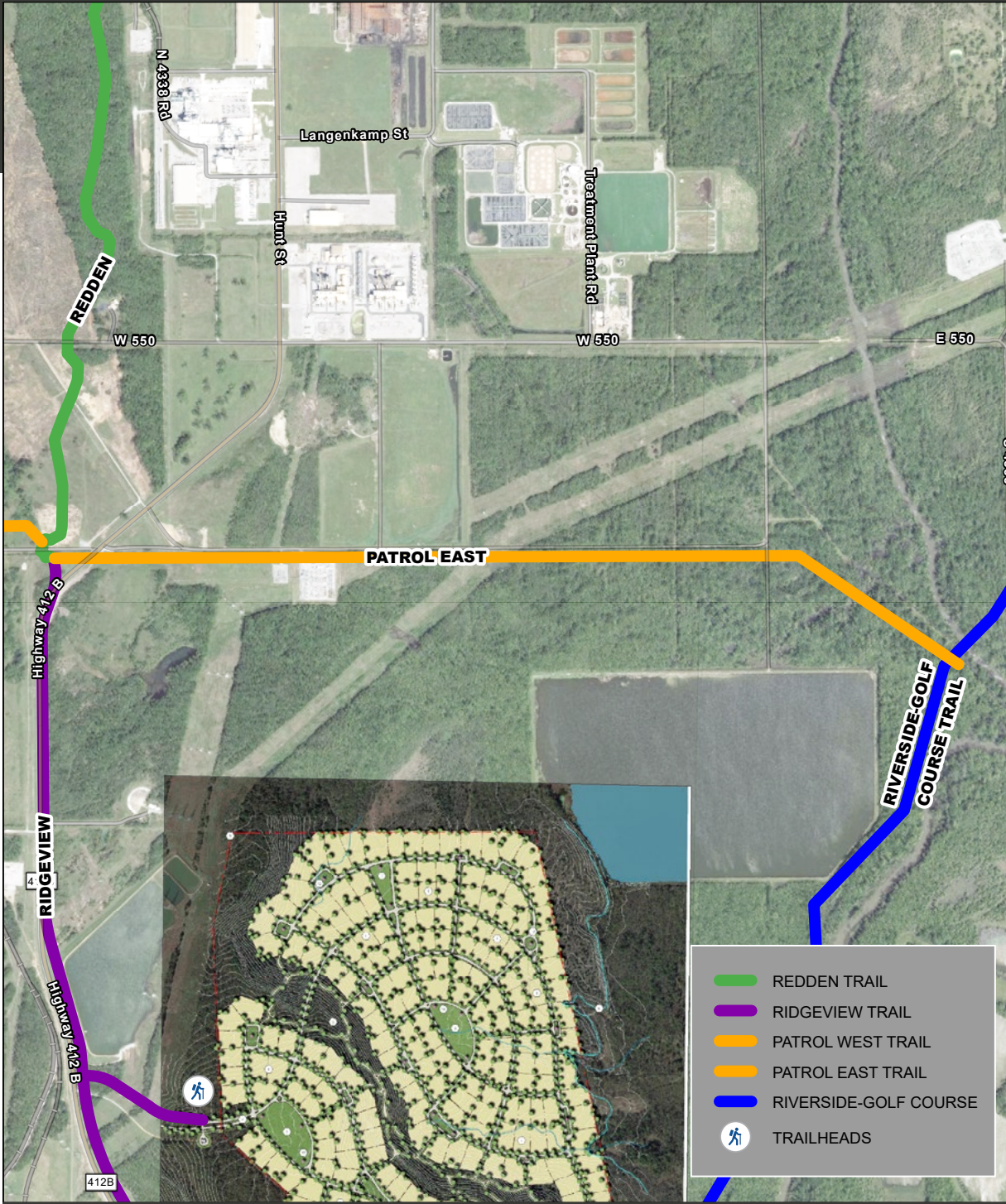


**Active Transportation Connectivity Master Plan**  
 Patrol West Trail  
 MidAmerica Industrial Park / Mayes County, Oklahoma  
 April 6th, 2023 / 022-06924



# PATROL ROAD EAST

This 2-mile trail proceeds east from the roundabout at Patrol Road and Hwy 412B and intersects the Golf Course Trail.



## Active Transportation Connectivity Master Plan

Patrol East Trail  
MidAmerica Industrial Park / Mayes County, Oklahoma

April 6th, 2023 / 022-06924



# CHOTEAU TRAIL

The Choteau Trail is a 2-mile extension off the Patrol Road Trail – West and provides a trail connection to the residential areas located south and west of MAIP at the intersection of Hwy 412 and Hwy 69.

