

CORRIDOR MASTER PLAN

2022













INTRODUCTION



The Wabash River Greenway (WRG), as conceived, is a significant recreational amenity being planned along the Wabash River, as it flows freely east to west, then south through Cass, Carroll, Tippecanoe, Warren and Fountain Counties, all within the ten-county Wabash Heartland Innovation Network (WHIN) region. When realized, this recreational amenity will create a nationally significant quality of life attraction along Indiana's River, the mighty Wabash. Planning now underway will ensure this Indiana resource will become an economic development driver for new public and private investment; utilize technology to enhance the user experience; improve water quality and aquatic habitat and restore a healthy riparian corridor ecology as the premier river system of the Midwest.

Humankind has, for centuries, found living on and near the Wabash River appealing. Native American Indians lived along its banks, fishing the bountiful waters and traveling by canoe up and down its course. When European settlers arrived, the river facilitated

the Great American Expansion by providing boat and steamboat transportation and provisions for settlers. The Wabash and Erie Canal was conceived as a visionary transportation network for the state, connecting state commerce to cities along the Great Lakes, the Atlantic Ocean, and the Gulf of Mexico. Although gaining status as the longest canal of the western hemisphere, railroads soon brought that vision to a standstill with the last Indiana canal boat docking in 1874, ending the canal era.

Since then, the automobile has replaced rivers, canals and railroads as the primary mode of transportation, leaving our rivers abandoned in many respects and mistreated in others. Most cities turned their backs on their rivers and lined them with industries that too often polluted the very waters that attracted and sustained Native American settlements.

Recognizing the need to reverse the Wabash River's decline, the combined generosity of North Central Health Services, the City of Lafayette, the City of West Lafayette, Tippecanoe County and Purdue University led to the formation of the Wabash River Enhancement Corporation (WREC) in 2004 with river restoration efforts focused on Tippecanoe County.

Driven by its mission to undertake projects and programs to improve and enhance water quality and aguatic life within the Wabash River and its tributaries, WREC has partnered with Lafayette and West Lafayette, as well as local businesses and industries to accomplish measurable improvements in Wabash River systems health. This has contributed to the quality of life of the Greater Lafayette community, as more residents discover the beauty of the Wabash River from a canoe,



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kayak or riverboat. WREC's success in Tippecanoe County has prompted a WHIN supported five-fold expansion of its mission: to broaden its reach from one Wabash River County to five. WREC has embarked upon this significant mission expansion for multiple reasons. First, to celebrate our great Wabash River heritage as an early transportation and commerce corridor for fur traders and settlers; and later, to tell the story behind the longest canal in the Western Hemisphere, the Wabash & Erie Canal. Most importantly however, WREC has undertaken this challenge to deliver a fivefold increase in their important work to improve aquatic habitat in the

Wabash River and reduce runoff pollutants, while bringing active living facilities to the region. This work is crucial to converting Indiana's River into a regional and national water resource attraction to be experienced within a tapestry of greenways and blueways woven throughout West Central Indiana along ninety river miles and over 230 greenway miles.

Since its founding, WREC has been actively raising awareness of this river resource, studying river system health and aquatic life, encouraging area residents and students to experience the river from the river, identifying and measuring pollutants, mitigating floodplain brownfields

and promoting riparian habitat restorations. WREC's important work has improved river system ecology while changing public perceptions of the potential that this natural resource has to offer. WREC has also been instrumental in leading local efforts to establish a Wabash River Greenway/Blueway within Tippecanoe County through land acquisitions, planning and design initiatives. Additional river corridor brownfield sites will be identified as part of the WRG corridor master plan and prioritized for environmental mitigation and reuse, either as recreational sites, new development and/or riparian landscape restorations.

The Wabash River Greenway brings a new era of purpose and benefit to this river corridor: a unique destination recreation greenway/ blueway amenity. When completed over 230 miles of greenway corridor routes will exist along both sides of the Wabash, with looped connections at existing bridge crossings. Woven into this hiking and biking amenity will be twenty-nine river access points for canoeing, kayaking and boating recreation. Twenty-three are existing State of Indiana DNR managed access sites. Six more are proposed along the corridor's ninety river miles to improve blueway access up and down the Wabash River Blueway. Discussions during planning efforts



INTRODUCTION

have generated interest with canoe and kayak liveries regarding business enterprises to host services that provide for same day greenway and blueway experiences by combining Bike Share Stations with Canoe & Kayak Share Stations. Business programming will provide customer parking while cyclists bike upstream to a launch site with a Canoe & Kayak Share Station. Cyclists then secure their bicycles to provided racks, check out their canoe or kayak and paddle downstream to their parked vehicle. Those cyclists riding on their own bikes simply retrieve their own bikes on their way home.

Supporting WHIN's mission to utilize technology and the internet of things to augment user experiences and

facilitate active living lifestyles, the Wabash River Greenway provides opportunities to lay broad band trunk lines during corridor development and construction. New recreational facilities and place making amenities celebrating local history and culture will come alive through mobile applications that enrich the Wabash River Greenway experience.

The daily lives of residents in all five counties and the leisure time of visitors and travelers enjoying the greenway will be made even more enjoyable through mobile applications supporting wayfinding to unique natural features, lodging services, dining opportunities, local attractions, provisions, camping facilities, medical services and

more. The 90-mile Greenway/
Blueway will bring regionally and
nationally recognized quality of life
active living amenities and facilities
where residents and visitors can
recreate while experiencing the river
environment. Embellishing those
experiences will be unanticipated
encounters and observations of the
aquatic life, waterfowl, mammals,
birds, and reptiles that thrive in
the corridor, both within the rural
countryside as well as within the
region's cities and towns.

Technology applications will enhance the user experience with information on area flora and fauna, local attractions, history and culture, nearest river public access sites, greenway/blueway experiences, changing weather conditions, visitor bureau event listings, dining venues, overnight accommodations, etc.

Notably, greenway users will not lose their signal when traveling the Wabash River Greenway in rural areas, as greenway corridor construction will include a broadband trunk line, bringing the Internet of Things (IoT) to wherever one may be, whether on the greenway or along the river corridor.

The anticipation behind the WRG is gaining momentum, in no small part, due to the ability of WREC to form partnerships and alliances with numerous organizations, agencies, institutions and jurisdictions to bring their visionary mission to life.

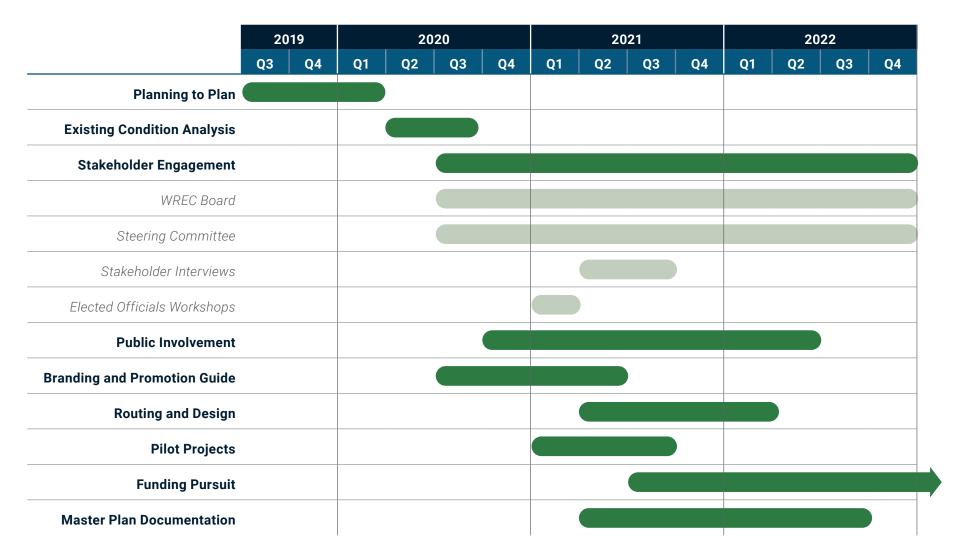


GUIDING PRINCIPLES

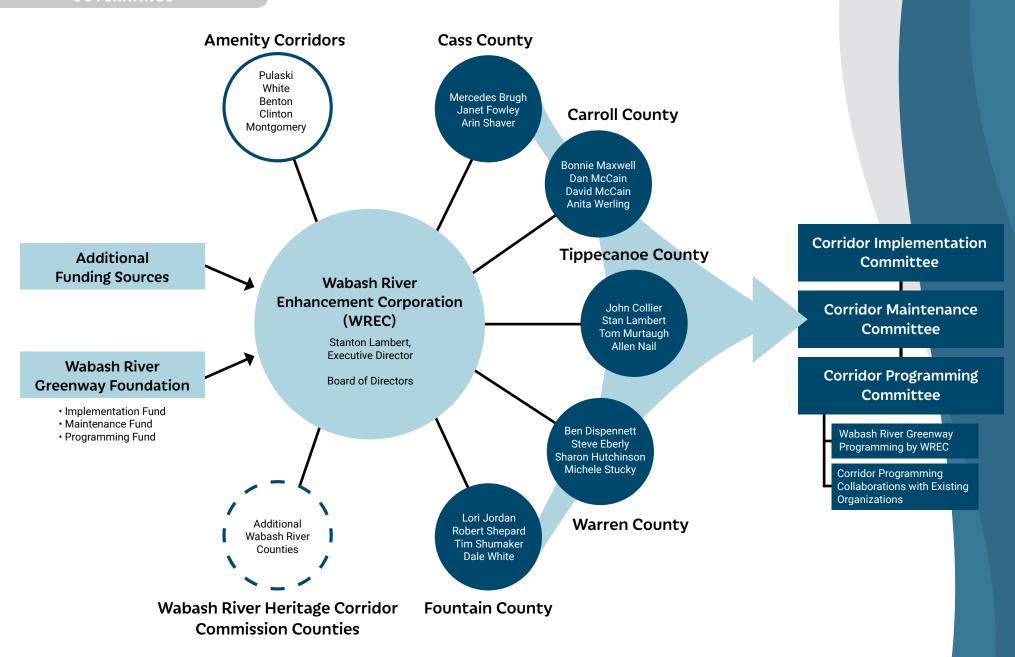
- Protect Fundamental **Resources and Values**
 - **2** Connect the Greenway to Other Places
 - Provide Opportunities for Many Greenway Experiences
 - Landards

 Design Greenway Improvements and Facilities to the Highest Standards
 - **5** Use the Greenway as a **Classroom and Laboratory**
 - 6 Work Cooperatively with Landowners
 - **Promote** Public Awareness and Support
 - Build Upon Past Accomplishments and Current Initiatives
 - Promote Partnerships and Recognize Leaders

Project Timeline







STEERING COMMITTEE

Steering Committee

| FOUNTAIN COUNTY | Tim Shumaker | Fountain County Commissioner |
|----------------------|------------------|------------------------------------------------------|
| | Robert Shepard | Former Mayor of Attica |
| | Dale White | Western Indiana Community Foundation |
| | Lori Jordan | Fountain County Soil and Water Conservation District |
| TIPPECANOE COUNTY | Tom Murtaugh | Tippecanoe County Commissioner |
| | John Collier | Lafayette Economic Development Department |
| | Stan Lambert | Wabash River Enhancement Corporation |
| | Allen Nail | Tippecanoe County Parks |
| PULASKI COUNTY | Fred Kasten | Panhandle Pathway Trail Group |
| | John Bawcum | Panhandle Pathway Trail Group |
| CASS COUNTY | Arin Shaver | Logansport / Cass County Planning |
| | Janet Fawley | Logansport Parks & Recreation Dept |
| | Mercedes Brugh | Trail Advocate, Little Turtle Waterway |
| CARROLL COUNTY | Anita Werling | Mayor, City of Delphi |
| | Dan McCain | Wabash & Erie Canal Association |
| | Bonnie Maxwell | Heartland Heritage |
| | David McCain | Trails Advocate |
| WARREN COUNTY | Sharon Hutchison | Warren County Council |
| | Michele Stucky | Warren County Community Foundation |
| | Ben Dispennett | Warren County Economic Development |
| | Steve Eberly | Wabash River Heritage Corridor |



Anticipated Outcomes

Regional cooperation and collaboration between economic development initiatives and quality of life investments have proven to be effective means toward building economic resiliency and talent attraction and retention. The scale and scope of this Greenway/Blueway project- covering ninety river miles and over two hundred and thirty trail miles- has engaged and solicited input from politicians, business and industry leaders, economic development directors, parks and recreation superintendents representing five counties and eight river cities and towns, along public engagement open houses and online surveys. The branding program for the project will provide users of this destination recreation greenway/blueway wayfinding that enhances their user experience, educates them on local history and culture, while also directing them to local businesses, dining, entertainment and hospitality services. WREC's oversight of this destination recreation Greenway/Blueway will guide cross-jurisdictional coordination of corridor management, greenway/blueway maintenance and corridor events. A summary of anticipated outcomes follows.



ANTICIPATED OUTCOMES

ECONOMIC RESILIENCY

Rural Indiana communities have largely been experiencing population declines, talent loss and disinvestment. Regional collaborations between jurisdictions have been shown to be an effective tool in reversing those challenges. The Trail Towns guide referenced herein is a valuable tool to promote the cross jurisdictional collaborations and promotions necessary for city and town merchants and service providers to successfully take advantage of the traffic generated by destination recreation greenways/blueways. WREC and local jurisdictional activities programming along this destination recreation corridor will be important to encourage locals and out of town visitors to experience the amenities within community event gatherings. Recreation tourists are seeking unique experiences in greenway/ blueway recreation, dining, entertainment, personal services, and hospitality. As planned, the Wabash River Greenway/ Blueway will be appealing to adventure recreation tourists, bringing increased economic activity to Wabash River cities and towns.



ACTIVE LIVING BENEFITS

Unfortunately, Indiana's health statistics do not compete well with other states. The majority of Indiana's health statistics can be traced back to inactivity and lack of exercise. Facilities such as those being planned within the Wabash River Greenway/Blueway, are attractive to residents when access to the facilities is nearby, convenient and safe to use. Area residents are much more apt to develop healthy habits when facilities are made available to accommodate active living opportunities. Unfortunately, much of our rural Indiana environment is not conducive to outdoor recreation and exercise. This project will be a major step forward in addressing those public infrastructure challenges in west central Indiana and will be a catalyst to improving Indiana's workforce health in the region.



TALENT ATTRACTION **AND RETENTION**

The place making amenities associated with the Wabash River Greenway/Blueway include a variety of functional elements and features, including: separated greenway trails, side paths along existing rights of way, trail heads for convenient access, clearly crafted wayfinding to enhance the user experience, information celebrating local history and culture, vantagepoints for viewsheds, and enframed vistas; all working together to create a sense of place and wellbeing. One's attachment to the place in which they live- is directly related to the opportunities that one has available to engage socially and recreationally with those with whom they share their community. Facilities such as the Wabash River Greenway/Blueway provide many opportunities for personal time spent in nature, active living toward improved mental health preparedness and "Social Connectivity" - or strong connections to people, places, history, culture and spaces that bring greater meaning to one's day to day living experiences. These all combine to increase the ability of a community to retain talent and attract talent, which is crucial to building strong and economically resilient communities.





PREVIOUS PLANS



SUPPORT TRAIL DEVELOPMENT

Kimley-Horn reviewed study area planning documents from each of the counties. cities and towns to assemble documented public interest in trails and greenways and to align the development and recommendations of the Wabash River Greenway Corridor Master Plan with local interests. The following represents a summary of information within existing City and County documents that is pertinent to the current process.

Previous Plans

CASS COUNTY

LOGANSPORT BIKE AND PEDESTRIAN MASTER PLAN | 2018

> Establishes development standards for the Bicycle & Pedestrian Master Plan implementation with proposed routes and improved connectivity.

LOGANSPORT COMPREHENSIVE PLAN | 2009, updated 2015

- > Capitalize on Logansport's scenic natural environment
- > Accommodate cultural and social needs of the community
- > Encourage healthy living

LOGANSPORT PARKS AND RECREATION MASTER PLAN | 2018

> Extend Little Turtle Waterway from downtown to France Park and further north to the Panhandle Pathway.

CASS COUNTY COMPREHENSIVE PLAN | 2009

- > Focus county recreational resources on regional attractions
- > Develop a recreational trail system that connects key destinations in the county while contributing to the regional trail network
- > Connect France Park to Panhandle Pathway and promote park as regional amenity
- > Connect trail segments into Chief Logan Run and update blueway water access facilities

Source: CBA

CARROLL COUNTY

DELPHI TRAILS MAP

Updated 2011

> Delphi hosts the most trail miles per capita in Indiana and welcomes the Wabash River Greenway with connections to their historic Courthouse Square and the Wabash & Erie Canal Interpretive Center

CARROLL COUNTY **COMPREHENSIVE PLAN**

2008

- > Carroll County should support trail development for quality of life and talent attraction benefits. Trail development should focus on linking existing trails with destinations, such as parks, employment, shopping, neighborhoods, schools, and libraries
- > Promote and support additional trail systems using waterways, rail corridors, and utility corridors

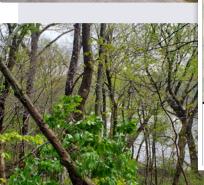
PREVIOUS PLANS

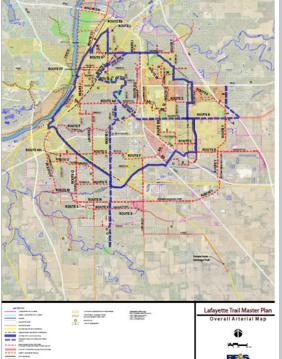


TIPPECANOE COUNTY

The City of Lafayette, the City of West Lafayette, Tippecanoe County Area Plan Commission and the Wabash River Enhancement Corporation have undertaken many studies, master plans and other types of planning initiatives that have identified the need and desired locations for trails and trail connectivity within the region. Pertinent selections of those plans and their relevance to the Wabash River Greenway are listed below. Public engagement via online community attitude surveys, open houses, social media updates, stakeholder meetings and focus groups have been at the forefront of each master plan process.







LAFAYETTE TRAILS **MASTER PLAN**

2012

A plan evaluating the existing trail network within the City of Lafayette and a portion of West Lafayette.

- > Proposes to connect three separate trails between Lafayette and West Lafayette
- > Utilizes the Wabash Heritage Trail as a connector to regions beyond Lafayette's corporate limits

TIPPECANOE COUNTY -2045 METROPOLITAN TRANSPORTATION PLAN | 2017

Documents the long range vision for trail transportation within the county.

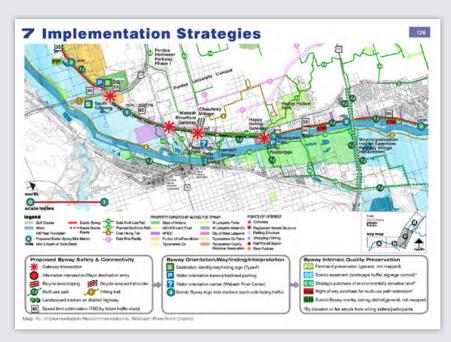
- > Includes Sagamore Parkway connector trail
- > Proposes extending the trail east of 9th St to link additional neighborhoods



WABASH RIVER SCENIC BYWAY **MANAGEMENT PLAN** | 2014

Documents a logical progression in a series of focused and interrelated efforts by the Wabash River Enhancement Corporation to enhance, protect, and preserve the rich natural and cultural heritage and intrinsic qualities of the Wabash River.

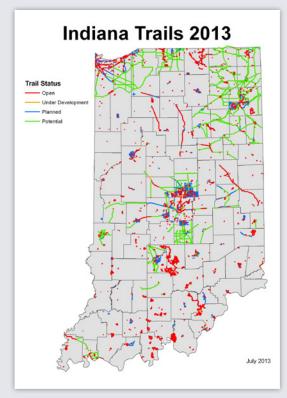
> Includes the concept of creating a multi-use trail within the Sagamore Parkway right-of-way



HOOSIERS ON THE MOVE, INDIANA DEPARTMENT OF **NATURAL RESOURCES**

2006, updated 2013

The ultimate goal of Hoosiers on the Move is having a trail within five miles of all Hoosier residents. In addition, the build out of the nearly 1,000 miles of the State Visionary Trails has progressed quickly by completing several extensive trail corridors that had already been acquired. Continued progress toward development of the State Visionary Trails will require a more strategic approach to fill in gaps and make connections between these trails. By completing several of the longest rail-trails in the state, Indiana can boast of having many more destination trails that will enhance tourism, promote



healthy lifestyles, and help boost economic development along those corridors and in surrounding communities. The Wabash River Heritage Trail is an identified State Visionary Trail in this plan.



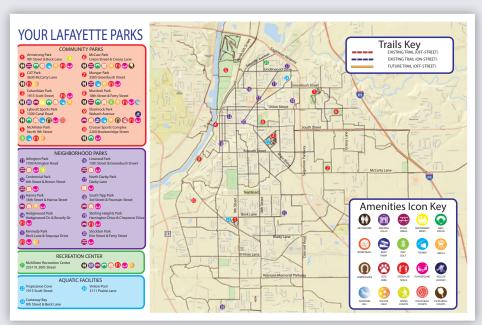
PREVIOUS PLANS

COMPREHENSIVE FIVE-YEAR PARK MASTER PLAN 2019-**2026, LAFAYETTE PARKS AND RECREATION** | 2019

- > Promote public awareness of facilities and opportunities
- > Establish trails and trail connections including bike lanes
- > Promote engagement with the Wabash River by establishing scenic gathering spots

WEST LAFAYETTE PARKS AND RECREATION SYSTEM **MASTER PLAN** | 2017-2021

- > Bikeways and trail ranked second for high priority needs
- > Expand connectivity of existing trail systems
- > Incorporate wifi hotspots into trails network





BIKE WALK GREATER LAFAYETTE SAFETY **PLAN** | 2017

- > Encourage travel by walking, biking, and transit
- > Develop business/ restaurant frequent walker/biker incentive program
- > Establish employee commuter incentive programs

GOOD TO GREAT, MAKING GREATER LAFAYETTE A COMMUNITY OF CHOICE | 2012

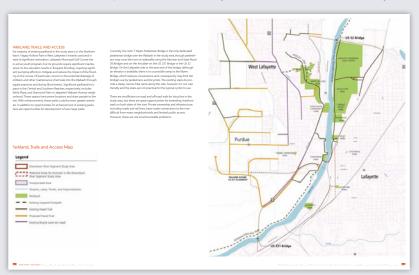
- > Create bicycle and pedestrian friendly Hilltop to Hilltop corridor
- > Secure Lafayette/West Lafayette Bicycle Friendly Community Status at highest levels possible (West Lafayette has bronze status)

MASTER PLAN FOR THE WABASH RIVER CREENWAY 2010

- > Pursue greenway benefits to improve agricultural economy, encourage exercise, increase business investments, preserve cultural heritage, increase water quality, and restore natural habitats
- > Connect fragmented public, private and nonprofit natural resources to create an identity for the greenway at landscape scale within the Wabash River floodplain

TWO CITIES, ONE RIVER | 2011

Plan to address established community desire to connect to this river as the centerpiece of our healthy, interconnected community.



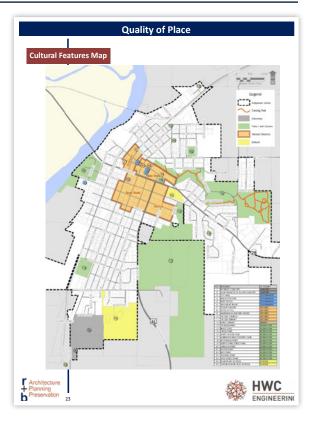
WARREN COUNTY

At the time of this Corridor Master Plan, Warren County and included jurisdictions did not have updated plans to be reviewed.

FOUNTAIN COUNTY

CITY OF ATTICA **COMPREHENSIVE PLAN** | 2016

- > Maintain smooth scenic roads in the Attica region, which are popular with our cyclist and motorist visitors
- > Provide opportunities for adventure recreation tourism
- > Promote boating, birdwatching and hiking activities at Ouabache Park
- > Improve wifi/data coverage









PHYSICAL INVENTORY

Physical Inventory

THE WABASH RIVER

Designated as the state river of Indiana, the Wabash River originates near Fort Recovery, Ohio. It runs for 30 miles before crossing the state line into Indiana, where it continues west, then southward 473 miles to the Ohio River. It is also one of the largest free-flowing rivers east of the Mississippi – flowing unimpeded for 400 miles from the Huntington Dam to the Ohio River confluence. Over its course, the Wabash River basin drains over 33,000 square miles or two-thirds of Indiana, much of which is agricultural land.



TRIBUTARIES

Several major tributaries contribute to the size of the Wabash River basin, including Eel River, Tippecanoe River, White River, and Wildcat Creek. These watersheds feed into the Wabash, which flows into the Ohio River, ultimately connecting to the Mississippi River where it meanders into the Gulf of Mexico. Tributaries host a variety of riparian habitats while also draining adjacent farmland, cities and towns. River flows carry a concentration of a variety of pollutants affecting the water quality of the river basin, adjoining rivers, and ultimately the delta where the river water converges with the ocean.



THE WABASH & ERIE CANAL

On February 22, 1832, the final Indiana portion of the Wabash & Erie Canal was completed which connected Toledo, Ohio to Evansville, Indiana. Flat-bottomed canal boats pulled by mules revolutionized the shipping industry and this link between the Great Lakes and the Ohio River led to a short-lived boom in commercial services that supported numerous towns along the Wabash River in the mid 1800's. However, the cost to maintain the canal's locks, bridges, and boats proved to be too much. With the rise of competing railroads, the Wabash and Erie Canal closed in 1876, after just 44 years in operation.

ATTRACTIONS & RECREATION AREAS

Several attractions, nature preserves, and recreational areas are located on or near the banks of the Wabash River. The cultural and historical significance of the corridor is highlighted by destinations such as French Post Park, Fort Ouiatenon, Williamsport Falls, France Park, and Portland Arch. A significant number of these natural resource amenities are protected sites to preserve the natural ecosystem and geologic features that make the Wabash River corridor unique.





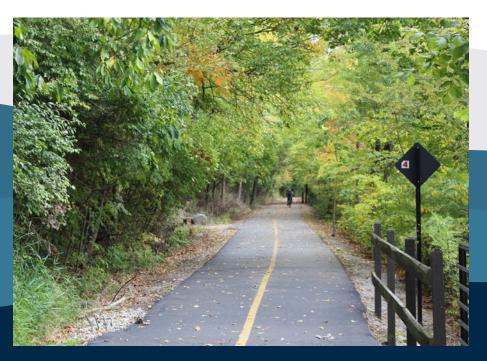
▲ Image courtesy of Wabash & Erie Canal Interpretive Center



PHYSICAL INVENTORY

EXISTING TRAILS & BIKE ROUTES

The Wabash River Greenway corridor contains several existing trails concentrated within river cities and towns such as Williamsport Falls, Covington Circle Trail, Delphi Historic Trails, the Panhandle Pathway in Kenneth, and the Little Turtle Waterway in Logansport. The largest constructed off-road network is the Wabash Heritage Trail, located in Tippecanoe County. Signed bike routes and on-road facilities are also developed in areas of Cass and Carroll Counties.



LARGE LANDOWNERS

The river corridor is dominated by agricultural, municipal, and industrial land uses, resulting in large parcels under the ownership of an agency, a private enterprise or private individuals. Large parcels are ideal for trail routing as single ownership reduces conflicts and challenges in construction. Private business enterprises with large land holdings near the Wabash River include Evonik Industries, Flex-n-Gate, Rogers Interstate Sand & Gravel, Badlands Off Road Park, US Aggregates, Lehigh Cement, and Cement, and Engineering Aggregates Corporation.





EXISTING CORRIDORS

1. TRANSPORTATION

Transportation corridors consist of an intersecting network of highways, county roads, city streets, and railways. Trail routing at both road and railway crossings should take into account the frequency and speed of traffic in order to implement appropriate safety standards to alert drivers to bicycle and pedestrian crossings.

2. UTILITIES

Most utility corridors contain above-ground infrastructure for power, electricity, and communications. When easements can be acquired for greenways and trails within these utility corridors, the ease of trail and greenway development is typically less expensive to implement. Water, storm, and gas lines are more concentrated in cities and towns than in rural stretches within the greenway corridor. These utility easements can also facilitate trail and greenway development.



▲ Image courtesy of battleground.in.gov

EXISTING BRIDGES/RIVER CROSSINGS

The Wabash River Greenway corridor has over 30 river crossings along its 90-mile length. Bridge types include vehicular, railway, and pedestrian crossings made from a variety of materials including concrete, metal, and wood. This corridor master plan evaluates the potential of existing bridges to accommodate bicycle and pedestrian facilities, either within the existing bridge deck or cantilevered off the existing structural members supporting the bridge. In a few places, existing abutments that remain from past bridges could be reused to facilitate pedestrian crossings separate from vehicular bridges.





Socioeconomic Profiles

Presents key socioeconomic metrics for the five counties that are transected by the planned Greenway:

FOUNTAIN

WARREN

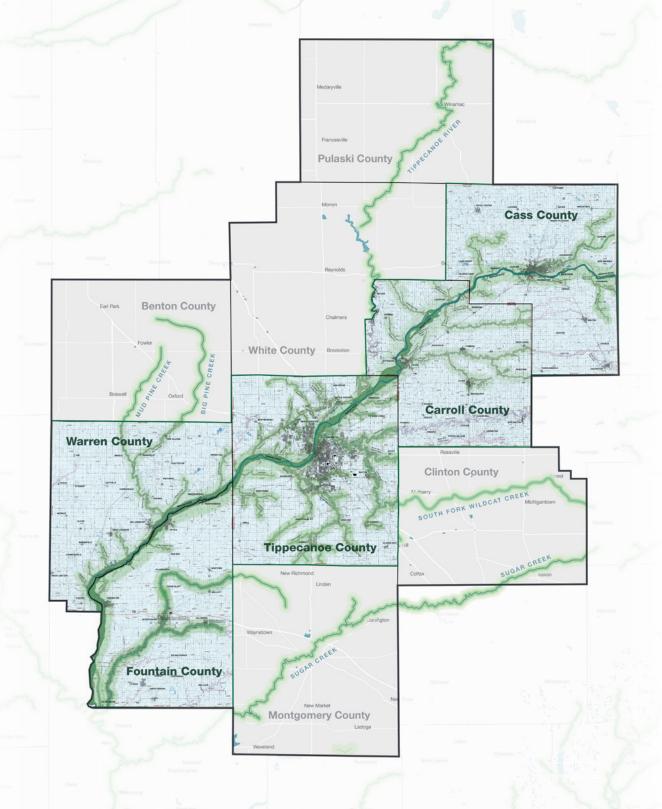
TIPPECANOE

CARROLL

CASS

Findings presented include current demographic and economic indicators, as well as growth trends.

Comparisons for the five counties are also provided.





DEMOGRAPHIC PROFILES

Five-County Greenway Region

DEMOGRAPHIC PROFILE

POPULATION CHARACTERISTICS



278,371 people in 2020

20,000 people since 2010, growth rate of 8.0%

40.3 years

32%+
of residents over the AGE of 25 HAVE earned a Bachelor's Degree

Source: ESRI BAO, US Census

HOUSEHOLD CHARACTERISTICS



106,382 households

in 2020, 7.9% growth rate

MEDIAN HOUSEHOLD INCOME \$53,419

AVERAGE HOUSEHOLD SIZE 2.46

29.7% OF ALL HOUSEHOLDS HAVE CHILDREN

Source: ESRI BAO, US Census

EMPLOYMENT CHARACTERISTICS



103,900 full-time jobs

13,400+ jobs

ADDED SINCE 2010, 14.8% growth rate

MAJOR INDUSTRIES INCLUDE:

Manufacturing Education Retail Trade

JOBS TO HOUSEHOLD RATION 96.9%

Source: ESRI BAO, US Census LEHD On the Map



Demographic Profiles

FOUNTAIN COUNTY

Within the five county Wabash River Corridor, Fountain County is the second least populated with 16,820 residents representing 6% of gross corridor population. In the ten years from 2001 to 2021, the county lost 420 residents, a decline of 2.5%. Of working residents, only 25% live and work in the county, 75% commute to work elsewhere and 52 % live elsewhere and commute in. Median household income is \$49.700. just 93% of corridor average MHI. At 398 square miles, Fountain County is the third largest county in the corridor with its western border having been carved by the Wabash River and offering interesting geologic formations, including the Portland Arch.

DEMOGRAPHICS

16,820 residents 35.4% 6.0% OF FIVE-COUNTY TOTAL

43.5 years **MEDIAN AGE** (REGION'S MEDIAN: 40.3)

40.2% **RESIDENTS UNDER AGE 35**

\$49,700 MEDIAN HOUSEHOLD INCOME (REGION'S MEDIAN: \$53,419) OF HOUSEHOLDS EARN LESS THAN \$35,000

31.2% OF HOUSEHOLDS HAVE CHILDREN AT HOME (29.7% FOR THE REGION)

2.43 **AVERAGE HOUSEHOLD SIZE**

Source: ESRI BAO, US Census

Attica SR 28 15 16 SR 341 Covington 2 US 136 SR 32

HISTORIC SITES

- 1. Fountain County Courthouse & Courthouse Square Historic District
- 2. Covington Residential Historic District
- 3. Carnegie Library of Covington
- 4. Brady Street Historic District
- 5. Old East Historic District
- 6. Cottrell Village
- 7. Attica Main Street Historic District
- 8. Attica Downtown Historic District

ATTRACTIONS

- 1. Pecan Basin: Cates-Clawson Reserve
- 2. Charlarose Lake & Campground
- 3. Clover Leaf Railroad Depot Museum
- Rivercrest Golf Club
- 5. Five Crossings Park
- 6. Devon Theatre
- 7. Covington City Park
- 8. Circle Trail
- 9. Portland Arch Nature Preserve
- 10. Arch Acres
- 11. Shawnee Bottoms
- 12. Snyder-Marshall Woods
- 13. Whistler-Hare Woods
- 14. Badlands Off Road Park
- **15.** Off the Trail Vacation Rentals & Campground
- 16. Harrison Hills Golf Club
- 17. Ravine Park / Arms Woods Park
- 18. Ouabache Park
- 19. McDonald Park
- 20. West Street Park

EMPLOYMENT

~3,991 jobs **HOSTED IN 2018**

66.2[%] JOBS-TO-HOUSEHOLDS RATIO

Out-commuting PREDOMINANT TRAVEL PATTERN FOR EMPLOYMENT

52.1% OF WORKERS COMMUTE IN

74.9% OF EMPLOYED RESIDENTS COMMUTE OUT

25.1% OF RESIDENTS LIVE AND WORK THERE

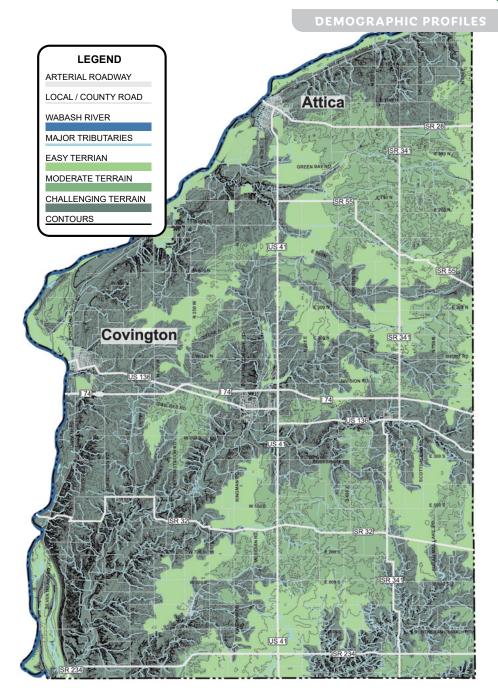
Attica

MOST COMMON EMPLOYMENT DESTINATION FOR RESIDENTS (11.5%), FOLLOWED BY COVINGTON (7.0%)

KEY EMPLOYMENT SECTORS:

Manufacturing 54.5%retail trade 10.8%EDUCATION 10.8%

Source: ESRI BAO, US Census LEHD On the Map



DEMOGRAPHIC PROFILES

WARREN COUNTY

Within the five county Wabash River Corridor, Warren County is the least populated with 8,538 residents representing 3.1% of gross corridor population. In the eleven years from 2010 to 2021, the county lost 30 residents, representing a decline of .3%. Of working residents, 41% live and work in the county, 59% commute to work elsewhere and 54% live elsewhere and commute in. . Median household income of \$60,200 is 112.7% of corridor average MHI. At 366 square miles, Warren County is the smallest county in the corridor with its eastern border having been carved by the Wabash River and its tributaries, creating Williamsport Falls, Indiana's tallest waterfall.

DEMOGRAPHICS

8,538 residents 3.1% OF FIVE-**COUNTY TOTAL**

45.2 years MEDIAN AGE (REGION'S **MEDIAN: 40.3)**

38.7%**RESIDENTS UNDER** AGE 35

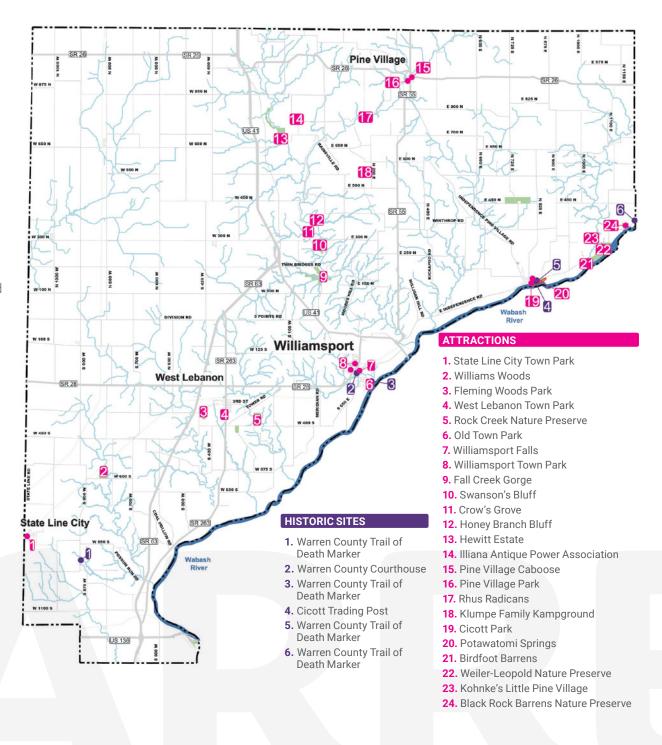
\$60,200 MEDIAN HOUSEHOLD **INCOME (REGION'S** MEDIAN \$53,419)

24.3% OF HOUSEHOLDS EARN LESS THAN \$35,000

31.7% **OF HOUSEHOLDS** HAVE CHILDREN AT **HOME (29.7% FOR** THE REGION)

2.49 **AVERAGE HOUSEHOLD SIZE**

Source: ESRI BAO, US Census



DEMOGRAPHIC PROFILES

EMPLOYMENT

~6,151 jobs

175.5%
JOBS-TO-HOUSEHOLDS RATIO

In- and out-commuting PREDOMINANT TRAVEL PATTERNS FOR EMPLOYMENT

53.9% OF WORKERS COMMUTE IN

58.9% OF EMPLOYED RESIDENTS COMMUTE OUT

41.1% OF RESIDENTS LIVE AND WORK THERE

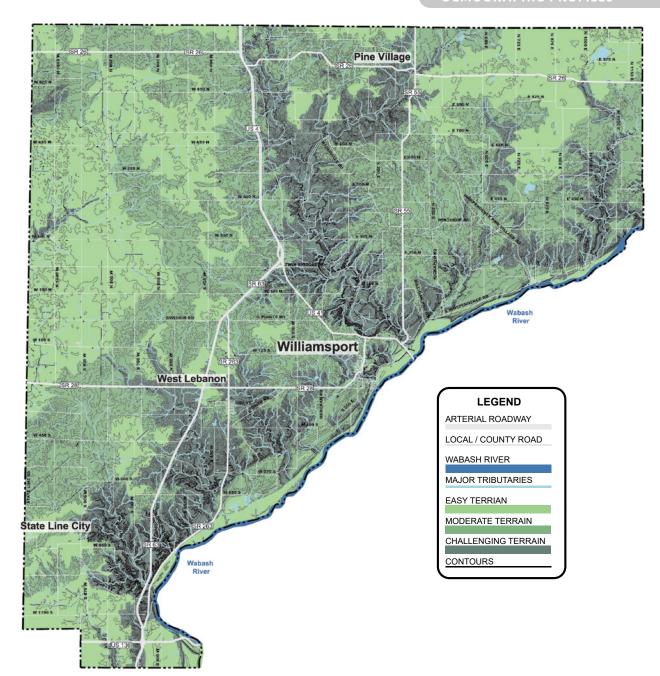
Monmouth

MOST COMMON EMPLOYMENT DESTINATION FOR RESIDENTS (30.2%), FOLLOWED BY GALESBURG (7.2%)

KEY EMPLOYMENT SECTORS

MANUFACTURING 36.1% EDUCATION 10.8% HEALTHCARE 9.1%

Source: ESRI BAO, US Census LEHD On the Map





TIPPECANOE COUNTY

Within the five county Wabash River Corridor, Tippecanoe County is the most populated with 193,688 residents representing 70% of gross corridor population. In the eleven years from 2010 to 2021, the county gained 20,908 residents, an increase of 12%. Of working residents, only 61% live and work in the county, 39% commute to work elsewhere and 47% live elsewhere and commute in. Median household income of \$51,339 is 96.1% of corridor average MHI. At 503 square miles, Tippecanoe County is the largest county in the corridor with the Wabash River providing a shared natural resource interface between Lafayette and West Lafayette.

