

TRAIL MASTER PLAN UPDATE

City of Chillicothe, IL

July 2023



PREPARED FOR:



PREPARED BY:



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Introduction

This is an update to the Chillicothe Trail Master Plan that was drafted in July 2020 by the City of Chillicothe (City) with the help of the City's Bike Path Task Force (BPTF). See Attachment A for the original Bike Master Plan. The Bike Master Plan's main goals remain similar:

- To plan for a well-connected, means of safe pedestrian/bike transportation to local schools, parks, civic buildings and area businesses
- Provide connectivity for residents that might not have access to vehicular transportation as well as provide connectivity to the planned regional trail system
- Provide a clear, concise guidelines for future trail development (having an approved Master Plan in place often enhances scoring on grant applications)

As part of the update process, the following will be completed:

1. identify obstacles, gaps and barriers to bike and pedestrian transportation in the City
2. present traffic counts, accidents, and travel heat maps for bike/ped travel in the City
3. destinations and trails from the original Master Plan will be litmus tested and refined to streamline, economize and eliminate redundant routes the network envisioned into a more refined, streamlined trail map
4. prioritize and categorize various routes and phasing of routes to align with future, known grant funding opportunities
5. provide wayfinding signage suggestions/locations

The original Master Plan chose to primarily use the underutilized Right-of-Way, and this will continue to be prioritized.

The updated Master Plan was reviewed and approved by both the BPTF (Month 2023) and the City (Month 2023). It was agreed that

1. Obstacles, Gaps and Barriers

The original Master Plan utilized public engagement and identified the following obstacles.

- A. State Highways - IL Route 29, the north-south State Highway through town carries up to 13,700 average daily traffic (ADT). There are three traffic lights within the City limits (Truitt, Walnut and Cloverdale), which aid with bike/ped crossings, but were not fully ADA compliant. IDOT is overlaying IL Route 29 during the 2023 construction season, and plans to update all crossings (new curb ramps, ped push buttons, crosswalk striping), which will be a big improvement for the town. Prior public engagement noted that the crossing locations were not visually apparent, which could lead to crossings at random locations which is unsafe. Additionally, this lack of delineation mostly discouraged walkers and bikers to traverse the highway. Any bike paths crossing IL Route 29 should plan on utilizing these newly updated traffic signal crossings. While they are more a “sidewalk” width, they should be fully ADA compliant. Since not a full 10’ wide, bikers may have to dismount and walk bikes, which is likely safer anyway. See Attachment B for map of the highway barrier and railroad barriers. Additionally, Attachment C shows the IDOT plans for the new curb ramps and striping at these three intersections (Truitt, Walnut and Cloverdale).
- B. Railroad – the Iowa Interstate Railroad runs parallel to and one block east of IL Route 29, adjacent to Third Street. The estimated number of freight trains per day is two(2), and track speed through town is 25mph. About half of the city streets traversing the railroad have sidewalks, and the other half do not, meaning in those locations pedestrians must cross the railroad by walking out into the roadway. Some of the locations with railroads do not have pedestrian crossing pads, meaning pedestrians must walk out into the roadway to transverse the tracks.

Additionally, the Norfolk Southern Railroad (NSRR) has mainline tracks on the north side of Chillicothe. Since the tracks are on the far north side of town, the barrier is not as extensive as the N-S railroad. See Attachment B for map of the highway barrier and railroad barriers.

- C. Sidewalk Gaps - there are various locations where existing sidewalk is provided along a city street, but the sidewalk is not continuous. South Second Street to Shores Acres Park (Swimming Pool Park) is a notable sidewalk gap that would be meaningful for mobility. Additionally, “north town” area (residential area North of Truitt) certainly has less sidewalks than some of the residential areas closer to downtown, and the newer subdivisions west of the schools. See Attachment D for map of existing sidewalks in Chillicothe.

2. Community Points of Interest

Additionally, the original Master Plan listed community points of interest that should be connected with the proposed bike trail system. The following are destinations listed within the original Master Plan, as well as additional locations added for this updated plan. See Attachment E for map of points of interest and Attachment F for map of planned Regional Trail System.

A. Schools:

- o Illinois Valley Central High School
- o Chillicothe Jr. High and Elementary Center
- o South Primary School
- o Calvary Baptist School
- o St. Edward's Catholic School

B. Places of Interest

- Civic Buildings: Library, Post Office, City Hall
- Pearce Community Center (610 Cedar Street) - converted old school building. Before/after school care, summer camps, group fitness classes, as well as indoor pool.
- Various Churches

C. Various Parks/Recreation Locations:

- Illinois River Front / Cutright Park and Eagle Landing - park with swings, playground, gazebo, and shelter. Also 20 foot Observation Tower & eagle statue. Adjacent to IL River boat ramps.
- Chillicothe Skatepark - centrally located at Moffit & 6th
- Shore Acres Park & Pool - Riverside Park with 19th-century clubhouse
- Santa Fe Park & Splash Pad - Santa Fe & Sunnyside (N of Truitt)
- Veterans Memorial Park (1619 Santa Fe Ave)
- Moffit Park - Walking trails to Chillicothe Bottoms Wildlife Sanctuary
- Link to Regional Trail system
 - o North on Benedict Street
 - o South on IL Route 29

3. Traffic Counts, Pedestrian Counts, and Crash Data

A. Traffic Counts

Average Daily Traffic (ADT) counts were taken from the current IDOT website for this report. IL Route 29 through Chillicothe is the heaviest traveled roadway in town (ADT 9,000 – 13,700). The next busiest streets are Cloverdale, Bradley and Truitt (ADT 2000 – 4000). Additionally Sante Fe, Sycamore, Walnut and Second Street see larger than average traffic (1000-2000 ADT). Beyond that, most streets see under 1000 vehicles per day. See Attachment G for map of ADT's.

B. Pedestrian Counts/Heat Maps

Tri-County Regional provided Strava Heat Map data for the city. Unfortunately, the data is aggregated on a big scale, which works for county-wide data, but didn't really work on a very local scale, like the City of Chillicothe.

C. Crash Data

Unfortunately, on August 8, 2022, the City suffered a fatal biking accident. The incident occurred at the 4-way stop intersection of North Bradley and Sycamore Street, near the Public Library. This unfortunate incident highlighted the need for safe, well-marked pedestrian and bicycle accommodations throughout town, including well-marked crosswalks.

Fortunately, other than that tragic incident, the City does not have a large number of pedestrian or bicycle related crashes. Databases at IDOT, Tri-County Regional and the City were checked, and known bike/ped crashes have been identified for the past 5 years. See Attachment H for map of crash data.

4. Proposed Trail Map and estimated cost of trail development

The original plan had some routes in parallel with each other, just a block or two apart. For economy, it was decided these doubled-up/redundant trails would be eliminated and just one route provided. This strategy still allowed most all the major destinations identified in the original Master Plan to be connected, or within 1 block of a trail route. Since crossing IL Route 29 is both a safety concern and an expensive endeavor due to the cost of traffic signals, the trail routes were selected to utilize the existing traffic signals at Truitt, Walnut and Cloverdale. As mentioned earlier, IDOT is in the process of updating these three crossings to make them fully ADA compliant, which will save the City money in the future. While the crossings are “sidewalk” width, IDOT often designs ramps at a lesser width than full bike width at urban crossings.

Additionally, with the Iowa Interstate Railroad running parallel to IL 29, the trail system will also cross the railroad three times. Additionally there is one crossing on the BNSF railroad. The existing pedestrian crossings (where provided) are older, and not fully ADA compliant. The trail projects will upgrade the crossing pads to be compliant with ADA.

Second Street roadway is 40’ wide south of downtown. The width is provided to allow for on-street parking in both directions, however, there is not a lot of on-street parking and the majority of the wide pavement is underutilized. The plan suggests a “road diet” for this situation. A road diet is an inexpensive way to make full use of underutilized roadways. We suggest eliminating one line of on-road parking and restriping to allow for one lane of parking, two through lanes and two bike lanes. This solution was suggested in this location, however, it is not being suggested at Truitt, even though that pavement is also 40’ wide in places. This is because of the proximity to the school, as well as because it is a marked Class II Truck Route, with gravel trucks coming from the gravel pit west of town. Also since the edge of town, rural traffic does not always slow down to the posted speed of 30 mph.

The proposed trail system has been laid out with a “main loop” encircling the heart of the City. This will allow for safe bicycle travel from one quadrant of the City to another.

Next, the “infill” trails will cross within the loop trail, reducing travel distances further. The paths were chosen to connect as many destinations as possible.

There is also a “west loop” which has been envisioned for many years. This loop connects outer subdivisions with the high school and the main loop. In the future it could be expanded another mile west to Krause Road if right-of-way became available (farm ground currently owned by 3 landowners) for a nice recreational loop.

Finally, there are three additional “outer reach” segments that originate off the main loop and are connections for specific destinations.

See Attachment I for proposed trail map.

See next page for summary of the main loop trail system, and the following page for summary of additional trail options.

See attachment J for cost estimate details.

- Assumptions:
 - Unless noted, trails were assumed to be 10'-wide, asphalt paved shared use paths. If a curb is present, assumed the trail would be 5' behind the face of roadway curb.
 - Aerial images available on internet were used to develop estimated quantities. No design or topographic survey were performed.
 - The land acquisition costs are assumed based on County parcel data available on the internet.
 - No utility research/coordination has taken place –adjustment costs were assumed.
- The cost estimates are for “budgetary” purposes.

Trail Segment	General Description	Destinations	Length (miles)	Total Estimated Project Cost*
A	Bradley & Cloverdale	City WON ITEP GRANT! Library, High School, Calvary Baptist School	0.65	\$839,190
B	Sycamore	Trail System connection, High School	0.21	\$399,197
C	Bradley	Trail System connection, High School	0.5	\$881,335
D	Truitt	Trail System connection, Junior High School; Pearce Community Center; Santa Fe Park	0.41	\$951,445
E	Cloverdale	Trail System connection, Calvary School to 2 nd Street, Shopping plaza (xing with IL 29 done); Pool Park	0.41	\$806,890
F	2 nd Street	Trail System connection; downtown (partial Road Diet)	0.63	\$606,727
G	Truitt	Trail system connection (xing with IL 29 done); St. Edwards School	0.34	\$639,585
H	1 st Street & Truitt	Trail System connection, downtown	0.61	\$1,143,818
		MAIN LOOP TOTAL	3.76	\$6,268,187

*Includes estimated costs for Construction, Engineering, Land Acquisition, and Utilities.
See Attachment J for Detailed Cost Estimates.

Trail Segment	General Description	Destinations	Length (miles)	Total Estimated Project Cost*
I	Sycamore & Santa Fe	Library, Grade School	0.44	\$795,860
J	East side of School District Field	Grade School, Calvary School, Commercial Plaza	0.50	\$904,387
K	Santa Fe	Pearce Comm Center, Grade School	0.62	\$1,121,439
L	Walnut	Downtown	0.45	\$813,948
		INFILL TRAILS TOTAL	2.01	\$3,635,634
M	Sycamore	Trail Connection	0.54	\$976,738
N	Private Field	Trail Connection	0.51	\$922,474
O	Private Field/ High School Property	Trail Connection, High School	0.62	\$1,121,439
		WEST LOOP TOTAL	1.67	\$3,020,651
P	Benedict, Matthews, Santa Fe	Regional Trails (north)	0.64	\$1,157,615
Q	Second Street	Moffit Nature Park Connection	0.40	\$723,509
R	Bradley, Harborway, Stillwater, McGrath	Commercial Plaza, Three Sisters Park, Regional Trails (south)	0.76	\$1,374,668
		OUTER REACHES TOTAL	1.80	\$3,255,792

*Estimate includes Construction, Engineering, Land Acquisition, and Utilities and is based on an average price per mile (\$1.8 mil) of Main Loop Trails.

MAIN LOOP TOTAL	3.76	\$6,268,187
ADDITIONAL TRAILS TOTAL	5.48	\$9,912,077
GRAND TOTAL	9.24	\$16,180,264

5. Prioritization and Categorization of Trails for grant funding opportunities

For prioritization, the City will continue to grow their network with each trail segment connecting to a previously built section. This will allow the trail system to grow in a meaningful, continuous manner. Additionally, because the City has experienced a biking fatality, the first priority trails will be centered on this accident site. Grants often consider accident data as a grading criteria, and upgrading the trail system at this critical area in town (near high school & library) will allow the most “good” to come of this terrible event.