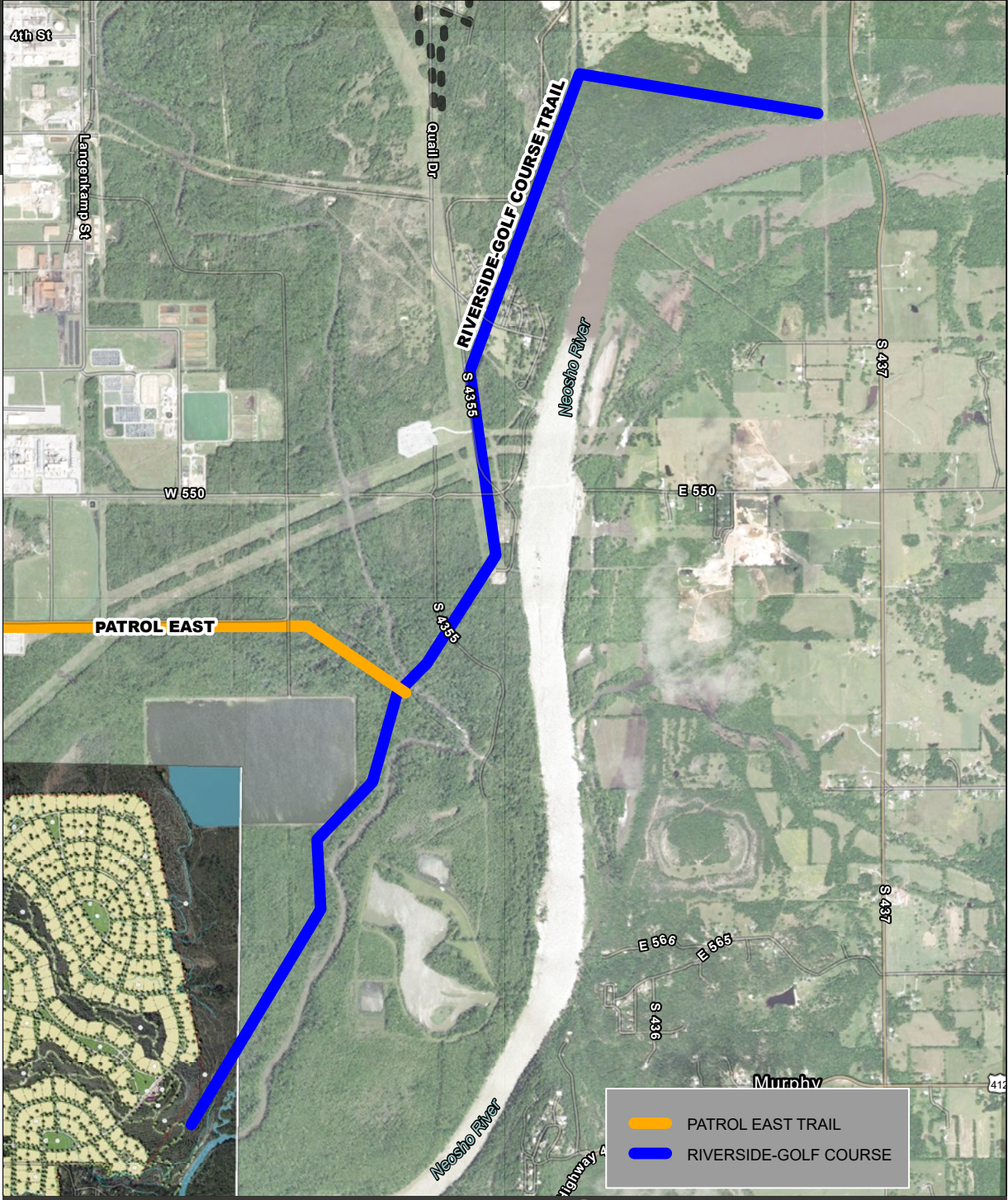


Active Transportation Connectivity Master Plan  
Choteau Trail  
MidAmerica Industrial Park / Mayes County, Oklahoma  
April 6th, 2023 / 022-06924



# RIVERSIDE - GOLF COURSE TRAIL

The Golf Course trail connects Ridgeview Subdivision to the Pryor Golf Course and parallels the Neosho River to provide a scenic alignment for the trail's 5-mile connection.