DEMOGRAPHICS

193,688 residents 70.0% OF FIVE-**COUNTY TOTAL**

29.6 years **MEDIAN AGE. NOTABLY** LOWER THAN REGION'S MEDIAN OF 40.3, INFLUENCED BY THE PRESENCE OF **PURDUE UNIVERSITY**

57.6% RESIDENTS **UNDER AGE 35**

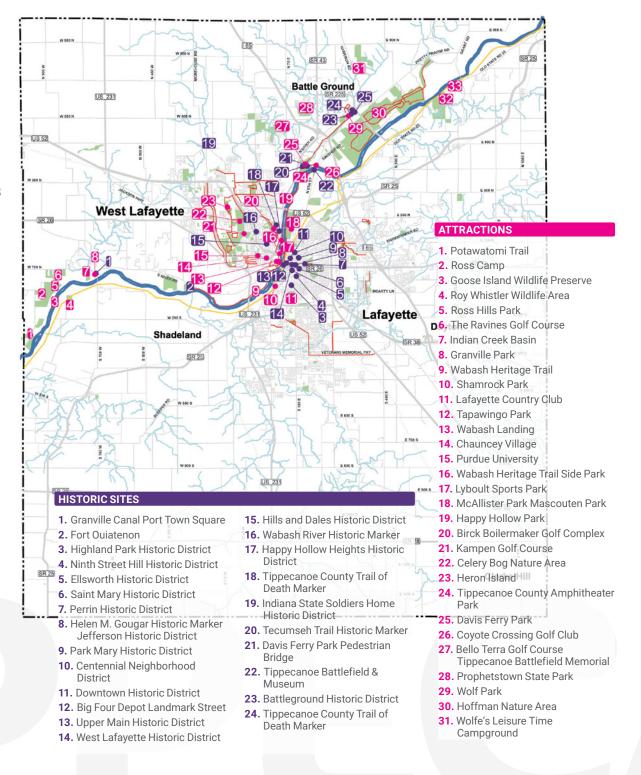
\$51,339 **MEDIAN HOUSEHOLD INCOME (REGION'S** MEDIAN \$53,419)

35.3[%] OF HOUSEHOLDS EARN LESS THAN \$35,000

28.5% OF HOUSEHOLDS HAVE CHILDREN AT HOME (29.7% FOR THE REGION)

2.43 **AVERAGE HOUSEHOLD SIZE**

Source: ESRI BAO, US Census



EMPLOYMENT

~84,601 jobs **HOSTED IN 2018**

107.6% JOBS-TO-HOUSEHOLDS RATIO

In-commuting PREDOMINANT TRAVEL PATTERN FOR EMPLOYMENT

47.3% OF WORKERS COMMUTE IN

38.8% OF EMPLOYED RESIDENTS COMMUTE OUT

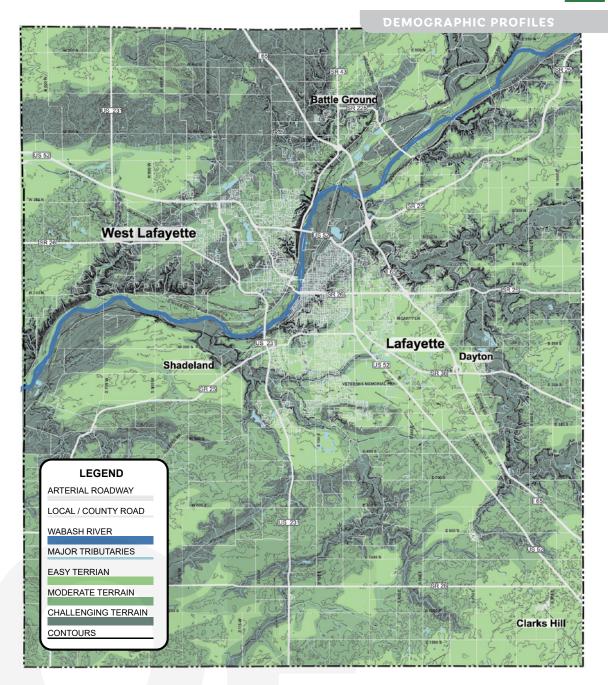
61.2% OF RESIDENTS LIVE AND WORK THERE

Lafayette MOST COMMON EMPLOYMENT DESTINATION FOR RESIDENTS (25.5%), FOLLOWED BY WEST **LAFAYETTE (5.3%)**

KEY EMPLOYMENT SECTORS:

manufacturing 20.1% EDUCATION 20.0% **RETAIL TRADE** 13.5%

Source: ESRI BAO, US Census LEHD On the Map





CARROLL COUNTY

Within the five county Wabash River Corridor, Carroll County is the third most populated with 20,663 residents representing 7.4% of gross corridor population. In the eleven years from 2010 to 2021, the county gained 508 residents, an increase of 2.5%. Of working residents, 21% live and work in the county, 79% commute to work elsewhere and 63% live elsewhere and commute in. . Median household income of \$55,987 is 105% of corridor average MHI. At 375 square miles, Carroll County is the fourth largest county in the corridor with the Wabash River floodplain providing the greatest topographical relief in this county of highly productive Indiana farm field flatlands.

DEMOGRAPHICS

20,663 residents 7.4% OF FIVE-COUNTY TOTAL

43.1 years MEDIAN AGE (REGION'S MEDIAN: 40.3)

40.6% **RESIDENTS UNDER AGE 35**

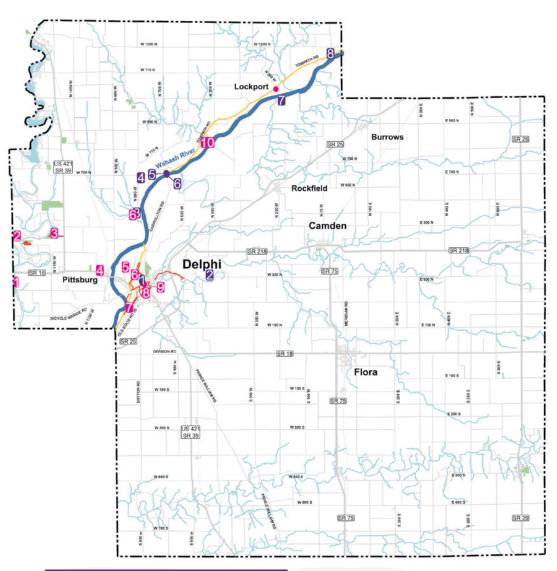
\$55,987 MEDIAN HOUSEHOLD **INCOME (REGION'S** MEDIAN \$53,419)

29.4% OF HOUSEHOLDS EARN LESS THAN \$35,000

32.1% OF HOUSEHOLDS HAVE **CHILDREN AT HOME (29.7%** FOR THE REGION)

2.54 **AVERAGE HOUSEHOLD SIZE**

Source: ESRI BAO, US Census



HISTORIC SITES

- 1. Delphi Courthouse Square Historic District
- 2. Deer Creek Valley Rural Historic District
- 3. Carroll County Trail of Death Marker
- 4. Carroll County Trail of Death Marker
- 5. Former Site of Mentzer Tavern
- 6. Carrollton Road Bridge Canal Crossing
- 7. French Post Park
- 8. Carroll County Trail of Death Marker
- 9. Martin Schoolhouse

ATTRACTIONS

- 1. Frog's Glory
- 2. Camp Tecumseh
- 3. Moyer Gould Woods
- 4. Hufford Wildlife Trusts
- 5. Tippecanoe Township Park
- 6. George Obear Overlook Park
- 7. Wabash & Erie Canal Interpretive Center
- 8. Trailhead Park
- 9. Riley Park
- 10. Delphi Opera House
- 11. Weaver Family Nature Reserve

EMPLOYMENT

~3,808 jobs HOSTED IN 2018

49.7% JOBS-TO-HOUSEHOLDS RATIO OF

Out-commuting PREDOMINANT TRAVEL PATTERN FOR EMPLOYMENT

63.0% OF WORKERS COMMUTE IN

78.6% OF EMPLOYED RESIDENTS COMMUTE OUT

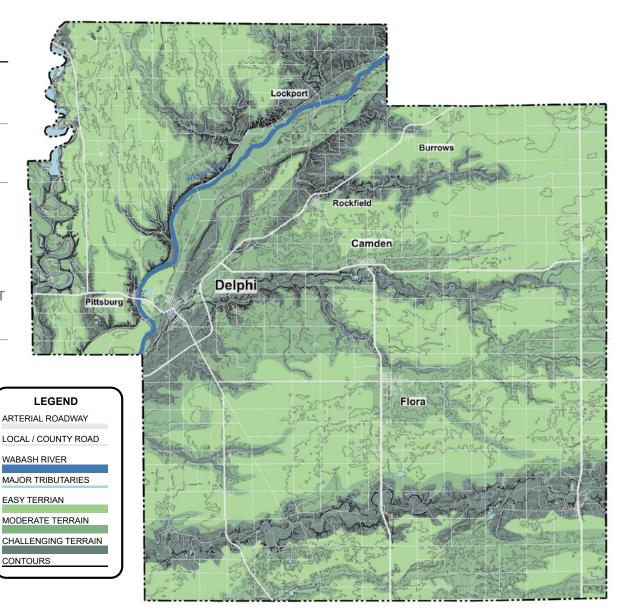
21.4% OF RESIDENTS LIVE AND WORK THERE

Logansport MOST COMMON EMPLOYMENT DESTINATION FOR RESIDENTS (8.9%), FOLLOWED BY **LAFAYETTE (7.7%)**

KEY EMPLOYMENT SECTORS:

MANUFACTURING 22.5% EDUCATION 12.0%**RETAIL TRADE** 10.1%

Source: ESRI BAO, US Census LEHD On the Map





DEMOGRAPHIC PROFILES

CASS COUNTY

Within the five county Wabash River Corridor, Cass County is the second most populated with 38,662 residents representing 13.9 % of gross corridor population. In the eleven years from 2010 to 2021, the county lost 304 residents, a decrease of .8 %. Of working residents, only 49% live and work in the county, 51% commute to work elsewhere and 44% live elsewhere and commute in. Median household income of \$49,869 is 93 % of corridor average MHI. At 415 square miles, Cass County is the second largest county in the corridor with the Wabash River carving out the greatest topographical relief in an east to west fashion through Indiana farmland and the city of Logansport.

DEMOGRAPHICS

38,662 residents 13.9% OF FIVE-COUNTY TOTAL

40.0 years MEDIAN AGE (REGION'S MEDIAN: 40.3)

44.0% **RESIDENTS UNDER AGE 35**

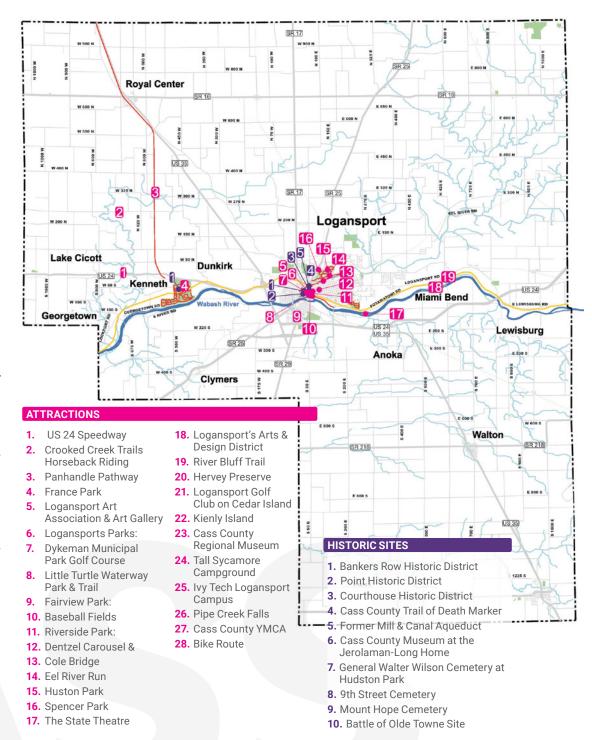
\$49,869 MEDIAN HOUSEHOLD **INCOME (REGION'S** MEDIAN \$53,419)

35 4% OF HOUSEHOLDS EARN LESS THAN \$35.000

33.3% OF HOUSEHOLDS HAVE **CHILDREN AT HOME (29.7%** FOR THE REGION)

2.54 **AVERAGE HOUSEHOLD SIZE**

Source: ESRI BAO, US Census



EMPLOYMENT

~5,349 jobs **HOSTED IN 2018**

37.9[%] **JOBS-TO-HOUSEHOLDS RATIO**

Out-commuting PREDOMINANT TRAVEL PATTERN FOR EMPLOYMENT

44.2% OF WORKERS COMMUTE IN

51.3% OF EMPLOYED RESIDENTS COMMUTE OUT

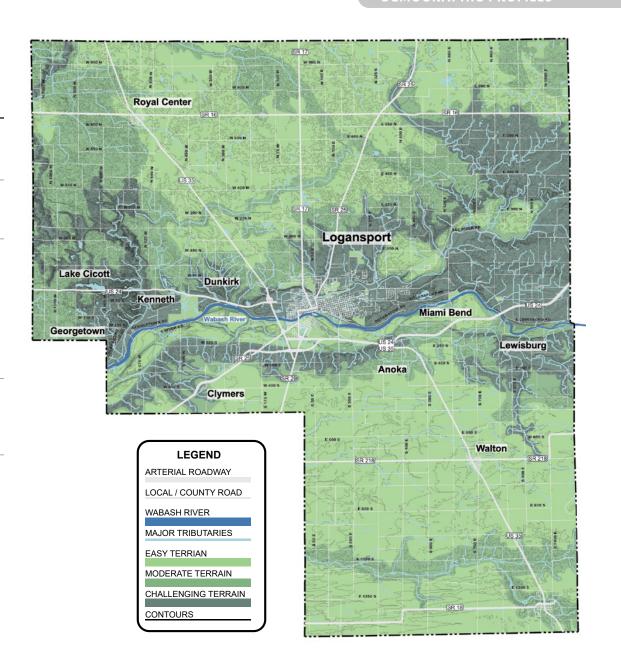
48.7% OF RESIDENTS LIVE AND WORK THERE

Logansport MOST COMMON EMPLOYMENT DESTINATION FOR RESIDENTS (29.6%), FOLLOWED BY Kokomo (2.7%)

KEY EMPLOYMENT SECTORS:

MANUFACTURING 75.0% HEALTHCARE 46.9% RETAIL TRADE 26.7%

Source: ESRI BAO, US Census LEHD On the Map







WREC Board Meetings

MEETING 01

07/23/2020



- 1. Existing Conditions Review
- 2. Needs & Benefits
- 3. Public Involvement & Engagement

Board reviewed project scope and tasks outlined below:

4. Mapping

- 5. Probable Costs & Financial Feasibility
- 6. Promotion
- 7. Master Plan Documentation
- 8. Pilot Projects & Implementation

MEETING 02 01/28/2021



Once the online survey and pop-up stations were held, the design team gave a progress update to the WREC Board. This update included public engagement results, pilot project options for selection, and case studies showing the economic and environmental benefits instigated by similar projects.

This first presentation to the Wabash River Enhancement Corporation (WREC)

MEETING 03

02/17/2021



Pilot project development was highlighted and options selected for further design study. Additionally, detailed schematic design for several Tippecanoe County pilot projects was evaluated.

MEETING 04

06/23/2021



Final conceptual and schematic pilot project exhibits were presented to the Board. Development updates to the wayfinding and signage concepts and Brand Identity Guidelines were shared. The design team attended a meeting for Next Level Trails to discuss possible grant funding.

MEETING 05

07/22/2021



This meeting reviewed a draft of the schematic routing for Tippecanoe County. Deliverables included trailhead designs, boat launch locations, identification of trail facilities, incorporation of current and ongoing projects within the study area, and enlargements of key areas along the Wabash River corridor.

MEETING 06

02/16/2022



Most recently, the WREC Board received an update on Tippecanoe County schematic routing including changes based on input and feedback to date.

Steering Committee Meetings

MEETING 01

8/27/2020



Project Overview & Scope

Tasks:

- 1. Existing Conditions Review
- 2. Needs & Benefits
- 3. Public Involvement & Engagement
- 4. Mapping
- 5. Probable Costs & Financial Feasibility
- **6.** Promotion
- 7. Master Plan Documentation
- 8. Pilot Projects & Implementation

This first Steering Committee meeting introduced the project to the committee members and presented relevant findings from a review of existing plans and site conditions.

Approximately 30 documents relating to parks, scenic routes, watersheds, bicycle and pedestrian plans, and comprehensive planning were identified and collected from each of the five primary counties for review.

Layers of data including wetlands and topography, attractions and destinations, right-of-way and traffic studies, historical context, and existing trail facilities were compiled to create basemaps for each county.







MEETING 02

10/27/2020



During the meeting the committee members confirmed the vision statement, reviewed the project website and mapping updates, and were introduced to case studies showing the variety of ways greenways and trails benefit the surrounding communities. The steering committee also gave input on potential pilot projects for each of the five primary counties.

Public engagement strategies that were virtual, safe, and accessible were discussed to reach the widest audience possible during Covid-19.



MEETING 03 01/26/2021



Public engagement feedback from the pop-up stations and online survey was synthesized and shared with the steering committee members. A high level of interest in greenway facilities such as trailheads, water fountains, restrooms, and canoe/kayak/ raft rentals noted by the public. Previously identified destinations such as Portland Arch. Williamsport Falls, and France Park were confirmed as popular destinations among the local communities.

MEETING 04

04/21/2021



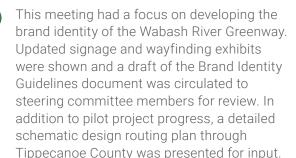
Between the third and fourth steering committee meetings, a series of presentations were held over a one-day period to raise elected official's awareness of the project. Results were presented and discussed at this meeting, as well as the refinement of selected pilot projects and the greenway brand. Additionally, over 50 bridges crossing the Wabash River were evaluated for structural soundness and capacity to accommodate greenway facilities as proposed in the routing plans.

Evaluate (Carroll County)



MEETING 05

06/24/2021









MEETING 06

07/27/2021

Fountain County routing review with local steering committee members in Covington



MEETING 07

07/27/2021

Warren County routing review with local steering committee members in Williamsport



MEETING 08

08/04/2021

Carroll County routing review with local steering committee members in Delphi

MEETING 09

08/04/2021

Cass County routing review with local steering committee members in Logansport

ELECTED OFFICIAL MEETINGS

Elected Official Meetings

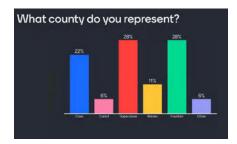


02/18/2021

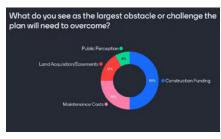
at 7:30a, 11:30a, 3p, and 6p

Elected officials were invited to attend one of four meetings to learn about the Wabash River Greenway consider supporting the project. Invitees included city and county councilors, county commissioners, mayors, LEDO members, and state representatives. The most heavily attended meetings were at 11:30a and 3p, making up nearly 70% of the attendees. Officials from all five river counties attended, along with Panhandle Pathway representatives from Pulaski County.

Most comments were in support of the greenway, noting that would benefit the quality of life, wellness, and talent retention in the surrounding communities. (key words) Construction funding was identified as the largest obstacle to the project, closely followed by maintenance costs and land acquisition. (challenges image) Overall the project was well received and several attendees identified contacts at the state level who would support the Wabash River Greenway.









"This is great for connecting the Commons at Little Turtle Waterways to France Park, and this has always been something we have always wanted to do, and having this as a regional plan helps sell it to the different energies that we need on board to move forward."

- Arin Shaver, Cass County Planner

"I think this project is exciting, to see the momentum going forward, I think this could be good for all of us."

- Mayor Duane Rodrick of Attica, Fountain County

"This is exactly what we should be doing to promote economic development"

- Ben Dispennett, LEDO Executive Director

"Yes, just do it. This is important."

- Dave Byers, Tippecanoe County Commissioner

"We're all 100% for it coming through town, there's already a bikeway along our roads, but it's not essentially bike or walking safe. We would like to see a trail, to create a safer route – it just needs funding partners."

- Georgia Jones, Town of Battleground Clerk Treasurer

STAKEHOLDER INTERVIEWS

Stakeholder Interviews

The design team compiled a list of stakeholders to engage about the project vision, routing, and funding opportunities. This list was divided into groups with similar interests including Economic Development, Land Use, Corporations, Art & Culture, and Health & Safety. 12 meetings were held throughout July with follow-up meetings scheduled through September.

IDENTIFIED STAKEHOLDERS:

- > Wabash River Heritage Corridor Commission (WRHCC)
- > IDDC
- ➤ Indiana Department of Transportation (INDOT)
- > Indiana Department of Natural Resources (DNR)
- > State Economic Development Corporation (EDC)/Indiana Office of Community & Rural Affairs (OCRA)
- > Local EDC's
- > Promoters
- > Community Foundations
- ➤ Agriculture/Natural Resources Conservation Service (NRCS)
- > NICHES
- > Local Transportation
- > Local Utilities
- > Regional Corporations
- > Wabash River Cycling Club
- > Public Safety
- > Big 4 Trail
- > ITC Partners at GLC
- > Panhandle Pathway
- > City of Monticello
- > Governor's Bike Task Force

Pop-Up Stations

To gather as much public feedback as possible, the design team set up interactive pop-up stations at public locations in the five primary counties that enabled current COVID-19 protocols to be practiced while providing residents with the opportunity to learn about the project and offer input. These pop-up stations were available to the public from December 2020 to January 2021 and consisted of informational and dot-voting boards, write-ins, and a take-home packet. Over 200 people engaged with the pop-up stations and left comments to guide the vision and development of the greenway.









PULASKI

Winamac









POP-UP STATIONS

POP-UP STATIONS SAMPLE MATERIALS

WHAT IS A GREENWAY? HANDOUT

RN ON INVESTMENT

investment vary depending on context, case studies ited States indicate that trail construction consistently

ISM SPENDING

nding an average of \$3,500 per person. Up to 40% of trail cal area. These visitors spend between 3 and 10 times as

E BENEFITS

De associated with elevated property values, especially when a trail is designed to provide neighborhood access and maintain residents' privacy. Trails, like good schools or low crime, create an amenity that commands a higher price for nearby

ENVIRONMENTAL IMPACT



Increased filtration of agricultural pollutants



Relinking of fragmented wildlife habitats along the corridor



Mitigation of potential flood damage







and local destinations allowing users to experience the region along an active living recreational resource. Regional regrets along an abuse living recreational resource, regional greenways connect local communities, enable fitness, promote

greenways connect tocal communities, enable timess, promote water and habitat conservation, and attract recreational tourism. Greenway ammenities will enhance and commemorate the cultural and historic importance of untranspare by certains a store for footingle and quarter. Social, cultural and economic benefits of greenways reach beyond the trail by boosting local business activity, prompting active living habits and attracting tourism to cities and towns along its course. In a similar fashion, tributaries that flow into the Wabash River will ultimately accommodate

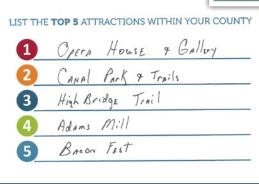
attracting tourism to crities and towns along its course. In a similar tashion, tributaries that flow into the Wabash River will ultimately accommodate additional greenways to expand regional connectivity and the attending benefits throughout all ten counties within the Wabash Heartland Innovation Network region.

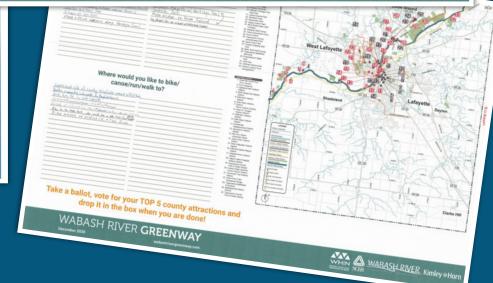
POP-UP STATIONS

POP-UP STATION SAMPLE MATERIALS









WHAT FACILITIES MAKE A GREENWAY EXPERIENCE GREAT?

The public have general consensus that bike and canoe rentals, signalized trail crossings, and paved boat access to the Wabash are the most important features of the greenway that they would like to see implemented. Several noted that trailheads are key facilities along the route, and should include amenities such as water fountains and trash cans, restrooms, picnic areas and overlooks, and signage kiosks.





















POP-UP STATIONS

TAKEAWAYS FROM POP-UP STATIONS

The feedback gained through the pop-up station exercise provided the planning team pertinent feedback regarding connectivity to the most important attractions and events within each of the 5 counties. The type, use, style and level of finish for proposed corridor amenities, features and elements was also gleaned from the feedback.

TOP 5 ATTRACTIONS PER COUNTY

CASS

- 1. France Park
- 2. Denzel Carousel
- **3.** Little Turtle Waterway
- 4. Houston Park Trail
- **5.** Riverside Bluff Trail

CARROLL

- 1. Delphi Opera House
- 2. Adam's Mill
- 3. Wabash & Erie Canal
- 4. Delphi Historic Trails
- 5. French Post Park

TIPPECANOE

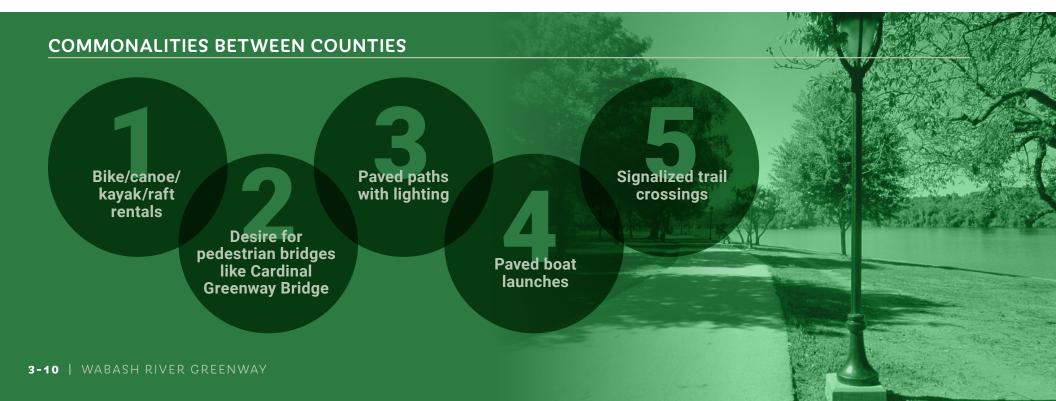
- 1. Celery Bog
- 2. Wabash River
- 3. Clegg Garden
- 4. Happy Hollow Park
- **5.** Purdue University

WARREN

- 1. The Falls
- 2. Pine Creek
- 3. Black Rock
- 4. Illiana Antique Power
- **5.** Rock Creek Nature Preserve

FOUNTAIN

- **1.** Attica Public Library
- 2. Badlands
- 3. Wabash River
- 4. Portland Arch
- 5. Coffing Bros Orchard

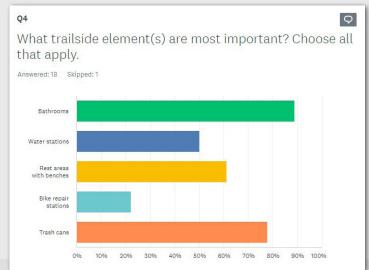


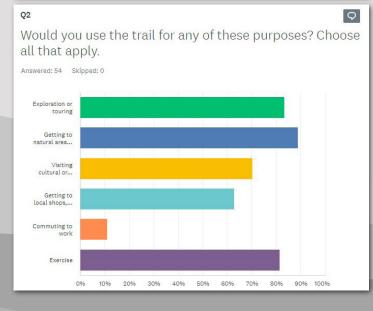
Surveys

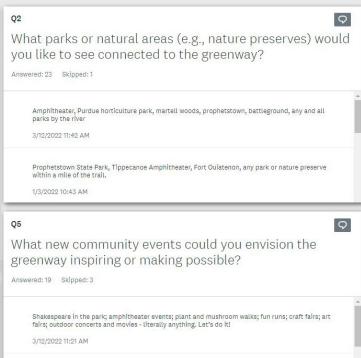
DETAILED **SURVEY RESULTS**

From October 202 to March 2021. a detailed survey was sent out as one of the first public engagement initiatives to gather opinions from local residents. The survey was available to those within the immediate five-county study area and the adjacent five counties that comprise the Wabash Heartland Innovation Network (WHIN).

Questions cover a range of topics including preferred level and mode of activity, comfortability with existing infrastructure, desire to bike or canoe/kayak more, spending and technological preferences, and what amenities or historical and cultural destinations make a greenway trip worthwhile.







Boating on the water

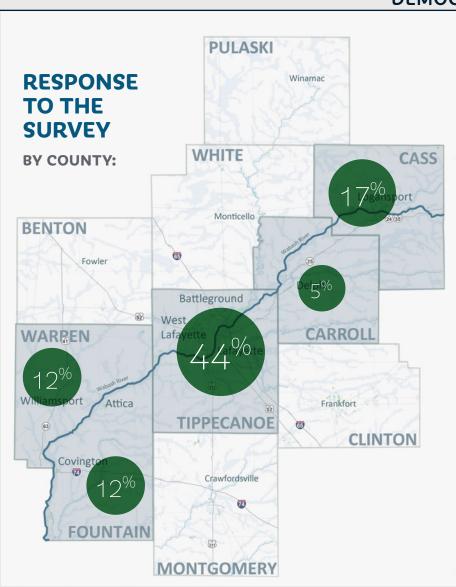
3/1/2022 7:56 AM

1/3/2022 10:40 AM

Family rides, Heritage days with demonstrations/activities along the trail. Ride to the Opera House in Delphi for a show. Ride to Canal Days.

SURVEVS

DEMOGRAPHICS



340
INDIVIDUALS

COMPLETED THE
44 QUESTION
SURVEY WITH
REPRESENTATION
FROM ALL 10
COUNTIES

SURVEY RESPONDENTS

46%

WOMEN

53[%]

50%

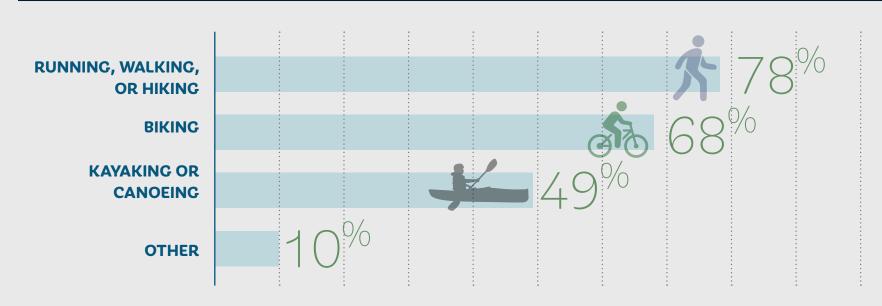
OF SURVEY RESPONDENTS WERE BETWEEN THE AGES OF 30 TO 49

10+

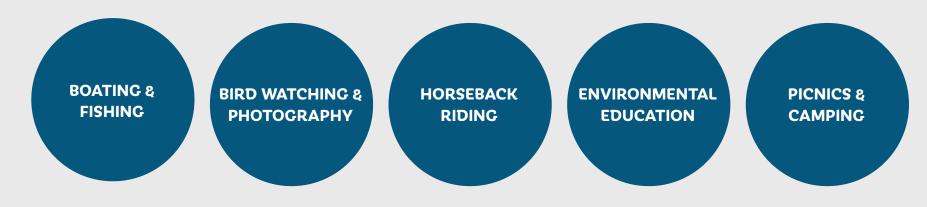
YEARS

LENGTH OF TIME THE MAJORITY OF RESPONDENTS (68%) HAVE LIVED IN THE AREA

PLANNED USE OF THE GREENWAY



NOTABLE OTHER WANTED USES:



HOW THE GREENWAY WOULD AFFECT USERS

70%

OF SURVEY RESPONDENTS
PLAN TO USE THE WABASH
RIVER GREENWAY AT LEAST

2X PER MONTH

 $88^{\%}$

WOULD SHOP AT A LOCAL BUSINESS WHEN THEY USE THE GREENWAY, SPENDING BETWEEN \$20-30

90%

WOULD BE MOTIVATED TO EXERCISE MORE IF THEY HAD CLOSE ACCESS TO THE WABASH RIVER GREENWAY

MOST ATTRACTIVE BUSINESS ALONG THE GREENWAY

of survey respondents want RESTAURANTS

7 1 %

OF SURVEY RESPONDENTS WANT

COFFEE SHOPS

of survey respondents want MICROBREWERIES

RUNNING, WALKING & HIKING

70%

WANT TO DO THIS ACTIVITY
MORE THAN THEY DO NOW

68%

DO THIS ACTIVITY
FOR BOTH HEALTH &
RECREATION

46%

RUN, WALK OR HIKE
2-5 TIMES PER
WEEK

HOW FAR WOULD YOU RUN, WALK, OR HIKE TO REACH A LOCAL ATTRACTION?

2 -5 MILES 41%

1-2 MILES 32%

5+ MILES 16%

1 MILE 10%

TOP ITEMS THAT MAKE A TRAIL MORE ATTRACTIVE FOR RUNNING, WALKING, OR HIKING

SHADE 72%

SEPARATED FROM VEHICLES **61%**WILDLIFE/BIRD WATCHING AREAS **60%**QUALITY MAINTENANCE **51%**SEATING AREAS **44%**

BIKING & CYCLING

68%

WANT TO DO THIS
ACTIVITY MORE THAN
THEY DO NOW

68%

DO THIS ACTIVITY FOR BOTH REACHING DESTINATIONS & RECREATION

52%

DO THIS ACTIVITY
FOR BOTH HEALTH &
RECREATION

HOW FAR WOULD BIKE TO REACH A LOCAL ATTRACTION?

10+ MILES 42%

5-10 MILES 26%

3-5 MILES 21%

1-3 MILES 11%

INCREASE OVER

98%

WITH FACILITY IMPROVEMENTS

24% would use bike share system

48% would not use bike share system

27% were undecided

CANOEING/KAYAKING

56%

WANT TO DO THIS ACTIVITY **MORE THAN THEY DO NOW**

CAMP WHEN CANOEING OR KAYAKING

WOULD USE A "CYCLING TO CANOE/ **KAYAK" SERVICE EXPERIENCE ON** THE WABASH RIVER **GREENWAY**

WHAT AMENITIES WOULD MAKE YOU WANT TO CANOE OR KAYAK MORE OFTEN?

> MORE DOCKS AND PULLOUTS **DEDICATED PARKING** MORE PICNIC LOCATIONS **CLEAN RESTROOMS RENTAL BUSINESS DRINKING FOUNTAINS**

WAYFINDING

WHERE WOULD YOU LOOK FOR INFORMATION ABOUT THE WABASH RIVER GREENWAY?

TRAIL WEBSITE 84%

social media 68%

park department website $63^{\%}$

VISITOR CENTER 29%

WHILE ON THE WRG, WHAT IS YOUR PREFERENCE?

sign only 41%

sign with weblink/QR code 18%

WRG WEBSITE $5^{\%}$

WRG MOBILE APP $5^{\%}$

ALL OF THE ABOVE 31%

WHAT SPECIFIC FACILITIES, AMENITIES, AND/OR FEATURES WOULD YOU LIKE TO SEE ALONG THE WRG? WHERE WOULD YOU ADD THEM?

"The greenway should connect to adjoining or nearby mountain bike trails, ice cream shops, public art, and have a shuttle service for bikes or kayak/ canoes."

"Scenic walkways/ overviews, drinking fountains, kayak/canoe launch dock, and green grass with tables to picnic create space for potential 'lunch by the river' type events."

"I would like to see a walking trail from Rt 26 to the Wabash along Big Pine Creek. Also, a canoe launch from Pine Village to Big Pine Creek."

"It would be great to have a boardwalkstyle outdoor area similar to Indiana Beach south of Lafayette near the Lyboult Sports Park. Also would like to see a free public access boat launch somewhere around the Tippecanoe River junction upriver from Lafayette for day float trips down to downtown or Davis Ferry."

"The greenway should provide covered bike racks at commercial "hotspots" where folks might want to stop for food and beverages and bike tool posts at each parking area."

"In Indianapolis there is nearly 20 miles of the Monon trail. Why not do this between Delphi, Lafayette, and Attica, then have an annual bike race, or 5K, Half Marathon, triathlon (run, bike, kayak) along the river. I live a half mile from it and ride my bike to my job to restaurants. If you build housing along it, it becomes a selling point/amenity."

"At each major trailhead public bathrooms with security cameras are a necessity and should be paired with drinking fountains and vending machines. Pavilions should be provided at each major trailhead and about halfway in between for shade, rest, or picnicking."

DO YOU HAVE ANY ADDITIONAL COMMENTS FOR THE WABASH RIVER GREENWAY?

"It is a terrific idea. If well planned and maintained properly will be a huge boon to the area."

"I love the idea of a greenway. It would be really nice if we could connect the trail at the amphitheater to the Hoffman Nature Preserve trail. This opens the door to some events that would bring income to the community."

"This is important to this generation because they have no motivation to leave their house. The health of our children is deteriorating at rapid speed we need a reason to get outside."

THEMED SHORT SURVEYS

As design efforts progressed, a series of six shortened surveys were published, focusing on specific aspects of the greenway system.

SURVEY 1 -**GETTING AROUND**



This survey concentrated on user preferences for bike, canoe, and kayak rental services, access to local trail connections and destinations, and for commuting, exercise, visiting cultural or historic destinations, or accessing natural areas.

SURVEY 2 -SAFETY



A recurring theme in public feedback was concern with safety measures along the greenway corridor. The residents within and around the corridor were asked about safety concerns within their community, what issues concern them as both a driver interacting with a trail, and as a trail user, and what new safety threats may concern them with the construction of greenway facilities.

SURVEY 3 -ARTS, CULTURE, HISTORY



Maintaining and expanding connectivity to cultural and historic resources is a quality of life endeavor of the greenway corridor. Respondents were asked which art pieces, cultural destinations, and historic sites are most significant in their communities, what ongoing and new community events could be supported by the greenway facilities, and if the use of public funds for ongoing trail maintenance is supported by residents.

SURVEY 4 - NATURAL RESOURCES & PARKS



This survey identified parks and natural areas of note where the feasibility of connections to the greenway corridor should be evaluated. Respondents ranked the importance of the greenway's design to incorporate native landscapes/wildlife habitats and to protect water quality, and if interpretive signage in natural areas would be used to support environmental education and exploration.

SURVEY 5 - BIKE AND PEDESTRIAN FACILITIES



Designing bike and pedestrian facilities with public input increases the amount of success the facilities have within the local community. This survey asked respondents to evaluate what level of buffering is preferred between shared paths and roadways, what features and elements are most important to incorporate, and how users of a regional destination greenway might benefit their community.

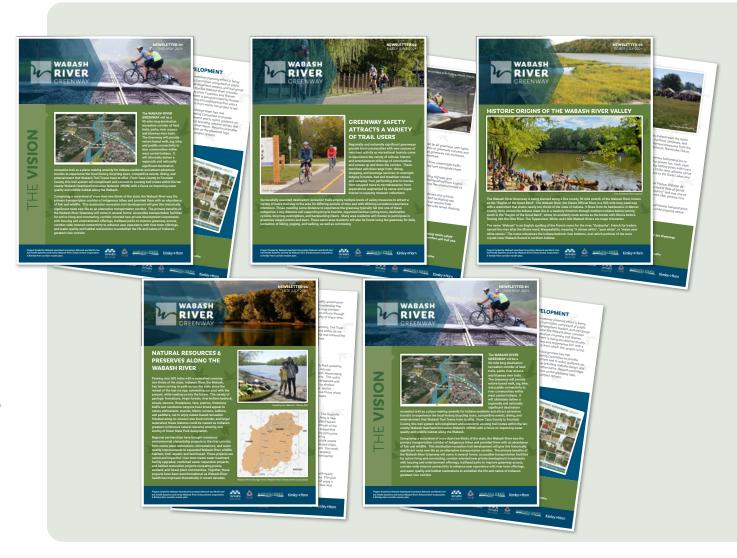
SURVEY 6 -THE RIVER



As the backbone of the greenway corridor, it is important to get public feedback on where and how the Wabash River may be engaged. Residents shared key locations to interact with the greenway in their communities, what water activities are popular, and the importance of native landscape buffers to protect water quality and reduce erosion. The survey also collected preferences on kayak and canoe rentals and interpretive signage about the river's history and ecology as part of the greenway experience.

Project Newsletters

During project development for the Wabash River Greenway/Blueway Corridor Master Plan, the project team prepared and distributed newsletters throughout the region via social media group lists and press releases. The newsletters were released over a twelvemonth period and posted on the WRG website (www.wabashrivergreenway.com) to achieve greater exposure around project development and beneficial project features. Newsletters covered topics such as: the Wabash River Greenway Corridor Master Plan Vision to serve the Wabash Heartland Innovation Network region, the importance of trail safety and convenience to prompt return visits to benefit the local economy, the rich natural history and geology of this river corridor and the many parks, preserves and land trust properties highlighting Indiana's natural resources, the various types of greenway/blueway facilities one will encounter along the two hundred and thirty three miles of land routes and ninety miles of blueway, and the importance of Indiana's River, the mighty Wabash, as it carries over twothirds of the state's storm water to the Ohio River and ultimately into the Gulf of Mexico.