All trails are not created equally. Some serve primarily as a route for kids to get to schools, some are more destination related such as reaching downtown, or a library, or the swimming pool, and some are more recreational based. Various grants are available from time to time, with each grant having a specific type of use targeted. Knowing which piece of the planned trail network is better suited for which type of grant will help the City have a roadmap of which trails to seek funding for.

For Chillicothe, the main “loop trail” has been made the first priority, with the “infill” trails being the second priority. This gets construction out beyond 2030. After that the City could decide if the “west loop” was priority over the individual outer connections.

Nearly all grants require local matching funds. For Federal grants, they are usually 80/20. These are often provided by a City's General Funds, although MFT funds can also be used. The past few years, IDOT has supplemented the federal transportation enhancement grants with up to 50% of local match dollars for certain communities. Chillicothe was a recipient of this program for their 2022 ITEP Application – there is only a 10% match. (It is unknown how long that program will continue, so for the chart below it is only estimated for one additional grant cycle). Then it is assumed a full/typical 20% match will be required again.

The following are suggested grants for various trail segments. Note that on average, the City will have to dedicate \$200,000 to \$210,000 yearly toward bike trails to achieve this result.

The trails are shown in priority order. The priority is based on each trail building on the next, so that the continuous amount of connected trail continues to grow.

See Attachment K for a listing of various grants and the usual cycle for grant opportunities.

Trail Segment	General Description	Primary Use	Proposed Grant	Possible Construction Year	Estimated Match
A	Bradley & Cloverdale	Alternate mode of Transportation (near School)	Project Awarded 2022 ITEP!	2025	\$83,919.0
B	Sycamore	Alternate mode of Transportation (near School)	2023 SRTS	2026	\$149,197
C	Bradley	Alternate mode of Transportation (near School)	ITEP 2024	2027	\$88,133.53
D	Truitt	Alternate mode of Transportation (near School)	TAP 2025 & 2025 IDNR	2028	\$501,445
E	Cloverdale	Alternate mode of Transportation (near School)	ITEP 2026	2029	\$161,377.95
F	2nd Street	Alternate mode of Transportation (near downtown)	HSIP 2025 (Road Diet)	2028	\$60,672.66
G	Truitt	Trail system connection (xing with IL 29 done); St. Edwards School	ITEP 2028	2031	\$127,917.09
H	1st Street & Truitt	Trail System connection, downtown	TAP 2027 & 2027 IDNR	2030	\$693,818
Total Amount of City Funds Required (2023 - 2031)					\$1,866,480
I	Sycamore & Santa Fe	Alternate mode of Transportation (near School)	2027 SRTS	2030	\$545,860
J	East side of School District Field	Alternate mode of Transportation (near School)	ITEP 2030 & 2029 IDNR	2033	\$454,387
K	Santa Fe	Alternate mode of Transportation (near School)	ITEP 2032 & 2031 IDNR	2035	\$671,439
L	Walnut	Alternate mode of Transportation (near downtown)	TAP 2029	2032	\$563,948
M	Sycamore	Trail Connection	ITEP 2034 & 2033 IDNR	2037	\$97,674
N	Private Field	Trail Connection	ITEP 2036 & 2035 IDNR	2039	\$92,247
O	Private Field/High School Property	Trail Connection, High School	ITEP 2038 & 2037 IDNR	2041	\$112,144
P	Benedict, Matthews, Santa Fe	Regional Trails (north)	ITEP 2040 & 2039 IDNR	2043	\$231,523
Q	Second Street	Moffit Nature Park Connection	TAP 2031	2033	\$144,702
R	Bradley, Harborway, Stillwater, McGrath	Commercial Plaza, Three Sisters Park, Regional Trails (south)	ITEP 2042 & 2041 IDNR	2045	\$274,934
Total Additional City Funds Required (2030 - 2045)					\$3,188,858

6. Trailheads and Wayfinding Signage

A few trailhead locations were suggested in the original Master Plan. These areas already are community gathering places and have existing parking facilities in place. Using these existing community resources is a great way to efficiently use these assets. A map kiosk would be provided at each of these locations, with an updated trail map insert needed as the trail system grows. Planned trailhead/map kiosk locations include the following:

- Public Library
- Pearce Community Center
- Shore Acres Park
- Santa Fe Park

Another place to consider for a trailhead is the open land on the NW & NE quadrants of Walnut & First. Trails are proposed up and down both of these cross streets. These open areas are owned by the City and are centrally located to downtown and the river front. Parking, bike racks, benches, and other amenities could be provided, as well as a kiosk with the trail map.

In addition to trailhead locations, just map kiosks will be installed at additional locations. These will be developed as the trail network was built out to that location. As the City grows its trail network, a few properly placed trail maps at key locations will be a great way to help pedestrians and bikers understand the connectivity of the City's trail system. Map kiosk only locations are envisioned at:

- Moffit Park
- Skate Park
- Cutright Community Park and/or City Hall

Maps and signage with a standardized shape and color scheme will be quickly identified and assist trail users with finding their way. See Attachment L for map of proposed trailheads and proposed signage/kiosk locations.

Attachment A
Original Bike Master Plan

CITY OF CHILLICOTHE TRAIL MASTERPLAN

Chillicothe, Illinois
Peoria County

MW

Midwest Engineering

Associates, Inc.

Prepared For:
City of Chillicothe

Prepared On:
October 9th, 2020

Prepared By:
Midwest Engineering Associates, Inc.



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SUMMARY:

The Chillicothe Trail Masterplan is a practical way to assist the City of Chillicothe, and the Bike Path Task Force to achieve their goal of having a well-connected city. The Chillicothe Trail will provide safe pedestrian connection points to local schools, parks, and area businesses. Many of the City's residents would have a more accessible and safe opportunity to the necessities of daily life. This trail system will serve a vital connectivity role for residents that might not have access to vehicular transportation and struggle to get to and from their residence and the sources for their daily needs. This Masterplan will also provide the foundation from which can be built upon for regional connectivity. Another key role of the Masterplan is to function as a means to seek funding and grant opportunities so that the City and Community may bring it to fruition.

The Masterplan provides the framework on how a trail network will be implemented throughout the City of Chillicothe. The implementation of the trail network will likely be through a phased approach over the course of several years as funding becomes available. Providing a network of trails throughout the City for both bicycle and pedestrian traffic will increase the connections between residential neighborhoods, businesses, schools, community spaces, and recreational areas. The Chillicothe Trail system will connect the surrounding community with the natural resources, places of interest, and essential services for greater opportunity for quality of life improvement for the local residents.



Rock Island Railroad Museum

1. Introduction:

The City of Chillicothe is rich in natural resources along with recreational activities, which have made it a quiet and inviting community of approximately 6,200 residents. Chillicothe sits along the Illinois River roughly 15 miles north of Peoria, which has an extensive trail system. As the city grows, they desire a more sustainable approach to an enhanced community by developing a vision and partnering with public and private entities, including the City of Chillicothe, Park District, IVC School District, area businesses, foundations and other regional organizations. This Masterplan will position the City in a way to receive funding and continue to stay in line with the vision of its residents and City staff.

"The mission of the Chillicothe Trail Initiative is to increase the economic development and overall quality of life in the Chillicothe Illinois region, by providing safe pedestrian pathways that improve transportation, promote healthy recreational activities, increase tourism and interest in local businesses, and attract new potential residents to the community." -Chillicothe Trail Committee

Chillicothe Trail Masterplan is intended to be a document that is easily readable, as well as one that provides clear, concise planning guidelines for future development. Trails in the Masterplan will be shown as routes that connect vital areas of the community with one another. These routes will vary in type and will be shown graphically throughout the Masterplan to give a better understanding of the intended trail. Along with trail type and branding some conceptual cost estimates will accompany the Masterplan to better understand the funding required for construction.

The Chillicothe Masterplan has been made possible with assistance of the following:

Jeff Jenkins: City of Chillicothe

Adam Leiner: Chillicothe Resident

Amanda Beadles: Economic Development Director

Andy Ruhland: Chillicothe Resident

Mike Ratcliff: Chillicothe Township Supervisor

Troy Mitchell: Chillicothe Resident

Kevin Yates: Chillicothe Park District

Jeff Admire: Chillicothe Resident

Brent Cranford: IVC District 321 School Board

Residents of Chillicothe, Illinois

2. Planning Strategy:

With the development of Chillicothe Trail Masterplan, collaboration between the design team and the Bike Path Task Force conducted research and analysis of existing infrastructure. It was this research and the public input that allowed the design of a Masterplan that would echo the vision of all involved.

It was during these meetings in which we collected information on township right of ways, trail head possibilities, and the connection to Three Sisters Park which would provide an additional 7+ miles of recreational trails. Other routes and places of interest were also brought to the team's attention and included into the Masterplan.

3. Chillicothe Trail Advantages

Walking and bicycling have been a part of the Chillicothe community's history and only continues to grow. Trails allow communities to increase retail, create and support local jobs, increase property values, reduce commuter costs, all while providing a low-cost health benefit to the community. As a network of routes, the Chillicothe Trail would provide many benefits, including the following:

Use of City Right of Way

The Chillicothe Trail will use the large underutilized Right of Way, so that more desirable trail can be constructed where feasible. When applicable, the large right of way would be used to construct the most desired path, which is a multi-use trail (a path isolated from vehicular traffic to accommodate bicycles and pedestrians). Using the right of ways as an advantage, the community will be better connected with places of interest and will create a safer means of travel.

Provide Safe Routes

There are many residents whose only means of transportation is bicycle, and or walking. The Chillicothe Trail would immediately and exponentially increase those individual's quality of life as well as create a safe environment for many to use as travel from neighborhoods to places of businesses and or



work. Another facet of the trail system would be safe routes it will provide to and from school for many of the children of the community.

Social and Economic

Many social and economic benefits would be felt throughout the community. An increase in tax revenue from an increase in property value as well as retail shopping experiences, and further development of businesses are among the list of many benefits a trail can provide. As transportation is provided throughout the town it allows for a more feasible means of travel for many of the residents who might not have easy access to the town's amenities. These transportation connections will allow for residents to frequent grocery stores, retail shops, and public parks that they might have previously been disconnected from.

Health and Wellness

Trails provide an important role in mental and physical health of the residents in the community. Research has shown that walking and biking can help reduce the risk of many health factors while also increasing one's mental health. The location of the trails provided in the Masterplan will encourage families and children to use them with the sense of safety and convenience.



City Park (North Second Street)

Connectivity to Surrounding Communities

Trails in the surrounding communities have been in the planning stage for numerous years. Having the Masterplan will help Chillicothe join and become part of the overall conversation with planning of the trails. Finding key connections with communities and the Tri-County Regional Planning commission, will help leverage funding opportunities that may become available. These trail connections also provide the ability to encourage local tourism throughout the region.

4. Trail Connections

Many trail priorities were considered while planning and designing the routes, which were: types of trails, city connectivity, trail head locations, and crossings. After multiple public engagements it was noted that the crossings at Route 29 (Fourth Street) need to be visually apparent and safe for the users. The lack of safe crossings may hinder residents to cross while on bike or foot. Using this advice moving forward there will need to be some design considerations to best delineate the path and to provide a great sense of security for the future users.

Types of Trail to be Included:

- Shared Multi-Use Trail (Non-Vehicular)
- Bike Lane (Dedicated Separation)
- Shared-Use Lane (“Sharrows”)
- Road Way Crossings
 - Major
 - Pavement Marking
 - Signage
 - Traffic Signals
 - Minor
 - Pavement Marking
 - Signage

City Connections:

- Chillicothe Schools
 - Illinois Valley Central High School
 - Chillicothe Jr. High and Elementary Center
 - South Primary School
 - Chillicothe Public Library
- Chillicothe Parks
 - Santa Fe Park
 - City Park
 - Shore Acres Park
 - Chillicothe Skate Park
 - Moffit Nature Park
 - Riverfront/Cutright Community Park
- Historic, Cultural, Community Resources
 - Railroad Museum
 - Historic Downtown
 - Veterans Memorial
 - Pearce Community Center
 - Chillicothe Recreational Area

Trail Head Locations:

It is anticipated that at the trail head locations there would be a bike station, and a map kiosk providing an outline of the trails and current location of the user. A small shelter along with a table would also be made available when feasible.

- City Park (Downtown)
- Public Library (Near Schools)
- Pearce Community Center (Central Location/Existing Parking)

- Shore Acres Park (High Traffic Park)

Map kiosk would also be provided at Santa Fe Park, and Moffit Park. As the trails continue outside of city limits further map kiosk would be provided.

5. Trail Routes & Infrastructure

Giving each trail its own identity will assist in being easily recognized throughout the community and easily readable on maps. Trails will connect with one another in order to complete a more comprehensive trail network, while connecting patrons to the connections mentioned above. The trail identities are as follows.