**Active Transportation Connectivity Master Plan**  
 Riverside-Golf Course Trail  
 MidAmerica Industrial Park / Mayes County, Oklahoma

April 6th, 2023 / 022-06924



# CONFLICT ZONES

Conflict zones are locations where the multiuse trail intersects and/or crosses a road, intersection, railroad, or other feature that could cause a crash between modes. Typical conflict zones that need to be addressed at MAIP include:

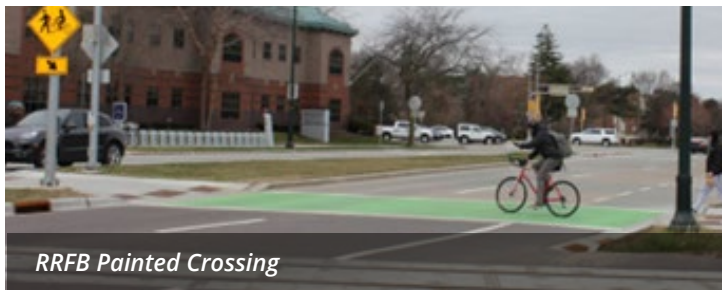
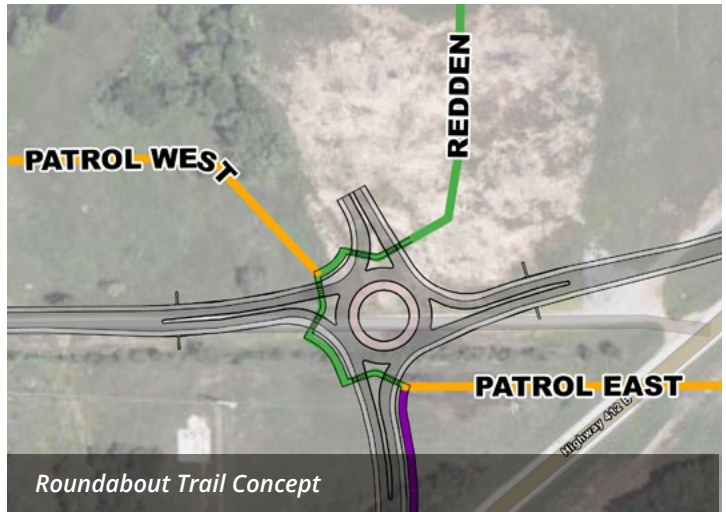
**1. Proposed Roundabout** – unlike traditional signalized or stop-controlled intersections, vehicles generally flow and merge through roundabouts without having to stop. Therefore roundabouts should be designed for slow speeds and geometry that facilitates motor vehicles yielding to bicyclists and pedestrians.

**2. Road Crossings** – the proposed multiuse trail alignments throughout MAIP have a few road crossings. For the most part, these road crossings are very visible and will require signage and pavement markings to improve safety. Trail users will need to stop at each crossing since the vehicular traffic will have the right-of-way. As sight conditions warrant, some crossings may require Rectangular Rapid Flashing Beacons (RRFBs) to safely alert drivers that cyclists and pedestrians may be crossing the road.

**3. Redden Road and Hwy 69A** – the Redden Trail will cross Hwy 69A and to ensure the safety of cyclists and pedestrians crossing Hwy 69A, a High-intensity Activated crosswalk beacon (HAWK) is proposed. A HAWK will stop traffic on Hwy 69A when activated by a cyclist or pedestrian. Once activated, the HAWK signal will show red lights to stop traffic and allow cyclists and pedestrians to safely cross the road.

**4. Zarrow and S. Elliott Road Intersection** – this intersection is being improved by MAIP. The improvement involves reconstructing the Zarrow leg of the intersection to align with S. Elliott Road. With the proposed S. Elliott Trail being constructed on the west side of S. Elliott and crossing Hwy 69A, a traffic signal is recommended to be installed to insure safe crossing for cyclists and pedestrians.

**5. Railroads** – MAIP has a number of rail lines and spurs serving the industrial tenants of the Park. The proposed multiuse trails cross some of these and will require special attention as well as approval by the rail owner.



# TRAIL HEADS

In order to provide users with points of access to the various trails proposed throughout MAIP's 9,000 acres, three trail heads are recommended for consideration.

The trailheads need to provide safe and easy access to the trails, accommodate parked cars and include amenities such as rest rooms, benches, drinking fountain, and bike repair stations.