Public Workshops

A total of four public open houses were held throughout the five primary counties. Based on the number of anticipated attendees, independent public open houses were located in Cass, Carroll, and Tippecanoe counties while Warren and Fountain meeting efforts were combined.

The meetings served as a review of preliminary design concepts, facility types, and overall project progress. Attendees voted on wayfinding styles and pictures that conveyed different greenway experiences, and were given the opportunity to write in comments about key destinations or locations were bike and pedestrian facilities could be improved. Input was gathered using printed exhibits, online surveys, and real-time polling using Mentimeter. Each meeting followed a similar format, delving into county-specific routing, reach maps, and pilot projects toward the end of the presentation to allow time for follow-up discussions.

FOUNTAIN/WARREN

The public open house for Warren and Fountain counties was located at the Warren County Learning Center on August 17th, 2021. Attendee input confirmed a high level of interest in canoe and kayak rental services, as well as dedicated trailheads with scenic overlooks. It is important to the public to connect the Greenway to community assets such as Williamsport Falls and Covington Circle Trail. Also suggested is a loop from Williamsport traveling out to State Line City and returning to the town. Attendees preferred the blue and limestone signage, as the color provides a stronger branding experience to both users and passers-by.

- > Project Overview
 - Previous Design Progress
 - Previous Public Engagement
- > Destination Trail Benefits
- > Reach Map Facility Types
- > State Visionary Trails
- > Regional Trail Connections
- > Overall Primary Route Facility Breakdown
- > Warren County Facility Miles Breakdown
- > Fountain County Facility Miles Breakdown
- > Detailed Reach Maps
- > Signage Umbrella
- > Wayfinding
- > Pilot Projects
 - Williamsport Falls to the Wabash
 - Cicott Park Water Access
 - Covington Circle Trail Segment
- > Survey Raffle: Giftcard to Wildcat Canoe and Kayak Too





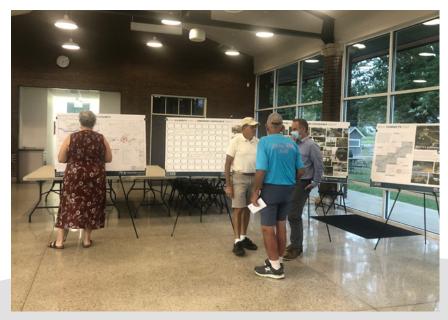
CARROLL

The public open house for Carroll county was located at the Delphi Community Center on August 19th, 2021. This meeting focused on the routing of the pilot project at the intersection of Old SR 25 and SR 39 leading into downtown. Out of the three options discussed, following the railroad bed from the canal to downtown was deemed the safest route for cyclists and pedestrians. The other options were between Monroe Street and Franklin Street into downtown, with Monroe Street being preferred as it diverts trail users away from Franklin Street which is a high traffic route. The majority of attendees liked the blue and limestone signage concept the best, noting that the integration of technology is a requirement as GIS tracking and online information systems continue to be popular among avid trail users.

- > Project Overview
 - Previous Design Progress
 - Previous Public Engagement
- > Destination Trail Benefits
- > Reach Map Facility Types
- > State Visionary Trails
- > Regional Trail Connections
- > Overall Primary Route Facility Breakdown
- > Carroll County Facility Miles Breakdown
- > Detailed Reach Maps
- > Signage Umbrella
- > Wayfinding
- > Pilot Projects
 - Railroad Spur
 - Old SR 25 and SR 39 intersection
 - Delphi Historic Trails Improvements
- > Survey Raffle: Giftcard to Wildcat Canoe and Kayak Too









CASS

The public open house for Cass county was located at Riverside Park's McHale Pavilion on September 7th, 2021. Attendee input confirmed the desire for more paved trails connecting to parks, greenspaces, and existing trails as well as a more robust connection to the river to support water activity rentals and events. The wayfinding and signage concepts received positive feedback, with the majority of attendees preferring the corten steel scheme over the blue and limestone option.

- > Project Overview
 - Previous Design Progress
 - Previous Public Engagement
- > Destination Trail Benefits
- > Reach Map Facility Types
- > State Visionary Trails
- > Regional Trail Connections
- > Overall Primary Route Facility Breakdown
- > Cass County Facility Miles Breakdown
- > Detailed Reach Maps
- > Signage Umbrella
- > Wayfinding
- > Pilot Projects
 - Panhandle Pathway to France Park
- > Survey Raffle: Giftcard to Wildcat Canoe and Kayak Too







TIPPECANOE

The public open house for Tippecanoe County was held at the West Lafayette Wellness Center on March 3rd, 2022. Large format roll plots were generated for this meeting to help the attendees visualize extensive lengths of the proposed greenway routing contiguously. These roll plots were very helpful in facilitating robust discussion between the design team and the attendees. Attendee feedback showed a high level of interest in the specific routing of the greenway, specifically of the proposed sidepaths along North River Road, South River Road, and Sagamore Parkway. The attendees also confirmed the desire for making connections to nearby outdoor amenities such as parks, nature preserves, landmarks, and existing trails. This public meeting was well attended and allowed the design team to collect a large variety of input from Tippecanoe County residents.

- > Project Overview
 - Previous Design Progress
 - Previous Public Engagement
- > Destination Trail Benefits
- > Reach Map Facility Types
- > State Visionary Trails
- > Regional Trail Connections
- > Overall Primary Route Facility Breakdown
- > Tippecanoe County Facility Miles Breakdown
- > Detailed Reach Maps
- > Signage Umbrella
- > Wayfinding
- > Pilot Projects
 - North River Road
 - Sagamore Parkway
- > Survey Raffle: Giftcard to Wildcat Canoe and Kayak Too





CHAPTER 4



Efforts to develop a Wabash River Greenway logo began with freehand sketch concepts for soliciting reactions from the Corridor Master Plan Steering Committee. Feedback from that review effort led to the creation of nine concepts based upon four design themes. Further discussion of brand guidelines, logo use, color palette, typography led the steering committee to select the final logo scheme shown below.

EARLY SKETCHES









DIGITAL CONCEPT DEVELOPMENT











WABASH RIVER GREENWAY





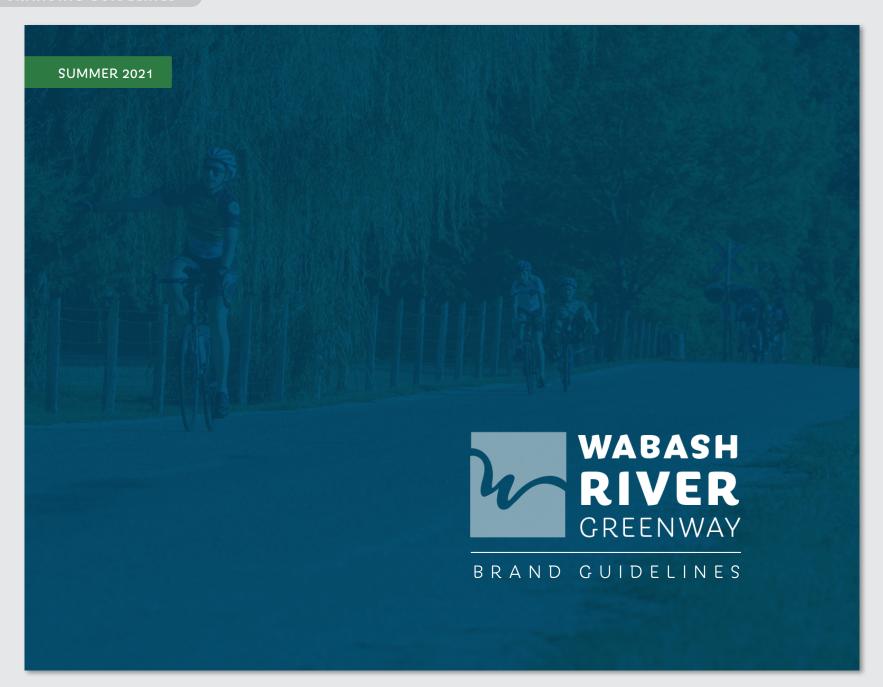
C - HORIZONTAL - LESS MOVEMENT

FINAL LOGO









COLOR PALETTE

Primary Colors



RGB: 6, 87,125 | CMYK: 96, 65, 31, 12

HEX: #05567c



RGB: 45, 12, 66 | CMYK: 90, 40, 99, 12

HEX: #2c7a42



RGB: 152, 152, 153 | CMYK: 43, 35, 35, 1

HEX: #979898



RGB: 95, 99, 105 | CMYK: 30, 22, 17, 77

HEX: #5f6369

Color is an integral part of brand identity. Consistent use of the color palette will reinforce the cohesiveness of the brand. There are both primary and secondary colors.

Secondary Colors



RGB: 98, 129, 63 | CMYK: 64, 31, 93, 14

HEX: #62803f



RGB: 187, 229, 238 | CMYK: 25, 0, 5, 0

HEX: #bae4ee



TYPOGRAPHY

Iskra

Iskra is used for headings and subheadings in various weights.

Iskra Light

ABCDERFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopgrstuvwxyz 1234567890

Iskra Medium **ABCDERFGHIJKLMNOPQRSTUVWXYZ** abcdefghijklmnopqrstuvwxyz 1234567890

Iskra UltraBold **ABCDERFGHIJKLMNOPQRSTUVWXYZ** abcdefghijklmnopqrstuvwxyz 1234567890

Roboto

Roboto is used for body text.

Roboto Light

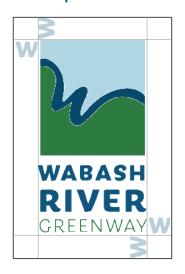
ABCDERFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopgrstuvwxyz 1234567890

Roboto Bold **ABCDERFGHIJKLMNOPQRSTUVWXYZ** abcdefghijklmnopgrstuvwxyz 1234567890

Typography is a powerful brand tool when used consistently. This set of typefaces best represent the Wabash River Greenway brand and should be used across all print and web applications.

LOGO Spacing & Sizing

Clear Space





To ensure legibility, always keep a minimum **clear space** around the logo. This space isolates the mark from any competing graphic elements like other logos or body copy that might conflict with, overcrowd, and lessen the impact of the Wabash River Greenway logo.

The required amount of clear space to ensure maximum visibility and legibility is determined by the height of the "W" in Wabash.

Minimum Size



Minimum print size .75" wide Minimum screen size 72 pixels wide



Minimum print size 1.5" wide Minimum screen size 144 pixels wide



LOGO

Primary Logos

Use on white or light background.





This is the main **logo** that will be used across primary brand applications. It helps audiences easily identify the Wabash River Greenway. The logo should always be applied with care and respect in every application according to these guidelines.

Reverse Logo

Use on dark background or over calm areas of photography.





Black and White Logos

Use when printed in black and white.





LOGO Counties

When adding the county name to the logo adjust the tracking to fit within the width of the logo.











LOGO Counties











LOGO Counties









WABASH RIVER GREENWAY | Brand Guidelines -





A few rules are necessary for maintaining the integrity of the brand. Don't compromise the overall look of the logo by rotating, skewing, or distorting in any way. Here are a few examples of some ways you should not consider using the logo.



Don't distort or skew



Don't rotate



Don't add effects



Don't alter color



Don't alter font



Don't place on poor contrasting background

WABASH RIVER GREENWAY | Brand Guidelines —

PHOTO DIMENSIONS

Pixel Size:

About 400-600 pixels wide for large images; 100-200 pixels wide for a thumbnail image

Resolution:

72 DPI

File Type:

JPG

PRINT DIMENSIONS

Pixel Size:

Multiply intended print size by resolution; e.g. an image to be printed as 6"W x 4"H would be 1800 x 1200 pixels.

Resolution:

300 DPI

File Type:

EPS or TIFF

WABASH RIVER GREENWAY | Brand Guidelines =

-10

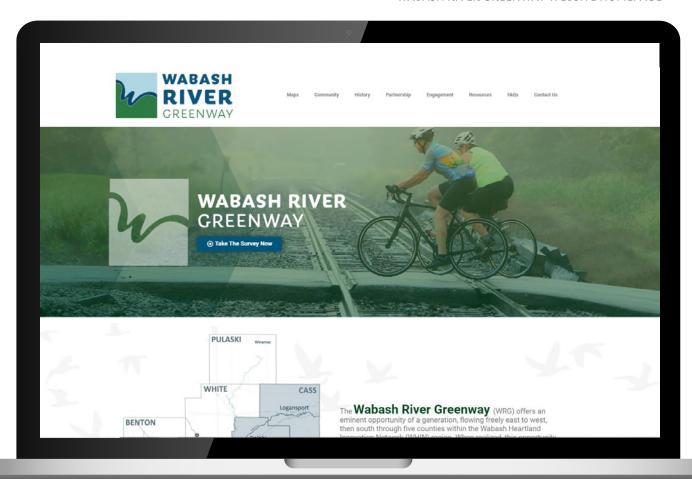


WEBSITE

Website Design Best Practices

Website design and messaging are critically important to increase browsing time and user engagement. The landing page must include a inspiration photo that illustrates the project well. Benefit focused headlines with compelling copy are necessary to hold web user interest. Once user interest is secured, employ clear and standout calls to action to generate engagement and support. Avoid distractions and advertisements, while making navigation of the website easy and intuitively obvious. It is always good to end with a 'thank you for visiting our website and enjoy your time on the Wabash River Greenway!'

WABASH RIVER GREENWAY WEBSITE HOMEPAGE



WABASH RIVER GREENWAY WEBSITE COMMUNITY OVERVIEWS



The Lafayette-West Lafayette area is also home to the Wabash Heritage Trail. This trail provides unique wildlife observation and unparalleled views throughout the 18-mile scenic corridor. The northern trailhead begins at Tippecanoe Battlefield and ends at Fort Oulatenon.

Wabash River sports a greenway with a bike path along 9th Street connecting local neighborhoods to the park. Parks and Recreation offerings range from six community parks, eight neighborhood parks, two large riverfront parks, and six miles of paved trails offering different options for outdoor leisure and enjoyment within easy reach of all

Lafayette residents.



Tippecanoe County Links



This 90 mile long Wabash River Greenway Corridor Master Plan is a critically important regional tool to build the necessary coalitions to achieve the greenway vision and demonstrate the advantages that a destination trail will bring to all jurisdictions along its route. Imagine riding your bike along the Little Turtle Waterway and enjoying a continuous greenway experience to each of these destinations-France Park, Delphi's Canal Interpretive Center and Prophetstown State Park - I can't wait to do just that!

Arin Shaver, AICP Executive Director, Cass County Planning Department



Economic Benefits

Properly planned and designed regional trails are popular recreation destinations, as well as functional transportation improvements that provide mobility benefits for local residents. Historic evidence from throughout the country shows that regional trails are economic assets, increasing property values, boosting spending at local businesses, and making communities more attractive to new residents and businesses investments. However, generalizing the specific economic benefits from one trail to the other can be challenging for a variety of reasons, including trail type, trail amenities, regional support, and unique characteristics.

The report features a literature review, highlighting the economic benefits of trails throughout the country over the past few decades. It also includes three indepth case studies looking at the success and quantified benefits of similar regional trails to the Wabash River Greenway.

LITERATURE REVIEW

Economic impacts are measured in a variety of ways. Below are some highlights from previous studies:

PROPERTY VALUES & PLACEMAKING



In Indianapolis, the Indiana University Public Policy Institute estimated that the \$62.5 million, 8-mile-long Indianapolis Cultural Trail has resulted in more than a \$1 billion increase in property values for properties within 500 feet of the trail.

SUPPORTING LOCAL BUSINESS



In Dunedin, Florida, after the abandoned CSX railroad was transformed into the Pinellas Trail, the downtown went from a 35% storefront vacancy rate to a 100% storefront occupancy with a waiting list for available space.

DIRECT SPENDING



A 2016 study of the Tammany Trace Rail Trail in Louisiana shows that direct spending brought an estimated \$3.356 million per year to the local **economy** from 2011 to 2014. The maintenance cost of the trail is \$1.1 million per year so the direct return is triple the investment.

THE BENEFITS **OF BICYCLES**

This section provides an overview of key findings regarding bicycle tourism resulting from a white paper literature review of existing research. These findings are particularly relevant today, as bicycle sales skyrocketed during the COVID-19 pandemic. According to the NDP Group, which tracks retail trends, "A staggering \$4.1 billion worth of bikes (excluding e-bikes) were sold in the United States between January and October 2020, a 62 percent increase over the same period in 2019." The increase in sales can be directly attributed to people seeking outdoor exercise and recreation opportunities that allow for social distancing. Research has identified that increased bicycle use is associated with positive impacts on health, the environment, the economy, and on quality of life.

REGIONAL CASE STUDIES

The Wabash River Greenway is planned along a 90-mile, five county section of the Wabash River corridor, extending through Fountain, Warren, Tippecanoe, Carroll and Cass counties. It will provide connections to many regional destinations such as parks, campgrounds, wineries and historic downtown areas.

To examine the economic impacts from similar types of trails, three case studies from around the country are summarized in the following pages. The table below provides an overview of the three trail systems.

| TRAIL | LOCATION | TRAIL TYPE | TRAIL LENGTH | MAJOR DESTINATIONS |
|-------------------------|------------------------|------------|--------------|-------------------------------------|
| KATY TRAIL | Missouri | Rail Trail | 240 miles | Columbia, St. Louis, Jefferson City |
| GREAT ALLEGHENY PASSAGE | Pennsylvania, Maryland | Rail Trail | 150 miles | Pittsburgh |
| CARDINAL GREENWAY | Indiana | Rail Trail | 62 miles | Muncie |



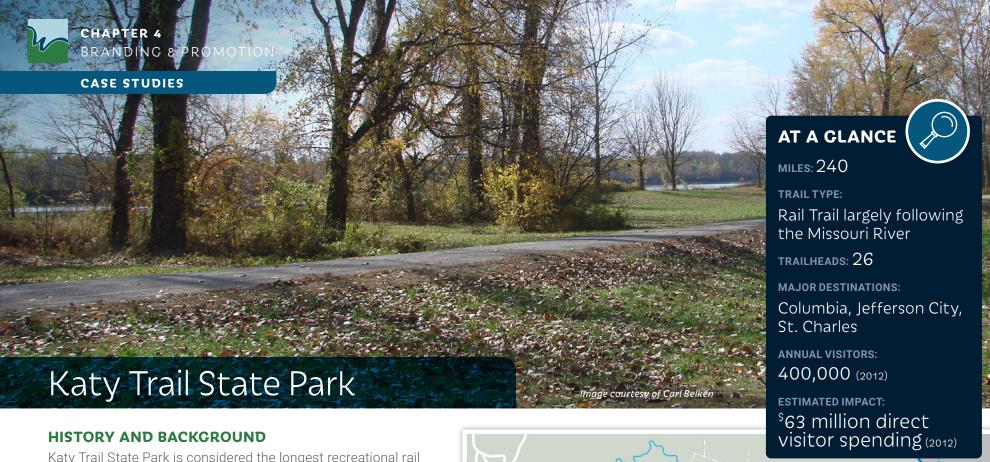
Image courtesy of Felix Wong



Image courtesy of Jon Dawson



Image courtesy of mcgron



Katy Trail State Park is considered the longest recreational rail trail in the country. The trail was developed in stages beginning in 1982, reaching its current length in 2011. The trail has influenced the formation of several spur trails that connect the Katy Trail with other regional destinations.

TRAIL SERVICES AND CHARACTERISTICS

Throughout the route, the trail passes through varied landscapes including farm fields, forests, wetlands and prairies. Several trestle bridges along the route are also popular attractions, along with restored railroad depots that speak to the trail's history.

The trail website provides a trip planner tool that allows riders to locate food, lodging, shuttles, and bike services along their route. Parking, water, and restrooms at trailheads are generally provided and maintained by the State Park, while other amenities are provided privately within the community. The trail supports a variety of local bike rides, races and festivals throughout the year.



Katy Trail Map

Source: Rails-to-Trails Conservancy

CASE STUDIES

REGIONAL CHARACTERISTICS

Demographic statistics were compiled for the area within 30 miles of the Katy Trail. Key statistics are shown below.

| COMPARISON OF SOCIOECONOMIC FACTORS, 2020 | | | | | | | |
|-------------------------------------------|-----------|---------------------|----------------------|---------------------|---------------------|-------------------------------------------|--|
| REGION | POP. | GROWTH 2010-2018 | MEDIAN HOME VALUE | MEDIAN HH INCOME | TOTAL EMPLOYMENT | MAJOR ATTRACTIONS | |
| KATY TRAIL | 4,555,717 | 4.5% | \$190,679 | \$61,768 | | St. Louis, Kanas City | |
| WABASH RIVER GREENWAY | 278,371 | 8.0% | \$125,773 | \$53,419 | 107,495 | Purdue University, Greater Lafayette Area | |

ECONOMIC IMPACT

A 2012 report commissioned by Missouri State Parks estimated that the trail attracts 400,000 visitors along its 240-mile length. These visitors have major impact on the tourism-related businesses that line the trail, including wineries, restaurants, shops, hotels and campgrounds. The study estimates that visitors have a total economic impact of \$18.5 million annually (2012 dollars), supporting over 350 jobs.

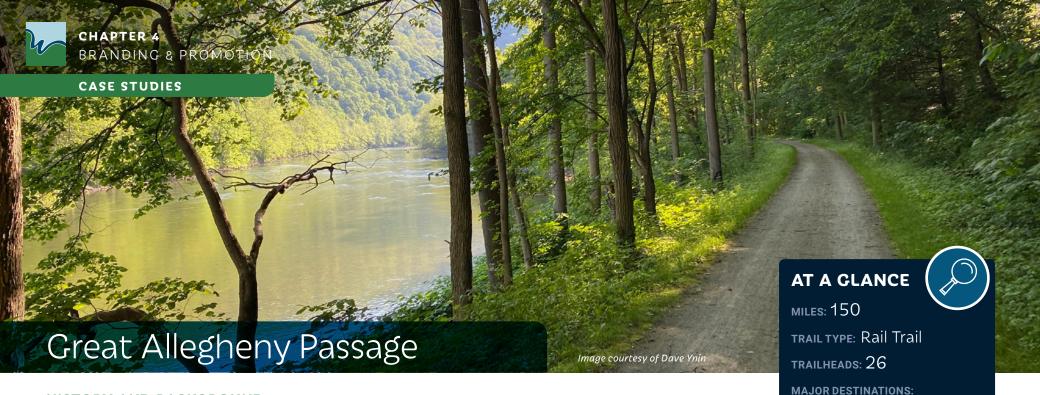
Survey respondents were categorized as local or non-local, with local defined as coming from a ZIP code that adjoins the trail. Over 67% of users were non-local users, but 93% of users came from within Missouri. Approximately three in four visitors are day users. The average spending of each group of visitors is included below:

| AVERAGE SPENDING OF LOCAL AND NON-LOCAL USERS, KATY TRAIL, 2012 | | | | | | | | |
|------------------------------------------------------------------------------------------------------------|---------|---------|----------|----------|--|--|--|--|
| LOCAL DAY NON-LOCAL DAY HOTEL, MOTEL AND CAMPGROUND USERS (31%) USERS (44%) B&B USERS (14%) VISITORS (10%) | | | | | | | | |
| PER-PERSON SPENDING PER-TRIP | \$11.54 | \$30.05 | \$297.30 | \$141.00 | | | | |
| AVERAGE ANNUAL SPENDING | \$309 | \$355 | \$503 | \$375 | | | | |

In the survey, a vast majority of non-local users said the Katy Trail was the main reason for their visit to the area, with visitors traveling an average of 83 miles to reach the trail. One-in-five riders stopped at a small town along the trail, with nonlocal visitors being significantly more likely to visit a nearby town. A vast majority of people were likely to repeat their visit, with 90% saying they use the trail at least once every two to three months.

LESSONS LEARNED

- > The Katy Trail initially faced strong opposition in rural communities from people who believed the trail would bring crime, traffic, and other problems. However, the obvious economic benefits have swayed most people since the trail's opening.
- > Promotes local community services, such as restaurants, groceries, bicycle services.
- > Economic Impact: \$18.5 million annually



Passage

HISTORY AND BACKGROUND

Most of the Great Allegheny Passage (GAP) trail follows abandoned railroad alignments between Pittsburgh and Cumberland, MD.

Trail development began in 1978 and was constructed in segments by rail trail groups along the corridor. The trail reached its current length in 2013. The trail connects with the C&O Towpath Trail in Cumberland, which continues an additional 185 miles to Washington, DC. This report focuses on the economic impacts of the Pittsburgh-Cumberland segment of the Great Allegheny Passage trail.

TRAIL SERVICES AND CHARACTERISTICS

Throughout its 150-mile route, the trail includes over 30 trail access points in townsalong the route or at campgrounds and parks. Access points typically include parking, restrooms and potable water. Picnic areas are provided every 5-10 miles along the trail. Campgrounds provide low-cost or free lodging, spaced every 10 to 15 miles along the trail.

The trail also passes through 13 towns, ranging from Pittsburgh (metro area population. 2,300,000) and Cumberland (pop. 19,000) to Rockwood (pop. 890). Gaptrail.org, the trail's main website, publishes a trail towns guide with information on services, attractions and connecting trails at each of these locations, along with maps to download. The GAP Trail Foundation is also a founder of the Trail Towns organization, which produces a guide for capturing trail-based tourism.



MARYLAND

CUMBERLAND

WASHINGTON

C & O Canal

Towpath

WEST VIRGINIA

CASE STUDIES

Trail Towns claim the GAP now has an estimated \$50 million economic impact each year, accounting for 40% of local income. A 2014 survey conducted by Trail Towns asked riders to estimate their daily spending when using the GAP. This survey showed that over half of trail users are on multi-day trips. The average user estimated spending almost \$60 on restaurants, and the average overnight user estimated spending \$124 on accommodations per night.

Transportation along the trail is provided by several independent outfitters, including a partnership with Amtrak. Amtrak provides a "Bring Your Bicycle Onboard" program, that allows riders to carry their bicycle into the passenger car. With Amtrak service offered in Pittsburgh, Connellsville, PA, and Cumberland, this has become a popular option for riders to bike one direction and ride the train back.

REGIONAL CHARACTERISTICS

Demographic statistics were compiled for the area within 30 miles of the GAP. Key statistics are shown below.

| COMPARISON OF SOCIOECONOMIC FACTORS, 2020 | | | | | | | |
|-------------------------------------------|-----------|---------------------|----------------------|---------------------|---------------------|-------------------------------------------|--|
| REGION | POP. | GROWTH 2010-2018 | MEDIAN HOME VALUE | MEDIAN HH INCOME | TOTAL EMPLOYMENT | MAJOR ATTRACTIONS | |
| GAP TRAIL | 2,440,648 | -0.3% | \$158,732 | \$57,793 | 1,102,356 | Pittsburgh | |
| WABASH RIVER GREENWAY | 278,371 | 8% | \$125,773 | \$53,419 | 107,495 | Purdue University, Greater Lafayette Area | |

ECONOMIC IMPACT

A 2012 Economic Impact Study completed by Frostburg State University asked business owners in the area to define the trail's impact on their business. On average, the responding businesses estimated that about 30 percent of their gross revenue can be attributed to the trail, an increase from 25 percent in 2008. The survey estimated the total trail revenue throughout the area to be approximately \$650,000 per establishment, with outdoor/trail businesses and lodging reporting a larger portion of their business coming from the trail than others.

More than 85% of businesses noted the seasonality of trail business, with peak sales months occurring between April and October. A 2019 trail usage study estimates between 930,000 and 1.05 million users on the trail each year. An estimated 63,000 people use the trail each year for multi-day trips.

Since the beginning of its development, the GAP has overcome immense local skepticism. According to a recent article by the Rails-to-Trails Conservancy, "People asked how a bike trail would make up for the loss of industry. The reality now is that when people talk about trails and economic development, they reference the GAP as the gold standard.

Many people have credited the area's natural beauty for the trail's success, as well as its destination bridges and tunnels. The trail includes thirty trestle bridges, and passes through numerous state parks, and the Laurel Highlands. Darla Carotta, who was involved with the trail's development, has said "There is an economic component to the trail, but that goes hand in glove with the idea that it's a beautiful—really beautiful—recreational and conservation resource that's protecting major pieces of our viewsheds"

LESSONS LEARNED

- > Partnerships and joint marketing efforts, such as Trail Towns, have magnified the trail's impact and provide great resources for local businesses.
- > Natural beauty and major destinations likely play a role in attracting up to 1 million visitors per year.
- Estimated economic impact: **\$50 million**



The Cardinal Greenway is a 62-mile trail connecting Marion and Richmond, IN. The route follows an abandoned rail line that carried passengers between Cincinnati and Muncie.

Cardinal Greenway, Inc. was incorporated as a non-profit in 1993 to facilitate trail development. The first phase of the greenway opened in 1999, and the most recent segment opened in 2011. It is Indiana's longest rail trail and is a primary Indiana segment of the East Coast to West Coast Great American Rail Trail.

SERVICES AND CHARACTERISTICS

Cardinal Greenway is a paved trail that connects ten towns. Each town offers varying attractions and services, including recreation areas, antique shops, museums, and seasonal events. Several historic depots and remnants of the historic rail service are located along the trail and provide historic attractions, a few of which have been converted into trail visitor centers.

The trail offers 25 official trailheads, all of which include parking, restrooms, water, and trail information.

The trail offers a variety of programs, including:

- > Loaner Bike Program: Free cruiser bikes are available to check out
- > Bike & Ride program: All Muncie transit buses are equipped with bike racks
- > Gift Shop: Fans of the trail can purchase fitness gear, merchandise and snacks



4-20 | WABASH RIVER GREENWAY

Image courtesy of cardinalgreenways.org

REGIONAL CHARACTERISTICS

Demographic statistics were compiled for the area within 30 miles of the Cardinal Greenway. Key statistics are shown below.

| COMPARISON OF SOCIOECONOMIC FACTORS, 2020 | | | | | | |
|-------------------------------------------|---------|---------------------|----------------------|---------------------|---------------------|-----------------------|
| REGION | POP. | GROWTH 2010-2018 | MEDIAN HOME VALUE | MEDIAN HH INCOME | TOTAL EMPLOYMENT | MAJOR ATTRACTIONS |
| Cardinal Greenway | 922,319 | -0.8% | \$110,439 | \$50,635 | 297,524 | Ball State University |
| Wabash River Greenway | 278,371 | 8% | \$125,773 | \$53,419 | 107,495 | Purdue University |

ECONOMIC IMPACT

The best economic impact data for the Cardinal Greenway comes from a 2017 study by the Eppley Institute at Indiana University. The study looked at the economic impacts of several trails across Indiana, with research completed mostly through trail user surveys.

The study found that the Cardinal Trail users are on the trail for an average of 11.5 miles each time they use the trail. While the average distance traveled on the trail has dropped since 2001, frequency has increased, meaning people are using the trail more often for shorter trips.



Image courtesy of cardinalgreenways.org

Respondents were asked to estimate their daily and annual spending related to their trail usage, with key findings in the table below.

| AVERAGE SPENDING BY CARDINAL TRAIL USERS BASED ON SURVEY DATA, 2017 | | | | | | |
|---------------------------------------------------------------------|------------------------------|-------------------------------------|----------------------------|----------------------------------------------------------|--|--|
| | AVERAGE DAILY SPENDING | AVERAGE ANNUAL TOTAL SPENDING | ANNUAL FOOD SPENDING | ANNUAL TRANSPORTATION SPENDING (INCLUDING LODGING) | | |
| CARDINAL GREENWAY | \$41.50 | \$4,528 | \$2,690 | \$1,075 | | |
| INDIANA STATEWIDE | \$47.30 | \$3,564 | \$1,678 | \$970 | | |

While total economic benefits of the trail are not widely documented, the trail did serve as a catalyst to additional trails in the area and has been widely embraced by the public despite initial skepticism.

LESSONS LEARNED

- > Trail users spend an average of \$3,000-4,000 in the local economy per user annually
- > Linking up regional destinations, such as parks and attractions are key to the trail's success
- > A regional focus is important. Identify an organization that can focus on **regional** trail development, maintenance and promotion, rather than individual town or county committees.

CASE STUDIES CONCLUSION

CONCLUSION

The case studies analyzed, coupled with white-paper research, suggest that the Wabash River Greenway will have a positive impact on the five-county region if designed to regional trail standards and properly promoted. Trail users make purchases in the local economy, creating jobs in the retail, hospitality, and tourism industries. Regional trails that connect to major destinations attract both local and non-local users, generating visitors that support the regional economy. Additionally, bicycle-related tourism has increased in recent years, suggesting this market is likely to continue increasing. The economic benefitsand health outcomes associated with trail development fall into the following general categories:



IMPROVED PROPERTY VALUES



INCREASED TOURISM SPENDING



IMPROVED HEALTH AND WELLNESS

Successful trails also rely on regional partnerships, effective marketing, and the provision of attractive amenities. Ongoing maintenance, connections to regional destinations, and effective tourism wayfinding are critical to trail success. Resources such as the Trail Towns Guide and outreach to successful regional trail organizations will guide the economic success of this regional trail. Overall, the Wabash River Greenway has the potential to become a key regional asset that contributes to an economically vibrant region.

Promotional Toolkit

A project promotional toolkit has been developed for corridor stakeholders to communicate information about the Wabash River Greenway Corridor Master Plan process and for use in promoting the destination recreation trail during implementation. The toolkit includes a summary slide presentation, printed trifold brochure and a Wabash River Greenway stand up traveling banner. The items provided include maps, graphics, trail user information as well as pertinent facts about the project and its impact on the region. Two Wabash River Greenway promotional videos are also included in the toolkit









Video Promotions

Projects of this magnitude require multiple communication means and methods across jurisdictions to garner the requisite regional supportacross jurisdictions to carry the vision through to completion and gain the benefits associated with a regional destination attraction. Video content from corridor elected officials and stakeholders has been collected and compiled for use in promoting the Wabash River Greenway. These videos are accessible at www.wabashrivergreenway.com and are available for use at community events, jurisdictional public hearings, parks board meetings, trails advocacy group meetings, church socials, land trust events, etc. Two videos have been prepared to accommodate the needs and time constraints of various events and gatherings. Should an agency or organization wish to use the video content and needs assistance in acquiring the videos for use at a community event or public hearing, please contact the Wabash River Enhancement Corporation at (765) 420-8505.

WABASH RIVER GREENWAY SUMMARY VIDEO

(DURATION: 6 MINUTES, 57 SECONDS)

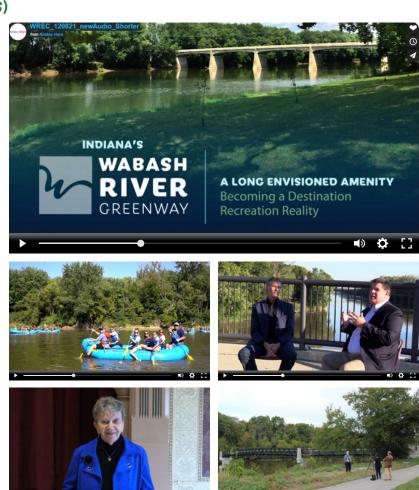
This abbreviated video content provides an overview of Wabash River Greenway and will be used to convey project features and build community support and enthusiasm for the project. This summary video introduces greenway elements and corridor attractions including:

- > Overall project length at 90 river miles
- > Looped trails on both sides of the river
- > River access points for canoeing/kayaking
- > Connections to Trail Towns local attractions

Anticipated outcomes from the Wabash River Greenway include:

- > Talent attraction and retention
- > Increased economic activity
- > Public health benefits

It is anticipated that this video will primarily be used to introduce the Wabash River Greenway to broader audiences to build support and interest in the benefits associated with a regional destination recreation trail and to generate dialogue about the coming greenway pilot projects within each of the five river counties.



WABASH RIVER GREENWAY EXPANDED VIDEO

(DURATION 12 MINUTES, 27 SECONDS)

This expanded video offers a more detailed description of the Wabash River Greenway and the multiple benefits associated with this regional attraction. This video introduces greenway elements and corridor attractions including:

- > The rich history and culture of Indiana's River along 90 river miles
- > Looped trails on both sides of the river featuring river crossings
- > Coming Pilot Projects to be constructed in each of the five river counties.
- > Water trail river access points for canoeing/kayaking
- > Economic benefits of a destination recreation. trail in jobs, real estate values and tourism
- > The water quality benefits that this project will bring to the Wabash River
- > The broad recreational appeal of a greenway featuring Indiana's natural resources and geology
- > Direct connections to that which Trail Towns have to offer:
 - Historic sites and museums
 - Local attractions, signature parks, and historic downtowns
 - Dining and entertainment venues
 - · Camping and lodging options

Anticipated outcomes from the Wabash River Greenway will include:

- > Talent attraction and retention
- > Increased economic activity and private real estate investments
- > Business and industry expansion
- > Public health benefits

It is anticipated that the primary use of this expanded video will be to augment and generate local discussions with audiences already familiar with the Wabash River Greenway project and seeking more detailed information about project benefits, pilot projects and overall scope. This video will also promote the benefits of these investments and the need for inter-agency cooperation to build support for the project. Expanded public awareness and understanding will be necessary to build support and interest in the benefits associated with a regional destination recreation trail as the coming Greenway Pilot Projects go to construction within each of the five river counties.











CHAPTER 5





Overall Connectivity & Access

NATIONAL TRAILS

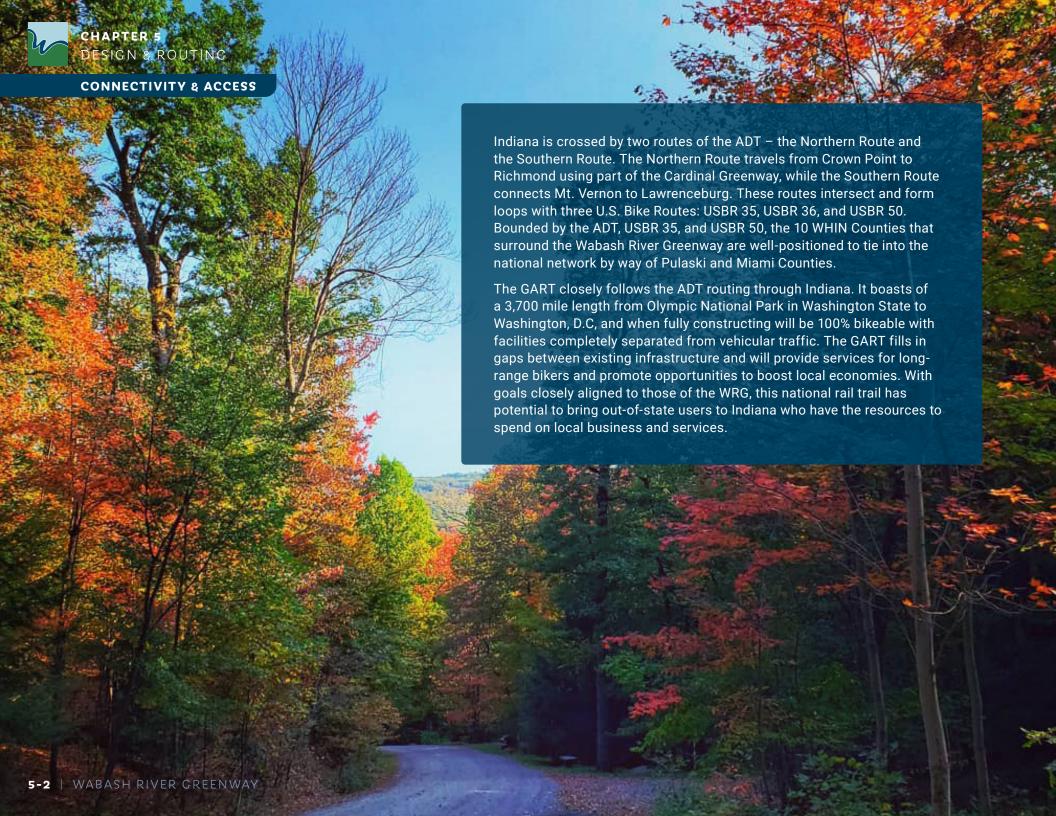
It is important to understand how the Wabash River Greenway fits into the greater network of hiking, biking, and backpacking trails that are being planned or are already well established. The following pages will discuss how the Wabash River Greenway connects into and supports trail facilities at national, state, and regional levels.

National scenic and recreational trails attract users looking to challenge their mental stamina and physical capacity. Backpacking excursions last a few days to a few weeks. Avid runners and hikers routinely perform through-hikes, starting at one end and finishing at the other. Two national trails run through Indiana: The American Discovery Trail (ADT) and the Great American Rail Trail (GART). The ADT is a coast-to-coast journey through 13 states, including Indiana. With more than 6,800 miles of continuous trail, it is no surprise that segments with the highest use are concentrated around cities and small towns.

"The Wabash River Greenway will attract visitors and recreational tourists to our peaceful and quaint river cities and towns - benefiting local merchants and adding quality of life amenities for all to enjoy."