Trail Routes:

Gold Route

The Gold Route is a proposed 8' wide multi-use connection loop that connects the Library, High School, and Grade School. The Gold Route also provides safe connections for students as they travel to and from school. Starting from the Library Trailhead, the Gold Route heads south along Bradley Avenue at Cloverdale Road, the trail will head east before heading back north along the west side of the Chillicothe City Cemetery toward Sycamore Street. This trail will also be used as a connection point between the Red Route and Purple Route. The Gold Route would consist of approximately 1.5 miles of multi-use trail. The construction of this route would be along the existing sidewalk near the library and a newly constructed multi-use path on the school property that is currently being farmed.



Chillicothe Public Library

Red Route:

Starting at the intersection of Sycamore and Bradley Avenue, the Red Route will consist of two loops. One reaches into the nearby neighborhood heading north on Bradley Avenue as a multi-use trail that would likely be constructed between the east curb and east right of way line. The trail then becoming a sharrows as it heads east on Truitt Street to facilitate for the on-street parking. As the trail then turns back south on Santa Fe Avenue it then becomes a multi-use trail heading toward the trail head located at the Pearce Community Center. The multi-use trail continues south toward Sycamore Street turning into sharrows as it heads west to intersect the Gold Route.



Multi-Use trail

Another loop from the starting point will head west as a multi-use trail until Prairie Springs Drive. Starting at Prairie Springs Drive, the route becomes a sharrow trail; this route would not be preferred until the road has been paved through the unincorporated area. The sharrows would continue as you head south on N. Krause Rd. and east on Cloverdale Rd. until you arrive at the water tower where the trail then becomes a multi-use trail again. Another aspect of this trail would connect residents to the nearby Three Sisters Park with a sharrow trail through River Sound Subdivision. The Red Route would provide a scenic agriculture loop on the west side of town for a more secluded ride, while connecting neighborhoods to schools. This route would consist of approximately 2 miles of multi-use trail, and 4 miles of sharrows.

Green Route:

The Green Route starts in Shore Acres Park and would likely be sharrows on Second Street as it heads north to connect Historic Downtown, and City Park. From City Park heading north to Moffit Park an 8' wide multi-use trail could be constructed on the east portion of the right-of-way. As the route heads west on Moffit Street it would remain an 8' wide multi-use trail on the north side of the road. After crossing route 29 (Fourth Street) the trail would then continue to connect the Skate Park with Santa Fe Park along the south side of Moffit Street and the west side of Santa Fe Avenue with an 8' wide multi-use trail. The trail from Santa Fe Park then continues South along the west side of Santa Fe Rd. to intersect the Red Route. The trail section along Benedict Street would likely be sharrows extending from Truitt Street to north of the railroad. The Green Route would primarily be used as a connection between many of the city parks as well as connecting neighborhoods with Historic Downtown, and retail opportunities. This route would consist of approximately 1.5 miles of multi-use trail, and 1.8 miles of sharrows.



Historic Downtown Sharrows

Purple Route:

The Purple Route starts at the Southeast corner of the Gold Route heading east on the south side of Cloverdale Rd. as an 8' wide multi-use trail. The route crosses Route 29 (Fourth Street) to Third Street. As the route heads north on Third Street it would be a bike lane on a converted one-way street to allow for the space of a 2-way bike lane. A downtown loop starting from the intersection of Santa Fe Avenue and Walnut would consist of sharrows heading east to the courtesy docks on the river then back to Third Street heading west on Pine Street. As Third Street terminates to the north there would be sharrows running east/west to connect Second Street to Santa Fe Avenue via Truitt Street. The Purple Route would serve to connect the neighborhood sector with the retail and historic downtown districts. It also connects patrons to the Illinois River via Cutright Park and courtesy docks. This route consists of approximately 0.2 miles of multi-use trail, 1 mile of bike lane and 1.3 miles of sharrows.



Third Street Bike Lane

Blue Route:

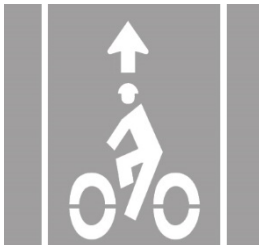
Starting at Shore Acres Park the Blue Route would be comprised of an 8' wide multi-use trail along Second Street heading south, until lane and right of way constraints dictate the trail to then become a sharrow trail. This route would connect along the scenic Illinois River to Rome, Illinois. It is anticipated that this route could continue south and thus connect with the City of Peoria Bike Trails, creating a more extensive trail system throughout the Central Illinois Area. This route would consist of approximately 1.2 miles of multi-use trail, and 0.6 miles of sharrows.



North River Beach Drive

Trail Infrastructure:

Trail infrastructure will consist of many different parts such that include, pavement, paint stripping/markings, posted signage, map kiosk, and bike stations.



Bike Lane



Sharrows



Crossing



Map Kiosk



Bike Station



Bike Lane Signage



Sharrows Signage

6. Concept Budgets

Gold Route:

Gold Route							
Item #	Description	Type	Frequency	Unit	Quantity	Unit Cost	Total Cost
1	Multi-Use Trail	Pavement		LF	8,000	\$60	\$480,000
2	Signage	Posted Sign	500LF	EA	16	\$500	\$8,000
3	Trail Head	Permanent		EA	1	\$2,800	\$2,800
4	Minor Crossing			EA	2	\$500	\$1,000
						Total	\$491,800

Conceptual Budget

Red Route:

Red Route							
Item #	Description	Type	Frequency	Unit	Quantity	Unit Cost	Total Cost
1	Multi-Use Trail	Pavement		LF	11,221	\$60	\$673,260
2	Sharrow Markings	Painted	250 LF	EA	84	\$250	\$21,000
3	Signage	Posted Sign	500 LF	EA	65	\$500	\$32,500
4	Trail Head	Permanent		EA	1	\$2,800	\$2,800
5	Minor Crossing			EA	30	\$500	\$15,000
						Total	\$744,560

Conceptual Budget

Green Route:

Green Route							
Item #	Description	Type	Frequency	Unit	Quantity	Unit Cost	Total Cost
1	Multi-Use Trail	Pavement		LF	8,065	\$60	\$483,900
2	Sharrow Marking	Painted	250 LF	EA	40	\$250	\$10,000
3	Signage	Posted Sign	500 LF	EA	36	\$500	\$18,000
4	Trail Head	Permanent		EA	2	\$2,800	\$5,600
5	Trail Map	Permanent		EA	2	\$1,500	\$3,000
6	Major Crossing			EA	2	\$2,500	\$5,000
7	Minor Crossing			EA	28	\$500	\$14,000
						Total	\$539,500

Conceptual Budget

Purple Route:

Purple Route							
Item #	Description	Type	Frequency	Unit	Quantity	Unit Cost	Total Cost
1	Multi-Use Trail	Pavement		LF	1,300	\$60	\$78,000
2	Bike Lane Markings	Painted		LF	5,315	\$2	\$10,630
3	Sharrow Marking	Painted	250 LF	EA	28	\$250	\$7,000
4	Signage	Posted Sign	500 LF	EA	28	\$500	\$14,000
5	Major Crossing			EA	4	\$1,500	\$6,000
6	Minor Crossing			EA	25	\$500	\$12,500
						Total	\$128,130

Conceptual Budget

Blue Route:

Blue Route							
Item #	Description	Type	Frequency	Unit	Quantity	Unit Cost	Total Cost
1	Multi-Use Trail	Pavement		LF	6,700	\$60	\$402,000
2	Sharrow Marking	Painted	250 LF	EA	14	\$250	\$3,500
3	Signage	Posted Sign	500 LF	EA	21	\$500	\$10,500
4	Minor Crossing			EA	4	\$500	\$2,000
						Total	\$418,000

Conceptual Budget

Appendices:

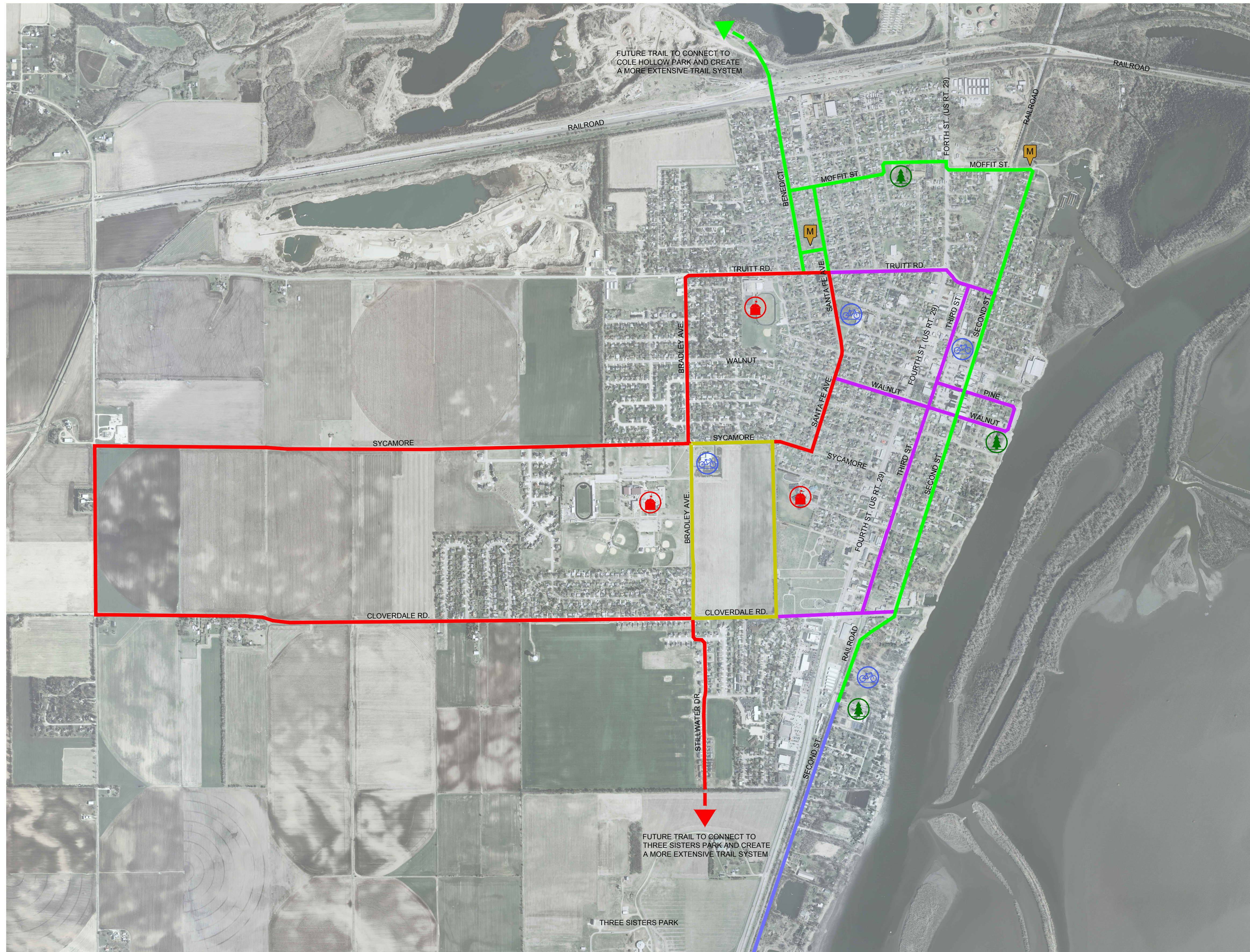
Appendix A: Chillicothe Trails Masterplan Route Map

Appendix A

Chillicothe Trails Masterplan Route Map

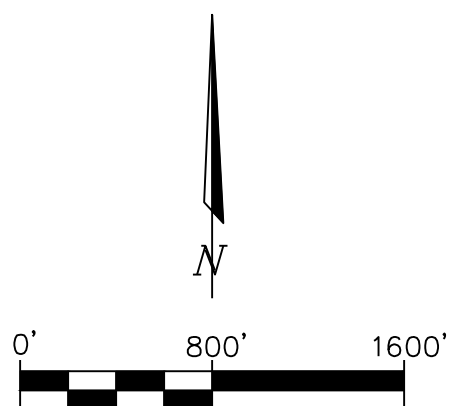


CHILLICOTHE TRAILS MASTERPLAN ROUTE MAP



LEGEND:

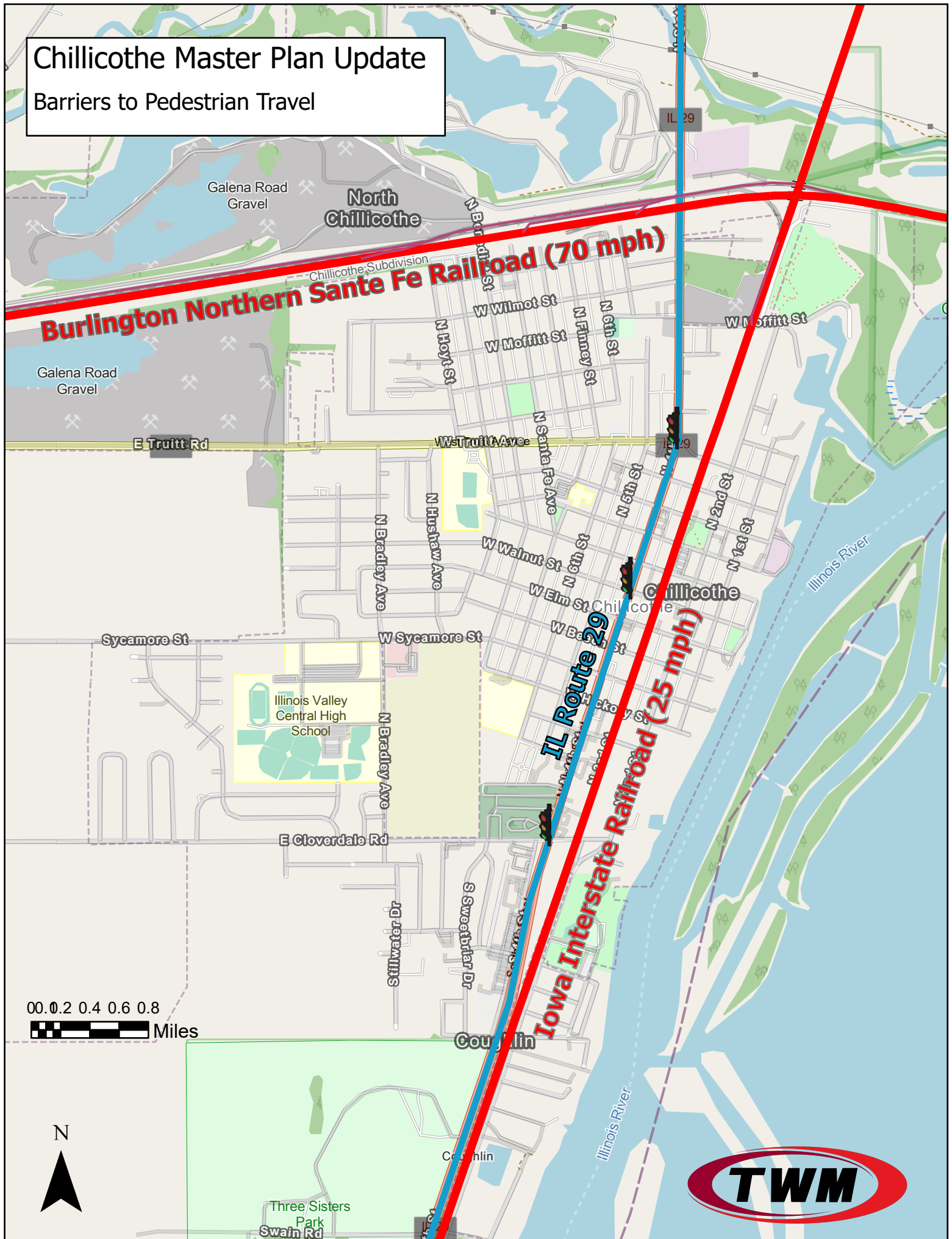
- PUBLIC SCHOOL
- PUBLIC CITY PARK
- TRAIL HEAD LOCATION
- MAP KIOSK LOCATION
- GOLD ROUTE
- RED ROUTE
- GREEN ROUTE
- PURPLE ROUTE
- BLUE ROUTE