Three trail head locations are proposed:

## 1. Ridgeview Subdivision

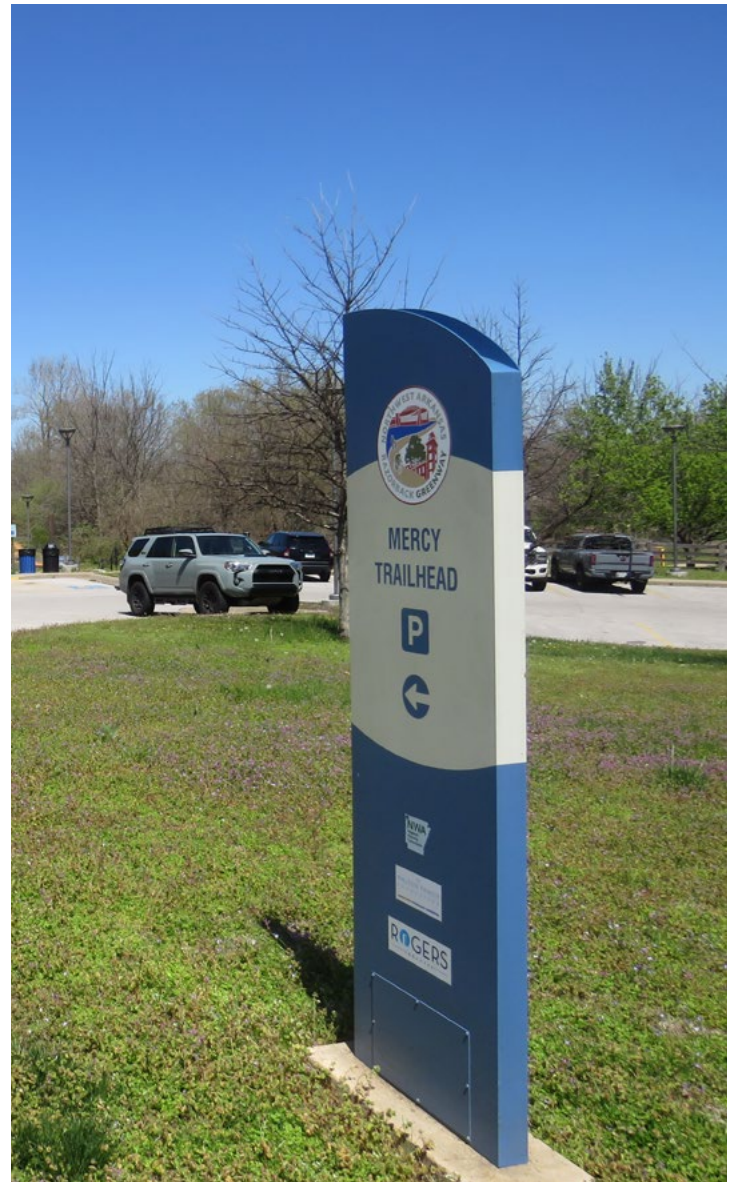
- Locating a trail head in close proximity to one of the entry drives to Ridgeview will accommodate both mountain bike riders and trail users alike.

## 2. The District

- The District mixed use development provides a great location for a trail head that can utilize existing parking spaces, rest rooms, restaurants, and direct access to The District Trail and S. Elliott Trail.

## 3. Lodging and BMX

- The location by the existing motels and the BMX facility are easily access off Hwy 69 and have direct access to the Airport Trail.







# MOUNTAIN BIKE TRAILS

MTB Builders, a Claremore, OK based design/build mountain bike contractor, assisted MAIP with determining where to locate and what type of mountain bike facilities should be constructed. On-site analysis identified the area around the Ridgeview Subdivision to be well suited for the development of mountain bike trails. The lay-of-the-land in this area will also accommodate beginning to advanced mountain bike riders.