Fountain County Commissioner, Tim Shumaker, Secretary





CHAPTER 5



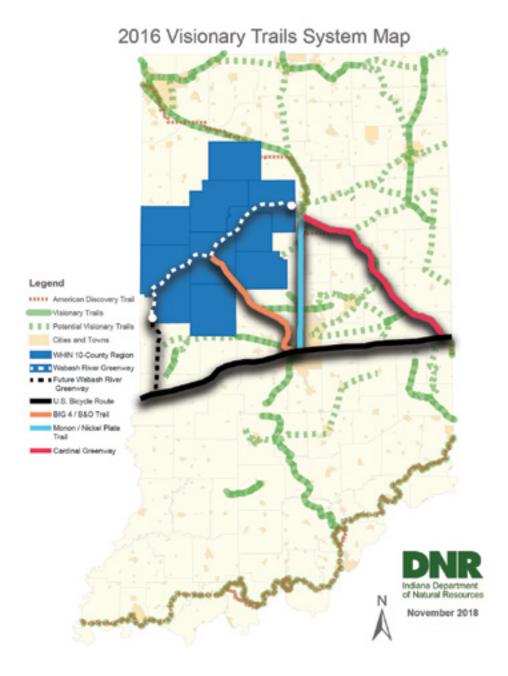
STATE TRAILS

At a state level, Indiana has completed a number of visionary trails and is planning to implement more in the future.

It is common knowledge that shorter loops and day trips appeal to a larger amount of trail users, compared to the number of those that choose to backpack or through hike. To appeal to a wider variety of users, a concept called the Half Wheel is proposed to form the shorter loops attractive to a larger number of users.

This concept combines constructed and proposed trails to form a half-wheel shape, allowing users to choose how much or how little they want to explore. The spokes are comprised of the Monon & Nickel Plate Trail, Big 4 Trail, and USBR 50. The rim is comprised of the Cardinal Greenway, the Wabash River Greenway, and a future extension of the Greenway to intersect with USBR 50. Implementation of this Wabash River Greenway Corridor Master Plan is a key investment, as the Greenway comprises a large part of the trail yet to be constructed.







CONNECTIVITY & ACCESS

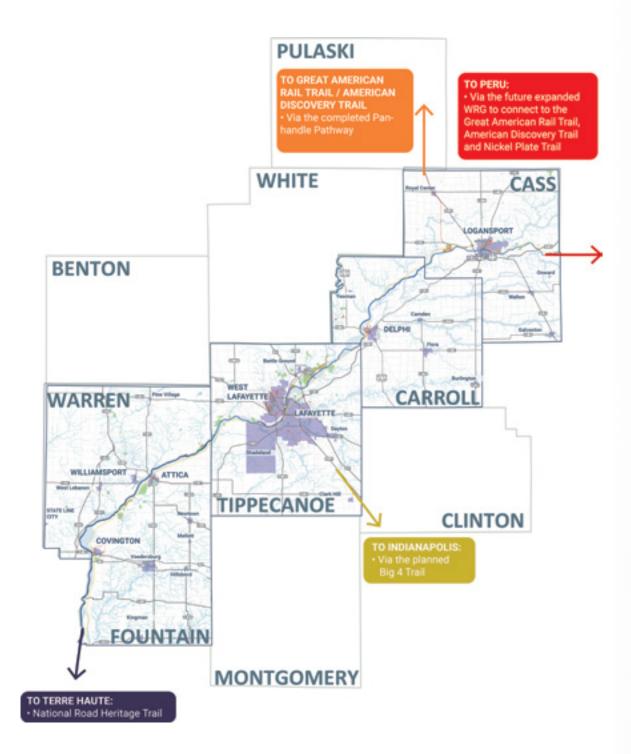
REGIONAL TRAILS

The state visionary trails connect to multicounty bike and pedestrian facilities, which tie into local systems. A part of the success of the Wabash River Greenway hinges on the ease of access to and from adjacent regional facilities. This Wabash River Greenway master plan identifies four existing and potential connections throughout the corridor.

Two of these are within Cass County. The first envisions an extended Greenway from Logansport to Peru, Indiana, connecting to the two cross-country trails, the ADT and the GART. It will also link to the Nickel Plate Trail, another rail trail that starts in Rochester, goes through Peru, and ends in Kokomo. A second access point to the ADT and the GART is through Winamac in Pulaski County, by way of the Panhandle Pathway.

The third connection links Lafayette to Indianapolis via the planned Big 4 Trail extension. This trail is one of the State Visionary Trails and has high potential to be completed in the near future due to strong support from the State.

The final regional link is another extension of the Greenway Corridor from Fountain County south to the National Road Heritage Trail (NRHT) in Terre Haute. The NRHT is a cross-state trail following the National Road Corridor and providing access to adjacent historic sites. Portions of the trail are still under development and when complete will span 150 from Terre Haute to Richmond.



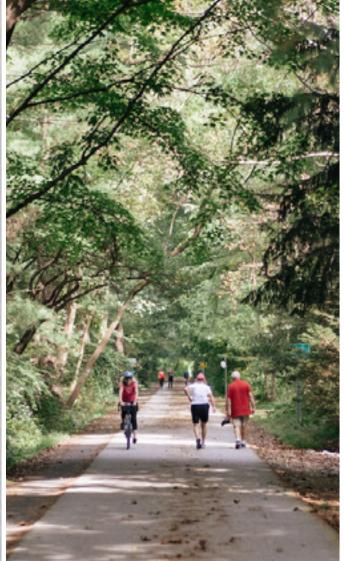


CONNECTIVITY & ACCESS



Regional trails are generally ADA accessible, paved corridors open to the general public. While these corridors host big events such as century rides, they are more frequently used for shorter activities such as dog walking, running, skating, and family bike rides.







1

organizing gets everyone working toward the same goal. The tough work of building consensus and cooperation among the groups that have an important stake in the downtown area can be eased by using the basic formula of a hands-on, volunteer-driven program and an organizational structure consisting of a board and committees to direct the program.

2

DESIGN gets a Trail Town into top physical shape. Capitalizing on its best assets—such as historic buildings and traditional downtown layout—is just part of the story. An inviting atmosphere created through attractive window displays, professional signage, well-maintained sidewalks, accessible parking areas, appropriate streetlights, and inviting landscaping conveys a visual message about what a Trail Town is and what it has to offer.

[3]

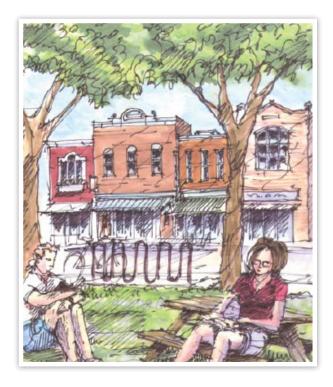
RESTRUCTURING finds a new purpose for the town's enterprises. By helping existing downtown businesses expand and by recruiting new ones to respond to today's market, Main Street programs help convert unused space into productive property and increase the competitiveness of business enterprises.

4

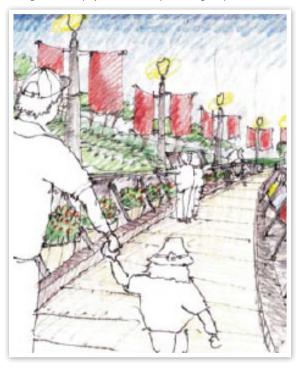
PROMOTION sells the image and promise of a Trail Town to all prospects. Marketing the downtown's unique characteristics to local customers, investors, new businesses, and visitors requires an effective promotion strategy. It forges a positive town image through advertising, retail promotions, special events, and marketing campaigns carried out by the local volunteers.



Images courtesy of Trail Towns by the Allegheny Trail Alliance







"Any trail, long or short, is a valuable asset to a community."

- Trail Town Manual, pg 6

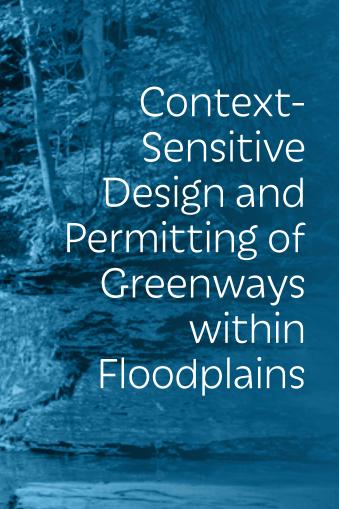
Also included are checklists to evaluate existing facilities and identify issues, define the trail corridor, track trail usage, and assess the capacity of local organizations and businesses to contribute to the revitalization effort.

Allegheny Trail Alliance supports their recommendations by summarizing studies that show that "the longer the trail, the farther people will travel to visit it, the longer they will stay, and the more money they will spend. A day-tripper will spend 4x as much as a local user, and an overnight visitor will spend 2x the amount of a day-tripper."

And to capture those long-distance users, trail towns should invest in partnerships to upgrade public amenities, assist existing businesses, install clear signage to retail districts, and enhance the gateway experience as people enter the town.



CONNECTIVITY & ACCESS



GREENWAYS

Greenways, in their broadest context, are open space lands recognized for their ability to connect people and places. These ribbons of open space are typically located within linear corridors such as along rivers or streams, or manmade corridors such as abandoned railroad beds or utility easements (greenways.com).

Greenways are natural areas of protected open space managed for conservation and/or recreation. They typically follow natural landscapes (i.e. riparian corridors along rivers or streams). Not all greenways include trails but most often the term greenway is associated with a trail (paved or natural surface) used for walking, bicycling, horseback riding, or other forms of recreation and transportation.

Greenway trails are often located in natural and regulated floodplains along rivers or streams. By preserving floodplains in a natural state and protecting them as greenway, many riverside communities are preventing potential flood damage and related costs. According to the Federal Emergency Management Agency (FEMA), the implementation of floodplain ordinances is estimated to prevent over \$1B in flood damage annually (FEMA.org). Beyond the immense benefit of protecting people and property by utilizing floodplains for recreation (rather than allowing for new development), communities benefit from greenways improving livability and resilience through recreation and open space areas.

FLOODPLAINS AS NATURAL SYSTEMS

Floodplains are an integral part of healthy river systems (AmericanRivers.org). Giving a river room to move and flood is the best protection against floods and the surest way to keeps rivers healthy. Natural floodplains are the low-lying land on either side of riverbanks and are considered part of a river. The benefits of floodplains to peoples and nature include:

- > Storing and slowing of flood waters
- > Protecting adjacent and downstream communities
- Improving water quality by acting as nature's filter
- Safeguarding people and property by acting as the first defense against flood damage
- Creating fertile soil for crops by depositing sediment and nutrients
- Nurturing life by providing a productive area for native plants and wildlife
- > Serving as natural nurseries for many fish and amphibians
- > Providing recreation through trails, hiking, boating/paddling
- > Connecting people with nature
- Recharging groundwater

Well-designed greenways and greenway trails can protect, restore, and complement the above benefits.



CONNECTIVITY & ACCESS

FLOODPLAIN MANAGEMENT AND REGULATIONS (LOCAL AND FEMA)

Floodplain management is a community-based effort to prevent or reduce risk of flooding.

Typically, a local community's floodplain protection requirements will be referenced in zoning and building codes or in a specific floodplain ordinance. While FEMA has minimum floodplain management standards for communities participating in the National Flood Insurance Program (NFIP), the community may choose to adopt a higher standard. Ultimately local communities (i.e. Cities or Counties) will typically regulate their own floodplains while referencing FEMA standards if they participate in the NFIP.

Flood mapping (a.k.a. Risk MAP or Flood Insurance Rate Map [FIRM]) is an important part of the NFIP, as it is a basis of the NFIP regulations and flood insurance requirements. Additionally, FEMA maps are typically referenced in a community's floodplain development ordinance or municipal code. FEMA maintains and updates Risk Map and underlying engineering (hydrologic and hydraulic) analysis used by communities, property owners, and insurance providers.

The areas along the Wabash River identified in the FEMA-FIRM (a.k.a. Risk Map) as a Special Flood Hazard Area (SFHA). SFHAs are defined as areas that will be inundated by a flood event with a one-percent chance of being equaled or exceeded in any given year. The one-percent annual flood is also referred to as the 100-year or base-flood. Along the Wabash River the SFHAs are labeled as FEMA Zone A or Zone AE.

Zone A: An SFHA with no Base Flood Elevations (BFEs) or flood depths shown. For this corridor FEMA Zone A is typically in more rural areas. See example map below.



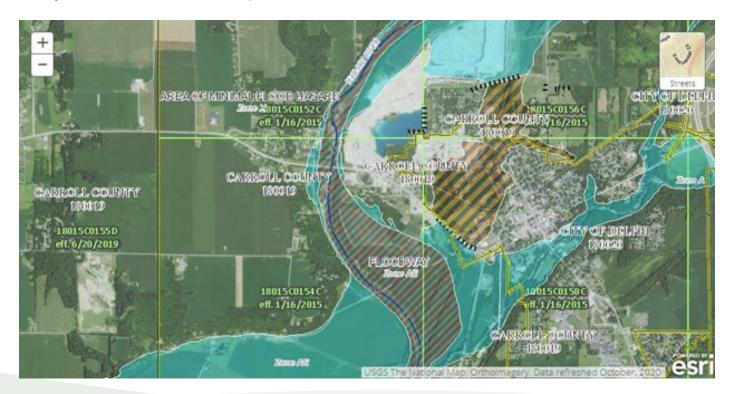
FEMA Zone A (typical for more rural areas in corridor)

Zone AE: SFHAs located at BFEs are derived from detailed hydraulic analysis and are shown on the map/Zone. For this corridor these are the areas where the Wabash River or significant tributaries are in more urbanized/developed areas.

FEMA mapped Zone AE may also have an area mapped as the designated "floodway". The floodway is highly regulated, as it is the primary conveyance area of the river and floodplain that must be reserved to discharge the base flood. See example map below.

Also, some Risk Maps areas outside the SFHA are mapped by FEMA as Zone X, "Areas of 0.2% annual flood" or "Areas of 1% annual chance of flood with average depths less than 1 foot" or "Areas with reduced flood risk due to levee" (as shown in orange and grey stripped zone in map below).

FEMA ZONE AE with Floodway and Zone X also shown (typical for urban areas).





PERMITTING TRAILS, BOARDWALKS, BRIDGES, **ETC. IN REGULATED FEMA FLOODPLAINS**

Generally, constructing recreation facilities such as greenway trails is accepted as a good complimentary use in floodplains, but will still require a local floodplain development permit under the definition of development. Development in the floodway and sometimes the floodplain (depending on local ordinance) will require an engineering (hydraulic) analysis/model to accompany the floodplain development permit. This analysis is typically called a flood impact analysis (FIA), and must be completed by a professional engineer, to FEMA standards. If the FIA proves the project has no impact (i.e. no impact on Base Flood Elevations), it can be approved locally. However, the local jurisdiction may request technical assistance from FEMA for reviewing the FIA. Many greenway trail projects, if designed correctly, can be permitted under this local process as no-impact/No-Rise Certification. The review and approval of a local floodplain development permit and No-Rise Certification can take two to six months.

Typically, projects that involve a structural crossing (i.e. pedestrian bridges) across a regulated/mapped floodway will require a Conditional Letter of Map Revision (CLOMR) unless the crossing can be fully elevated above the BFE spanning the entire floodway. This is typically not feasible as a bridge approaches "pinch" in the floodway to minimize the bridge span length. This fill in the floodway and/or crossing can require a map revision through FEMA. CLOMRs are submitted to FEMA for approval and typically take 5-12 months for review and approval. The CLOMR allows for the project to be constructed. After the project is built, the as-built information will be used to update CLOMR to a Letter of Map Revision (LOMR). The LOMR is the actual revision to the FEMA map and associated model. This CLOMR/LOMR process will likely be required for any structural crossing across the Wabash River or any major tributary with a mapped floodway.

ADDITIONAL TYPICAL PERMITS IN RIVERS, STREAMS, AND FLOODPLAINS

Trails construction that will clear, fill, and excavate within waters of the U.S. (WOTUS) (i.e. as jurisdictional stream or wetlands) will be required under the Clean Water Act to obtain a Section 404 permit from the U.S. Army Corps of Engineer (USACE) and a corresponding Section 401 Water Quality Certification (WQC) from the Indiana Department of Environmental Management.

Section 10 of the Rivers and Harbors Act of 1899 requires regulated activities conducted below Ordinary High Water (OHW) elevations of navigable waters (i.e. the Wabash Rivers) of the U.S. be approved permitted by the USACE. Regulated activities include the placement or removal of structures, filling, excavation, or any disturbance to of soils/sediments.

FEMA CLOMRs and USACE permits require compliance with the federal Endangered Species Act (ESA). ESA documentation from the U.S. Fish and Wildlife Service (USFWS) with determination or concurrence is required to accompany each application.

There may be other permits or clearances beyond FEMA, Section 404., Section 10, and Section 401 required based on natural or cultural resources specific to the project.

DESIGNING AND CONSTRUCTING TRAILS, BOARDWALKS, AND PEDESTRIAN BRIDGES IN FLOODPLAINS

To maintain floodplain's natural and community benefits as discussed above, while being regulatory compliant with local and FEMA standards and Clean Water River and Harbors Acts, we have provided the following typical design examples and construction considerations specific to greenway trails in floodplains. These are high-level trail and ecological planning and design concepts and are not a substitute for detailed engineering and landscape architectural evaluation for specific projects.

Typically, greenway trails need to adhere to national design standard for off-road trails and greenway facilities, as defined by American Association of State High Transportation Official (AASHTO), the American with Disabilities Act, and the Manual on Uniform Traffic Control Devices (MUTCD). With these guidelines, other considerations specific to working in natural floodplains include:

- > Clearing and grubbing should be as minimized as possible to maintain tree canopy and riparian vegetation.
 - This typically includes clearing the trail width and an additional 2-foot shoulders (i.e. clearing 14-feet for 10foot paved greenway trail)
 - An additional selective clearing of limbs and underbrush may go an additional 5-feet on each side to remove limbs and underbrush, increasing sight lines and enhancing safety of trail users.

Example of clearing limits







SUBCATEGORY

➤ When trails are in areas with high-velocity flood flow (i.e. inside the floodway) the trail surface is best implemented as reinforced with concrete as opposed to asphalt. This will provide more resiliency to high-velocity flows leading to reduced repair and maintenance post-construction.



Concrete approach and bridge deck due to velocities

- ➤ The primary trail corridor should be outside the floodway or the streamside riparian corridor (30- to 50-feet from top of the bank).
 - Maintaining a buffer will protect the river, provide water quality benefits, and keep the trail away from any erosion hazards.
 - Design can provide some footpath (non-paved) hiking trails to allow for some connection to the water off the main greenway trail.
 - May provide some selective locations where the trail connects close to the river at boat ramps or scenic overlooks. Special consideration in planning and design should be given to these areas.

- ➤ Boardwalks are typically required when crossing wetlands or poorly drained areas.
 - Top down construction may be a requirement of the 404/401 USACE/ IDEM permit(s).
 - For wheeled users, concrete is the best surface. Wood surfaces tend to be slippery when wet and pose a safety hazard to cyclists.
 - Boardwalk widths and structural design should account for maintenance vehicles and/or emergency vehicles (fire, ambulance, etc.) use/loading as appropriate.





Example of top down constructed boulder through wetlands, a deck made of concrete for bikes, and 14-foot wide for maintenance vehicles

SUBCATEGORY

- > The trail surface and shoulders should be elevated and superelevated enough to be slightly above the adjacent floodplain and created positive drainage, avoiding ponding on the surface. They should not be so high that the height could impact the hydraulic function of the floodplain or impact base flood elevations.
 - Sheet flow off the trail should be maximized
 - Small slab-top bridges or culverts can help ensure hydraulic connectivity is maintained across the trail to maintain natural flow patterns or flood storage in the floodplain



Greenway trail with shoulder, and small slab-top bridge/ culvert to allow water to flow across floodplain without flowing over the trail surface

- > Additional native trees can be planted along the trail for both aesthetic and environmental reasons.
 - This can improve appearance, provide a cool environment for users, and provide habitat for birds and wildlife
- Bridges should be optimized to be compliant with local floodplain and FEMA regulations and to minimize impacts under USACE Section 404 and IDEM WQC. This design process is usually iterative to find best economic and ecological value.
 - When possible, in crossing smaller streams, the stream should be fully spanned.
 - Prefabricated bridges ordered from the manufacture are popular options.



Example of small bridge constructed on-site for small drainage



Example of a prefabricated bridge (112-foot span) across larger stream. This bridge came in two pieces and was set by crane.





Greenway Access

TRAILHEADS

Trailheads are key elements in the Corridor design because they designate specific locations to get on and off the greenway. Depending on location, trailheads may range in scale from a small gravel lot to a large paved parking area complete with restrooms, water fountains, and trash containers. Water access is an integral feature of many of these areas.

PULASKI

CASS

The Corridor Master Plan builds upon existing trailheads and proposes new trailheads at regular intervals along the length of the Greenway. Rehabilitation of existing trailheads includes repaying, adding or enhancing water access, incorporating amenities, and installing Wabash River Greenway branded trail kiosks and monument signage.

Successful trailheads are easy to find, clearly marked, and accessible to all types of users. As the gateway to the trail experience, clean, functional, and aesthetic trailheads welcome users to the greenway and to the surrounding communities.

Due to its regional nature of spanning across counties and communities, the route is divided into Reaches in order break the greenway down into greater detail. The limit of each reach is determined by bridge crossings or county lines and capture intuitive loops to and from major destinations along the corridor.

REACH 01

Cass County Line to East Logansport

REACH 02

REACH 04

REACH 05

US 231 Bridge to Independence

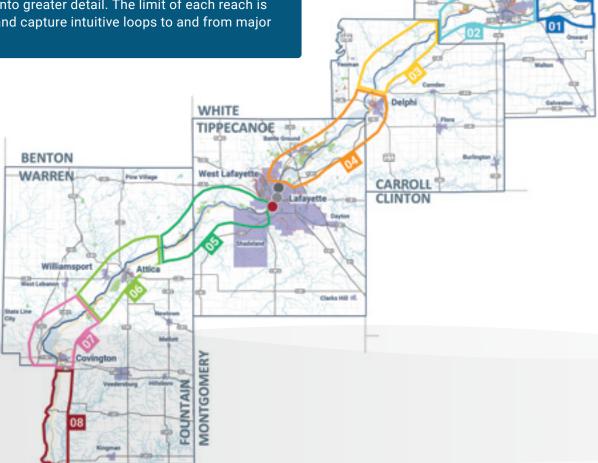
REACH 06

REACH 07

REACH 08

I-74 to Fountain County Line

- North Urban Reach
- Central Urban Reach
- South Urban Reach





CONNECTIVITY & ACCESS

WATER ACCESS

Draining over two-thirds of the State of Indiana, the Wabash River supports verdant woodlands and meadows along both banks of this water resource sustaining a wide variety of wildlife and aquatic life.

A primary goal of the Wabash River Greenway/Blueway is to encourage public use of this resource while educating users on the importance of protecting and preserving our water resources. Time spent on the river provides meaningful exposure to the river, it's natural beauty, Indiana geology and riparian plant morphology. Most repeat users of the Wabash River as a recreational water resource will become stewards of the river.

Convenient water access for river-based experiences from fishing to kayaking, and swimming to canoeing, is crucial to expanding river stewardship and building public awareness of this recreational resource. Main Street events staged on the river also play a substantial role in building community support for river stewardship programs and investments.

The design of the greenway/blueway corridor supports "on the water" activities with improvements to existing Indiana Department of Natural Resources Public Access Sites and the establishment of new access sites with launch facilities. The Wabash River Greenway/Blueway offers

three categories of water access: hand carry, paved ramps and watercraft launch access. Hand carry access allows canoe and kayak access in sensitive areas where site constraints prohibit launching a boat hitched to a vehicle. These access sites may include steps or narrow dirt paths on slopes, accommodating personal portage of kayaks and canoes to the water's edge. Paved ramps provide the most convenient access for larger watercraft to enter the water without the challenges of rutted ramps. Watercraft launch sites for canoe and kayak access provide for ease of water entry with docks and railings. Depending upon the river bank conditions, these Watercraft launch sites may be designed to accommodate water access for physically challenged recreation users.

Currently the ninety river miles within the study area offers twelve existing Public Access Sites with five proposed access sites and launch facilities. Eight existing hand carry access sites will be expanded to twelve when the greenway/blueway plan is built out. Where feasible, these facilities will be further embellished with some or all the following: trailheads, wayfinding, information about local history and culture, and area attractions for dining, lodging and entertainment.

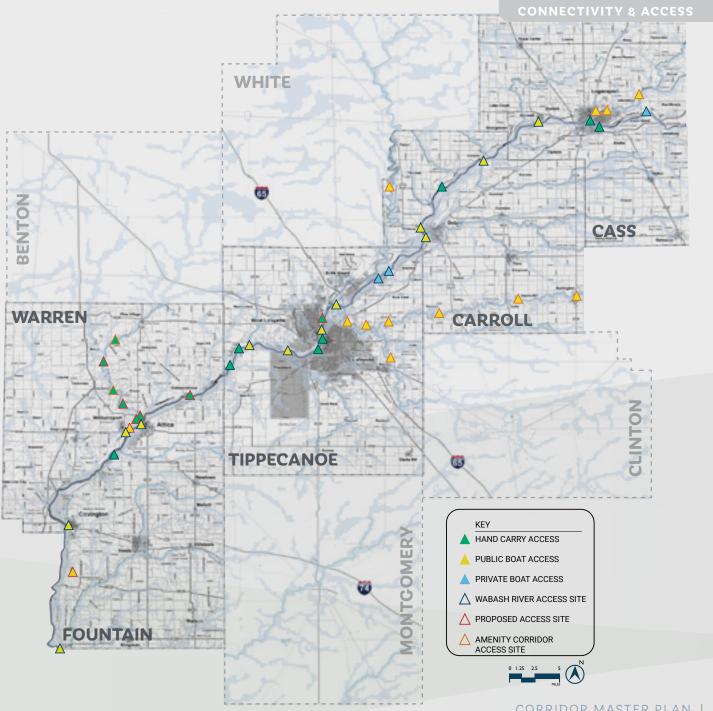






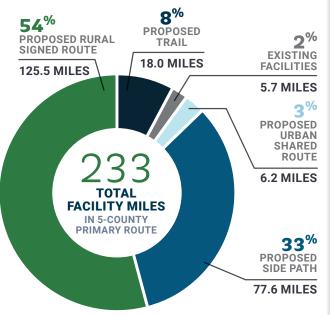


The corridor master plan identifies existing public access sites along the Wabash River and adjacent tributaries that feed into the Wabash, such as Wildcat Creek or Eel River. Wabash River Greenway/Blueway planning efforts for newly proposed public access sites and types of access facilities are complimentary to existing facilities. Proposed locations will facilitate the provision of greenway/ blueway livery services to support this destination recreation amenity.

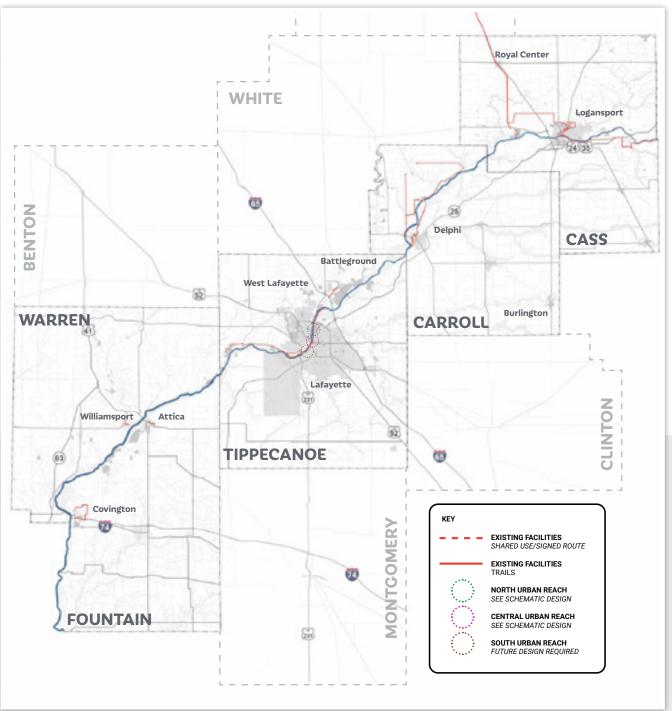




FACILITIES



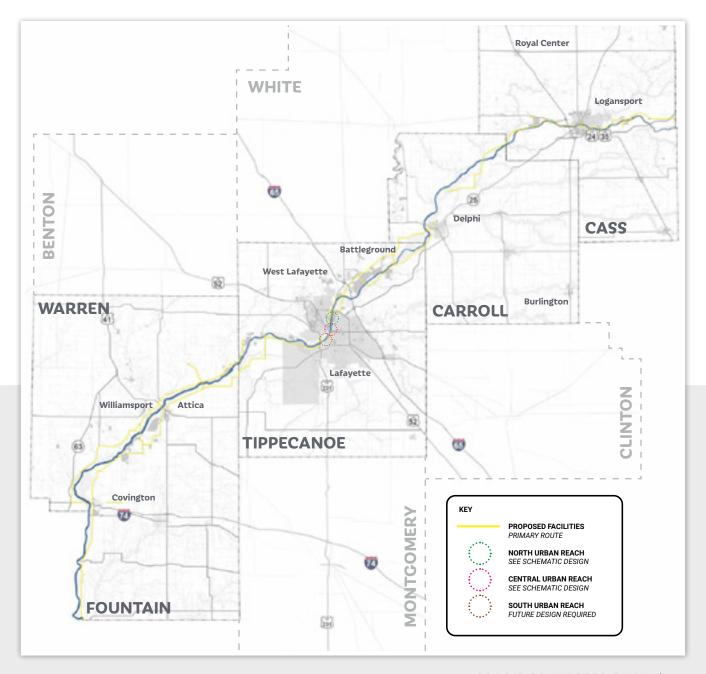
EXISTING FACILITIES In addition to identifying existing water access, the design team also documented the location and miles of bike and pedestrian facilities in proximity to the Wabash River. Significant stretches of completed facilities include the Little Turtle Waterway, Delphi Historic Trails, the Wabash Heritage Trail, Williamsport Falls Trail, and Covington Circle Trail. Altogether, 16.9 miles of trails and side paths compose 5% of the proposed routing.



CONNECTIVITY & ACCESS

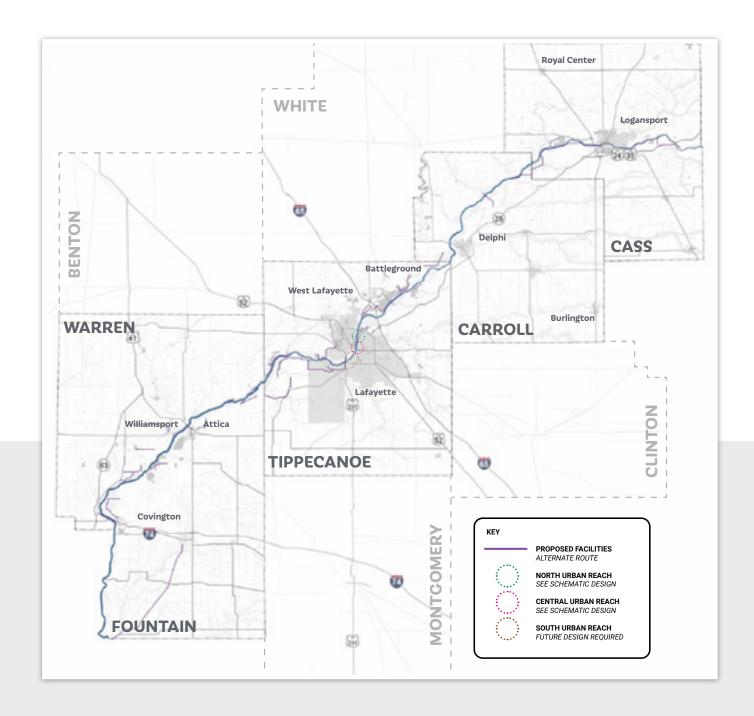
PRIMARY ROUTES
Primary routes plus
existing facilities make up
a 353 mile long trail network along
90 miles of river. This is achieved
by incorporating numerous loops
and interconnectivity that gives
users options so they don't have to
travel the same way twice. It also
increases the likelihood of return
visitors to explore the other path
previously unchosen.

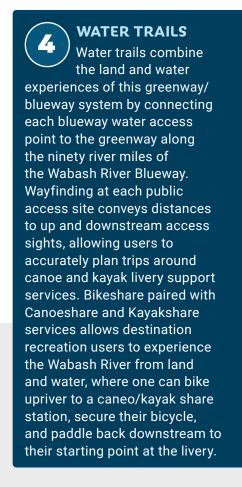
The proposed primary routing combines several facility types: rural signed routes, trails, urban shared routes, and side paths. Rural signed routes are the most prevalent facility type, due to the longer stretches of rural environments as the route travels from county to county. This on-street facility is concentrated on lower-speed roads, designated scenic routes, and signed county bikeways to protect bikers from speeding vehicles. The next most prevalent type are side paths. Side paths are a fully separated facility from the road, and are critical to pedestrian safety in high speed or high traffic areas. Together, rural signed routes and side paths compose about 87% of the primary route. The remainder is split between asphalt trails, existing trails, and urban shared routes.

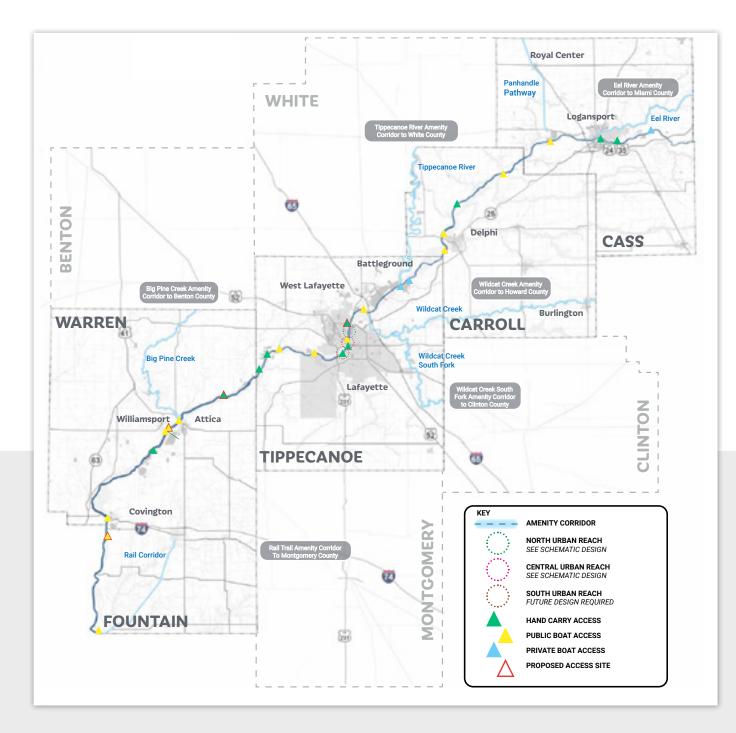




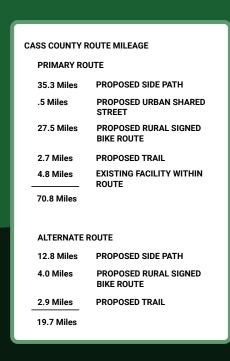
ALTERNATE ROUTES The design team put together alternate routes to be used if the primary route is found to be unconstructable. These routes are feasible but less desirable due to property acquisition needs or distance from the Wabash. The alternatives follow the same concept as the primary routes, forming loops throughout the corridor and contain several facility types.

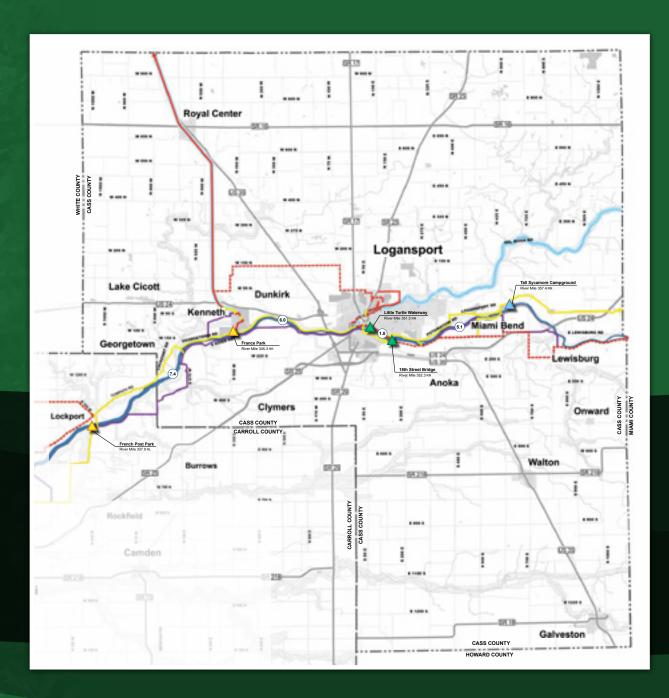




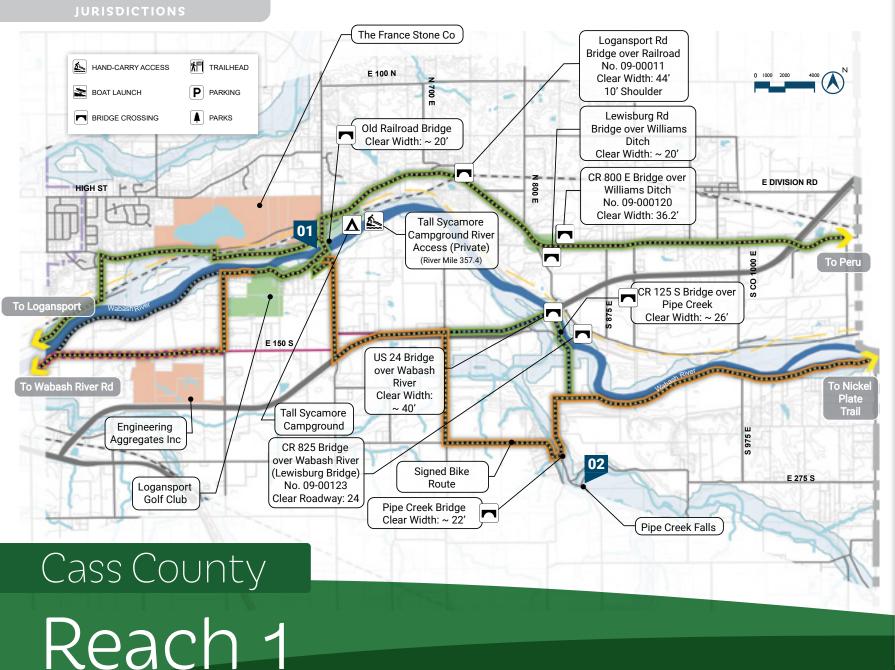












FEMA FLOODWAY PARCELS WATER BODIES ARTERIAL LOCAL/COUNTY ROAD CONTOURS HISTORIC CANAL ROUTE EXISTING TRAILS EXISTING BIKE ROUTE PARKS AND OPEN SPACE WABASH RIVER MAJOR TRIBUTARIES COUNTY LINE CORPORATE BOUNDARY PROPOSED SIDEPATH PROPOSED SIDEPATH ALONG SCENIC BYWAY PROPOSED SIDEPATH ALONG BIKE ROUTE PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING PROPOSED SHARED USE/-SIGNED ROUTE PROPOSED TRAIL PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE EXISTING TRAIL UPGRADED PRIMARY ROUTE ALTERNATE ROUTE PROPOSED PARK MASTER PLAN UPDATE Park

REACH 1 HIGHLIGHTS

Within this reach, a key Wabash River crossing point for the greenway is adjacent to CR 600 E. Old Zimmerman Bridge used to be located just west of the CR 600 E bridge. This abandoned railroad crossing was maintained as a fishing deck until it fell into disrepair was removed in January 2021. Now this spot is a prime location for a new pedestrian bridge to allow greenway users from both Peru and Logansport to loop back to their starting point using the opposite riverbank.

Pipe Creek Falls is a scenic destination just off the Panhandle-Nickel Plate signed greenway bike route. The falls spill over a series of dams historically used to operate several wood and grain mills during the mid-1800's. Recognized on the National Registry of Historic Places, the last standing mill, turned resort and now a private residence, provides a terminus to the vista across the Falls. While the grounds immediately adjacent to the Falls are privately owned, visitors enjoy biking around, fishing in, and boating on Pipe Creek.