Attachment B
Barriers in Chillicothe

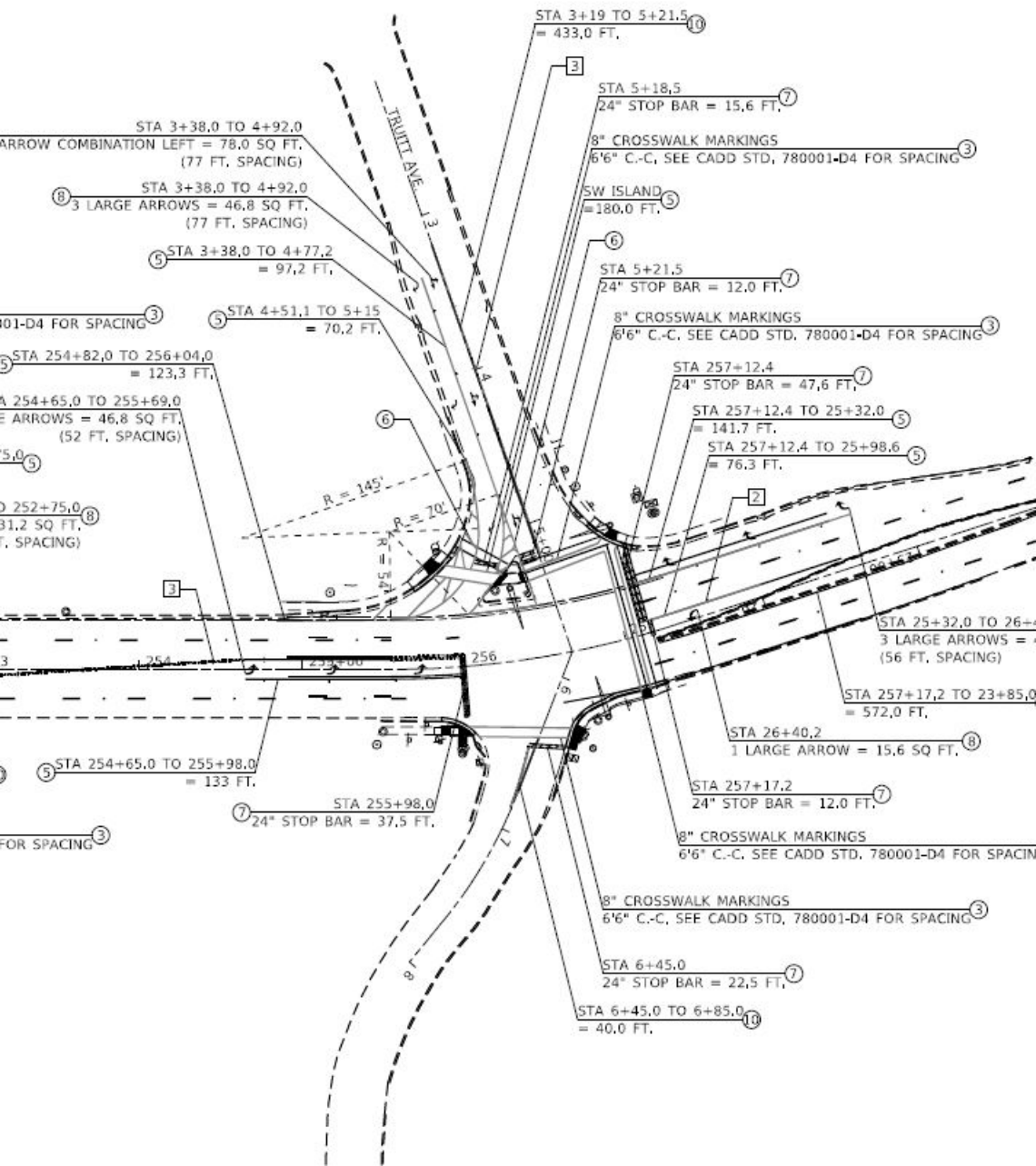
Chillicothe Master Plan Update

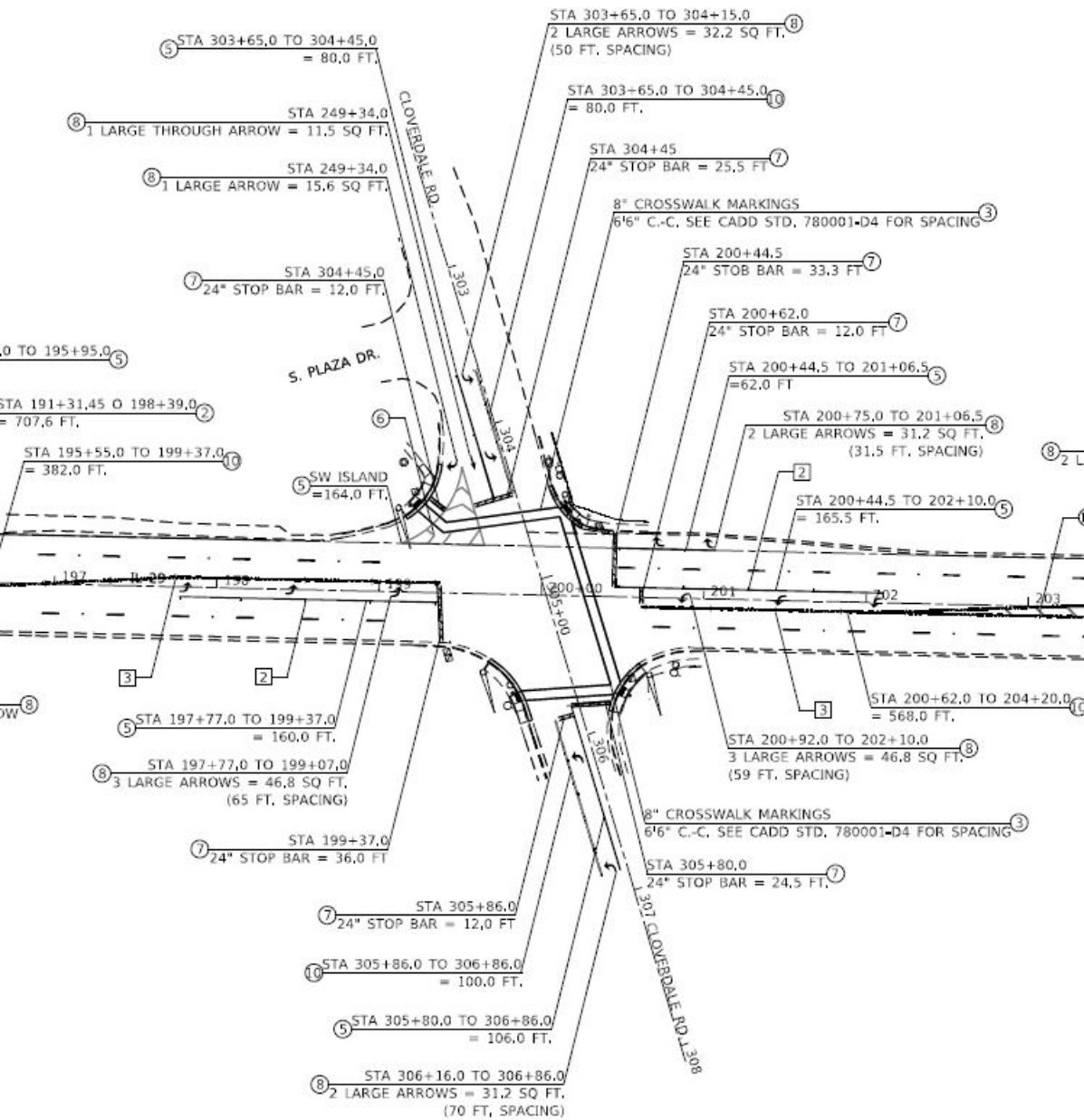
Barriers to Pedestrian Travel



Attachment C

IDOT Plans for Curb Ramp Updates



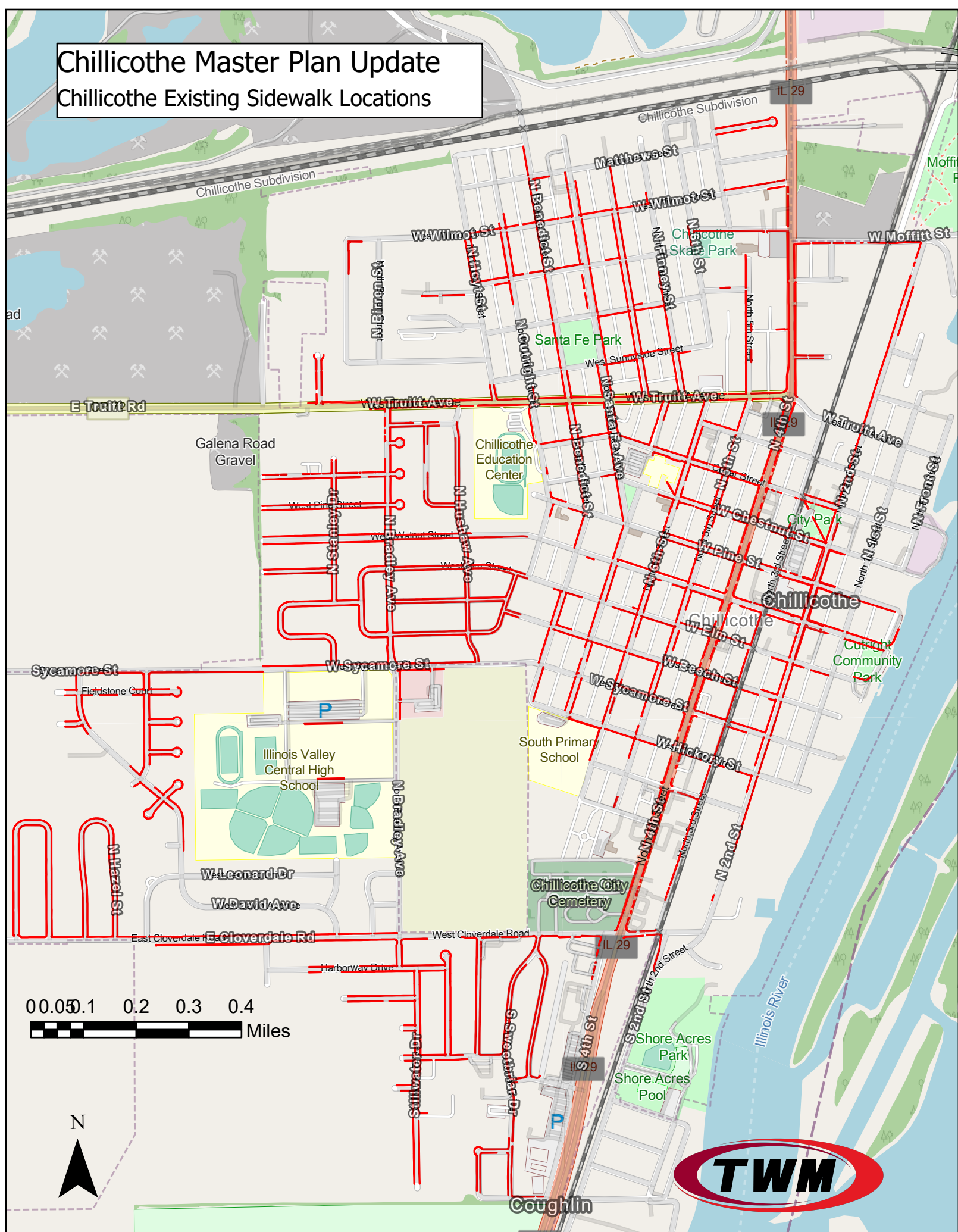


Attachment D

Existing Sidewalks in Chillicothe

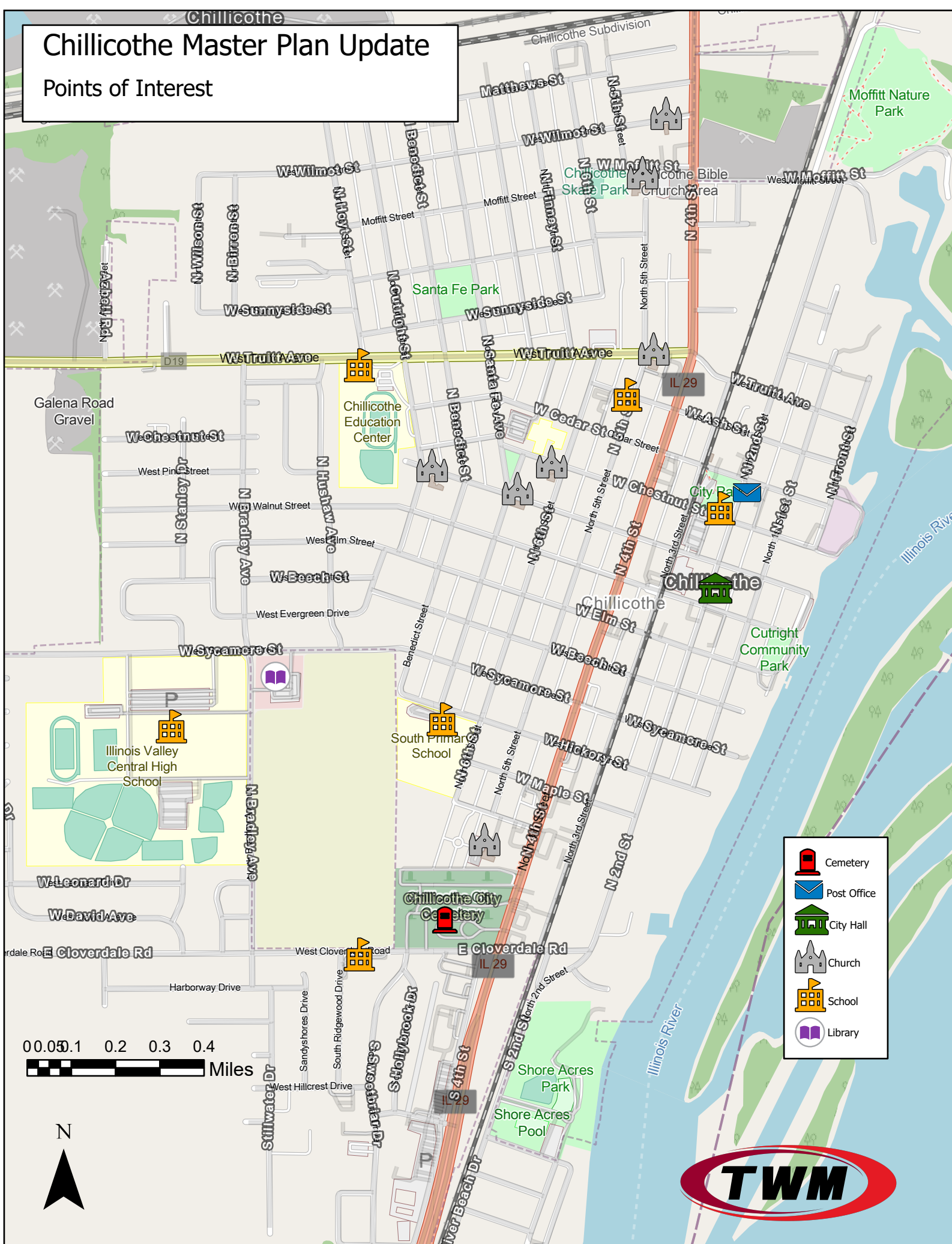
Chillicothe Master Plan Update

Chillicothe Existing Sidewalk Locations



Attachment E
Points of Interest in Chillicothe

Points of Interest



Attachment F
Planned Regional Trail System

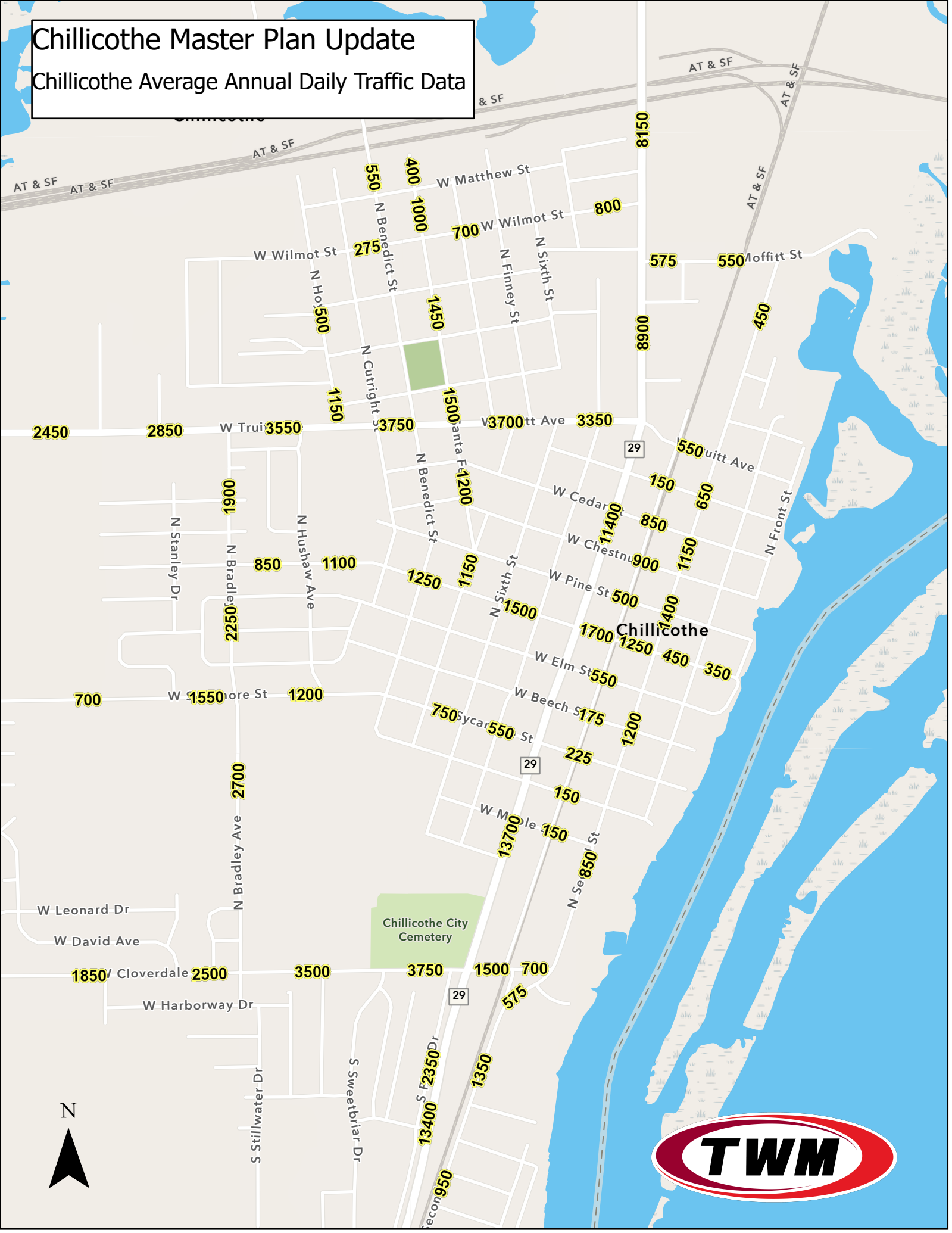


Attachment G

Average Daily Traffic in Chillicothe

Chillicothe Master Plan Update

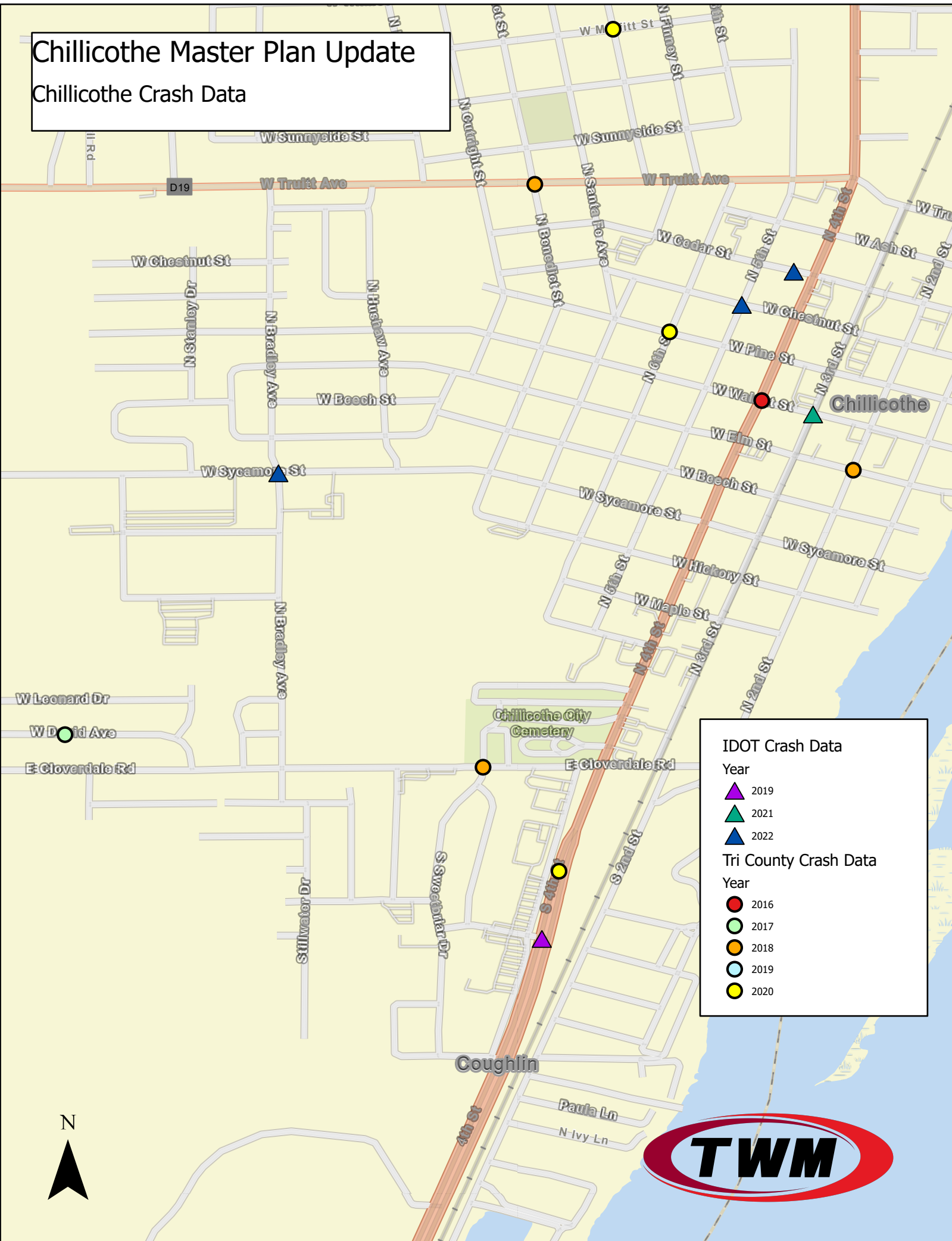
Chillicothe Average Annual Daily Traffic Data



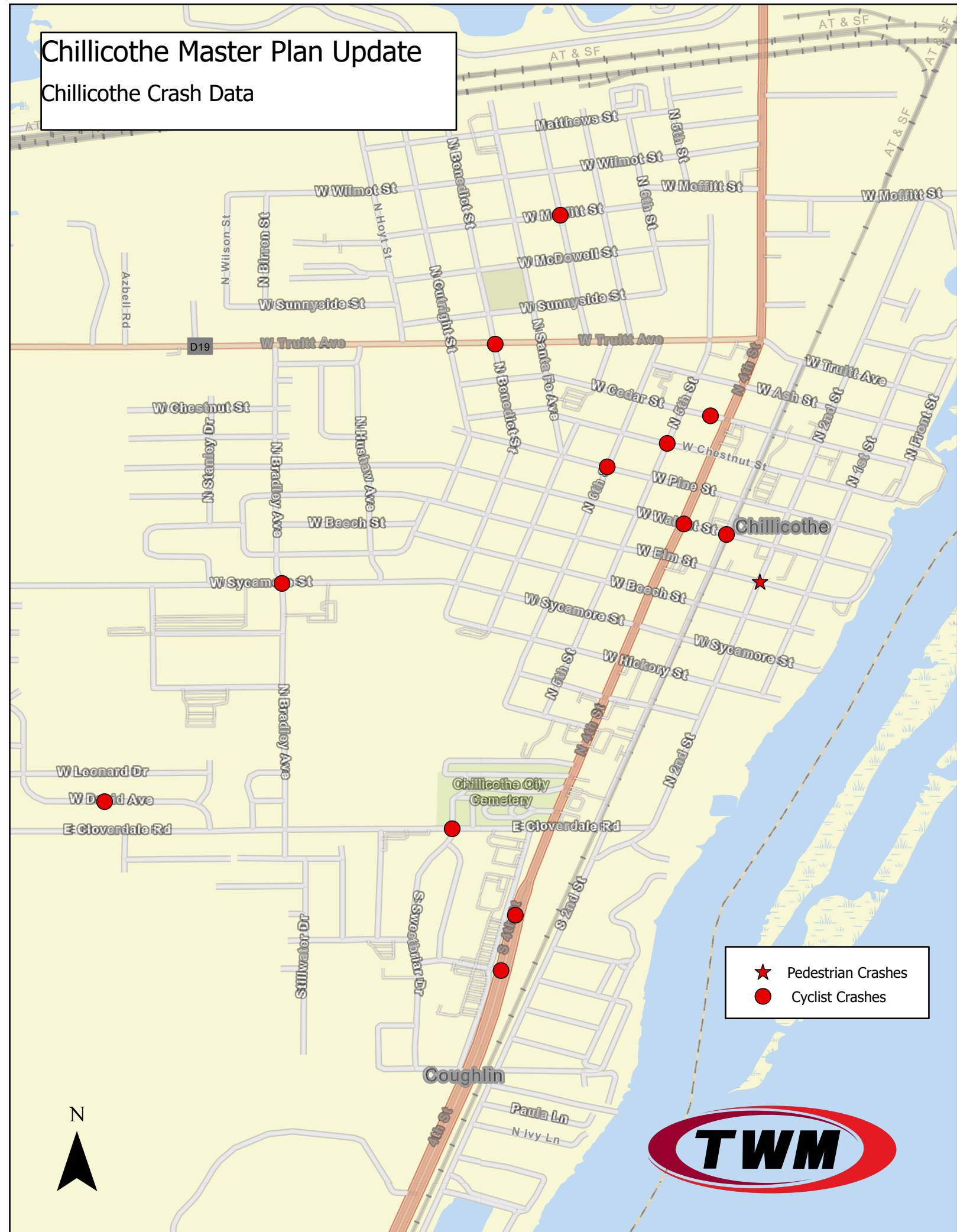
Attachment H
Bike/Ped Crash Data in Chillicothe

Chillicothe Master Plan Update

Chillicothe Crash Data



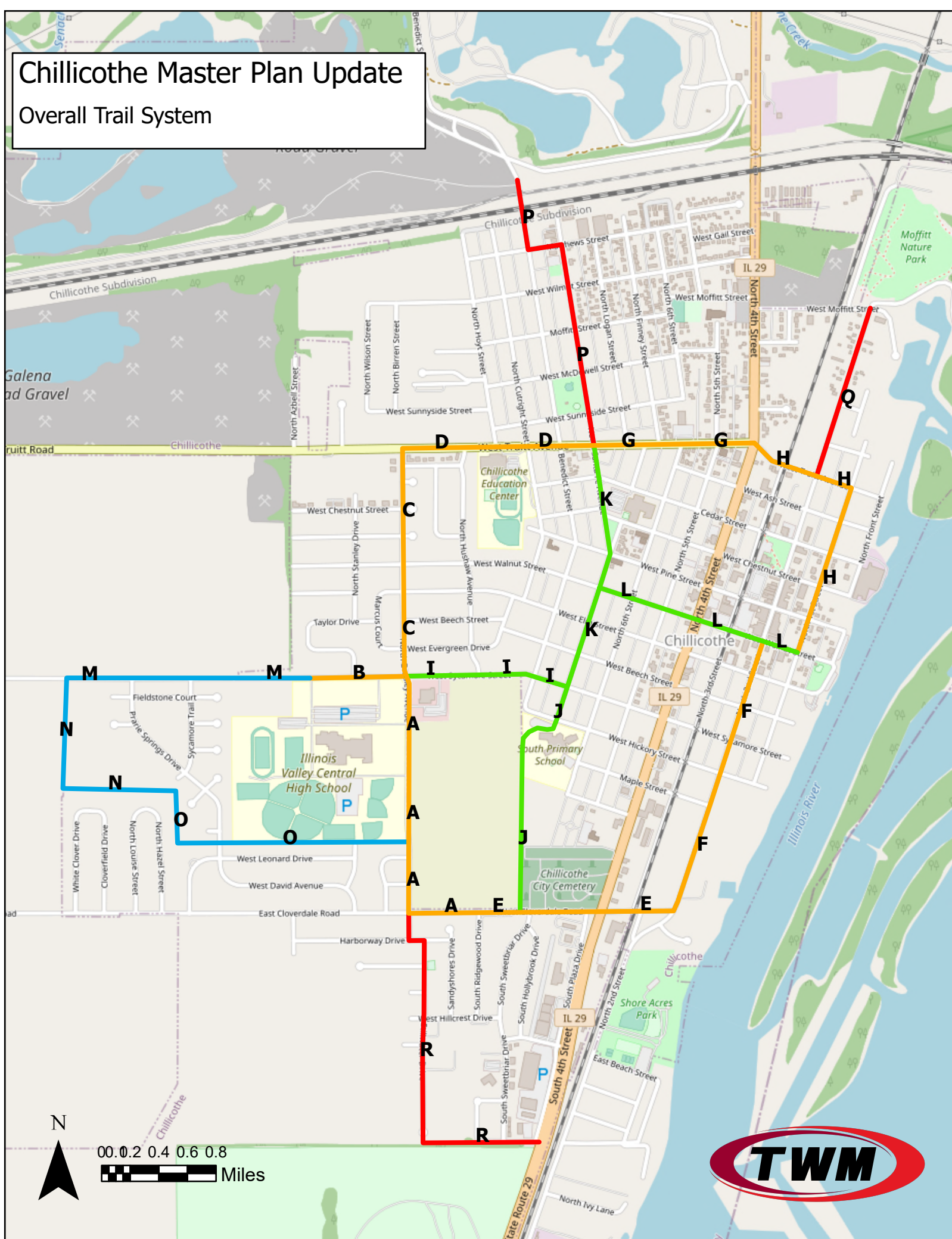
Chillicothe Crash Data



Attachment I
Proposed Trail System for Chillicothe

Chillicothe Master Plan Update

Overall Trail System



Attachment J
Cost Estimates



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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**
Project No.: 220445 - ITEP Application Fall 2022

Client: Chillicothe
Date of Estimate: 9/26/2022

SCOPE: Segment A - 0.5 mi on Bradley Ave From Sycamore to Cloverdale + 900' on Cloverdale to Ridgewood Dr.

LENGTH:
3500 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
AS SUBMITTED FOR SUCCESSFUL FALL 2022 ITEP GRANT APPLICATION					
	Earthwork	2500	Cu Yd	\$ 35.00	\$ 87,500.00
	Aggregate Base Course	2100	Ton	\$ 35.00	\$ 73,500.00
	Hot-Mix Asphalt Surface Course	515	Ton	\$ 165.00	\$ 84,975.00
	Bituminous Materials Prime Coat	10150	Pound	\$ 1.50	\$ 15,225.00
	PCC Driveway Pavement	50	Sq Yd	\$ 80.00	\$ 4,000.00