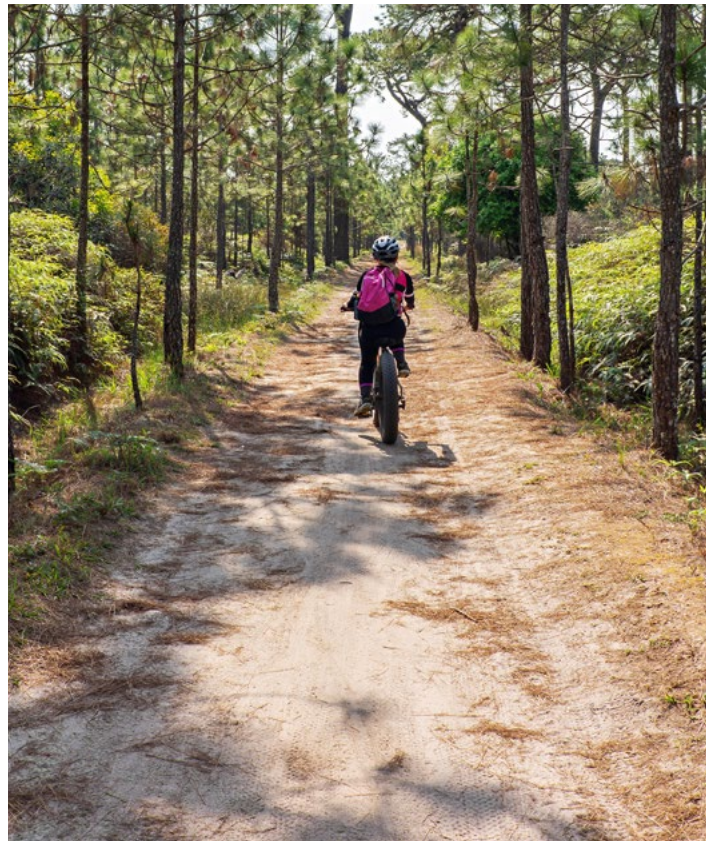
## MOUNTAIN BIKE TRAIL DESIGN

Key design elements that ensure a mountain bike facility is enjoyable and offers riding experiences for a variety of skill levels include:

- 1. Sustainability.** Using International Mountain Bike Association (IMBA) sustainable design standards and best practices, we will lay out a mountain bike/hiking trail to create a diverse and enjoyable experience for the users.
- 2. Rolling Contour design.** The trail will be designed along the contours of the hillsides allowing for a gradual climb and descent while also utilizing grade reversals for maximum erosion mitigation.
- 3. Stacked Loop System.** The trails will have separate loops to provide users a choice of length of travel and varied levels of difficulty. Ideally the beginner friendly trails are closer to the Trailhead and then increase in difficulty the further the user travels. This allows a variety of user groups to enjoy the trails right from the trailhead while spreading out the different levels of riders throughout the trail system.
- 4. Trailhead.** Ideally the Trailhead/Parking area will be near the beginner friendly trails. We will propose that the Trailhead will be as close as possible to the Green (beginner) trails depending on availability of access for parking. We want all levels of riders to have an enjoyable experience from the start of their ride.

## MAIP BEGINNER LEVEL TRAILS = 12.5 MILES

Beginner trails are indicated with a green circle on a trail marker or green line on a trail map. Beginner trails will have wider and smoother tread (usually 36" wide or more) with minimal natural obstacles such as embedded rocks and exposed roots. These trails will have optional loops with shorter distances and easier climbs for those who are just starting to work on their skills and learning to ride on trails. If jumps are introduced they will be 3 to 4 feet high with a gentle smooth takeoff and will be a table top style feature to ensure confidence and safety.



## MAIP INTERMEDIATE LEVEL TRAILS = 8 MILES

Intermediate trails are indicated with a blue square on a trail marker or blue line on a trail map. These trails will sometimes be narrower (typically 24" - 36") and will commonly have some exposed roots and embedded rocks to challenge a more experienced rider. Intermediate trails will be longer in nature and can possibly have more intense or steeper climbs for those with more fitness. Small to medium sized drops can also be introduced as alternate lines or trail features.



## MAIP ADVANCED LEVEL TRAILS = 1.5 MILES

Advanced level trails are indicated with a black diamond on a trail marker or with a black line on a trail map. These trails can be even narrower than the beginner or intermediate trails (typically 12' or more). Riders on a black diamond trail can expect the unexpected. Advanced riders will enjoy challenging their skills and equipment on bigger natural features such as exposed roots, larger rock gardens and bigger drops with steeper terrain. If jumps are introduced they are typically 5 to 7 feet high with steeper, more aggressive takeoffs.



**OPTION LINE**  
 SHORT DETOURS THAT OFFER DIFFERENT DIFFICULTY THAN AN EASIER ROUTE.  
 OPTIONAL LINES CAN BE EASIER ROUTE AROUND A TECHNICAL FEATURE ("RIDE AROUND") IF ON AN ADVANCED TRAIL. ON BEGINNER OR INTERMEDIATE TRAILS, THE OPTIONAL LINE CAN PROVIDE MORE CHALLENGE.