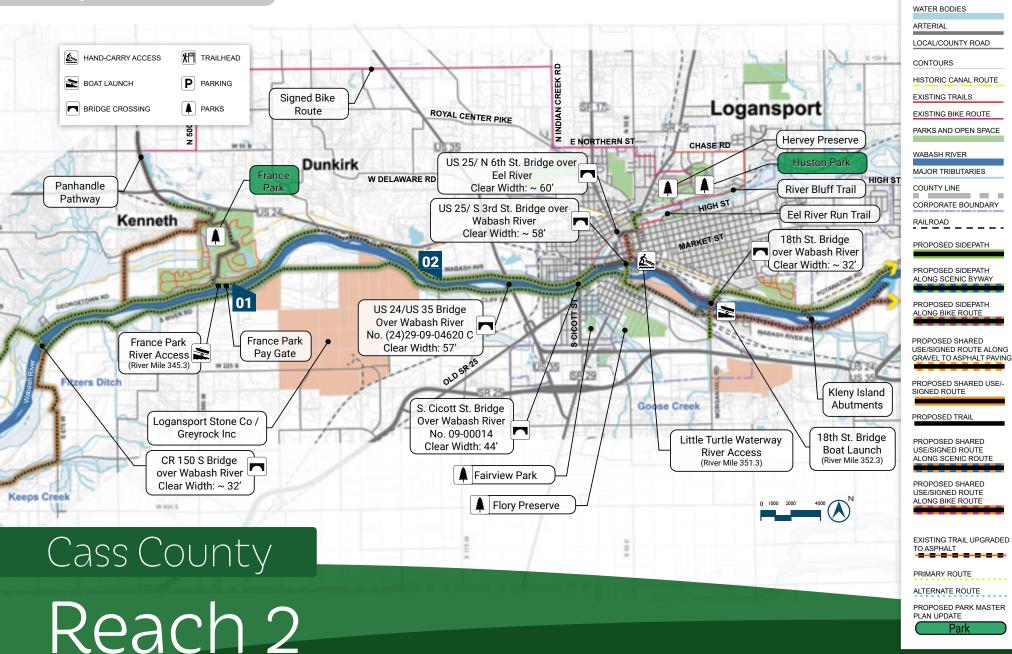








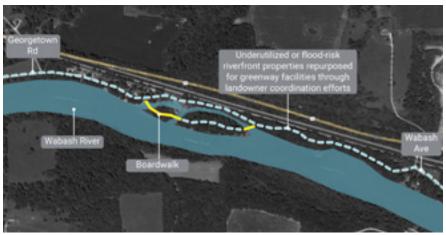




FEMA FLOODWAY

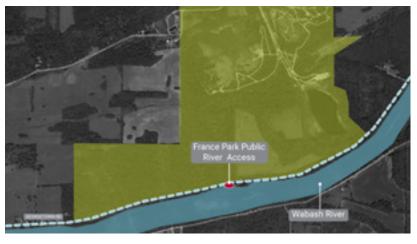
REACH 2 HIGHLIGHTS

Wabash Avenue provides a continuous low-traffic connection between Logansport and France Park, two major destinations within this reach. It is a scenic route overlooking the Wabash with a lot of potential to attract bikers, hikers, and float trippers once greenway improvements are put in place.



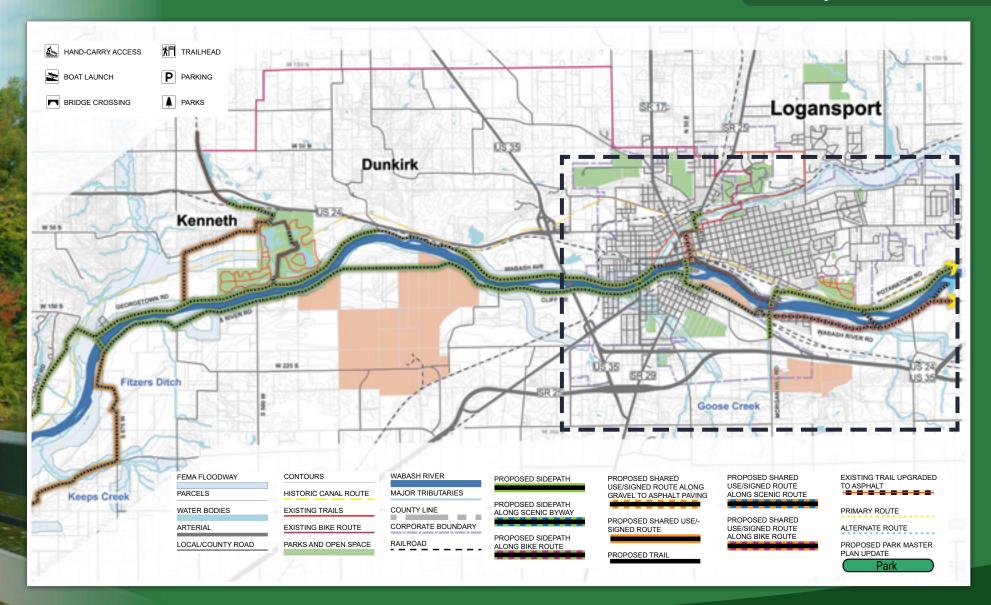


France Park's Public Access Site is located on the south end of the park, across Wabash Avenue and is the last put-in in Cass County before reaching Carrollton Road Bridge in Delphi. Users can launch from one of several access points along the Eel and Wabash Rivers in Logansport and float down to France Park. The access site includes a paved boat ramp, viewing deck, and pavilion.

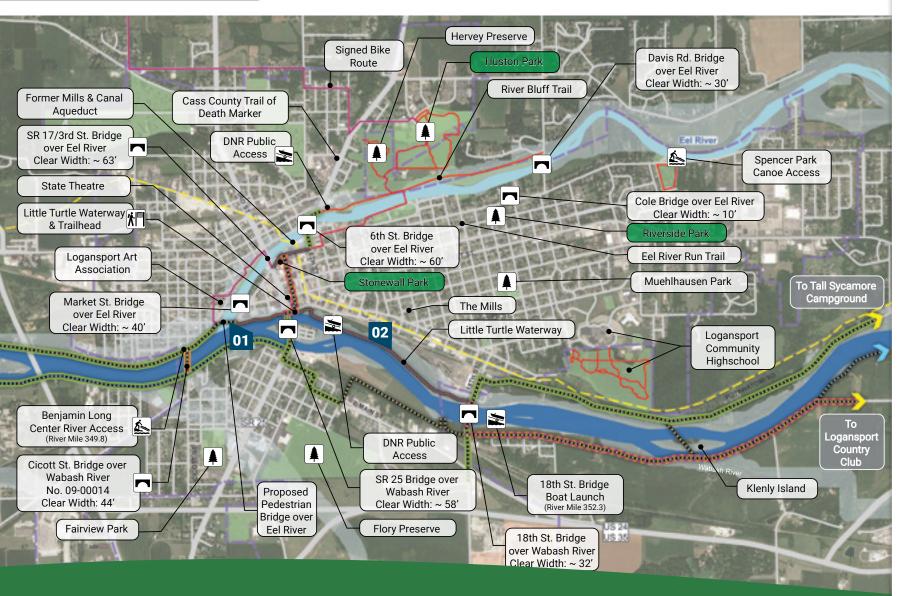












Logansport

FEMA FLOODWAY

PARCELS

WATER BODIES

ARTERIA

LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

COUNTY LINE

CORPORATE BOUNDARY

RAILROAI

PROPOSED SIDEPATH

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED TO ASPHALT

PRIMARY ROUTE

ALTERNATE ROUTE

PROPOSED PARK MASTER PLAN UPDATE

Park

LOGANSPORT HIGHLIGHTS

O1 In the late 1700's, the Wabash River Valley was controlled by the Miami Tribe, led by War Chief Little Turtle. The naming of the Little Turtle Waterway recognizes this chief and the region's turbulent history. The trail is an asphalt path that runs parallel to the Wabash River from 18th St to its trailhead plaza at 5th St. From there, the trail continues west as a dirt path to the confluence of the Eel and Wabash rivers. The Little Turtle Waterway Plaza showcases a historic 32-foot signal bridge that forms the gateway to the trailhead which incorporates brick piers with granite medallions designed by a Miami tribal elder. The gateway frames a sculpture of two cranes, the totem of Little Turtle's tribe. Granite pavers are inscribed with stories from the Miami, Potawatomi, and French traders who have populated the region over time. Established trails such as the Little Turtle Waterway lend a significant measure of historical and cultural significance to the greenway corridor.

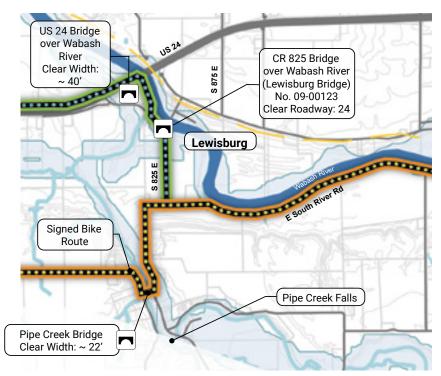
Local and county officials have expressed interest to connect downtown Logansport to France Park. Between pavement upgrades to the Little Turtle Waterway and the proposed side path on Wabash Avenue, the last gap in the route is to cross over the mouth of the Eel River. To bridge the gap, a non-motorized pedestrian bridge will need to be constructed just south of the existing railroad crossing.







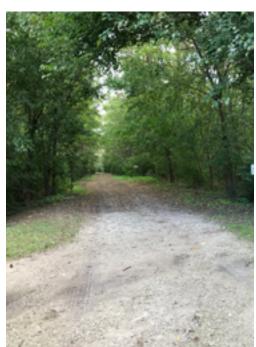


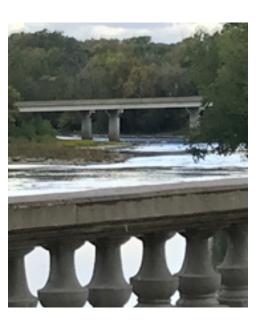


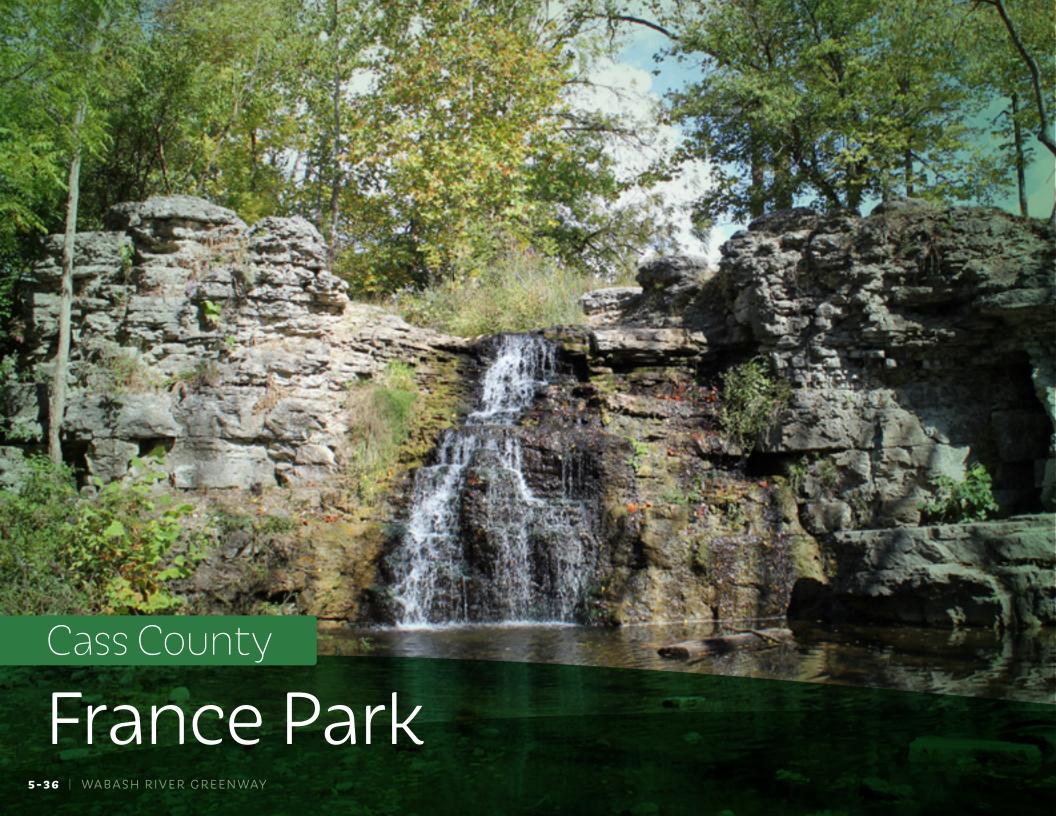


LEWISBURG HIGHLIGHTS

Lewisburg is an unincorporated community located upriver from Logansport. The Panhandle/Nickel Plate signed connector route passes through Lewisburg and there are several scenic viewpoints for those that wish to take a guick detour into the surrounding community.











FRANCE PARK HIGHLIGHTS

France Park contains a total of 773 acres, and is managed by Cass County. Just over 5 miles from Logansport, this recreational facility offers hiking, biking, camping, fishing, and disc golf. In the middle of the park is a quarry pond that attracts scuba divers for training programs. The spacious acreage provides opportunity for both quiet retreats and programmed day-trips. Access to the Wabash River just south of the park adds to its offerings and enables connection to Logansport not only by way of Wabash Avenue, but by boat as well.





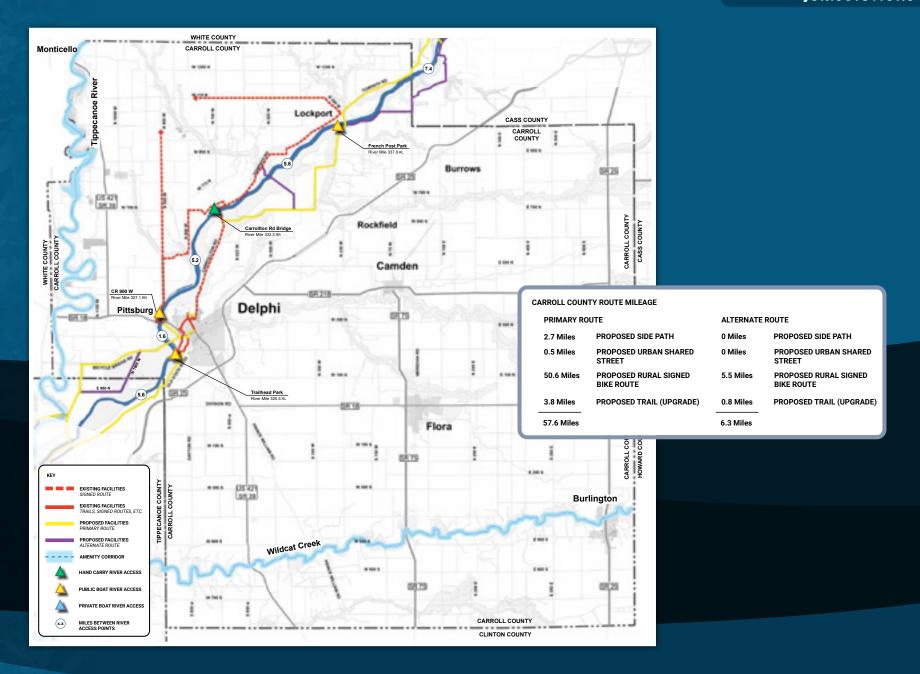
GEORGETOWN HIGHLIGHTS

Georgetown is a community founded during the era of the Erie Canal by French Canadians. The community's bridge over the Wabash River contributes to the greenway corridor as it closes the loop between Logansport, France Park, and Georgetown.

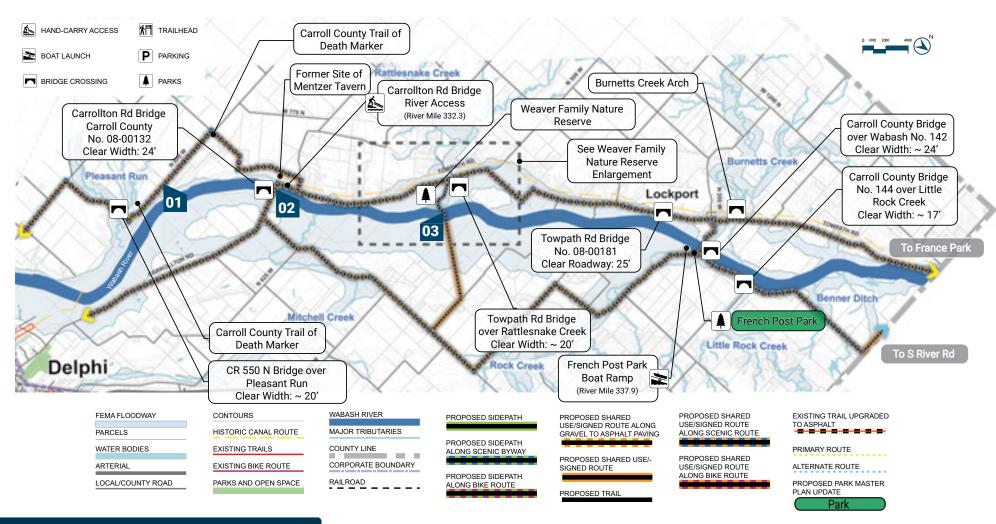












Carroll County

Reach 3

REACH 3 HIGHLIGHTS

The proposed routing follows established scenic routes through Carroll County – the majority aligns with the Wabash River Scenic Driving Route, and the segment from Lockport to Carrollton Bridge to Delphi follows Cass County Bike Route #1. The greenway corridor improvements utilize and enhance the interconnectivity of these existing routes.

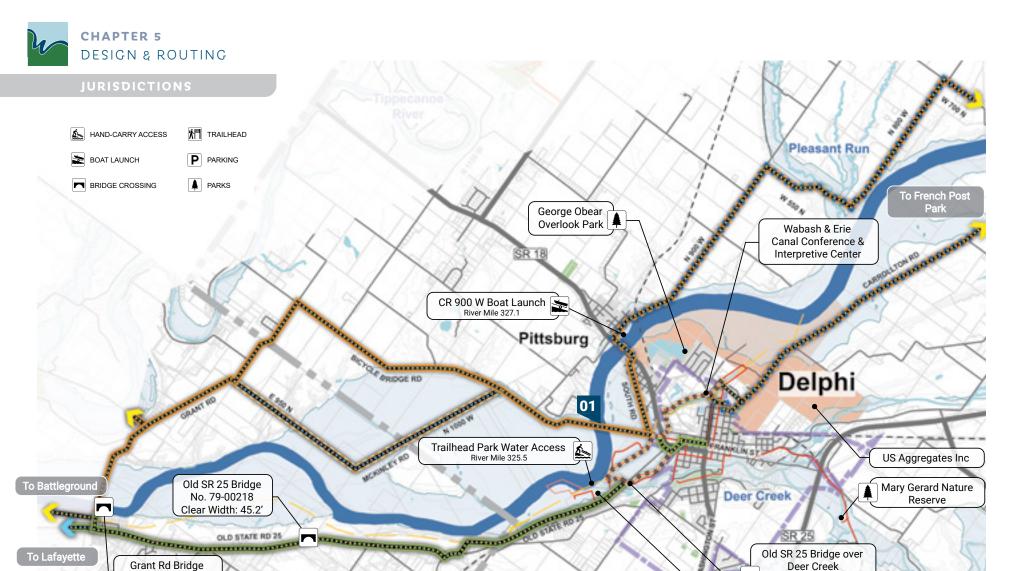


Carrollton Bridge is a destination within the county, featuring six concrete arches as it spans the Wabash River. Built in 1927, it was restored in 2008 and is listed on the National Register of Historic Places. An unpaved boat ramp is located on the west end of the bridge, utilized by kayaks, canoes, and small boats.



The connection over the Wabash River from the east bank to Weaver Family Nature Reserve proposes dividing the length from Lockport to Carrollton Bridge into two smaller loops. Shorter routes appeal to a wide user base while providing more options for long-distance users to switch up their experience. This connection would include landowner agreements to reach the east bank and the construction of a new pedestrian bridge to the preserve.





Carroll County

No. 79-00150

Clear Width: 28'



No. 025X-08-01145 B

Clear Width: 44.2'

Reach 4

FEMA FLOODWAY

PARCELS

WATER BODIES

ARTERIAL

LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

COUNTY LINE CORPORATE BOUNDARY

RAILROAD

PROPOSED SIDEPATH

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED TO ASPHALT

PRIMARY ROUTE

ALTERNATE ROUTE

PROPOSED PARK MASTER PLAN UPDATE

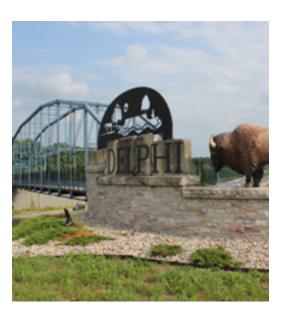
Park

REACH 4 HIGHLIGHTS

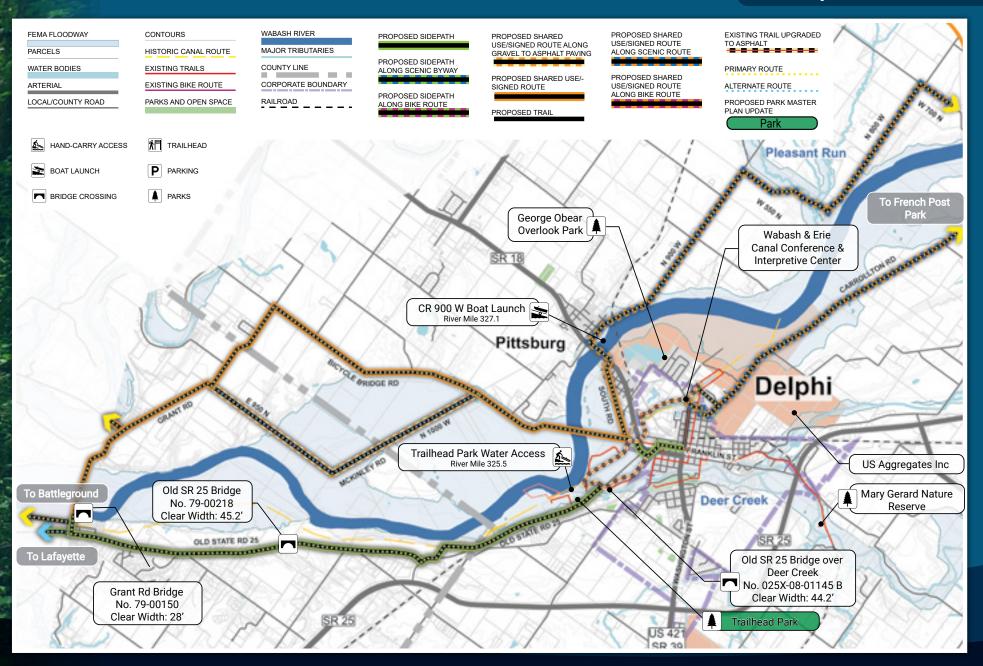
Bicycle Bridge Road is one of two river crossings that directly connect Delphi to the opposite side of the Wabash. It is the most direct route into the city for travelers approaching from Battle Ground in Tippecanoe County. A long-term goal is to connect non-motorized trail users from the greater Lafayette area to Delphi, and greenway improvements along this road would facilitate that goal.



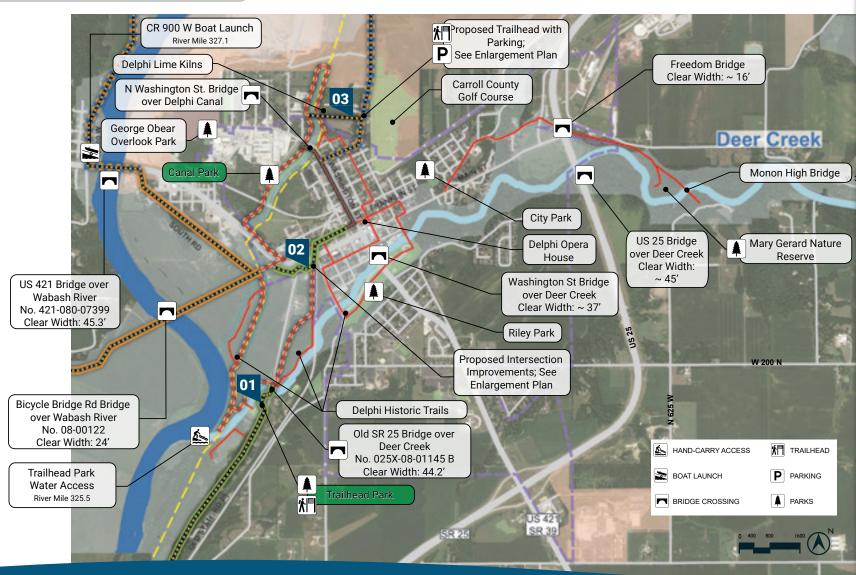












Delphi

ALTERNATE ROUTE
PROPOSED PARK MASTER

PLAN UPDATE

DELPHI HIGHLIGHTS

The City of Delphi recognizes the community benefits of outdoor recreation, and currently maintains 10 miles of trail within the city limits. The hub of this trail network is Canal Park, an area that commemorates the era of the Wabash and Erie Canal. To tie Canal Park into the greenway corridor, an extension along the defunct Belt Railroad spur to Carrollton Road is proposed, including a trailhead complete with parking, maps, and wayfinding signage. The railroad once shipped lime from kilns along the canal, the ruins of which are preserved within Canal Park.

The Delphi Historic Trail system runs southward to Trailhead Park and loops back north toward the downtown. However, pedestrian connectivity directly into downtown is impeded at the State Road 39 and Old State Road 25 intersection. The proposed solution includes installing crosswalk signals on Old State Road 25 and a trail extension to direct users to the State Road 39 underpass tunnel. Once on the other side of State Road 39, Monroe St or a proposed rail trail can connect to the existing Washington Street facilities.

Trailhead Park anchors the southern end of Delphi Historic Trails. Its amenities include a shelter, picnic tables, grills, and access to the Wabash River via Deer Creek. Recommended improvements include paving the parking area and enhancing signage with the Wabash River Greenway brand.

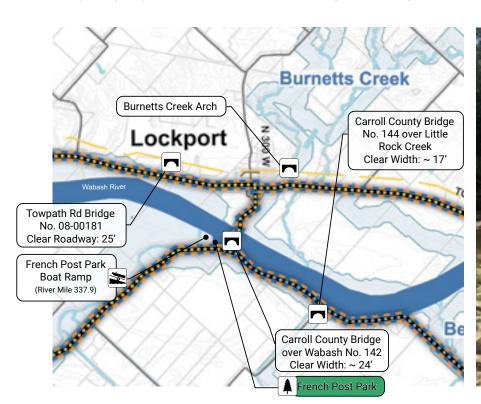




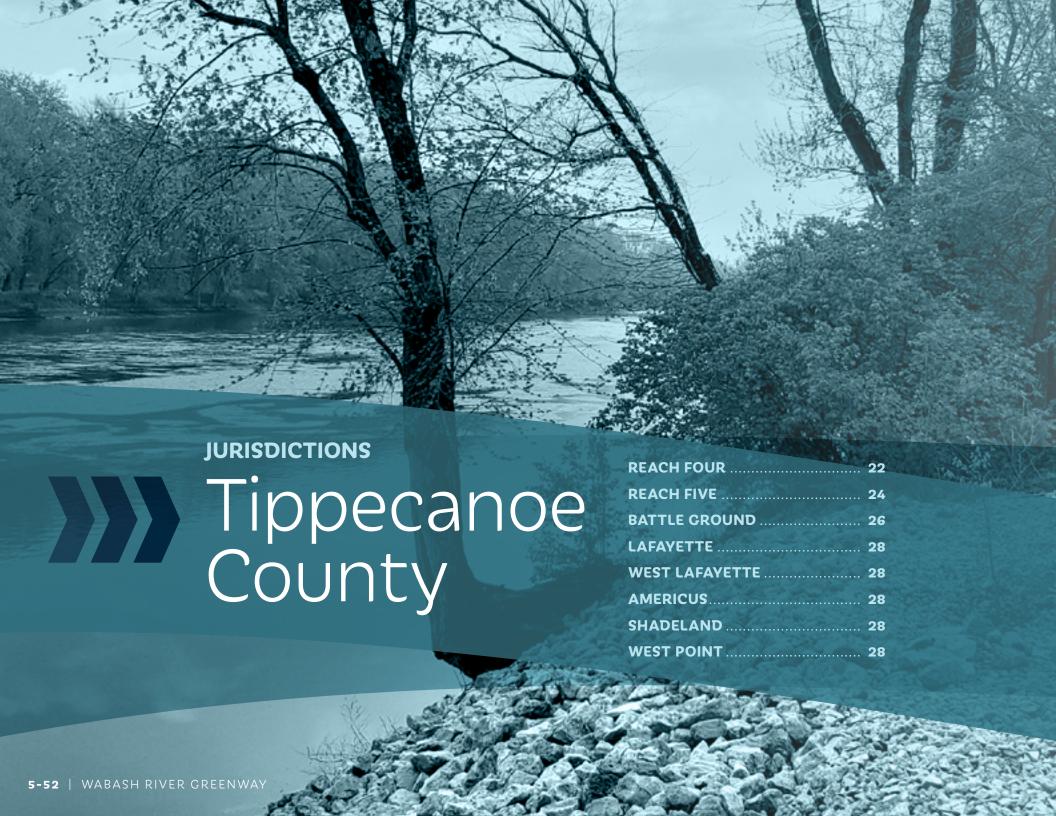


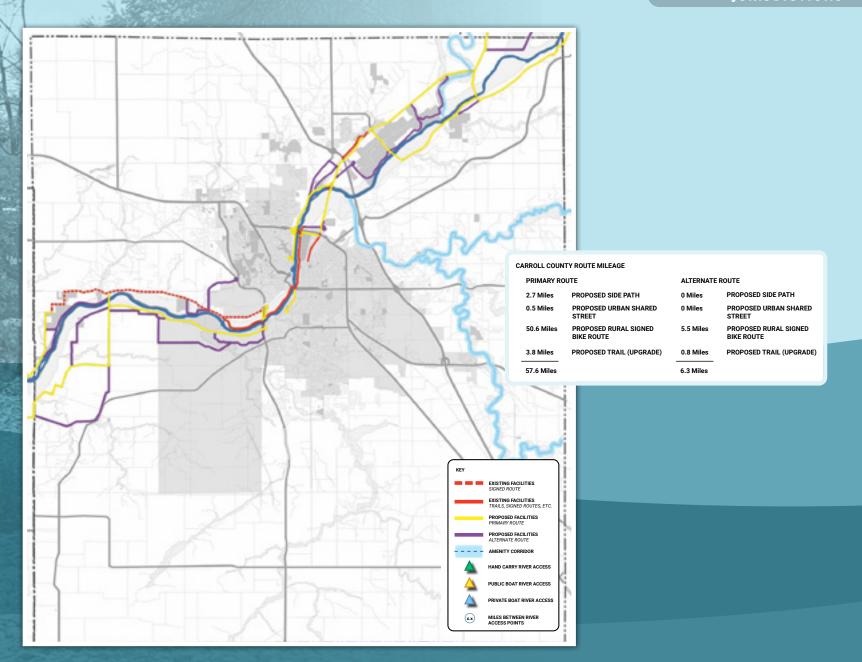
LOCKPORT HIGHLIGHTS

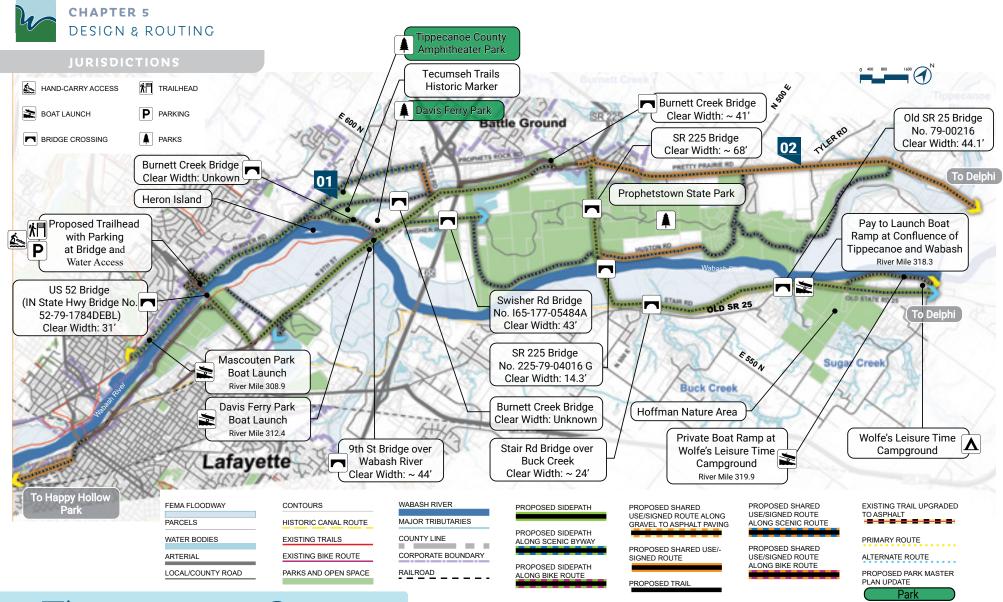
One of the largest canal towns in its heyday, Lockport was named for its location next to a series of locks on the Erie Canal. Now, due to the its bridge crossing over the Wabash, the community adds to the greenway corridor by completing loops between both Carrollton Bridge and Georgetown.











Tippecanoe County

Reach 4

REACH 4 HIGHLIGHTS

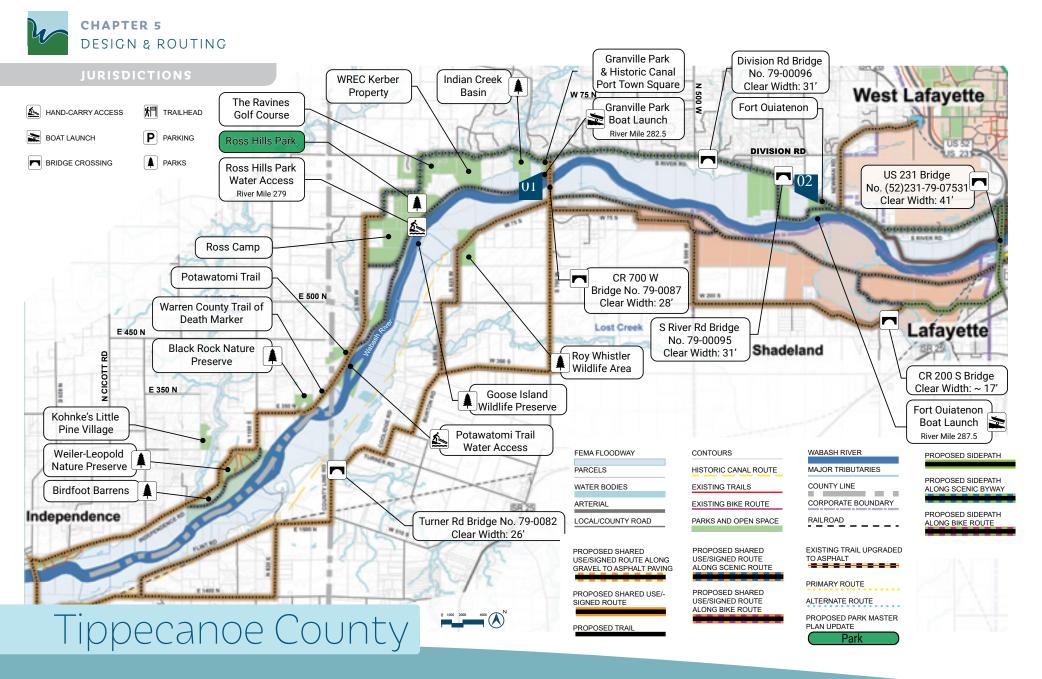
Pretty Prairie Road borders
Prophetstown State Park and leads into downtown Battle Ground on its south end. On the north end, it tees into Grant Road and connects up to Delphi via Bicycle Bridge Road. Proposed on-road greenway facilities intersect several decision points where users can choose to visit Prophetstown State Park, Battle Field Memorial and Museum, Tippecanoe County Amphitheater Park, or Davis Ferry Park.

Tippecanoe County Amphitheater Park sits on 166 acres and includes soccer fields, hiking and biking trails, event lawns, and a 1,500 seat amphitheater. Situated just outside of West Lafayette, the park presents the perfect opportunity to take greenway facilities off-road and meander through forests and over creeks on the way to Battle Ground.









Reach 5

REACH 5 HIGHLIGHTS

Fort Ouiatenon is the historic site of a fortified fur trading post of the same name. The site now contains a replica blockhouse, picnic areas, and event space for festivals and reenactments. The Wabash Heritage Trail follows River Road to the Fort, with plans to extend the trail through the site and along the Wabash River before connecting back to River Road. Fort Ouiatenon also features a boat ramp that is well used for activities on the river.

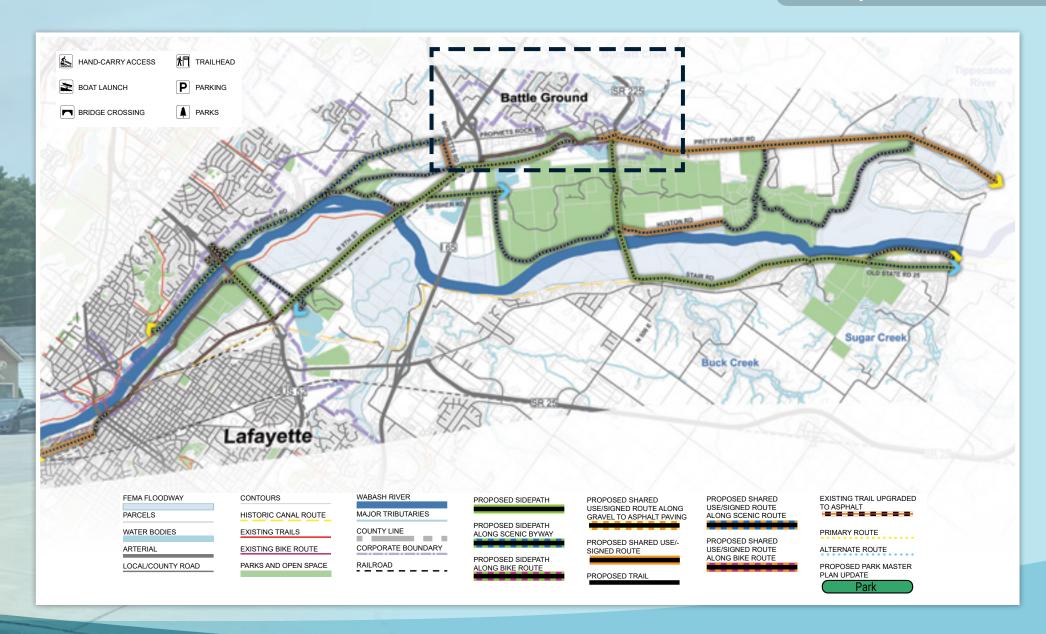
Granville Park features a paved boat launch adjacent to the CR 700 W bridge over the Wabash. The 14 acre park is bisected by Indian Creek, and offers a truly untouched nature experience just a few miles outside of West Lafayette.















Town of Battle Ground

BATTLE GROUND HIGHLIGHTS

9th Street is established as a primary alternative transportation corridor between Lafayette and Battle Ground. An asphalt sidepath is already constructed along 9th St from Canal Street to Lafayette's corporate boundary, with plans to extend the sidepath north toward Battle Ground. The greenway routes through Davis Ferry Park, crosses the Wabash using a separated pedestrian bridge, and goes under I-65 as 9th St passes through Battle Ground and turns into Pretty Prairie Road.

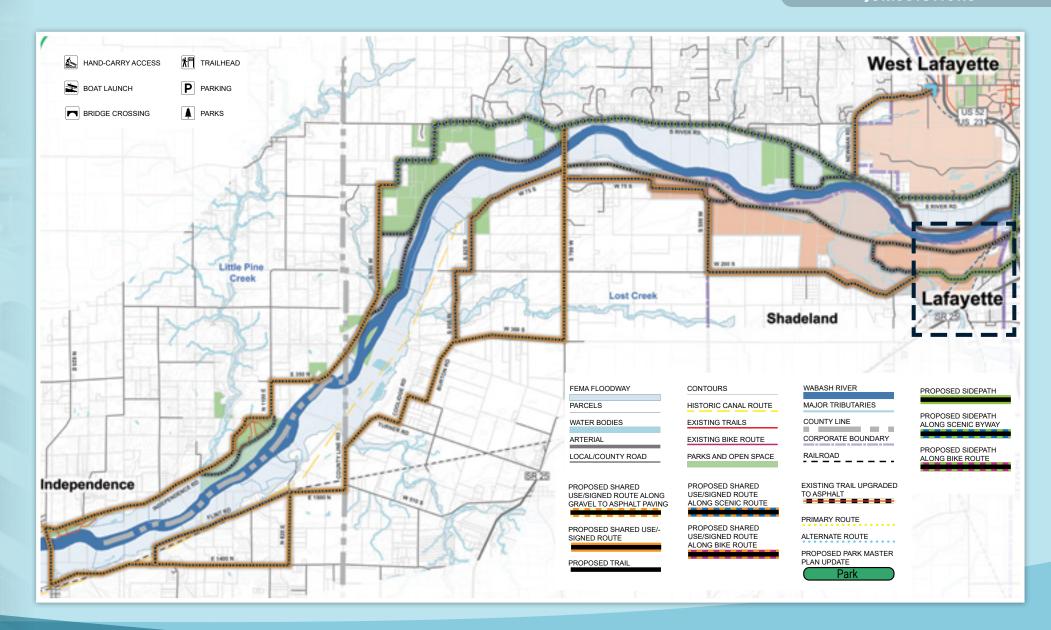
A national material control.