	Pavement Markings	1	L Sum	\$ 12,000.00	\$ 12,000.00
	Pavement Marking Removal	1	L Sum	\$ 5,000.00	\$ 5,000.00
	Driveway Pavement Removal	50	Sq Yd	\$ 15.00	\$ 750.00
	Pipe Culverts (Various Sizes)	100	Foot	\$ 120.00	\$ 12,000.00
	Bollards	9	Each	\$ 850.00	\$ 7,650.00
	Unsuitable remove and replace	200	Ton	\$ 120.00	\$ 24,000.00
	ADA Ramps (incl. curb and detectable warnings)	12	Each	\$ 5,000.00	\$ 60,000.00
	Sidewalk Removal	2800	Sq Ft	\$ 5.00	\$ 14,000.00
	Mid Block Xings w RRFB	2	Each	\$ 17,000.00	\$ 34,000.00
	Seeding, Special	1	Acre	\$ 5,000.00	\$ 5,000.00
	Mulch	1	Acre	\$ 5,000.00	\$ 5,000.00
	Traffic Control and Protection	1	L Sum	\$ 35,000.00	\$ 35,000.00
	Mobilization	1	L Sum	\$ 35,000.00	\$ 35,000.00
	Various Erosion Control Items	1	L Sum	\$ 15,000.00	\$ 15,000.00
	Tree Removal (Various Sizes)	50	Unit	\$ 80.00	\$ 4,000.00
	Signage	1	L Sum	\$ 10,000.00	\$ 10,000.00
	Construction Staking	1	L Sum	\$ 12,000.00	\$ 12,000.00
	Ornamental Tree, Species TBD	5	Each	\$ 600.00	\$ 3,000.00
	Special Waste Removal	1	L Sum	\$ 10,000.00	\$ 10,000.00
					\$ -
Construction Cost Sub-Total					\$ 568,600.00
Contingency					
Engineering					
	Phase I Engineering @	8%		\$	56,860.00
	Phase II Engineering @	6%		\$	45,490.00
	Construction Engineering @	8%		\$	68,240.00
Engineering Sub-Total					\$ 170,590.00
Land Acquisition					
Land Acquisition Sub-Total					\$ 100,000.00
Utilities					
Utility Relocations and/or Adjustments				\$0	\$ -
OPINION OF PROBABLE PROJECT COSTS					\$ 839,190.00

The quantities and prices shown are an engineering opinion of probable construction cost to assist the client in identifying the magnitude of construction cost. Costs are not based on contractor's bids, and actual construction cost may vary. Costs are estimated on present day costs and do not reflect future inflation or seasonal adjustments.