USE EXISTING TRAILS AND NATURAL FEATURES

**Trail Features that provide for Challenge**  
 Illustrations are a key element of this process and are used to define and describe trail user objectives and illustrate how the following two characteristics are translated into trail features that provide a challenge for the rider.

## MOUNTAIN BIKE TRAIL CONSTRUCTION COST:

- The cost of mountain bike trail construction utilizing both hand building and mechanized construction techniques will average \$12/ft. or \$63,360 per mile.
- Large bridge construction cost can run approximately \$50,000 to \$70,000 for a 40-foot bridge depending on construction type.
- Signage: Trail markers and trailhead map kiosk signs can run \$500 and \$3,000 respectfully. If the project requires 40 trail markers @ \$20,000 and 5 map kiosks @ \$15,000 the total sign cost would be \$35,000.

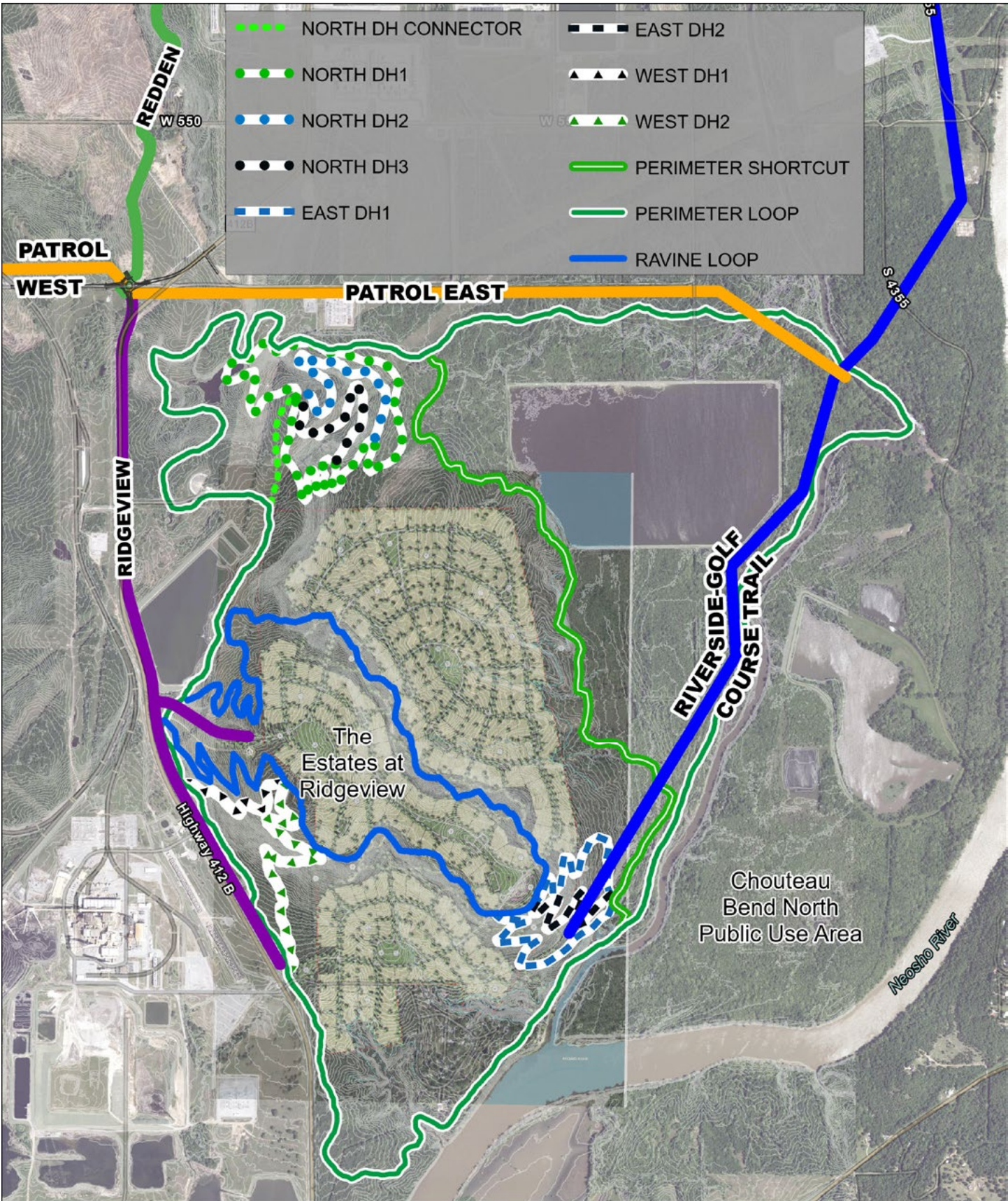
## TRAIL MAINTENANCE CONSIDERATIONS:

- Volunteer maintenance can be a great way to engage the local riders to take ownership of the local trail system. This requires someone to step up as a passionate leader and organize the related tasks and schedule workdays. Establishing a 501c3 non-profit organization to raise money for tools, fuel, and promotional items will eventually be necessary.
- Weed eating and trimming trees in the spring and summer months is a big part of keeping the trail corridor clear and enjoyable. Cutting out fallen trees is a year-round job with high winds and storms occurring throughout the year.
- Tread repair: Trails will change or become cupped over time and low areas may need some attention from time to time. De-berming the low side of a trail or creating a knick in a low spot that doesn't drain well will need to happen occasionally as trails get a lot of use over time.

The initial design is intended as a concept for the stakeholders to see what is possible on the land available for trail construction. The initial concept design will be based on contour maps of the available land for trail construction. A general rule for trail design is to use 10 acres per mile (i.e. 100 acres = 10 miles of possible trails). Actual trail design may vary when MTB Builders walk the property and see positive and negative control points.

- **NEGATIVE CONTROL POINTS:** areas to be avoided such as flat sections that hold water.
- **POSITIVE CONTROL POINTS:** areas that add enjoyment such as unique rock formations or scenery.





# MidAmerica Connectivity Project

Mountain Bike Trails  
MidAmerica Industrial Park / Mayes County, Oklahoma

April 6th, 2023 / 022-06924



Legend DH = Downhill

An aerial, top-down photograph of a person riding a mountain bike on a dirt trail. The rider is wearing a light-colored shirt and dark shorts, and is positioned in the lower right quadrant of the frame. The trail is a light-colored dirt path that winds through a dense forest of trees and bushes. The overall scene is captured in a monochromatic, high-contrast style, with the rider and the trail appearing in lighter tones against the darker, textured background of the forest. A bright yellow rectangular banner is overlaid on the upper portion of the image, containing the title text.

# OPINION OF PROBABLE COST MIDAMERICA CONNECTIVITY PROJECT

## Opinion of Probable Costs

The following opinions of probable cost are based on our team's years of implementing active transportation facilities and mountain bike trails. These are "order of magnitude" costs and will need to be refined and updated when trail design is initiated.

# THE DISTRICT TRAIL

OPINION OF PROBABLE COST  
MIDAMERICA CONNECTIVITY PROJECT

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	12,481		\$3,120,250
Trail Heads	N/A		
Easement & Acquisition		N/A	
Engineering Design		12	\$374,430
Survey & Const. Staking		3.25	\$101,408
Flood Study & Env. Analysis		2	\$62,405
Contingency		15	\$468,038
<b>ESTIMATED TOTAL:</b>			<b>\$4,126,531</b>

Note: Trail to be located within existing right-of-way between frontage road and HWY 69A

# THE REDDEN TRAIL

OPINION OF PROBABLE COST  
MIDAMERICA CONNECTIVITY PROJECT

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	15,611		\$3,902,750
HAWK at Redden & 69A			\$150,000
Easement & Acquisition		5	\$195,138
Engineering Design		12	\$468,330
Survey & Const. Staking		3.25	\$126,839
Flood Study & Env. Analysis		2	\$78,055
Contingency		15	\$585,413
<b>ESTIMATED TOTAL:</b>			<b>\$5,506,525</b>



**OPINION OF PROBABLE COST**  
MIDAMERICA CONNECTIVITY PROJECT

# S. ELLIOTT ROAD TRAIL

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	10,587		\$3,811,320
Trail Heads	N/A		
Easement & Acquisition		N/A	
Engineering Design		12	\$457,358
Survey & Const. Staking		3.25	\$123,868
Flood Study & Env. Analysis		2	\$76,226
Contingency		15	\$571,698
<b>ESTIMATED TOTAL:</b>			<b>\$5,040,470</b>

Note: Trail to be located within existing right-of-way on west side of S. Elliott

**OPINION OF PROBABLE COST**  
MIDAMERICA CONNECTIVITY PROJECT

# RIDGEVIEW TRAIL

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	11,602		\$2,900,500
Trail heads			\$1,200,000
Easement & Acquisition		5	\$145,025
Engineering Design		12	\$348,060
Survey & Const. Staking		3.25	\$94,266
Flood Study & Env. Analysis		2	\$58,010
Contingency		15	\$435,075
<b>ESTIMATED TOTAL:</b>			<b>\$5,189,936</b>