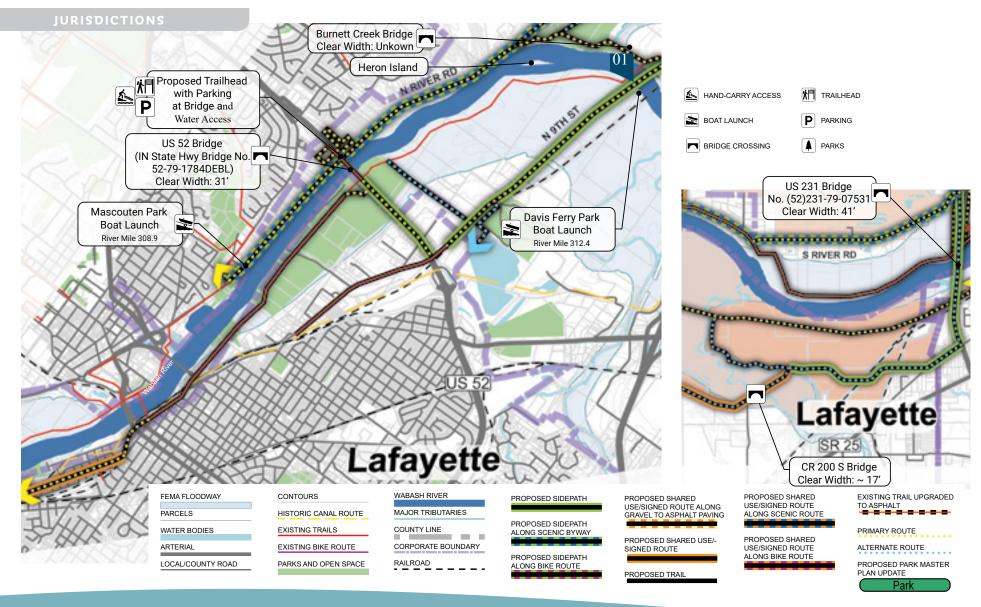
Tippecanoe Battlefield Park A national historic landmark, commemorates the Battle of Tippecanoe between United States forces and the local Native American confederation. The 96 acre park includes a marble obelisk, museum, nature center, picnic areas, and scenic trails. The cultural and historical significance of the site makes it a clear destination along the greenway corridor.











Lafayette

LAFAYETTE HIGHLIGHTS

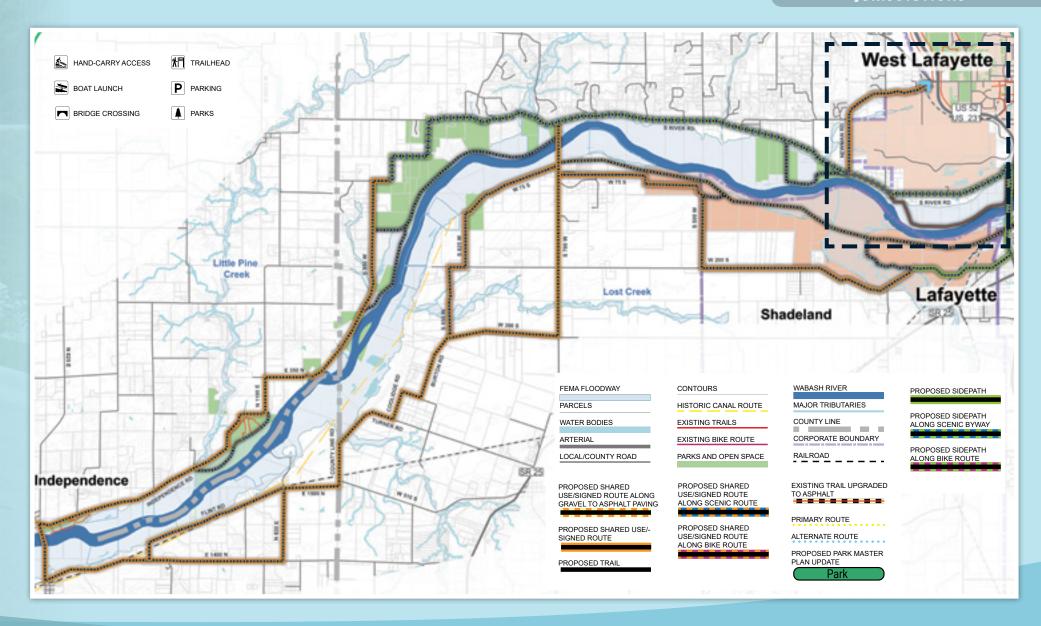
Extending the trail network connecting into 9th St corridor in Lafayette is central to the interconnectivity of the greenway. One critical segment is connecting from 9th Street to the pedestrian infrastructure improvements on the Sagamore Parkway Bridge using a sidepath. This sidepath also provides the opportunity to route down and around the bridge to join with the Lafayette side of the Wabash Heritage Trail that runs along the Wabash River.



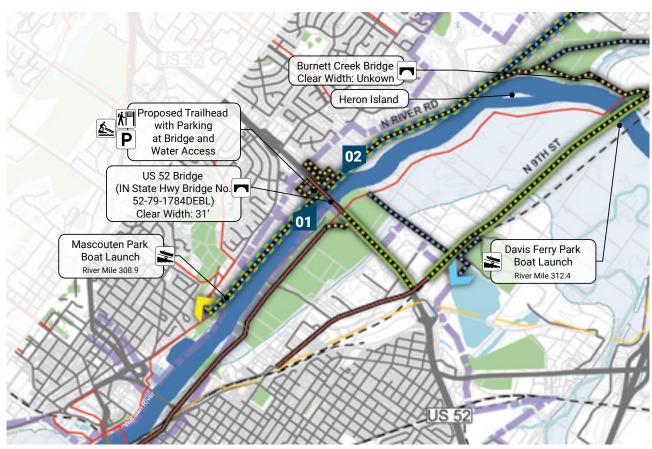




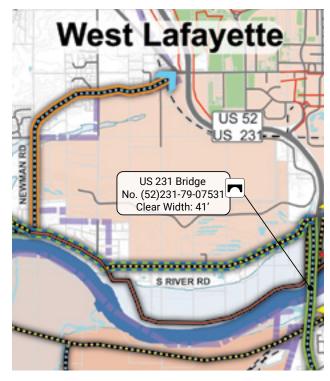


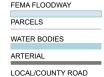








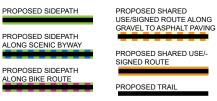








WABASH RIVER



PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED TO ASPHALT PRIMARY ROUTE ALTERNATE ROUTE PROPOSED PARK MASTER PLAN UPDATE

West Lafayette

WEST LAFAYETTE HIGHLIGHTS

River Road is a prominent corridor with scenic views of the Wabash along its route. Once trail improvements are made to connect North River Road to Sagamore Parkway overhead, It will act as an anchor for pedestrians crossing the Wabash from Lafayette. Due to its visible location, it makes sense to use the North River Road underpass as a trailhead for the Wabash River Greenway corridor. The trailhead would include vehicle and bike parking, greenway kiosk, and monument signage.

West Lafayette has a robust city-wide trail system in place, and the Wabash River Greenway seeks to fill in gaps between existing facilities along the river to create a continuous corridor throughout the region. One key segment runs from the proposed North River Road trailhead to Happy Hollow Road. This sidepath will connect the trailhead to Mascouten Park and tie into the existing trail network leading to Happy Hollow Park.

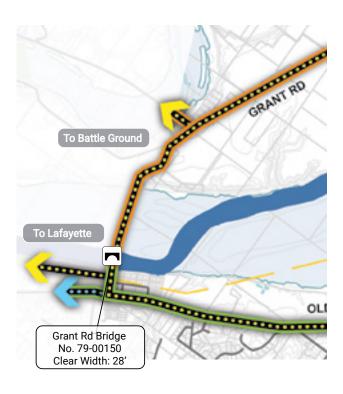






AMERICUS HIGHLIGHTS

Americus is located on the opposite bank from the confluence of the Tippecanoe and Wabash rivers. The community is home to a campground that accommodates both RV and tent campers with its pool, playgrounds, trails, and water access for fishing and nature viewing. A second pay-to-launch boat ramp with parking is located near Hoffman Nature Area, offered by a private residence with river front property.



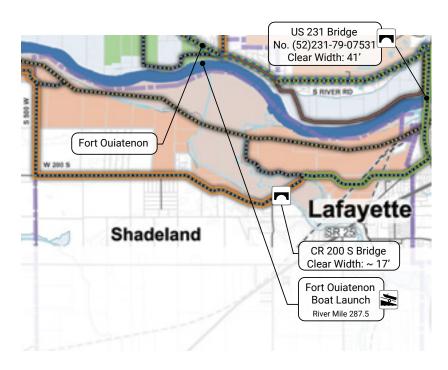






SHADELAND HIGHLIGHTS

Shadeland's boundary encompasses a significant length of riverfront property along the Wabash. Most of this property is used for farming purposes and is privately held. However, there is opportunity to work with landowners to build and utilize offroad trails in this portion of the greenway corridor instead of limiting visitors to on-road facilities.



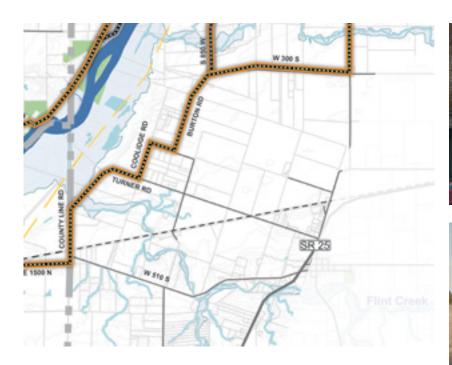






WEST POINT HIGHLIGHTS

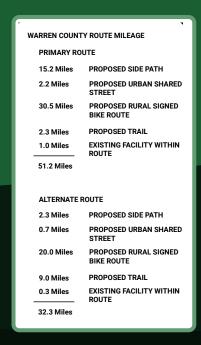
West Point is a small unincorporated community located just off State Road 25. The surrounding county roads are used by local bike clubs as a part of routine rides and large-scale cycling events.

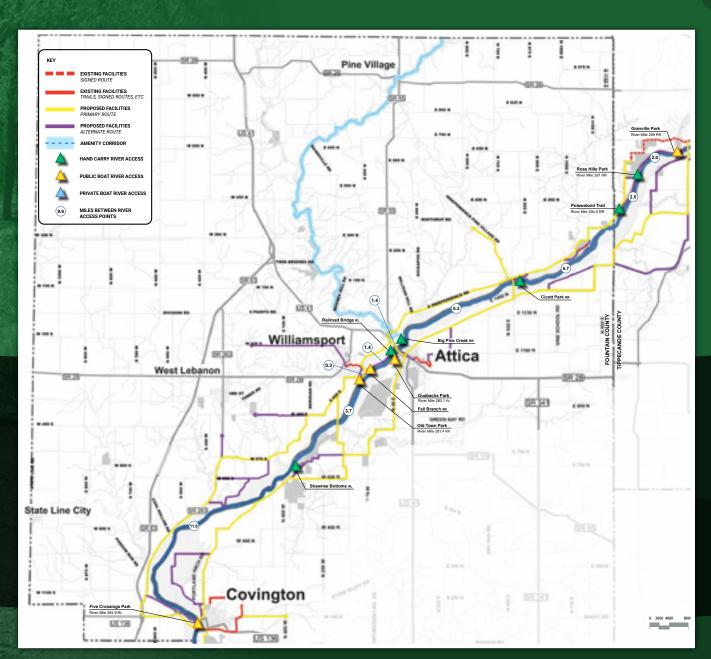


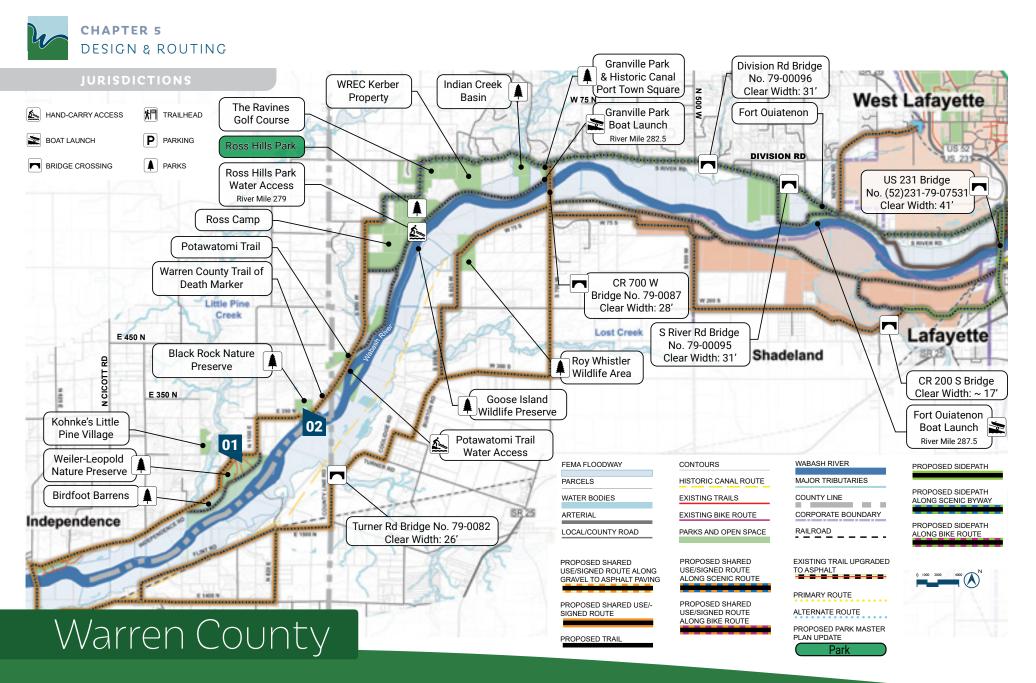












Reach 5

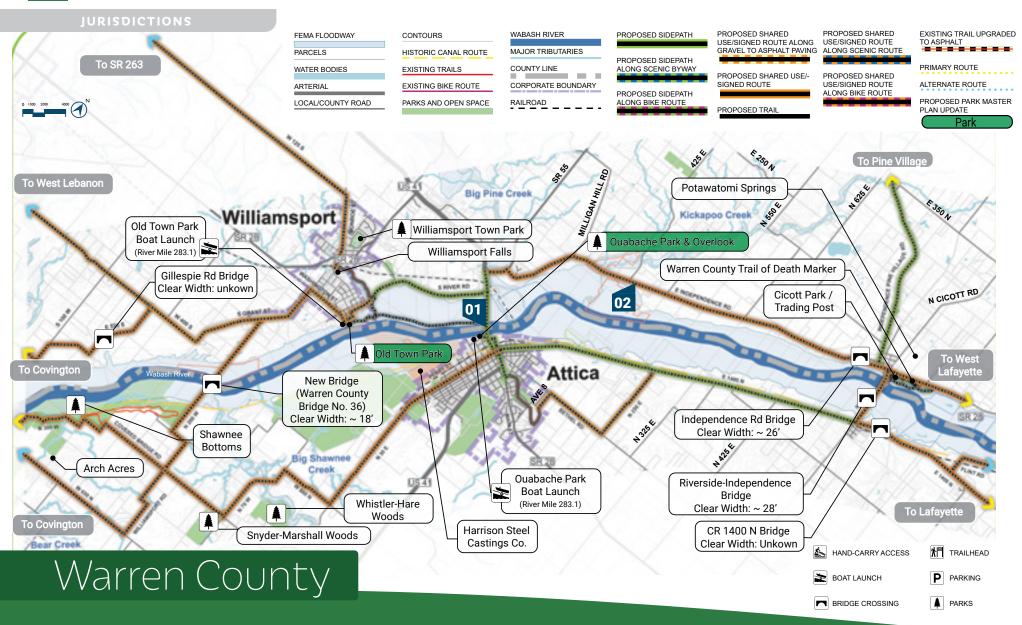
REACH 5 HIGHLIGHTS

Warren County is home to several nature preserves, most of which are clustered toward the northeast portion of the county. A notable preserve is Black Rock which protects a landscape of sandstone barrens and steep cliffs that is unusual to find in the Wabash River valley.

Weiler-Leopold Nature Preserve is adjacent to Black Rock, and features a loop trail winding through oak savannas, native prairies, and wooded ridges. Conveniently located off Independence Road, the main route between West Lafayette and Independence, Weiler-Leopold Nature Preserve adds native recreation value to the greenway corridor.







Reach 6

REACH 6 HIGHLIGHTS

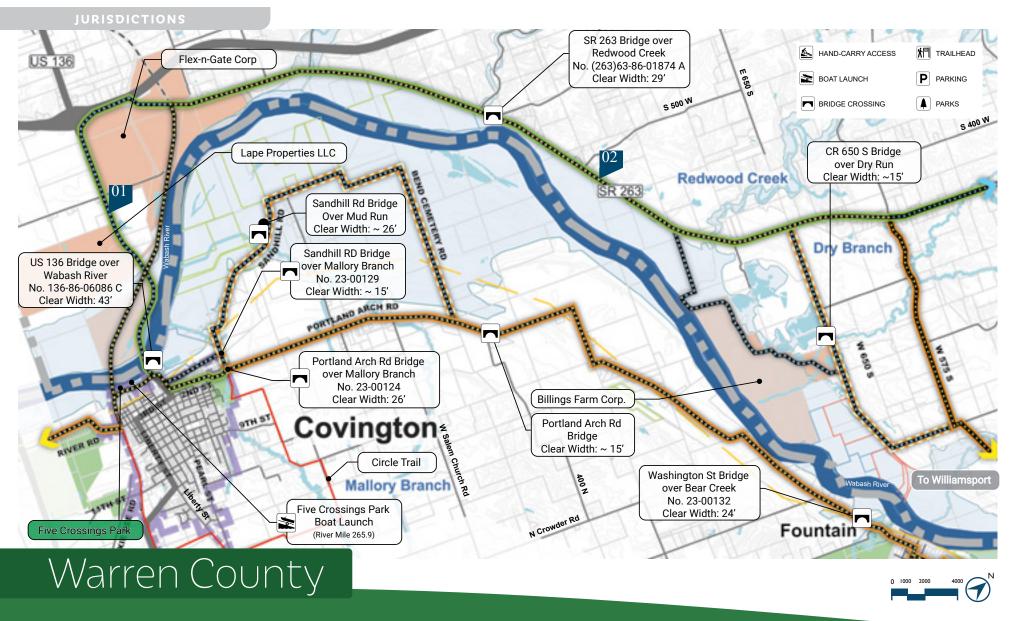
Independence Road forms the backbone of the greenway corridor between Independence and the Town of Williamsport. As the route moves away from dense urban center, on-road facilities are suggested due to lower traffic counts and a decrease in conflict risk. The intersections at Independence Pine Village Road and State Road 28 provide opportunity to extend bike and pedestrian facilities further into the county and nearby communities.

The State Road 28 bridge spanning the Wabash provides a vital connection between Williamsport and Attica in Fountain County. This bridge has sufficient clear width to support pedestrian improvements and has Ouabache Park in Attica situated on one end as a destination to draw users to the greenway and increase non-motorized travel between the two communities.









Reach 7

FEMA FLOODWAY

PARCELS

WATER BODIES

ARTERIAL

LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

COUNTY LINE

CORPORATE BOUNDARY

RAILROAD

PROPOSED SIDEPATH

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED TO ASPHALT

PRIMARY ROUTE

ALTERNATE ROUTE

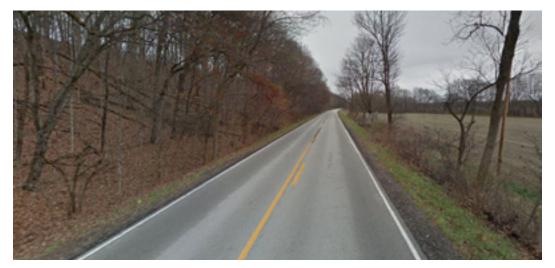
PROPOSED PARK MASTER PLAN UPDATE

Park

REACH 7 HIGHLIGHTS

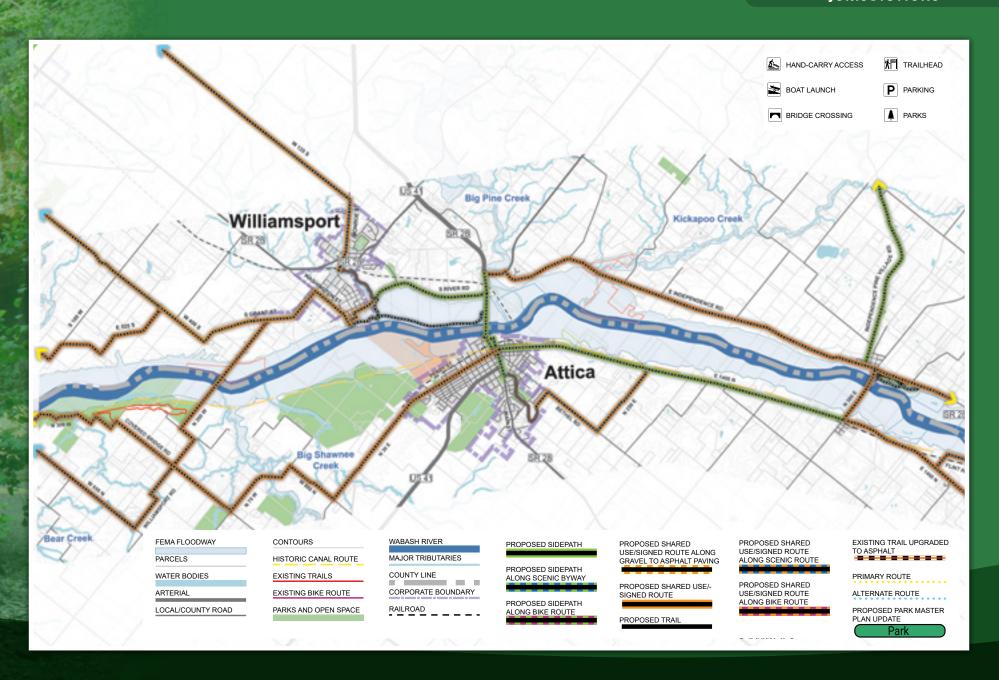
In the south portion of the county, the greenway continues to use county road on-street facilities until it intersects State Road 263. Since the large volume and high speed of traffic on State Road 263 is not compatible with pedestrians, the greenway then turns into a buffered sidepath following the road's alignment as it approaches US 136.

A rail corridor justinorar 3. 2
US 136 and SR 263 interchange A rail corridor just north of the presents an amazing opportunity to construct a trail adjacent to the railway and rebuild an abandoned bridge over the Wabash River. This solution is attractive because the flat rail bed makes for simpler construction and diverts non-motorized travelers who wish to cross into Covington from using the US 136 thoroughfare.

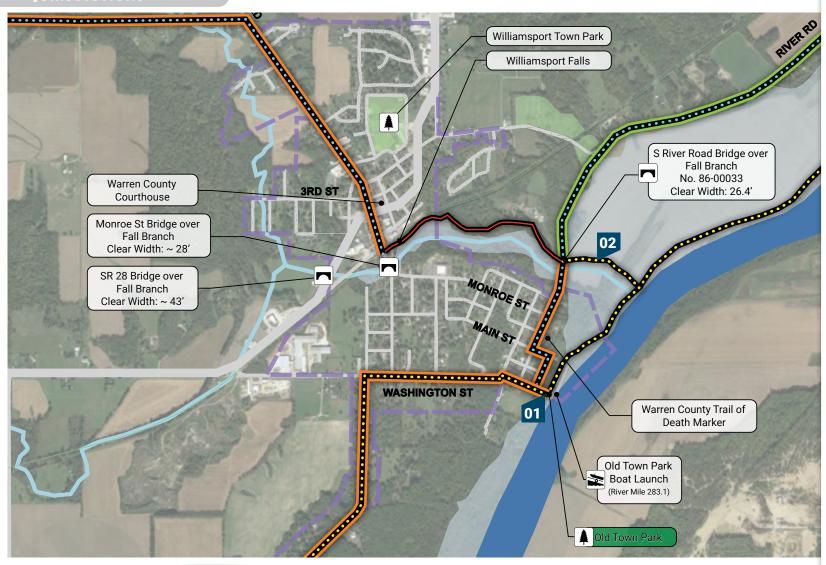












Williamsport

FEMA FLOODWAY

PARCELS

WATER BODIES

ARTERIAL

LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

COUNTY LINE

CORPORATE BOUNDARY

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED

PRIMARY ROUTE

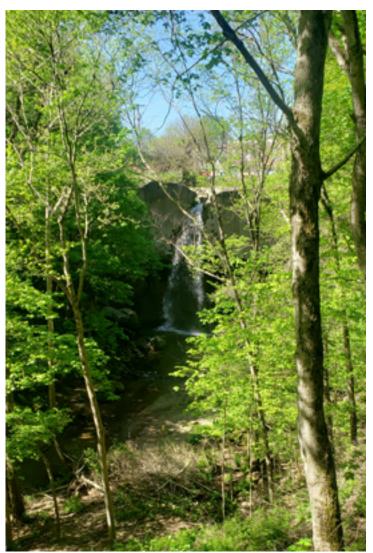
ALTERNATE ROUTE

PROPOSED PARK MASTER PLAN UPDATE

WILLIAMSPORT HIGHLIGHTS

Fall Branch is a tributary that feeds into the Wabash River and contains the highest waterfall in Indiana. Known locally as The Falls, the 90-foot natural attraction draws residents and visitors to downtown Williamsport to experience the sight and sound of the waterfall and to hike the wooded loop trail along Fall Branch. Greenway enhancements to this area include extending the trail to where Fall Branch outlets into the Wabash River.

Adding to Williamsport's trail system is key to provide the structure necessary to support the greenway corridor. Old Town Park can become a hub where proposed paved trails, bike routes, and water access converge. This transformation would include amenities such as seating, drinking fountains, an enhanced shelter, and improved boat launch facilities.



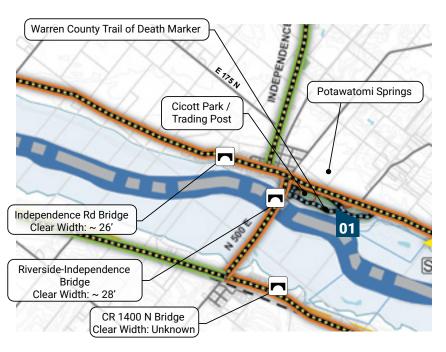






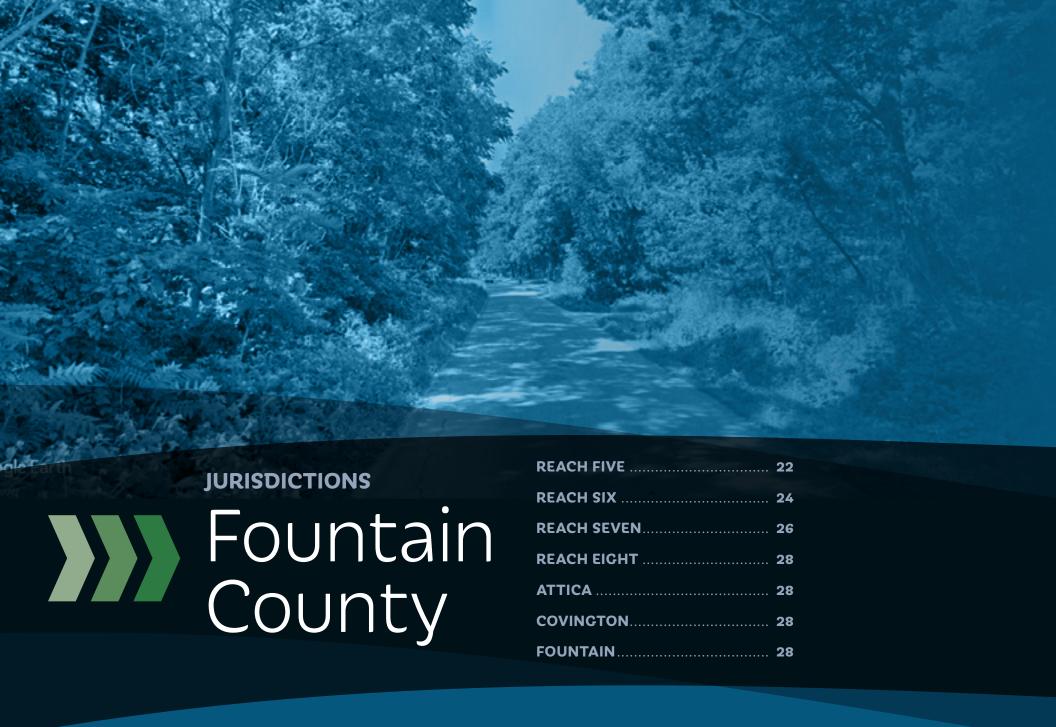
INDEPENDENCE HIGHLIGHTS

Located just over the Tippecanoe/Warren county line, Independence and its bridge over the Wabash closes the loop between itself, Lafayette, and West Lafayette. Independence is locally known for Cicott Park, founded to preserve remnants of a homestead and trading post and to commemorate the heritage of early pioneers and native tribes who lived on the banks of the Wabash River. Park amenities include restrooms, a grill, a picnic pavilion, and a loop trail. Since it is on the riverbank, a boat launch is a desirable feature, but steep grades sloping down to the water have prevented water access from being added.

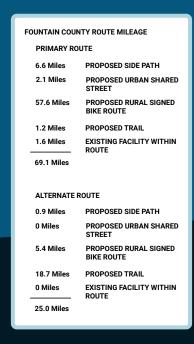


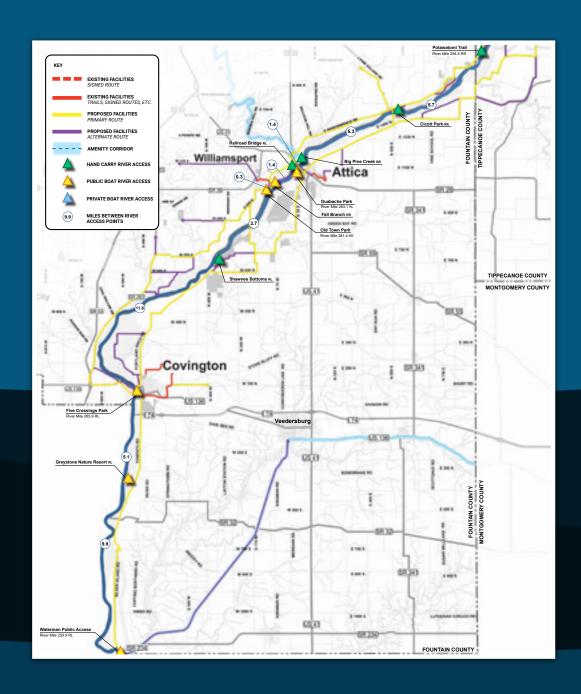


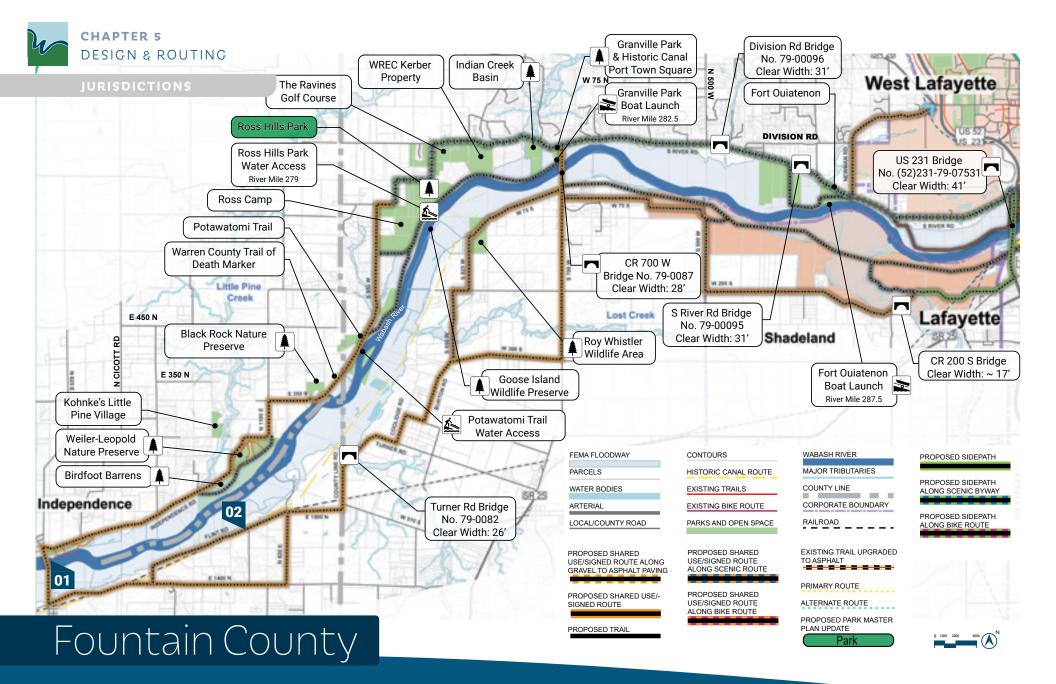




JURISDICTIONS







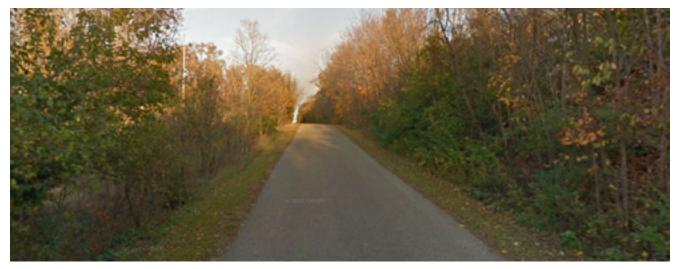
Reach 5

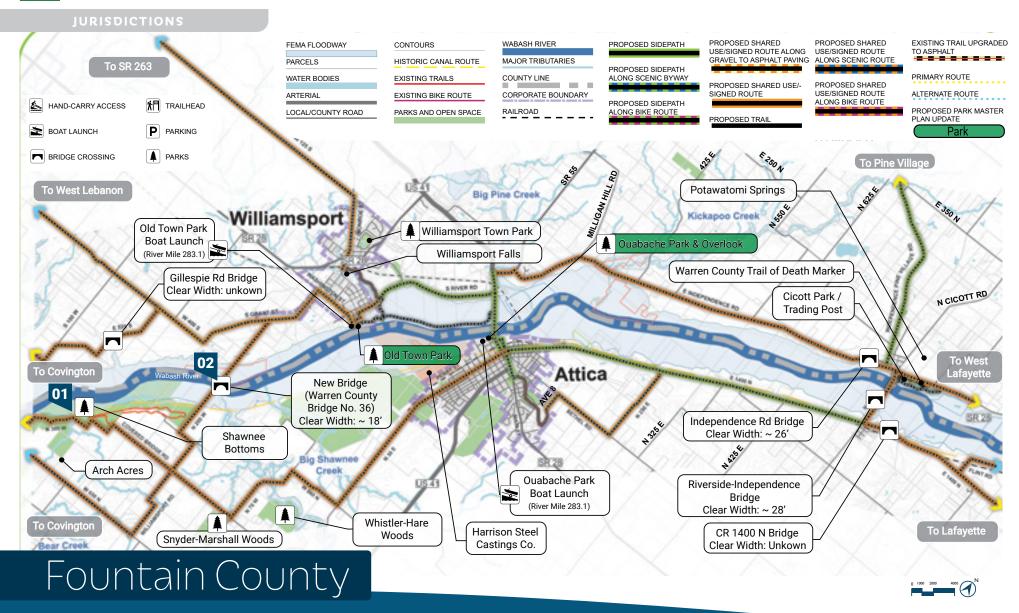
REACH 5 HIGHLIGHTS

Though Flint Road is a part of several routes used by regional bike clubs, local cyclists agree that the gravel surfacing is not ideal. The greenway routing proposes to avoid Flint Road altogether, using N 820 E and E 1400 N instead.

the receiving end of the The limits of this reach end at bridge from Independence. Many cyclists use this crossing to ride over the Wabash River, and any proposed improvements to facilitate nonmotorized traffic is welcomed.







Reach 6

REACH 6 HIGHLIGHTS

Shawnee Bottoms is named for its acres that reside in the Wabash Rive floodplain, the bottom land. The 459 acre property is bisected by the historic route of the Wabash and Erie Canal, dividing the preserve into two unique habitats. One is the bottom land, defined by seep streams, floodplain landscapes, and a pond fed by the seep streams and the river's floodwaters. The other is the uplands, an elevated area which supports an array of species and habitat communities within its wooded acres and stone outcroppings. On-road greenway facilities pass along the southern boundary of Shawnee Bottoms, enticing visitors to encounter the diverse ecosystems just steps from the greenway.

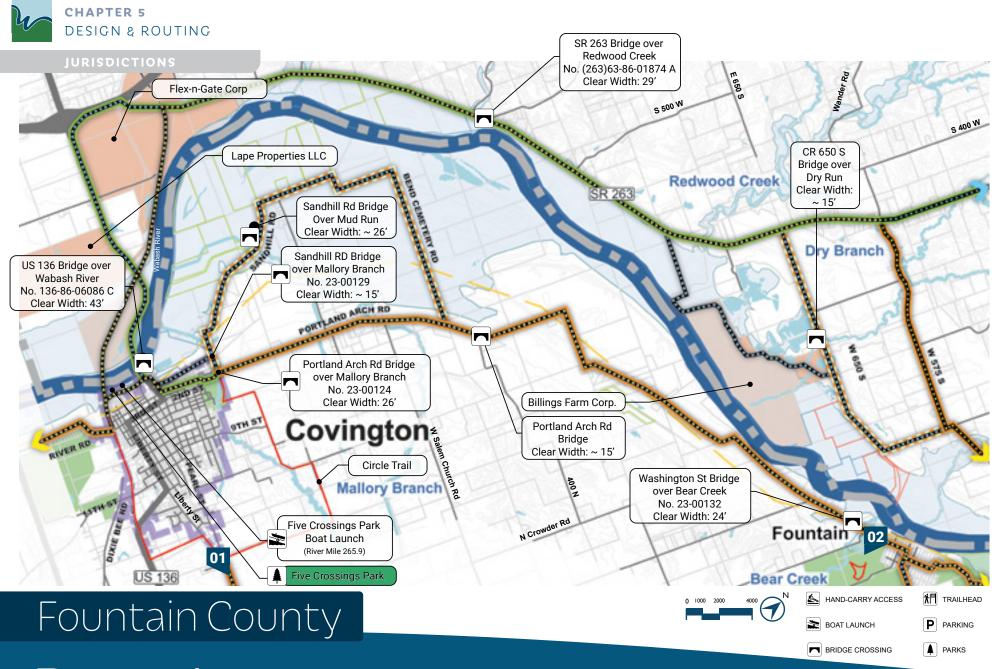
New Bridge is one of the longest surviving double warren truss bridges in Indiana, built in 1906. Before State Road 28 spanned the Wabash connecting Attica to Williamsport, New Bridge functioned as the closest crossing to join the two communities. It is recognized for its historical and cultural significance, and is a vibrant landmark within the greenway corridor.











Reach 7

JURISDICTIONS

FEMA FLOODWAY

PARCELS

WATER BODIES

ARTERIAL

LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

COUNTY LINE

CORPORATE BOUNDARY

RAILROAD

PROPOSED SIDEPATH

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED TO ASPHALT

PRIMARY ROUTE

ALTERNATE ROUTE

PROPOSED PARK MASTER PLAN UPDATE

Park

REACH 7 HIGHLIGHTS

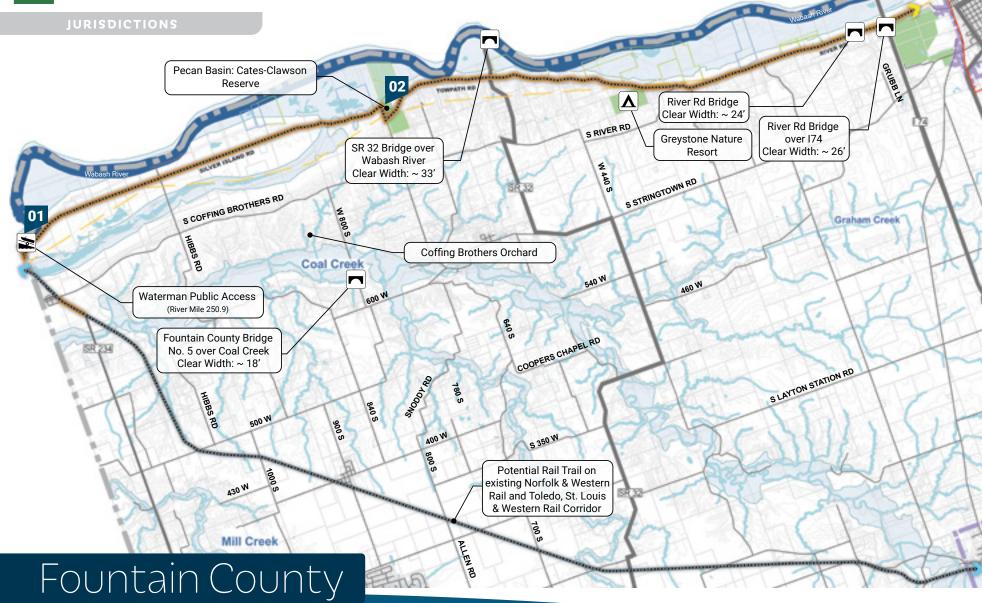
Portland Arch Nature Preserve features one of the few naturally water-carved arches in Indiana. The preserve encompasses over 400 acres of sandstone gorges, wooded ravines, and several tributaries feeding into Bear Creek which outlets into the Wabash River. Located next to the community of Fountain between Attica and Covington, Portland Arch provides a scenic respite within the greenway corridor.