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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**

Project No.: 221257

Client: Chillicothe

Date of Estimate: 7/25/2023

SCOPE: Segment B - 1100' on Sycamore St From Bradley to HS entrance + 700' add'l sidewalk to HS tie in point

LENGTH:
1100 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
	EARTHWORK	815	CU YD	\$ 30.00	\$ 24,450.00
	AGGREGATE BASE COURSE, TYPE B, 6"	428	TON	\$ 30.00	\$ 12,840.00
	HMA SURFACE COURSE, MIX C, 2"	137	TON	\$ 135.00	\$ 18,495.00
	SIGNAGE AND PAVEMENT MARKINGS	1	L SUM	\$ 1,650.00	\$ 1,650.00
	TEMP EROSION CONTROL	1	L SUM	\$ 2,750.00	\$ 2,750.00
	FINAL SEEDING/MULCHING	0.51	ACRE	\$ 6,000.00	\$ 3,060.00
	PCC SIDEWALK, 4"	4200	SQ FT	\$ 10.00	\$ 42,000.00
	PCC DRIVEWAY PAVEMENT	266	SQ YD	\$ 85.00	\$ 22,610.00
	DRIVEWAY PAVEMENT REMOVAL	266	SQ YD	\$ 15.00	\$ 3,990.00
	ADA RAMPS	10	EACH	\$ 5,000.00	\$ 50,000.00
	CONCRETE CURB & GUTTER	275	FOOT	\$ 35.00	\$ 9,625.00
	PIPE CULVERTS/STORM SEWERS, VARIOUS SIZES	206	FOOT	\$ 85.00	\$ 17,531.25
	DRAINAGE STRUCTURES	2	EACH	\$ 2,000.00	\$ 4,000.00
	SIDEWALK REMOVAL	50	SQ FT	\$ 3.00	\$ 150.00
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
	TRAFFIC CONTROL AND PROTECTION	1	L SUM	\$ 8,526.1	\$ 8,526.05
	MOBILIZATION	1	L SUM	\$ 13,300.64	\$ 13,300.64
Construction Cost Sub-Total					\$ 234,977.94
Contingency					
Contingency @				15%	\$ 35,246.69
Engineering					
Phase I Engineering @				12%	\$ 32,426.96
Phase II Engineering @				10%	\$ 27,022.46
Construction Engineering @				10%	\$ 27,022.46
Engineering Sub-Total					\$ 86,471.88
Land Acquisition					
Land Acquisition (ROW or Easement)		5000	Sq. Ft.	\$1.50	\$ 7,500.00
Land Acquisition Services (Legals, Exhibits, Negotiations)		5	Parcels	\$5,000	\$ 25,000.00
Land Acquisition Sub-Total					\$ 32,500.00
Utilities					
Utility Relocations and/or Adjustments		1	L Sum	\$10,000	\$ 10,000.00
OPINION OF PROBABLE PROJECT COSTS					\$ 399,196.51

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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**

Project No.: 221257

Client: Chillicothe

Date of Estimate: 7/25/2023

SCOPE: Segment C - 2600' on Bradley from Sycamore to Truitt

LENGTH:
2600 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
	EARTHWORK	1926	CU YD	\$ 30.00	\$ 57,780.00
	AGGREGATE BASE COURSE, TYPE B, 6"	1011	TON	\$ 30.00	\$ 30,330.00
	HMA SURFACE COURSE, MIX C, 2"	324	TON	\$ 135.00	\$ 43,740.00
	SIGNAGE AND PAVEMENT MARKINGS	1	L SUM	\$ 3,900.00	\$ 3,900.00
	TEMP EROSION CONTROL	1	L SUM	\$ 6,500.00	\$ 6,500.00
	FINAL SEEDING/MULCHING	1.19	ACRE	\$ 6,000.00	\$ 7,140.00
	PCC DRIVEWAY PAVEMENT	417	SQ YD	\$ 85.00	\$ 35,445.00
	DRIVEWAY PAVEMENT REMOVAL	417	SQ YD	\$ 15.00	\$ 6,255.00
	ADA RAMPS	16	EACH	\$ 5,000.00	\$ 80,000.00
	CONCRETE CURB & GUTTER	390	FOOT	\$ 35.00	\$ 13,650.00
	PIPE CULVERTS/STORM SEWERS, VARIOUS SIZES	293	FOOT	\$ 85.00	\$ 24,862.50
	DRAINAGE STRUCTURES	2	EACH	\$ 2,000.00	\$ 4,000.00
	SIDEWALK REMOVAL	11600	SQ FT	\$ 3.00	\$ 34,800.00
	MSE BLOCK RETAINING WALL	1500	SQ FT	\$ 75.00	\$ 112,500.00
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
	TRAFFIC CONTROL AND PROTECTION	1	L SUM	\$ 18,436.1	\$ 18,436.10
	MOBILIZATION	1	L SUM	\$ 28,760.32	\$ 28,760.32
Construction Cost Sub-Total					\$ 508,098.92
Contingency					
Contingency @				15%	\$ 76,214.84
Engineering					
Phase I Engineering @				10%	\$ 58,431.38
Phase II Engineering @				8%	\$ 46,745.10
Construction Engineering @				8%	\$ 46,745.10
Engineering Sub-Total					\$ 151,921.58
Land Acquisition					
Land Acquisition (ROW or Easement)		23400	Sq. Ft.	\$1.50	\$ 35,100.00
Land Acquisition Services (Legals, Exhibits, Negotiations)		18	Parcels	\$5,000	\$ 90,000.00
Land Acquisition Sub-Total					\$ 125,100.00
Utilities					
Utility Relocations and/or Adjustments		1	L Sum	\$20,000	\$ 20,000.00
OPINION OF PROBABLE PROJECT COSTS					\$ 881,335.33

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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**

Project No.: 221257

Client: Chillicothe

Date of Estimate: 7/25/2023

SCOPE: Segment D - 2200' on Truitt, from Bradley to Santa Fe Ave

LENGTH:
2200 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
	EARTHWORK	1630	CU YD	\$ 30.00	\$ 48,900.00
	AGGREGATE BASE COURSE, TYPE B, 6"	856	TON	\$ 30.00	\$ 25,680.00
	HMA SURFACE COURSE, MIX C, 2"	274	TON	\$ 135.00	\$ 36,990.00
	SIGNAGE AND PAVEMENT MARKINGS	1	L SUM	\$ 3,300.00	\$ 3,300.00
	TEMP EROSION CONTROL	1	L SUM	\$ 5,500.00	\$ 5,500.00
	FINAL SEEDING/MULCHING	1.01	ACRE	\$ 6,000.00	\$ 6,060.00
	PCC DRIVEWAY PAVEMENT	350	SQ YD	\$ 85.00	\$ 29,750.00
	DRIVEWAY PAVEMENT REMOVAL	350	SQ YD	\$ 15.00	\$ 5,250.00
	ADA RAMPS	16	EACH	\$ 5,000.00	\$ 80,000.00
	CONCRETE CURB & GUTTER	330	FOOT	\$ 35.00	\$ 11,550.00
	PIPE CULVERTS/STORM SEWERS, VARIOUS SIZES	248	FOOT	\$ 85.00	\$ 21,037.50
	DRAINAGE STRUCTURES	2	EACH	\$ 2,000.00	\$ 4,000.00
	SIDEWALK REMOVAL	10400	SQ FT	\$ 3.00	\$ 31,200.00
	MSE BLOCK RETAINING WALL	2500	SQ FT	\$ 75.00	\$ 187,500.00
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
	TRAFFIC CONTROL AND PROTECTION	1	L SUM	\$ 19,868.7	\$ 19,868.70
	MOBILIZATION	1	L SUM	\$ 30,995.17	\$ 30,995.17
Construction Cost Sub-Total					\$ 547,581.37
Contingency					
Contingency @				15%	\$ 82,137.21
Engineering					
Phase I Engineering @				10%	\$ 62,971.86
Phase II Engineering @				8%	\$ 50,377.49
Construction Engineering @				8%	\$ 50,377.49
Engineering Sub-Total					\$ 163,726.83
Land Acquisition					
Land Acquisition (ROW or Easement)		22000	Sq. Ft.	\$1.50	\$ 33,000.00
Land Acquisition Services (Legals, Exhibits, Negotiations)		15	Parcels	\$5,000	\$ 75,000.00
Land Acquisition Sub-Total					\$ 108,000.00
Utilities					
Utility Relocations and/or Adjustments		1	L Sum	\$50,000	\$ 50,000.00
OPINION OF PROBABLE PROJECT COSTS					\$ 951,445.41

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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**

Project No.: 221257

Client: Chillicothe

Date of Estimate: 7/25/2023

SCOPE: Segment E - 2200' on Cloverdale Rd, from Ridgewood Dr to 2nd Street; assume no signal upgrades at IL 29 (since done by IDOT in 2023).

LENGTH:
2200 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
	EARTHWORK	2444	CU YD	\$ 30.00	\$ 73,320.00
	AGGREGATE BASE COURSE, TYPE B, 6"	856	TON	\$ 30.00	\$ 25,680.00
	HMA SURFACE COURSE, MIX C, 2"	274	TON	\$ 135.00	\$ 36,990.00
	SIGNAGE AND PAVEMENT MARKINGS	1	L SUM	\$ 3,300.00	\$ 3,300.00
	TEMP EROSION CONTROL	1	L SUM	\$ 5,500.00	\$ 5,500.00
	FINAL SEEDING/MULCHING	1.01	ACRE	\$ 6,000.00	\$ 6,060.00
	PCC DRIVEWAY PAVEMENT	375	SQ YD	\$ 85.00	\$ 31,875.00
	DRIVEWAY PAVEMENT REMOVAL	375	SQ YD	\$ 15.00	\$ 5,625.00
	ADA RAMPS	10	EACH	\$ 5,000.00	\$ 50,000.00
	CONCRETE CURB & GUTTER	1000	FOOT	\$ 35.00	\$ 35,000.00
	PIPE CULVERTS/STORM SEWERS, VARIOUS SIZES	1000	FOOT	\$ 85.00	\$ 85,000.00
	DRAINAGE STRUCTURES	9	EACH	\$ 2,000.00	\$ 18,000.00
	SIDEWALK REMOVAL	2050	SQ FT	\$ 3.00	\$ 6,150.00
	RAILROAD CROSSING	1	L SUM	\$ 20,000.00	\$ 20,000.00
	RR FLAGGING/PERMIT/ETC	1	L SUM	\$ 20,000.00	\$ 20,000.00
	TREE REMOVAL	24	EACH	\$ 1,000.00	\$ 24,000.00
	FLASHING BEACON ON SECOND STREET @ PARK X-ING	1	L SUM	\$ 15,000.00	\$ 15,000.00
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
	TRAFFIC CONTROL AND PROTECTION	1	L SUM	\$ 18,460.00	\$ 18,460.00
	MOBILIZATION	1	L SUM	\$ 28,797.60	\$ 28,797.60
Construction Cost Sub-Total					\$ 508,757.60
Contingency					
Contingency @				15%	\$ 76,313.64
Engineering					
Phase I Engineering @				10%	\$ 58,507.12
Phase II Engineering @				8%	\$ 46,805.70
Construction Engineering @				8%	\$ 46,805.70
Engineering Sub-Total					\$ 152,118.52
Land Acquisition					
Land Acquisition (ROW or Easement)		19800	Sq. Ft.	\$1.50	\$ 29,700.00
Land Acquisition Services (Legals, Exhibits, Negotiations)		4	Parcels	\$5,000	\$ 20,000.00
Land Acquisition Sub-Total					\$ 49,700.00
Utilities					
Utility Relocations and/or Adjustments		1	L Sum	\$20,000	\$ 20,000.00
OPINION OF PROBABLE PROJECT COSTS					\$ 806,889.76