**OPINION OF PROBABLE COST**  
MIDAMERICA CONNECTIVITY PROJECT

# AIRPORT TRAIL

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	13,034		\$3,258,500
Trail Heads	N/A		
Easement & Acquisition		5	\$162,925
Engineering Design		12	\$391,020
Survey & Const. Staking		3.25	\$105,901
Flood Study & Env. Analysis		2	\$65,170
Contingency		15	\$488,775
<b>ESTIMATED TOTAL:</b>			<b>\$4,472,291</b>

**OPINION OF PROBABLE COST**  
MIDAMERICA CONNECTIVITY PROJECT

# PATROL ROAD WEST TRAIL

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	13,740		\$6,720,079
Trail Heads	N/A		
Easement & Acquisition		5	\$336,004
Engineering Design		12	\$806,410
Survey & Const. Staking		3.25	\$218,403
Flood Study & Env. Analysis		2	\$134,402
Contingency		15	\$1,008,012
<b>ESTIMATED TOTAL:</b>			<b>\$9,223,310</b>

**OPINION OF PROBABLE COST**  
MIDAMERICA CONNECTIVITY PROJECT

# PATROL ROAD EAST TRAIL

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	10,450		\$2,612,500
Trail Heads	N/A		
Easement & Acquisition		5	\$130,625
Engineering Design		12	\$313,500
Survey & Const. Staking		3.25	\$84,907
Flood Study & Env. Analysis		2	\$52,250
Contingency		15	\$391,875
<b>ESTIMATED TOTAL:</b>			<b>\$3,585,657</b>

**OPINION OF PROBABLE COST**  
MIDAMERICA CONNECTIVITY PROJECT

# CHOTEAU TRAIL

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	9,574		\$2,393,500
Trail Heads	N/A		
Easement & Acquisition		5	\$119,675
Engineering Design		12	\$287,220
Survey & Const. Staking		3.25	\$77,789
Flood Study & Env. Analysis		2	\$47,870
Contingency		15	\$359,025
<b>ESTIMATED TOTAL:</b>			<b>\$3,285,079</b>

# RIVERSIDE-GOLF COURSE TRAIL

ITEM	LF	% CONST. COST	EST. CONST COST
12' Concrete Trail	25,075		\$6,268,750
Trail Heads	N/A		
Easement & Acquisition		5	\$112,375
Engineering Design		12	\$752,250
Survey & Const. Staking		3.25	\$203,735
Flood Study & Env. Analysis		2	\$125,375
Contingency		15	\$940,313
<b>ESTIMATED TOTAL:</b>			<b>\$8,415,798</b>

# PRIORITIZATION OF PROJECTS

## RAISE Grant

During the preparation of the MidAmerica Industrial Park’s Active Transportation Connectivity Master Plan, the U.S. Department of Transportation issued a Notice of Funding Opportunity for the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant application. MAIP leadership prepared and submitted a RAISE application to fund five (5) of the highest priority trails. The trails identified would provide an incredible backbone to MAIP.

The RAISE Grant had a maximum funding request of \$25M and based on the Opinions of Probable Cost prepared for each trail the following funds were requested:

TRAIL	COST
S. Elliott Trail	\$5,040,470
District Trail	\$4,126,531
Redden Trail	\$5,506,525
Airport Trail	4,472,291
Ridgeview Trail	\$5,180,936
<b>TOTAL</b>	<b>\$24,326,753</b>

The application was successfully submitted in March 2023 and going through the review process at U.S. Department of Transportation. An expected announcement of funded applications should be in the fall of 2023.



# U.S. ARMY CORPS OF ENGINEER

The U.S. Army Corps of Engineers (C.O.E.) controls hundreds of acres of land in and around MAIP. During the course of the preparation of this Master Plan, many conversations were had with C.O.E. representatives. Typically, multiuse trails are considered viable improvements on C.O.E. land. Unfortunately, in the area in and around MAIP, the C.O.E. allows hunting to occur between October and March of each hunting season. If trails are approved within the hunting zones, the trails would have to be closed during hunting season (October – May). This would render these trails useless for well over 50% of the time. For this reason, the Chouteau and Riverside-Golf Course trails are only recommended when hunting is no longer permitted in the corresponding C.O.E. lands. As the park and neighboring communities grow, this change will become increasingly necessary due to the close proximity of residential, industrial and commercial land uses.