This reach includes Covington, the county seat. The city's vision to complete its Circle Trail and engage the riverfront aligns with the goals of the Wabash River Greenway. Because of its prominent connectivity to the greenway corridor, Covington is a central hub for development of county-wide bike and pedestrian facilities. There is potential for the first leg of this system to be an extension from the Circle Trail to Veedersburg and eventually across the county line to Crawfordsville - contributing not only to Fountain County's non-motorized transportation infrastructure but also to the region's efforts to improve bicycle and pedestrian network connectivity.









Reach 8

JURISDICTIONS



LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

COUNTY LINE CORPORATE BOUNDARY

RAILROAD

PROPOSED SIDEPATH

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED

PRIMARY ROUTE

ALTERNATE ROUTE

PROPOSED PARK MASTER PLAN UPDATE

Park

REACH 8 HIGHLIGHTS

Waterman Public Access Site is a boat launch managed by Indiana's DNR, located just beyond the Fountain and Parke county line on the south side of the State Road 234 bridge. There are no other official water access points between it and Covington, 15 miles upriver, therefore Waterman Public Access Site is a critical anchor for the greenway corridor.

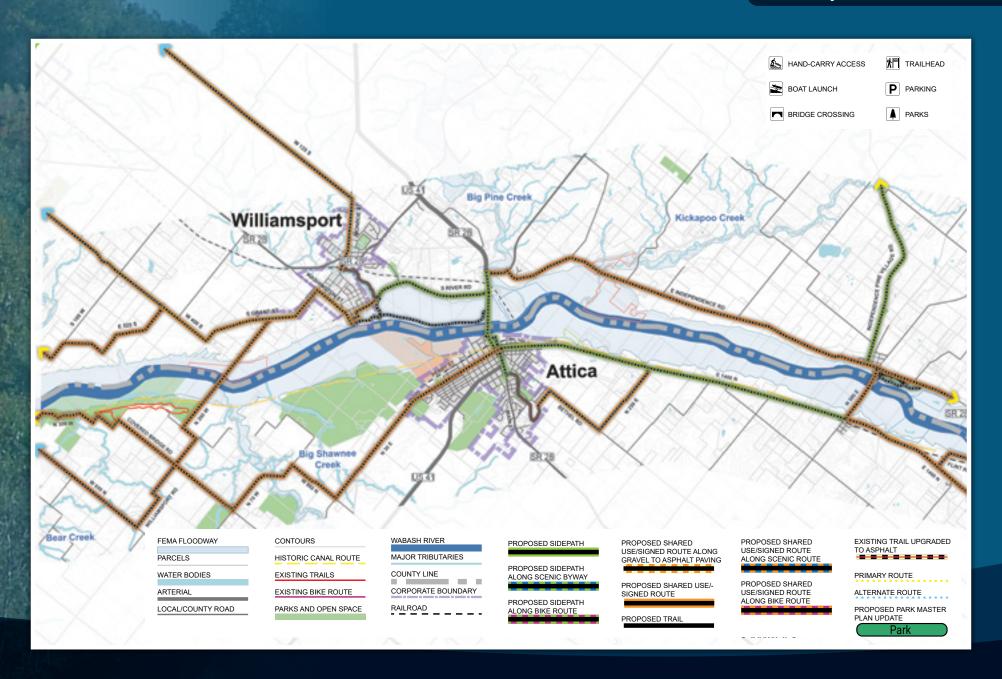
Pecan Basin is a 155 acre nature preserve established to restore and protect floodplain forests and native grasslands to recreate habitats that were lost when the land was used for agricultural production. Most of the property is reserved for naturalization, leaving a universally accessible half-mile loop trail for visitors to enjoy scenic vistas over the upland habitat community.



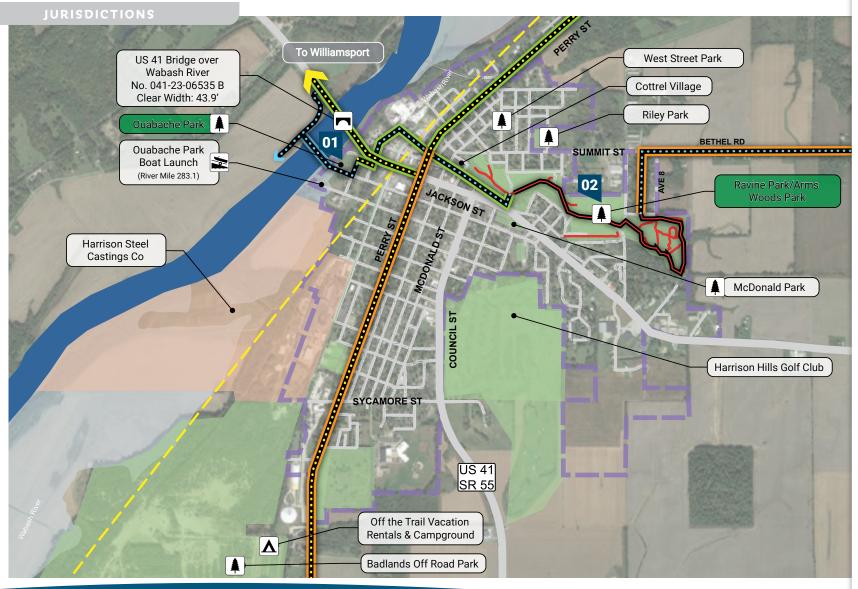




JURISDICTIONS







Attica

FEMA FLOODWAY

PARCELS

WATER BODIES

ARTERIAL

LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

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COUNTY LINE

CORPORATE BOUNDARY

RAILROAD

PROPOSED SIDEPATH

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED TO ASPHALT

PRIMARY ROUTE

ALTERNATE ROUTE

PROPOSED PARK MASTER PLAN UPDATE

Park

URISDICTIONS

ATTICA HIGHLIGHTS

Ravine Park spans an impressive 90 acres in the middle of Attica. It attracts residents with a community pool, picnic shelters, playgrounds, and nature trails that wind through oak forests and across numerous streams. The park is also a regional icon, included in routes planned by local cycling clubs who ride up and down the Wabash River.

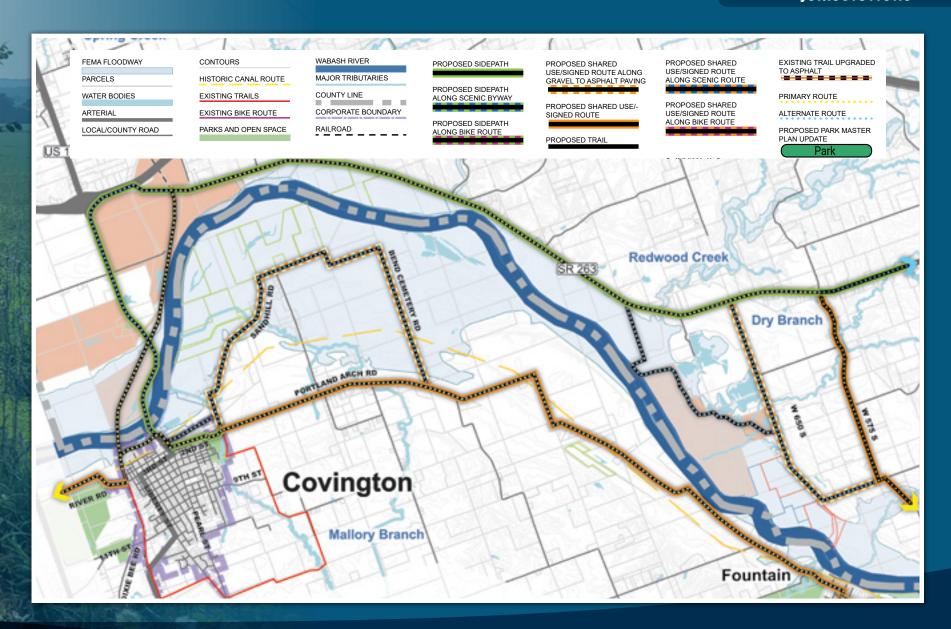
A smaller park located on the Wabash River just south of the State Road 28 bridge, Ouabache Park offers several amenities within its compact size. These include campsites, restrooms, a shelter, and a paved boat ramp all of which are universally accessible. Linking this park to the greenway facilities along State Road 28 would strengthen the connection between the communities of Attica and Williamsport.



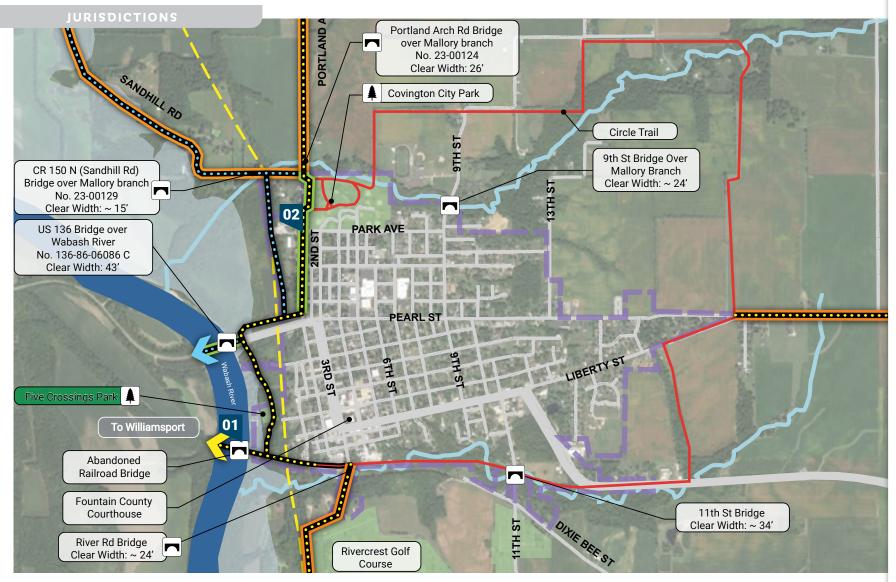




JURISDICTIONS







Covington

FEMA FLOODWAY

PARCELS

WATER BODIES

ARTERIAL

LOCAL/COUNTY ROAD

CONTOURS

HISTORIC CANAL ROUTE

EXISTING TRAILS

EXISTING BIKE ROUTE

PARKS AND OPEN SPACE

WABASH RIVER

MAJOR TRIBUTARIES

COUNTY LINE

CORPORATE BOUNDARY

PROPOSED SIDEPATH

PROPOSED SIDEPATH ALONG SCENIC BYWAY

PROPOSED SIDEPATH ALONG BIKE ROUTE

PROPOSED SHARED USE/SIGNED ROUTE ALONG GRAVEL TO ASPHALT PAVING

PROPOSED SHARED USE/-SIGNED ROUTE

PROPOSED TRAIL

PROPOSED SHARED USE/SIGNED ROUTE ALONG SCENIC ROUTE

USE/SIGNED ROUTE ALONG BIKE ROUTE

EXISTING TRAIL UPGRADED

PRIMARY ROUTE

ALTERNATE ROUTE

PROPOSED PARK MASTER PLAN UPDATE

JURISDICTIONS

COVINGTON HIGHLIGHTS

The City of Covington has made substantial investments in its Circle Trail, a multi-use asphalt path following the perimeter of the city and connecting destination points such as City Park to the neighborhoods on the southside. The final segment of the Circle Trail is the riverfront portion that will not only complete the circle, but provide a route through Covington compatible with greenway facilities. This route plans to intersect with the proposed pedestrian bridge and the boat ramp at Five-Crossings Park, cross under US 136 and take 2nd Street to City Park.

From a regional perspective, it makes sense to provide a way for greenway users to loop from Covington to Williamsport, over to Attica, and back to Covington. However, the only bridge from Covington to Warren County is US 136, a major thoroughfare that would not easily accommodate pedestrian infrastructure. A plausible solution is reconstruction of a nearby abandoned railroad bridge, accessed from Covington's Circle Trail extension and connecting to a proposed rail trail leading up to a sidepath on State Road 263. This new pedestrian bridge could be made a feature of the greenway, with opportunity for viewing decks and local art pieces that describe the history and culture of the Wabash Rive valley.









URISDICTIONS

FOUNTAIN HIGHLIGHTS

Fountain is a small community adjacent to Portland Arch Nature Preserve. Its historical significance is seen in the remnants of the Wabash and Erie Canal found along well-named Towpath Road. While the greenway corridor proposes a through route within the community, users may take a detour on Scout Camp Road to access Portland Arch.







SCHEMATIC ROUTING

Schematic Routing

The intersection of North River Road and Sagamore Parkway, (US 52), is a key focus area in the schematic routing of the Wabash River Greenway. This intersection will offer a variety of amenities for trail users including a trailhead, wayfinding signage, vehicle and bicycle parking, a scenic overlook, a ramp system to get trail users onto the side path along Sagamore Parkway, and access to the Wabash river via a hand carry boat launch. The many amenities featured in this area are intended to make this part of the greenway a convenient and useful hotspot and gathering place for greenway patrons.

The most prominent facility type in this area is a 12-foot-wide side path that is located in between North River Road and the Wabash River. As the side path approaches the Sagamore Parkway Bridge and trail head from the south, it transitions into boardwalk to accommodate the flooding and enhanced proximity to the river in the that area. This boardwalk leads the path directly to the trailhead and ramp system located under the Sagamore Parkway Bridge. This Trailhead is equipped with vehicular and bicycle parking, wayfinding and informational

signage, a hand carry boat launch and access to the Wabash River, and a ramp system that gives greenway users access to the pedestrian bridge and side path that runs along Sagamore Parkway. The side path along Sagamore parkway is equipped with another stopping point along the side path that serves as a scenic overlook and rest stop. Additionally, this node also includes another ramp system that connects greenway users to the Wabash Heritage Trail. After passing under sagamore parkway and the trail head located there, the side path continues to follow North River Road and the Wabash River.

Another notable part of the Tippecanoe County schematic routing is located slightly north of the Sagamore Parkway and North River Road intersection. This area is a culmination of Tecumseh Trail Park, Davis Ferry Park, and the Tippecanoe County Amphitheater Park. This culmination will offer many amenities to greenway patrons including many acres of park land, trails, park shelters, trail heads access to the Wabash River, and a large amphitheater. As the side path along North River Road approaches this area from the south, it branches off from North River Road and connects to the trail system located throughout Tecumseh Trail Park and the Tippecanoe Amphitheatre Park. The schematic routing in this area leaves most of the existing trail as they are, however, more connections

from one trail to another have been added to create a greater sense of connectivity. This improved trail system also connects to the proposed side path along North 9th Street. This side path along North 9th Street continues North as well as South, where it crosses the Wabash River before a ramp system brings trail users back down to grade. Additionally, the trail system also connects to the existing Davis Ferry Bridge and Wabash Heritage Trail.

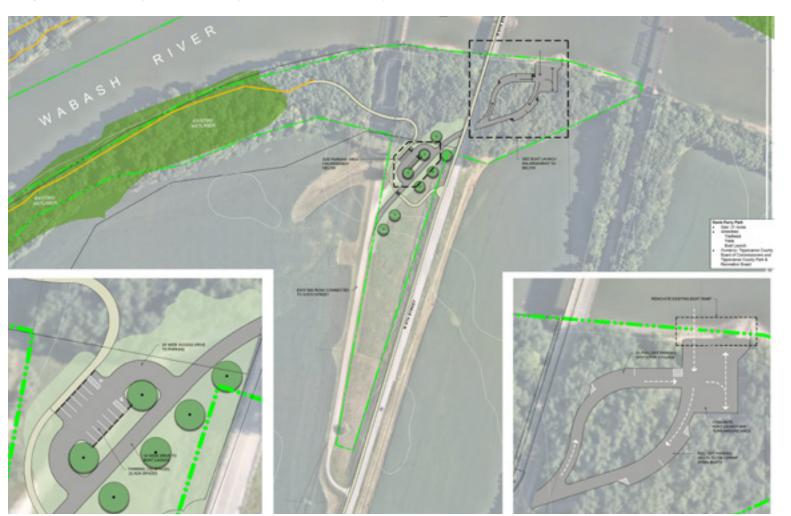
The intersection of North River Road and Sagamore Parkway and the culmination of parks and trails north of the intersection both followed a similar process of design. The schematic routing within Tippecanoe County and the surrounding areas was largely informed by data from surveys and GIS. This Data included information such as the width and location of existing right of ways, topography, flood zones, parcel boundaries, and more. This data was also paired with a site visits, photos of existing conditions, and the use of google street view. With all this information taken into account, the routes of trails, side paths, trail heads, and other amenities were laid out initially. This initial planning then underwent a series of reviews. discussions, and iterations before the final version of the schematic routing was determined and proposed.



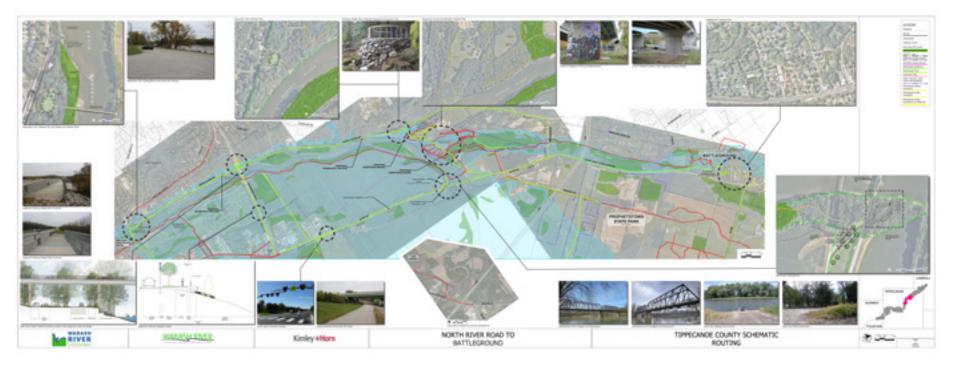
HIGHLIGHT AREA

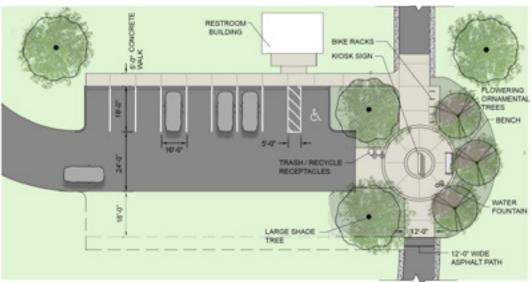
Highlight Area - Park Connector Loop

The RAISE Project will develop Phase Two of the Wabash River Greenway—the North River Road/North 9th Street Road Connector Loop, an 8+ mile active transportation loop connecting Lafayette, West Lafayette, and Purdue University, Prophetstown State Park, and the Wabash River Greenway to each other. It will consist of a combination of side paths, boardwalk sections, signed bike routes, trails, one bike/pedestrian-dedicated Wabash River Bridge, and two trail bridges to create a looped active transportation network that spans the Wabash River.



The project develops critical active transportation infrastructure in an area currently lacking it, and connects it to the Lafayette and West Lafayette active transportation systems, providing essential linkages to commercial, residential, and associated job centers, as well as three city parks and four county parks—in addition to the aforementioned Prophetstown State Park.



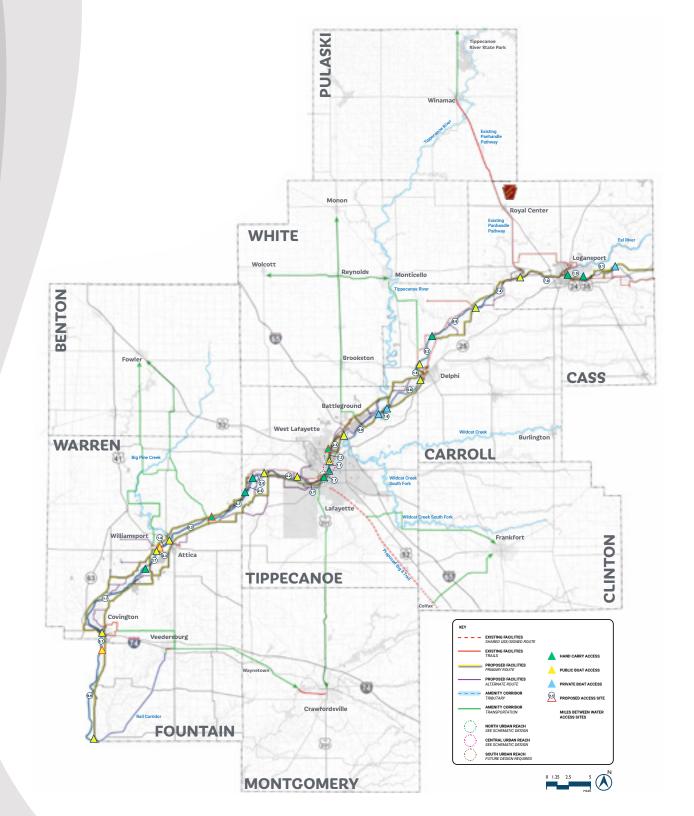


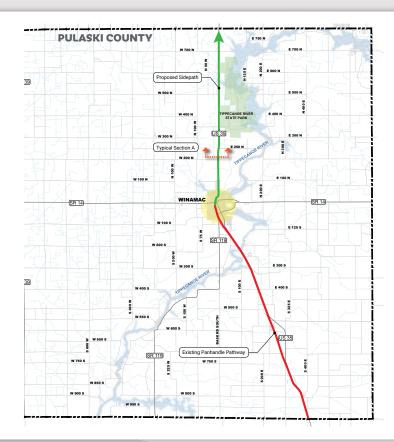
Significantly, it develops a safe active transportation route to Prophetstown State Park and the four county parks that currently can only be safely reached by automobile. When completed, the RAISE Project segment of the WRG will include 4.4 miles of side paths, 0.5 mile of boardwalk, 2.0 miles of new trail facilities along existing roadways and through various parks, 1 bike/pedestrian-dedicated Wabash River Bridge, and 2 trail bridges. It will incorporate 1.2 miles of upgrades to an existing Lafayette city trail section and provide connections to and through seven Lafayette, West Lafayette, and Tippecanoe County parks, as well as 1.0 mile of street signed bicycle route along Swisher Road, a lesser traveled county road, to provide a connection to Indiana's very popular Prophetstown State Park.



Resource Amenity Corridors

The Wabash River Greenway/ Blueway Corridor Master Plan is being developed within five counties of the ten county Wabash Heartland Innovation Network (WHIN). As this destination recreation greenway/blueway trails project unfolds, additional trail connectivity is being studied to expand the greenway/blueway experiences into the remaining WHIN counties, and, where possible, utilizing tributaries of the Wabash River to connect these corridors to this destination recreation amenity. Quality of life and quality of place amenities such as the Wabash River Greenway/ Blueway and these Resource Amenity Corridors are important components of WHIN's mission to: retain talent in the region: and attract talent to the region, while building economic resiliency within the many rural WHIN communities.



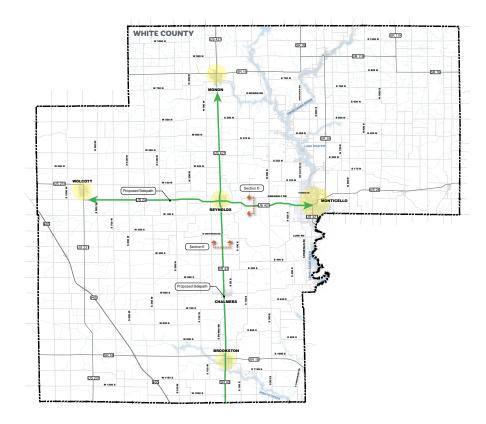


PULASKI COUNTY/TIPPECANOE RIVER STATE PARK

The Panhandle Pathway is an existing asphalt trail leading from France Park west of Logansport to Winamac in Pulaski county. The goal would be to extend this trail further north to the Tippecanoe River State Park, providing a continuous "park to park" connection of France Park to Tippecanoe River State Park. The Panhandle Pathway currently runs along the US 35 corridor and terminates in the town of Winamac. The proposed extension would continue through Winamac, providing a connection to Winamac Town Park, and follow US 35 north to the State Park. The proposed pathway north of Winamac is a 12' wide asphalt side path in the public right-of-way with a minimum separation of 8' from the US 35 travel lanes.

As a tributary, the Tippecanoe River also provides a blueway connection to the Wabash River. This blueway runs through the entire county starting in the northeast corner and flows southeast through the town of Winamac and continuing through White county where it meets the Wabash River.

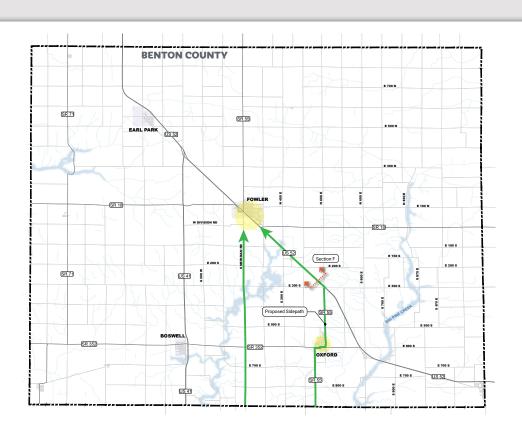
RESOURCE AMENITY CORRIDORS



WHITE COUNTY/MONTICELLO

White county provides multiple small towns that would benefit from a greenway connection to local attractions and the Wabash River Greenway. Running north through the county along US 421, this proposed greenway corridor would connect the towns of Brookston, Reynolds, and Monon. Branching out from Reynolds an additional pathway running east/west would connect the town of Wolcott to Monticello. The benefits of running a trail through small towns include increased property values, increased local spending, and improved community health.

The city of Monticello possesses one of the larger local attractions of Indiana Beach. Located on Lake Shafer and Tippecanoe River, Indiana Beach is an amusement park that deserves a connection to the Wabash River Greenway and local towns. This connection would be made through an asphalt side path in the public right-of-way along US 421 and the blueway connection of the Tippecanoe River that runs south through Monticello to the Wabash River.

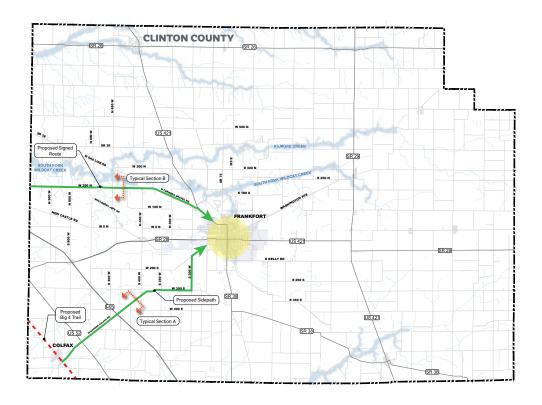


BENTON COUNTY/BIG PINE CREEK

Big Pine Creek is a tributary of the Wabash River that flows from the east side of Benton County southwest to Warren county and connects to the Wabash River near Williamsport and Attica. This blueway provides scenic views of natural rock outcroppings along the creek, as well as the opportunity to experience whitewater rapids on kayak. Big Pine Creek also has multiple public access points to launch boats and recreationally enjoy the waterway.

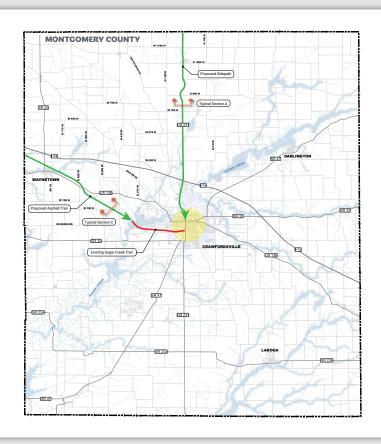
The towns of Fowler and Oxford are connected by an asphalt side path running along US 52 and SR 55.

RESOURCE AMENITY CORRIDORS



CLINTON COUNTY/FRANKFORT/BIG 4

Two asphalt side paths connect the Wabash River Greenway to Clinton county and the City of Frankfort. Both of these side paths branch out from the planned Big 4 Trail that is to run from downtown Lafayette to Lebanon, Indiana. Making a connection to this trail provides a larger regional destination opportunity for cyclists to go from Frankfort to Indianapolis and/or Lafayette. The north pathway corridor is a signed bike route that enters the City of Frankfort on the northwest side via US 421 and continues west along West 200 North and runs parallel to the South Fork Wildcat Creek. The southwest connection to Frankfort is a 12' wide asphalt path to be built in the public right-of-way along West Mason Colfax Road and South 200 West. This southwest pathway will not only connect to the Big 4 Trail but also the Town of Colfax. The blueway corridor running through Clinton county that will be utilized is the South Fork Wildcat Creek which flows from the north side of Frankfort to the Wabash River where it's confluence is northeast of Lafayette.



MONTGOMERY COUNTY/CRAWFORDSVILLE

The City of Crawfordsville has a population of 16,000 residents and is the home of Wabash College, two pathway corridor connections are made to the city. An asphalt side path runs from downtown Lafayette along US 231 to Crawfordsville. The second connection would utilize and extend the existing Sugar Creek Trail to the northwest. Sugar Creek Trail currently traverses from Wabash College to a bridge across Sugar Creek where it terminates. Utilizing an old rail bed, a new asphalt trail would run from Sugar Creek in Montgomery County through the Town of Veedersberg in Fountain County and ultimately to the Wabash River and Town of Covington. Providing a connection to Crawfordsville and Sugar Creek provides a route to access multiple attractions such as Lafayette to the north, and Turkey Run State Park to the southwest that Sugar Creek flows through in Parke county.



PULASKI

Logansport

02

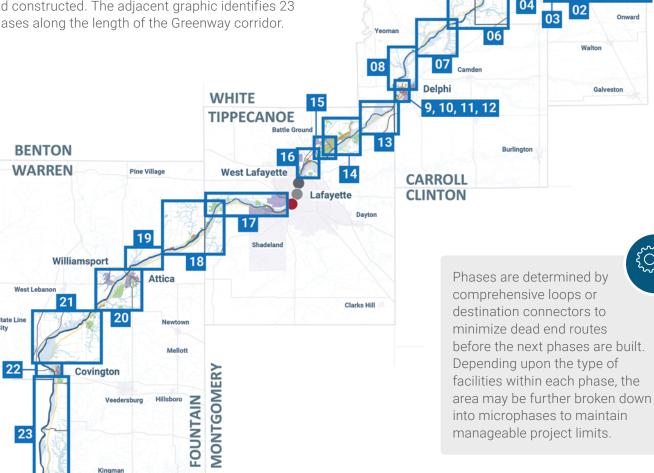
Galveston

CASS



Phasing

Phases are an important component of an implementation plan, as they divide large projects into sizeable portions to be successfully funded and constructed. The adjacent graphic identifies 23 phases along the length of the Greenway corridor.



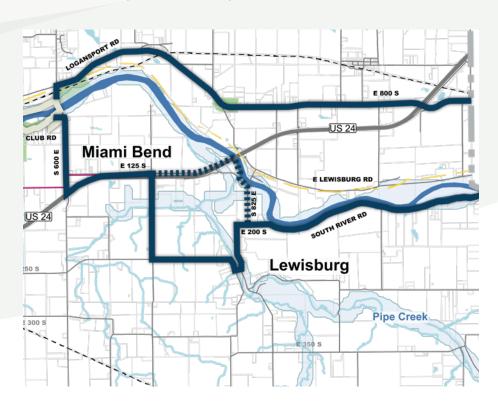


PHASING

PHASE 1

Phase 1 extends west from the Cass/Miami county line up to but not including the S 600 E bridge. The northern portion follows E 800 S to Logansport Rd, ending at the S 600 E bridge. On the other side of the bridge, the route runs south to US 24, and follows an existing Panhandle Pathway/ Nickel Plate Trail signed connector route over Pipe Creek to S River Rd. The signed route extends into Miami County to Peru, where it intersects the Nickel Plate Trail.

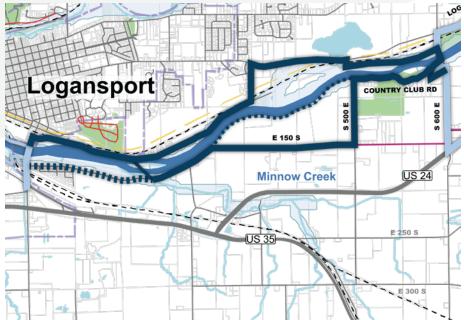
The dashed line indicates an alternate route to follow US 24 to S 825 E before connecting back into the signed connector route.



PHASE 2

Phase 2 picks up at the S 600 E bridge and includes pedestrian accommodations at the river crossing. South from the bridge the route follows Country Club Rd, jogs over to E 150 S which turns into S River Rd. From there a new crossing over the Wabash to Potawatomi Rd is proposed, re-using piers left over from a railroad bridge over Kienly Island. Once on the other side of the river, the route heads to downtown Logansport stopping at the 18th St bridge, or heads back east to complete the loop at the S 600 E bridge.

Alternate routes are to continue along S River Rd past Kienly Island to 18th St, and to connect Country Club Rd to S River Rd using river adjacent properties instead of the proposed on-road facilities.



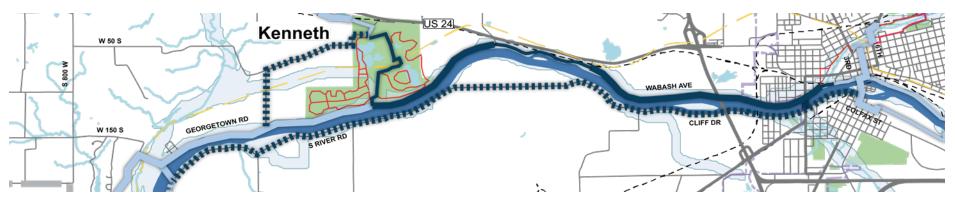
Phase 3 completes the 18th St section, connecting south to Ivy Tech Dr. From 18th St, the route heads toward downtown on both sides of the river, utilizing Little Turtle Waterway on the north, and river adjacent property to the south. On the south side, the route follows Colfax St to 3rd St, crosses the Wabash and rejoins the Little Turtle Waterway. Improvements to the Little Turtle Waterway from 3rd St to the confluence of the Eel and Wabash Rivers prepare for the opportunity to connect downtown Logansport to France Park. Returning to 3rd St, the route turns north, using the signed connector route to the 6th St bridge, and crossing over the Eel River to the existing DNR water access site. The 6th St bridge also provides another connection between River Bluff Trail and Riverside Park Loop.

PHASE 4

Phase 4 encompasses the length of Wabash Ave from downtown Logansport to France Park. Starting at the end of the Little Turtle Waterway, it includes construction of a pedestrian bridge over Eel River to Wabash Ave. Pedestrian improvements to the Cicott St Bridge are also proposed. The route then follows the road alignment, getting off the road and weaving through natural areas where possible. Across from the Wabash River public access site, the route turns northward into France Park where a gated entry exists today. Further trail connections within the park are proposed as the route will ultimately connect with the Panhandle Pathway extension to the north.

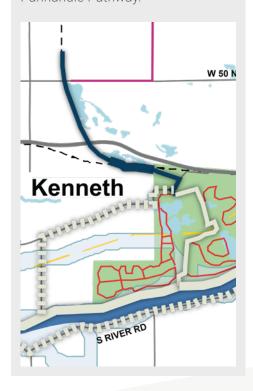
The alternate route from downtown Logansport follows Cliff Rd on the south side of the Wabash River. Cliff Rd turns into S River Rd, and the route ends at the bridge crossing to Georgetown. The alternative to traveling directly through France Park is to continue on Wabash Ave to S 600 W, turn on W 50 S, and join the Panhandle Pathway at the entrance to the park.

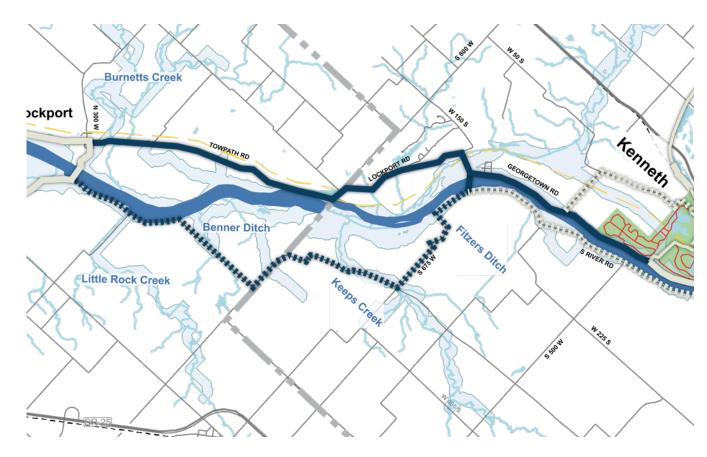






Phase 5 completes the Panhandle extension from its current stopping point to France Park. The proposed route curves southeast, crosses an active railway, and travels through land off of Berry Lane to connect to France Park. The design and implementation of this phase is currently being explored by trail's organization, Friends of the Panhandle Pathway.





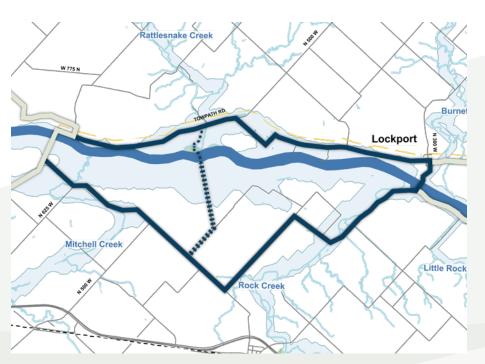
PHASE 6

Phase 6 crosses the county line into Carroll County, extending from France Park to Lockport. Starting at the public access site, the route passes through Georgetown, includes pedestrian improvements to Georgetown Rd bridge, and follows Lockport Rd to the county line. It then picks up in Carroll County on Towpath Rd and ends in Lockport.

The alternative route continues along S River Rd on the southeast side of the Wabash. S River Rd turns into S 675 W and cuts over to S 800 W via W 325 S. The route then turns onto W 1050 N in Carroll County, and ends across the river from Lockport at the N 300 W bridge crossing.

Phase 7 includes the N 300 W bridge to Lockport and follows Towpath Rd along the northwest side of the river to where it intersects with N 700 W. The southeast route follows N 275 S to W 850 N, turns into N 350 W, and connects to Carrollton Rd via W 700 N and W 675 N.

This phase has one alternate route proposing a river crossing mid-way between Lockport and Carrollton Rd bridge. Once on W 700 N, the route turns onto N 425 W, then angles along W 750 N to the Wabash River. From this point, a pedestrian bridge would need to be constructed over the river to the Weaver Family Nature Reserve, where the greenway could travel through the preserve and link up with the alignment along Towpath Rd.



PHASE 8

Phase 8 finalizes the connection between Delphi and the northern part of the county. From Delphi, the route follows Carrollton Rd to the bridge crossing, loops back on N 700 W and follows the county's Wabash River Scenic Driving Route to Pittsburg. After crossing the Wabash on SR 39, the route turns onto South Rd and meets up with Delphi Historic Trails' network.













Phase 9 is a short yet critical piece of the greenway corridor. This phase connects the Canal Park trails to Carrollton Rd via an abandoned rail spur dating back to Delphi's lime production era. The intersection of the trail. Carrollton Rd, and a piece of Delphi's history makes this a prime location for a trailhead. The proposed trailhead includes a monument sign visible from a distance, parking, a seating area, and a kiosk complete with maps and trail information about the Wabash River Greenway. Wabash River Greenway signage at this trailhead will celebrate Delphi's canal era transportation serving the lime kilns perched on the waterway.

PHASE 10

Phase 10 proposes enhancements to Delphi's Historic Trails system directly adjacent to Canal Park. One enhancement is a connection from the Carrollton Rd trailhead to Washington St bridge via Adams St, Indiana St, and Clay St. The other improves the Historic Trail on the Interpretive Center side of the canal by upgrading the gravel path to asphalt.

PHASE 11

Phase 11 builds on the existing pedestrian underpass that crosses SR 39 and by proposing a loop back across SR 39 into downtown Delphi extending to Washington St bridge. Gravel to asphalt pavement upgrades are recommended between the intersection of Old State Rd 25 & SR 39 and the Historic Trails crossing under Old State Rd 25 near Trailhead Park.

PHASE 12

The final phase in Delphi fills in the gravel to asphalt pavement gap between the Old SR 25 crossing and the SR 39 underpass.

Phase 13 extends from Delphi in Carroll County to Grant Road in Tippecanoe County. Beginning at South Street in Delphi, the route travels west along Bicycle Bridge Rd, turning south on N 1200 W and continuing along Grant Rd. The route includes pedestrian improvements to the Grant Rd bridge to Americus and turns toward Delphi, following Old SR 25 to the Historic Trails crossing.

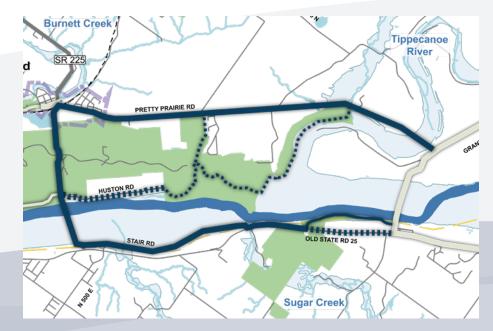
The proposed alternate cuts the Bicycle Bridge segment short, turning on N 1000 W instead of going all the way to Grant Rd. N 1000 W changes to McKinley Rd once in Tippecanoe County. The route then connects to Grant Rd via E 950 N. The caveat to this alternative is that the existing gravel road from N 1000 W to E 950 N needs to be paved with asphalt to make this a viable option.