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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**

Project No.: 221257

SCOPE: Segment F - 1400' separate SUP on 2nd Street, from Cloverdale Rd to north of Maple St + Add'l 1900' Bike Lanes only on 2nd Street, from north of Maple St. to Walnut St (assume Road Diet on 40' wide roadway)

Client: Chillicothe

Date of Estimate: 7/25/2023

LENGTH:
1400 FT.
1900 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
	1400' SEPARATE BIKE TRAIL COSTS				
	EARTHWORK	1037	CU YD	\$ 30.00	\$ 31,110.00
	AGGREGATE BASE COURSE, TYPE B, 6"	544	TON	\$ 30.00	\$ 16,320.00
	HMA SURFACE COURSE, MIX C, 2"	174	TON	\$ 135.00	\$ 23,490.00
	SIGNAGE AND PAVEMENT MARKINGS	1	L SUM	\$ 2,100.00	\$ 2,100.00
	TEMP EROSION CONTROL	1	L SUM	\$ 3,500.00	\$ 3,500.00
	FINAL SEEDING/MULCHING	0.64	ACRE	\$ 6,000.00	\$ 3,840.00
	PCC DRIVEWAY PAVEMENT	458	SQ YD	\$ 85.00	\$ 38,930.00
	DRIVEWAY PAVEMENT REMOVAL	458	SQ YD	\$ 15.00	\$ 6,870.00
	ADA RAMPS	4	EACH	\$ 5,000.00	\$ 20,000.00
	CONCRETE CURB & GUTTER	700	FOOT	\$ 35.00	\$ 24,500.00
	PIPE CULVERTS/STORM SEWERS, VARIOUS SIZES	700	FOOT	\$ 85.00	\$ 59,500.00
	DRAINAGE STRUCTURES	6	EACH	\$ 2,000.00	\$ 12,000.00
	SIDEWALK REMOVAL	500	SQ FT	\$ 3.00	\$ 1,500.00
	TREE REMOVAL	8	EACH	\$ 1,000.00	\$ 8,000.00
					\$ -
	+ 1900' ROAD DIET COSTS FOR STRIPE BIKE LANES:				\$ -
	PAVEMENT MARKINGS (5 lines)	9500	LIN FT	\$ 2.00	\$ 19,000.00
	EX SKIP-DASH PAVEMENT MARKING REMOVAL	475	SQ FT	\$ 5.00	\$ 2,375.00
	PAVEMENT MARKINGS LETTERS & SYMBOLS (bike & arrow)	150	SQ FT	\$ 50.00	\$ 7,500.00
	SIGNAGE	1	L SUM	\$ 5,000.00	\$ 5,000.00
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
	TRAFFIC CONTROL AND PROTECTION	1	L SUM	\$ 11,421.4	\$ 11,421.40
	MOBILIZATION	1	L SUM	\$ 17,817.38	\$ 17,817.38
Construction Cost Sub-Total					\$ 314,773.78
Contingency					
Contingency @				15%	\$ 47,216.07
Engineering					
Phase I Engineering @				12%	\$ 43,438.78
Phase II Engineering @				10%	\$ 36,198.99
Construction Engineering @				10%	\$ 36,198.99
Engineering Sub-Total					\$ 115,836.75
Land Acquisition					
Land Acquisition (ROW or Easement)		12600	Sq. Ft.	\$1.50	\$ 18,900.00
Land Acquisition Services (Legals, Exhibits, Negotiations)		18	Parcels	\$5,000	\$ 90,000.00
Land Acquisition Sub-Total					\$ 108,900.00
Utilities					
Utility Relocations and/or Adjustments		1	L Sum	\$20,000	\$ 20,000.00
OPINION OF PROBABLE PROJECT COSTS					\$ 606,726.60

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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**

Project No.: 221257

Client: Chillicothe

Date of Estimate: 7/25/2023

SCOPE: Segment G - 1800' on Truitt Ave, from Santa Fe Ave to IL 29 (assume no signal upgrades at IL 29 since IDOT completed in 2023)

LENGTH:
1800 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
	EARTHWORK	1333	CU YD	\$ 30.00	\$ 39,990.00
	AGGREGATE BASE COURSE, TYPE B, 6"	700	TON	\$ 30.00	\$ 21,000.00
	HMA SURFACE COURSE, MIX C, 2"	224	TON	\$ 135.00	\$ 30,240.00
	SIGNAGE AND PAVEMENT MARKINGS	1	L SUM	\$ 2,700.00	\$ 2,700.00
	TEMP EROSION CONTROL	1	L SUM	\$ 4,500.00	\$ 4,500.00
	FINAL SEEDING/MULCHING	0.83	ACRE	\$ 6,000.00	\$ 4,980.00
	PCC DRIVEWAY PAVEMENT	333	SQ YD	\$ 85.00	\$ 28,305.00
	DRIVEWAY PAVEMENT REMOVAL	333	SQ YD	\$ 15.00	\$ 4,995.00
	ADA RAMPS	13	EACH	\$ 5,000.00	\$ 65,000.00
	CONCRETE CURB & GUTTER	270	FOOT	\$ 35.00	\$ 9,450.00
	PIPE CULVERTS/STORM SEWERS, VARIOUS SIZES	203	FOOT	\$ 85.00	\$ 17,212.50
	DRAINAGE STRUCTURES	2	EACH	\$ 2,000.00	\$ 4,000.00
	SIDEWALK REMOVAL	8200	SQ FT	\$ 3.00	\$ 24,600.00
	MSE BLOCK RETAINING WALL	1000	SQ FT	\$ 75.00	\$ 75,000.00
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
	TRAFFIC CONTROL AND PROTECTION	1	L SUM	\$ 13,278.9	\$ 13,278.90
	MOBILIZATION	1	L SUM	\$ 20,715.08	\$ 20,715.08
Construction Cost Sub-Total					\$ 365,966.48
Contingency					
Contingency @				15%	\$ 54,894.97
Engineering					
Phase I Engineering @				10%	\$ 42,086.15
Phase II Engineering @				8%	\$ 33,668.92
Construction Engineering @				8%	\$ 33,668.92
Engineering Sub-Total					\$ 109,423.98
Land Acquisition					
Land Acquisition (ROW or Easement)		16200	Sq. Ft.	\$1.50	\$ 24,300.00
Land Acquisition Services (Legals, Exhibits, Negotiations)		13	Parcels	\$5,000	\$ 65,000.00
Land Acquisition Sub-Total					\$ 89,300.00
Utilities					
Utility Relocations and/or Adjustments		1	L Sum	\$20,000	\$ 20,000.00
OPINION OF PROBABLE PROJECT COSTS					\$ 639,585.44

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OPINION OF PROBABLE CONSTRUCTION COST

Project: **Trail Master Plan**

Project No.: 221257

SCOPE: Segment H - 1200' on Truitt Ave, from IL 29 to 1st St. (assume no signal upgrades at IL 29 since IDOT completed in 2023) + 1600' on 1st Street, from Truitt to Walnut. **No**

Existing Sidewalk

Client: Chillicothe

Date of Estimate: 7/25/2023

LENGTH:

2800 FT.

Item No.	Item Description	Quantity	Unit	Unit Cost	Total Item Cost
	EARTHWORK	5185	CU YD	\$ 30.00	\$ 155,550.00
	AGGREGATE BASE COURSE, TYPE B, 6"	1089	TON	\$ 30.00	\$ 32,670.00
	HMA SURFACE COURSE, MIX C, 2"	348	TON	\$ 135.00	\$ 46,980.00
	SIGNAGE AND PAVEMENT MARKINGS	1	L SUM	\$ 4,200.00	\$ 4,200.00
	TEMP EROSION CONTROL	1	L SUM	\$ 7,000.00	\$ 7,000.00
	FINAL SEEDING/MULCHING	1.29	ACRE	\$ 6,000.00	\$ 7,740.00
	PCC DRIVEWAY PAVEMENT	889	SQ YD	\$ 85.00	\$ 75,565.00
	DRIVEWAY PAVEMENT REMOVAL	889	SQ YD	\$ 15.00	\$ 13,335.00
	ADA RAMPS	13	EACH	\$ 5,000.00	\$ 65,000.00
	PIPE CULVERTS/STORM SEWERS, VARIOUS SIZES	1500	FOOT	\$ 85.00	\$ 127,500.00
	DRAINAGE STRUCTURES	8	EACH	\$ 2,000.00	\$ 16,000.00
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
					\$ -
	TRAFFIC CONTROL AND PROTECTION	1	L SUM	\$ 22,061.6	\$ 22,061.60
	MOBILIZATION	1	L SUM	\$ 34,416.10	\$ 34,416.10
Construction Cost Sub-Total					\$ 608,017.70
Contingency					
Contingency @				15%	\$ 91,202.65
Engineering					
Phase I Engineering @				10%	\$ 69,922.04
Phase II Engineering @				8%	\$ 55,937.63
Construction Engineering @				8%	\$ 55,937.63
Engineering Sub-Total					\$ 181,797.29
Land Acquisition					
Land Acquisition (ROW or Easement)		25200	Sq. Ft.	\$1.50	\$ 37,800.00
Land Acquisition Services (Legals, Exhibits, Negotiations)		25	Parcels	\$5,000	\$ 125,000.00
Land Acquisition Sub-Total					\$ 162,800.00
Utilities					
Utility Relocations and/or Adjustments		1	L Sum	\$100,000	\$ 100,000.00
OPINION OF PROBABLE PROJECT COSTS					\$ 1,143,817.64

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Attachment K
Available Bike/Ped Grants

Funding Opportunities for Pedestrian/Bike Projects

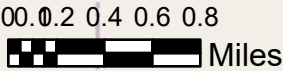
Acronym	Program	Awarding Agency	Source	Max Award Amount	Match Ratio	Competition	General Description	Eligible Items	Typical Grant Date
STU	Surface Transportation Urban	IDOT	Federal	sliding scale	80/20	within MPO	Transportation infrastructure improvements. Communities within the Peoria urbanized area can apply for this funding to build or improve roadways that include bicycle accommodations or to build separated bicycle paths.	ROW, PE, CE, Constr	Yearly, Due in January
TAP	Transportation Alternative Program	IDOT	Federal	sliding scale	80/20	within MPO	For bicycle paths, sidewalks, multi-modal connectivity, etc. Communities within the Peoria urbanized area can apply.	ROW, PE, CE, Constr	Yearly, Due in January
ITEP	Illinois Transportation Enhancmeent Program	IDOT	Fed and/or State	\$1,000,000	80/20	statewide	Transportation related enhancements designed to strengthen the cultural, aesthetic, and environmental aspects of the intermodal transportation system. Specifically set-aside for transportation alternatives such as bicycle infrastructure and the conversion of abandoned railroad corridors to trails.	ROW, PE, CE, Constr	Fall, even years
SRTS	Safe Routes to School	IDOT	Fed & State	\$250,000	Currently 100%	statewide	Safe Routes to School Program funds projects to enable and encourage children to walk and bicycle to school, improve safety and reduce traffic and air pollution in the vicinity of schools	ROW, PE, CE, Constr	Fall, odd years
HSIP	Highway Safety Improvement Program	IDOT	Federal	sliding scale	90/10	statewide	Highway Safety Improvement Program provides funding for safety improvement projects that will achieve a significant reduction in traffic fatalities and serious injuries on all public roads.	ROW, PE, CE, Constr	Yearly, Due in June
MFT	Motor Fuel Tax	IDOT	State/Fuel Tax	n/a	100	local allotment	Provides funds for the purpose of improving, maintaining, repairing, and constructing highways. Can also be used for sidewalks.	ROW, PE, CE, Constr	ongoing
BPP	Bike Path Program	IDNR	State (IDNR)	\$200,000	50/50	statewide	Recreational trail construction including site clearing, grading, drainage, bridges, access control devices, fences & signs.	Constr	Spring, yearly or bi-yearly
RTP	Recreational Trail Program	IDNR	Federal	\$200,000	80/20	statewide	Provides grants to eligible local governments for projects that develop or rehabilitate bike paths and/or acquire land for bike path development.	Constr	Spring, yearly or bi-yearly
OSLAD	Open Space Lands Acquisition and Developmen	IDNR	State (IDNR)	\$600,000	50/50	statewide	Program is a state-financed grant- Park roads and paths, parking, utilities and restrooms.	Constr	Spring, various years


Attachment L


Proposed Trailhead Locations


Chillicothe Master Plan Update

Trails, trailheads, and kiosks



 Kiosk

 Trailhead

 New Trails