Pittsburg OLD STATE RD 25

PHASE 14

Phase 1 loops through the middle of Prophetstown State Park using Pretty Prairie Rd, SR 225, Stair Rd, and Old SR 25. SR 225 does not offer direct access to the park and is a good through-route for greenway users. The leg traveling northeast on Old SR 25 takes advantage of the opportunity to move off-road and winds through Hoffman Nature Area, ending at Grant Rd in Americus.

The dashed alternate routes through Prophetstown State Park explore how access from SR 225 and Pretty Prairie Rd could combine with the park's existing network. This alternate has potential to eliminate the need for onroad facilities through the town of Battle Ground. On the other side of the river the alternate continues to follow Old State Rd 25 to Americus, in lieu of routing through Hoffman Nature Area.





Phase 15 is a connector between the loops formed by Phases 14 and 16. It follows N 9th St from SR 225 to Burnetts Rd and includes a combination. of existing and proposed trails through Tippecanoe Battlefield Memorial & Museum grounds to form a self-contained loop.

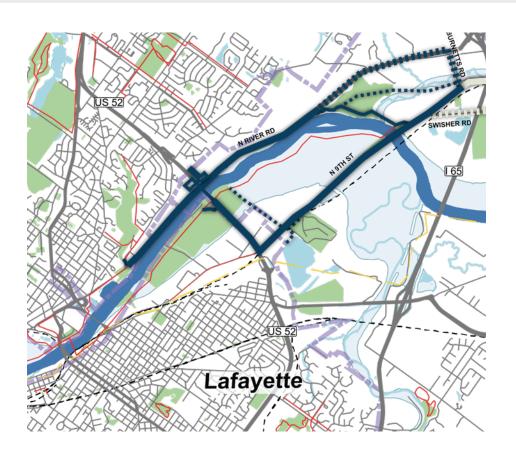
The alternate shows an additional path branching off N 9th St to Prophetstown State Park's entrance on Swisher Rd. From there, a route follows the perimeter of the park and crosses SR 225, joining the rest of the interior trail network leading to Pretty Prairie Rd.



PHASE 16

Phase 16 connects several parks and green space areas within a short distance of each other. Beginning at Burnett Rd, the route continues south on N 9th St, crosses the Wabash at Davis Ferry Park, and turns west at US52/Sagamore Pkwy. At this point, the route splits with options to connect to the Wabash Heritage Trail on the Lafavette side of the Wabash, or to use the pedestrian facilities on US52/Sagamore Pkwy bridge to re-cross the river into West Lafayette. Once in West Lafayette, the route descends to N River Rd street level, where a trailhead with parking, kiosks, and signage is proposed. Traveling south on N River Rd leads to Mascouten Park, tying into the trail system connecting Happy Hollow Park to N River Rd. Moving north from the trailhead, the route leads to Tippecanoe County Amphitheater Park and diverges from the road to wind through Tecumseh Trails, cross Burnetts Creek, and complete the loop back to 9th St at Davis Ferry Park.

Alternate routes include bypassing Tippecanoe County Amphitheater Park and connecting N River Rd to N 9th St via Burnetts Rd and cutting the corner at Davis Ferry Park by routing directly to Burnetts Rd from Tecumseh Trails. An additional route parallel to Sagamore Pwy explores connecting to the Wabash Heritage Trail using riverside properties owned by both the Lafayette City Park & Recreation Board and adjacent corporations. On the other side of 9th St, a connection is proposed to a park property owned by the Tippecanoe County Park & Recreation Board that has trail and pond amenities.

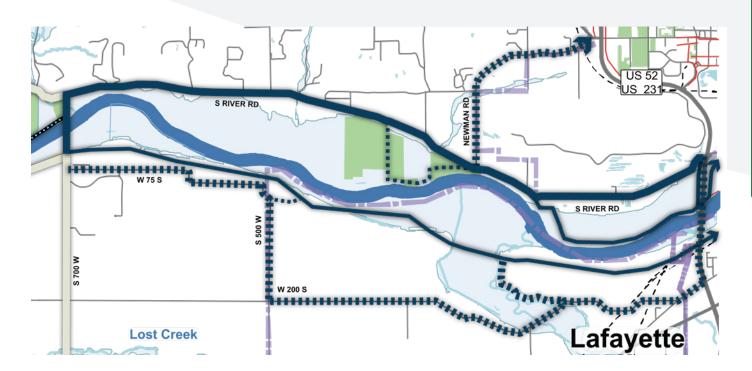


PHASING

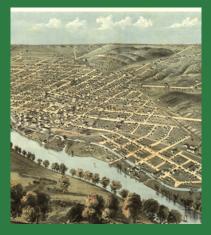
PHASE 17

Phase 17 picks up at US 231 and follows the Wabash River Scenic Byway up to S 700 W. Pedestrian improvements are proposed at the bridge crossing. At the south end of the bridge, the route veers off-road and follows the alignment of the river until intersecting US 231. This trail requires cooperation with private landowners and corporations who own the properties with frontage on the Wabash. Back on the north side of the river next to 231, an extension of the Wabash Heritage Trail is proposed, following the shape of the river and rejoining the Wabash River Scenic Byway just before Newman Rd.

Alternates within this phase propose routing a portion of the path along the Wabash River Scenic Byway through Fort Ouiatenon, turning northward at Newman Rd and connecting to Purdue University's campus. On the south side, on-road facilities linking S 700 W to US 231 are proposed, should trail construction challenges near the river prove difficult. Between the riverside trail and the on-road facilities, connections are shown which allow users to select varying distances to match their abilities while encouraging return trips to explore different routes.



This Corridor Master Plan does not include the Northern, Central, or Southern Urban Reaches as described in Two Cities, One River: Master Plan for the Wabash River Urban Corridor, 2011, as these areas are already under study and design development.



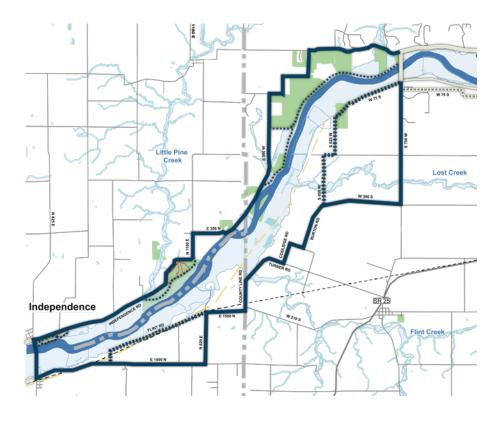


PHASING

PHASE 18

Phase 18 starts at S 700 W bridge, crosses into Fountain and Warren counties to loop through Independence, and returns back to the S 700 W bridge. Both routes on the north and the south sides of the river largely follow an existing loop used by the Wabash River Cycle Club. In Warren County, the proposed path diverts from this cycle loop near Black Rock, using S 950 W to jog by Ross Camp and Ross Hills Park to rejoin the Wabash River Scenic Byway in Tippecanoe County. On the south side, the route bypasses Flint Rd in favor or N 820 E and E 1400 N. Flint Rd is kept in the corridor master plan as an alternate route.

Additional alternates include new and improved trails in Weiler Leopold Nature Preserve and Cicott Park. Cicott Park is a proposed location for canoe and kayak water access. Alternates in Tippecanoe County involve following the river alignment with trails through Ross Camp, Ross Hills Park, WREC properties and riverfront properties. Across the river from Ross Camp, a secondary route connecting S 700 W bridge to W 300 S is shown. This segment of gravel road will require conversion to asphalt pavement to safely accommodate the Wabash River Greenway.

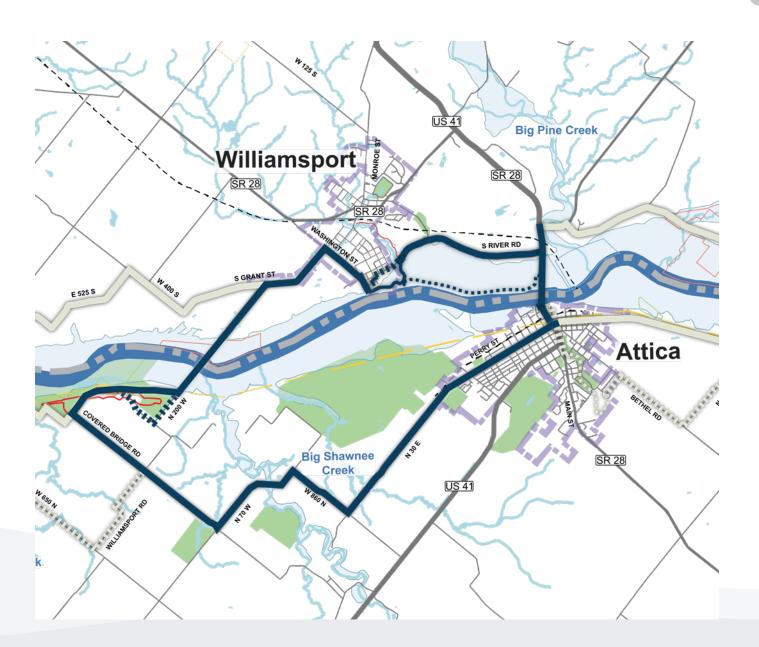


PHASE 19

Phase 18 is a connector between Independence and Attica. The route north of the Wabash follows Independence Rd from Independence bridge to US41/SR28. South of the Wabash the route follows E 1400 N, turning into Perry St within Attica's city limits and ending at Main St.

The alternate course departs on E 1400 N, routing through Ravine Park/Arms Woods via N 250 E, Bethel Rd, and Avenue 8. This route exits Ravine Park and heads west on Main St, turning on Market St before intersecting with US41/SR28.





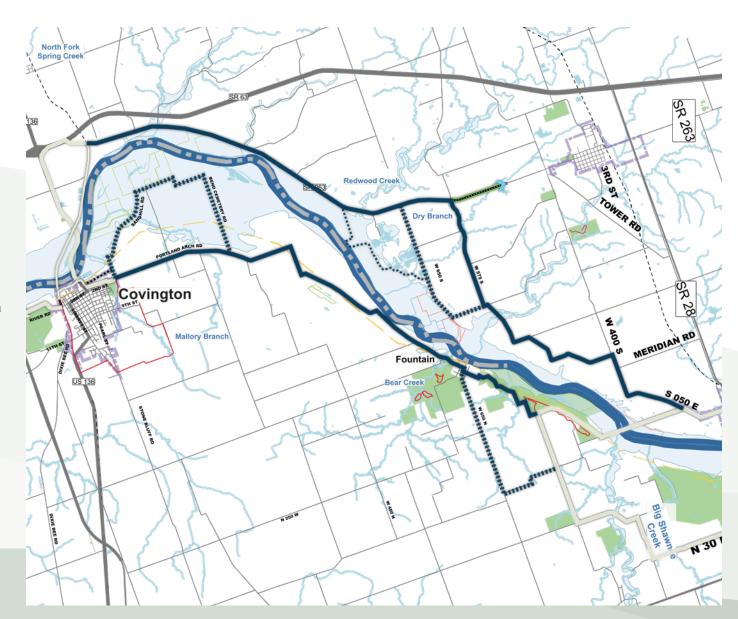
Phase 20 forms a concise loop between Williamsport and Attica. Starting at the US41/SR28 bridge in Attica, the route turns south on Perry St, cutting over to Covered Bridge Rd via W 860 N and N 70 W. Covered Bridge Rd leads to Shawnee Bottoms, where one can choose to meander through the nature preserve on the way to Shawnee Bridge. Crossing the Wabash, the route takes S 050 E into Williamsport. The route then makes its way to Old Town Park and follows the banks of the Wabash to Fall Creek, connecting to River Rd and the trail leading to Williamsport Falls. Once on River Rd, the route intersects with US41/SR28 and crosses the bridge back into Attica.

The alternate in Fountain County bypasses the north end of Shawnee Bottoms in favor of onroad facilities. Alternates in Warren County offer a couple of options to complete the loop to Attica. The first uses 3rd street to connect Old Town Park to River Rd, and the second shows potential to use river properties to link the Fall Creek segment to US41/SR28.



One of the larger phases, Phase 21 works to fill in the gap between Attica/Williamsport and Covington. Starting close to Shawnee Bridge on the west side of the river, the route meanders along county roads as close to the river as possible, intersecting SR 263 at W 575 S. Along SR 263, off-road facilities are proposed which end at a rail corridor near the SR 63 and US 136 interchange. On the east side, the route moves south from Shawnee Bottoms, passes through Fountain and Portland Arch Nature Preserve, a local geological wonder. From there, the route continues along Portland Arch Rd to Sandhill Rd in Covington.

Alternates in Warren County include using W 650 S, and connecting to SR 263 via a potential trail winding through land owned by local companies. Fountain County alternates include linking Covered Bridge Rd to Portland Arch Rd by way of W 650 N, and a short loop using Sandhill Rd and Bend Cemetery Rd.





Phase 22 ties the greenway corridor in Warren County to Covington. This route begins where Phase 21 ended at the intersection of SR 263 and the rail corridor. The rail corridor continues east through land owned by local companies as well as the City of Covington until it crosses the Wabash utilizing an abandoned railroad bridge. Once in Covington, the route splits into two directions. One continues east to tie into the Circle Trail on the south side of the city, and the other segment turns north and passes under US 136 to 2nd St, linking Five Crossings Park to City Park and completing the riverfront segment of the Circle Trail.

If the Warren County rail corridor is not used, the alternate is to follow SR 63 and use US 136 to cross over into Covington. Another alternate is an off-road path from US 136 to Sandhill Rd in lieu of the 2nd Street connection to City Park.

PHASE 23

The final Phase runs from Covington to Waterman Public Access Site just south of the Fountain/Parke County line. This route starts along River Rd from the Circle Trail, veers onto Towpath Rd at the fork, and continues through Pecan Basin on Silver Island Rd. From Silver Island Rd, the route turns on Old SR 234 to pass under the SR 234 bridge and finish at Waterman Public Access Site.





Wabash River Greenway Pilot Projects Selection Process

The implementation and construction of this destination recreation trail will roll out in segments due to its magnitude: ninety river miles and over 233 route miles along both sides of the Wabash with river crossings providing looped trail routes up and down the corridor. Pilot projects have been identified within each of the five river counties as demonstration projects to convey the value of these investments and reinforce the project brand:

The Wabash River Greenway is a regional destination trail designed to provide new experiences, increase wellbeing, build a trail tourism economy, support wildlife, enhance water quality and improve access to the Wabash River.

The pilot projects are important to the overall success of the Wabash River Greenway for these reasons:

TO BUILD USER AWARENESS BY DEPLOYING WABASH RIVER GREENWAY CORRIDOR IMPROVEMENTS INCLUDING:

- ➤ Trailhead facilities: parking, bike racks, signs, benches, rest rooms, trees, and landscape
- Sign types: monument, roadway, directional, mile marker, kiosk, wayfinding, and interpretive
- > Pavement types: asphalt, concrete, pavers, stone
- ➤ Habitat restoration and water quality improvement measures
- Conduit placement for broadband deployment and tech enhanced user experiences

TO DEMONSTRATE THE ENVIRONMENTAL BENEFITS OF THE WABASH RIVER GREENWAY:

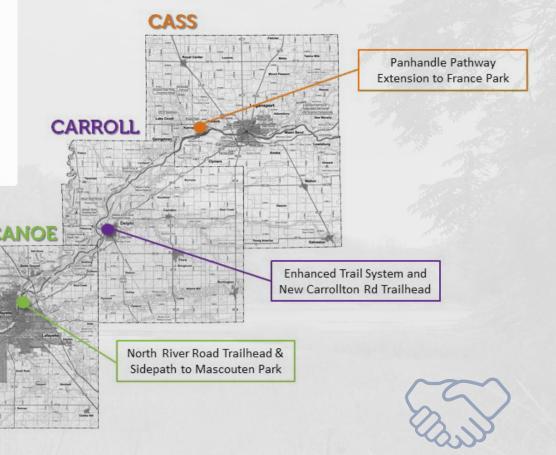
- > Connecting people with nature
- ➤ Providing recreation opportunities for hiking, boating, biking, and paddling
- ➤ Improving water quality through floodwater storage and infiltration
- Providing buffer habitat to protect adjacent and downstream communities
- > Preserving and protecting fish and amphibian habitat
- ➤ Increasing groundwater recharge with native landscapes

TO HIGHLIGHT THE ECONOMIC AND HEALTH BENEFITS OF THIS DESTINATION RECREATION TRAIL FOR:

- > Talent retention and attraction
- ➤ Deploying Trail Town strategies for increasing local merchant/ hospitality revenues
- ➤ Identification of prime real estate development opportunities seeking trailside locations
- ➤ Increased healthy habits resulting in workforce health improvements

The design team and steering committee vetted sixteen potential projects throughout the five river counties as early contenders for Wabash River Greenway Pilot Projects with a focus on feasibility. Criteria for final pilot project selections included:

- > Shovel ready site / or shovel ready status of the project
- > High levels of community support for the project
- > Project funding has been secured / or status of funding and its prospects of attainability
- > Land is acquired / or status of willing seller/partner
- > Environmental conditions are favorable for project development without delay
- > Beneficial timing with other development projects



The Falls to Old Town Park Covington Circle Trail **FOUNTAIN**

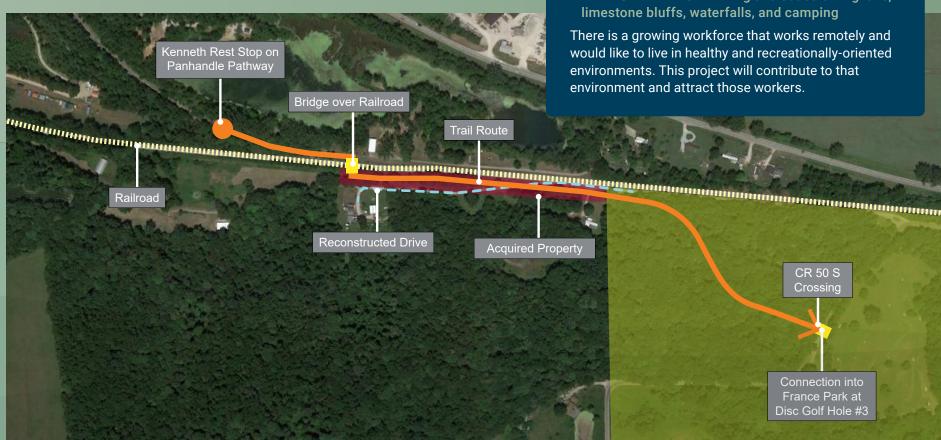
While pilot project selection criteria were stringent, it is critical that all five pilot projects can be implemented with broad community support and without delay. This approach to launching pilot projects will facilitate completion of the larger Wabash River Greenway through these demonstration projects that serve communities up and down the river corridor.

The following pilot projects have been selected for early implementation in each of the five Wabash River counties and are described in detail here.



There are four major area attractions to draw visitors and new residents to this area:

- > Significant visionary trail: PANHANDLE PATHWAY
- > Attractive state park: TIPPECANOE RIVER STATE PARK and the preservation work on native plants along the trail
- > Scenic recreational waterways: TIPPECANOE & **WABASH RIVERS**
- > FRANCE PARK: Swimming and scuba diving lake,





Delphi Historic Trails

The Carroll County pilot project for the Wabash River Greenway will bring branded signage, wayfinding, trailhead construction, trail pavement upgrades and native landscapes to Delphi's fourteen miles of Historic Trails. A large portion of Delphi trails were originally built by the State of Indiana as the towpath for the Wabash & Erie Canal. These crushed limestone trails will be converted to asphalt trails to provide safe and convenient access to Carroll County's Courthouse Square, the restored Delphi Opera House, downtown dining venues, the Canal Interpretive Center, and its Pioneer Village.



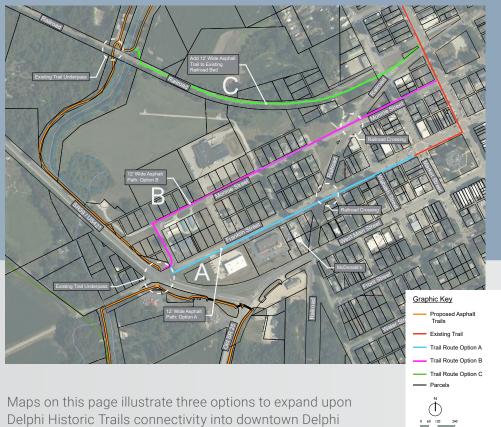


In addition to Delphi Historic Trails upgrades, a new Carrollton road trailhead, and a trail extension along a former railroad spur, will entice Wabash River Greenway users onto the Canal Towpath, ultimately introducing these visitors to the Canal Interpretive Center, the canal boathouse and downtown Delphi's attractions and dining venues. The trailhead will provide safe parking, and convenient trail access with site furnishings, benches and a drinking fountain. The rich history of Delphi will come alive with interpretive signage highlighting cultural and historic milestones for which Delphi is known: the City Hall Opera House and Delphi's incredibly popular lime industry that in their day produced the best lime plaster to be had in the United States. A walk or bike ride along Delphi's Historic Trails will certainly be a step back in time for users of this destination recreation trail.









for trail users approaching the city from Lafayette, West Lafayette, Purdue University, and Prophetstown State Park.

Graphic Key

Proposed Asphalt

Proposed Gravel Trails

Classified Flowlines

--- Parcels

Contours

■ Bridge Crossing



Trail Distances

1.0 Mile East Path From Old SR25 Intersection to Deer Creek Bridge

1.0 Mile West Path From Old SR25 Intersection to Deer Creek Bridge

.5 Mile East Gravel Path

.5 Mile West Gravel Path











Under the Railroad Passageway

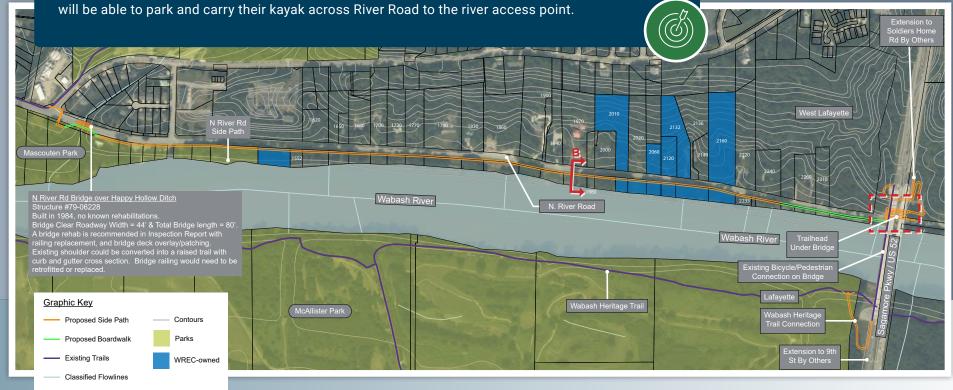
As Wabash River Greenway users approach Delphi, safe crossings under a railroad and state highways will bring them directly to Delphi's Canal Park & Interpretive Center, the living history Pioneer Village and opportunities for a ride along the historic Wabash & Erie Canal towpath. Here, visitors can pause for a museum visit and a ride on an authentic canal boat replica along a restored portion of the historic canal.





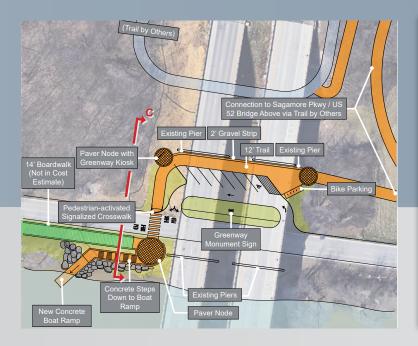


A proposed boat launch will provide access to the river for recreational boaters with small crafts like kayaks and canoes. This project will utilize existing unused space underneath Sagamore Parkway bridge and connect the trail to the top side of the bridge. This trailhead will provide a convenient pull-off parking area underneath the bridge for vehicles traveling along North River Road. Users



Parcels



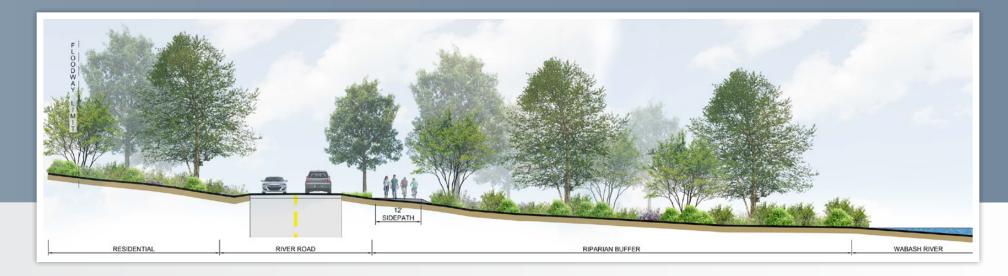




These photographs and illustrations depict the layers of connectivity being proposed within the North River Road Pilot Project in Tippecanoe County. The Sagamore Parkway bridge, situated high above North River Road and the mighty Wabash River, is supported by large concrete structural bridge piers, recently converted into a local artist's canvas by Zach Medler's Ephemeral Robots mural. The bridge and structural piers provide a sheltered place for this trailhead offering greenway and blueway access to local trails. The Wabash River Greenway is threaded through this space on a boardwalk adjacent to another structural pier with the canoe and kayak access immediately adjacent for an easy slide into Indiana's River. Above on Sagamore Parkway, a dedicated bike lane was installed years ago during an Indiana Department of Transportation bridge deck replacement. This Pilot Project will now bring connectivity from North River Road up to Sagamore Parkway and across the Wabash River to North Ninth Street on the Lafayette side of the river, connectivity that had been wisely anticipated years ago.





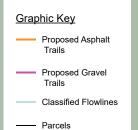


The Wabash River Greenway is being led by the Wabash River Enhancement Corporation, whose mission is to enhance the quality of life in the Wabash River Corridor by creating sustainable opportunities to improve health, recreation, education, economic development, and environmental management. This project will further the Corporations mission through the conversion of riverfront properties into resilient native riparian landscapes that filter stormwater runoff, provide wildlife habitat, reduce sediment - the number one pollutant in the Wabash, and when discovered, deliver the requisite mitigation of brownfields, prior to native landscape restorations, to reduce toxic impacts during flooding events. The end result will be parkways, greenways and blueways woven through an abundance of nature.



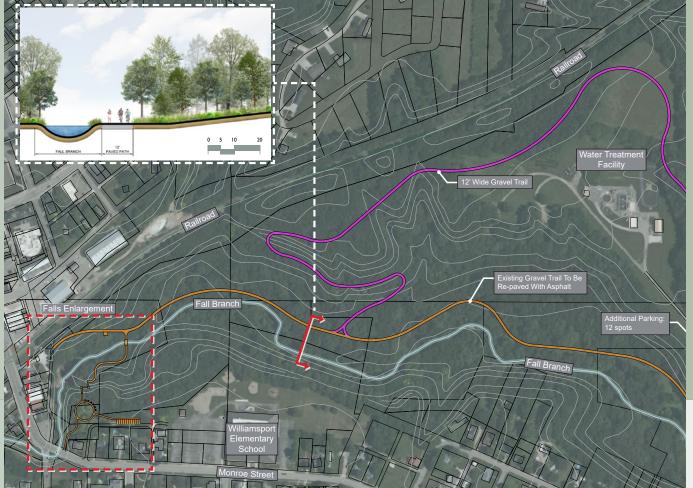






Contours





Utilizing new signage and performing a riparian restoration along the Falls Branch will enhance the visibility of the Falls that are currently partially hidden by overgrown vegetation. Increased visibility of the Falls will help to activate and create a regional attraction that will bring more business to the Town of Williamsport. Accommodations for visitors to this striking geologic formation requires public parking, trail access, park appurtenances and accessibility. Current conditions limit user access. Proposed parking facilities and trails will replace existing gravel parking and provide order and safety to the user experience while additional overlooks will take advantage of viewsheds to Indiana's tallest waterfall.

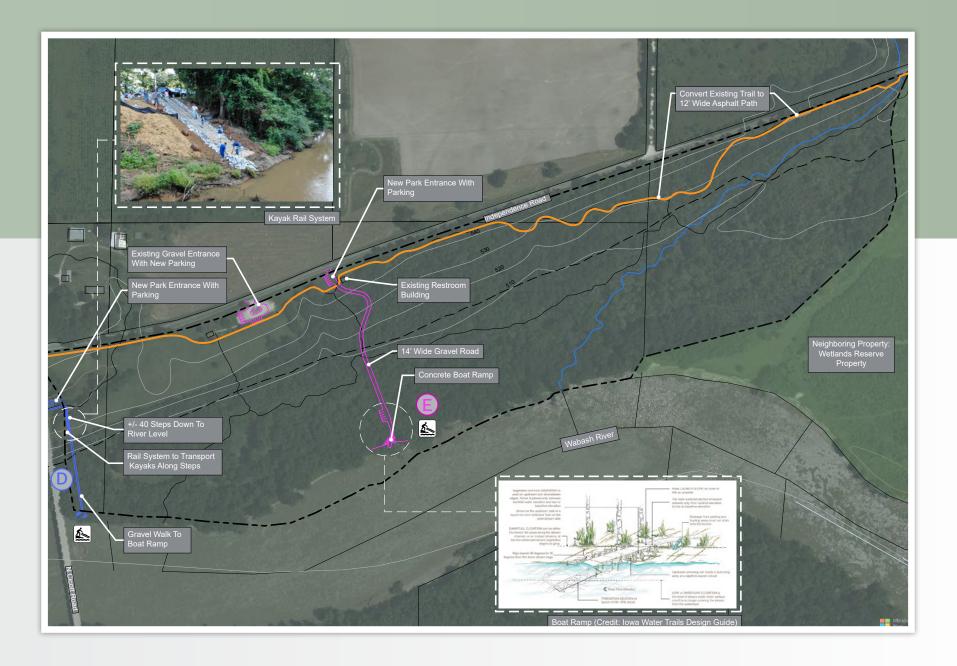


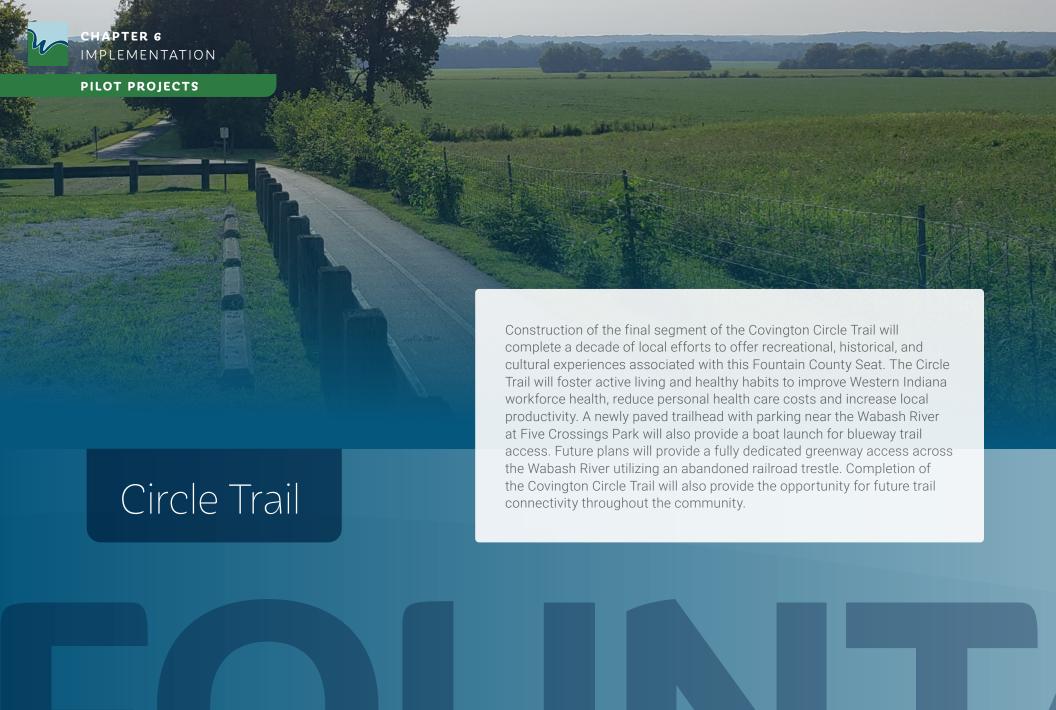






To truly experience the wonder of the Williamsport Falls, one should plan a trip after a rain or when snow is melting, since the flow is intermittent. Fall Branch drains a rather small watershed in Warren County before arriving at the Williamsport Falls and dropping ninety feet to the bedrock below. From there, it flows another mile along the deep ravine it has been carving out over the centuries. It is here in the heat of summer where locals go to cool off. Trail improvements will ultimately take visitors from the Falls all the way to the banks of the Wabash River where an overlook is planned. A boardwalk will allow visitors to experience the riverfront wetlands as one proceeds to Old Town Park.

















---- Parcels

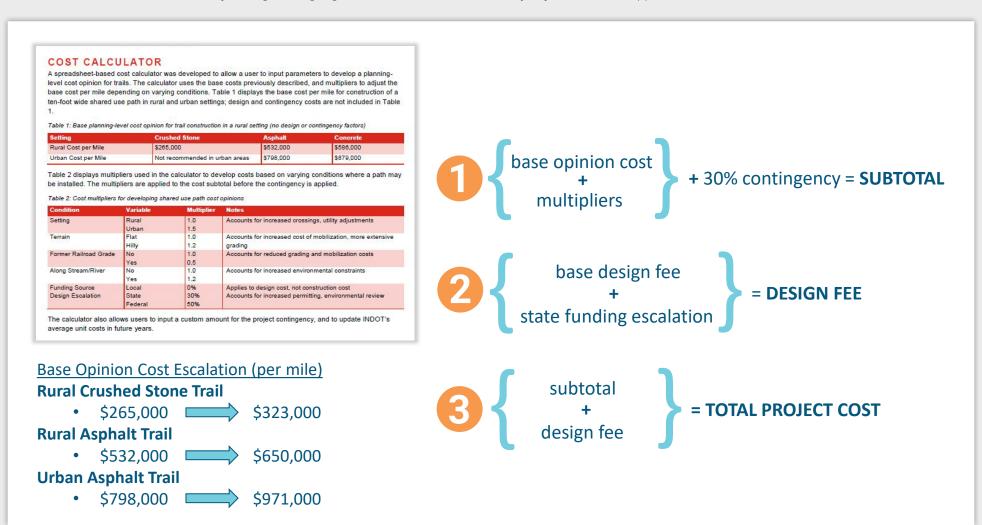
--- Contours

Future Park Connection

PROBABLE COST

Probable

The planning level opinions of probable cost of construction were developed utilizing the Indiana Department of Transportation's bicycle and trails cost calculator. The tool was developed in 2019 and provides various options and multipliers to customize the estimate regarding type of terrain, surface and base material, drainage considerations, urban vs. rural, utility adjustments and funding source requirements. Additionally, trailhead and site amenities including wayfinding and signage were included. An inflationary adjustment was applied to be consistent with end of 2021 costs.



| Greenway Facility Mileage by County | |
|-------------------------------------|-------------------------------------------|
| Cass County | 43.18 miles <i>primary</i> route |
| | 16.19 miles <i>alternate</i> route |
| Carroll County | 39.18 miles <i>primary</i> route |
| | 04.92 miles <i>alternate</i> route |
| Tippecanoe County | 58.24 miles <i>primary</i> route |
| | 38.69 miles <i>alternate</i> route |
| Warren County | 44.23 miles <i>primary</i> route |
| | 22.20 miles <i>alternate</i> route |
| Fountain County | 48.22 miles <i>primary</i> route |
| | 25.77 miles <i>alternate</i> route |

≥ 233.05 miles PRIMARY ROUTE

₹107.77 miles₽ALTERNATE ROUTE



| Opinion of Probable Cost by County | |
|------------------------------------|-------------------------------|
| Cass County | \$66,000,000 - \$70,000,000 |
| Carroll County | \$10,000,000 - \$12,000,000 |
| Tippecanoe County | \$110,000,000 - \$120,000,000 |
| Warren County | \$54,000,000 - \$60,000,000 |
| Fountain County | \$20,000,000 - \$22,000,000 |

\$260M to \$284M TOTAL PROBABLE COST

FUNDING STRATEGIES



Funding Strategies

NORTH CENTRAL HEALTH SERVICES (NCHS)

www.nchsi.com

NCHS is committed to supporting organizations that demonstrate sound financial management, efficient operations, and the organizational capacity to sustain successful projects with significant potential for positive impact on the community. As a healthcare provider, NCHS prioritizes funding for capital grants addressing needs identified by the 2018 River Bend Hospital Community Health Needs Assessment and the 2018 NCHS Community Health Needs Assessment Implementation Plan.

COMMUNITY BENEFIT CAPITAL GRANTS accepts unsolicited requests from qualified nonprofit organizations seeking financial support for capital projects related to health and the development of healthy communities. Capital grant proposals are accepted from tax-exempt, nonprofit organizations, as defined under section 501(c) (3) of the Internal Revenue Code, that serve one or more of the following counties in Indiana: Benton, Carroll, Clinton, Fountain, Montgomery, Tippecanoe, Warren, or White.

Funding priorities include the following criteria:

- > Enhance health outcomes and develop healthy communities
- > Create opportunities for sustainable and significant long-term impacts
- > Have broad community support and sponsorship
- > Encourage creativity and collaboration among organizations
- > Efficiently utilize limited resources
- > Leverage funding opportunities
- > Build capacity, improve, or expand existing programs that address demonstrated unmet community needs

Letters of inquiry are accepted during the following capital grant cycles with the following fund availability periods:

- > Letters requesting over \$250,000 are accepted May 1 - August 1 with funds available after January 1 of the following year
- > Letters requesting \$100,000-\$250,000 are accepted on an ongoing basis with funds available within 90 days of approval
- > Letters requesting less than \$100,000 are accepted on an ongoing basis with funds available within 90 days of approval



INDIANA OFFICE OF COMMUNITY & RURAL AFFAIRS (OCRA)

www.ocra.in.gov

Stormwater Improvements Program goals strive to:

- > Reduce flooding
- > Cut stormwater treatment and energy costs
- > Protect rivers, lakes, and vital landscape
- > Generate jobs and spur economic revitalization

A maximum grant award of \$600,000 is in effect for all Stormwater Improvements projects. The maximum award is not intended to serve as a target figure for requests for grant assistance. OCRA will review the level of grant assistance requested and will consider the appropriateness of the project's scope, the level of demonstrated need and the financial resources of the applicant. If OCRA determines that a lesser amount is appropriate, it may be necessary to revise the project before it is submitted in final form. A local match of 10% of the total project cost will be required for consideration of funding.

The amount of CDBG funds granted will be based on a \$5,000 cost per project beneficiary. General types of activities that are eligible for SIP funding include stormwater improvements (retention, lines, etc.)

Planning Grants require a 10% local match, maximum grant amounts are listed by project type below:

> Water Utilities Infrastructure Studies

- \$60,000 for a study on two utilities
- \$90,000 for a master utility study (water, wastewater, and stormwater)
- Note: All utilities controlled by the community must be covered by the study

> Comprehensive Plans

- Populations over 10,000 are limited to \$60,000
- Populations under 10,000 are limited to \$50,000

> Economic Recovery Plans are limited to \$50,000

> Broadband Plans

- Limited to \$50,000 for a single community
- Limited to \$70,000 for a region

INDIANA DEPARTMENT OF TRANSPORTATION (INDOT)

www.in.gov/indot

Community Crossings is a partnership between INDOT and Hoosier communities, both urban and rural, to invest in infrastructure projects that catalyze economic development, create jobs, and strengthen local transportation networks.

INDOT holds two CCMG Call for Projects each year, one in January and one in July. Projects that are eligible for funding through Community Crossings include road and bridge preservation projects with Americans with Disabilities Act (ADA) compliance in connection with these projects. Material costs for chip sealing and crack filing operations are also eligible for funding. CCMG awards state funds for CONSTRUCTION ONLY: maintenance of traffic is part of construction, and DO NOT participate in contingency fees on contractor contracts.

Community Crossings is open to all local government units in the State of Indiana. Match percentages are:

- > Cities and towns with a population of fewer than 10,000 will receive funds using a 75/25% match.
- > Cities and towns with a population of greater than 10,000 will receive funds using a 50/50% match.
- > Counties with a population of fewer than 50,000 people will receive funds using a 75/25% match.
- > Counties with a population of greater than 50,000 people will receive funds using a 50/50% match.

FUNDING STRATEGIES

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM)

www.in.gov/idem

CLEAN WATER ACT

- > SECTION 205(J) GRANTS are for water quality management planning to determine the nature, extent and causes of point and non-point source pollution problems, as well as develop plans to resolve these problems.
 - **Eligible Entities**: Municipal governments, county governments, regional planning commissions, and other public organizations.
 - Amount Available: Amount varies, averages \$350,000 annually.
 - Grant Cycle: One application round per year.
- > SECTION 319(H) GRANTS are for projects that reduce documented non-point source water quality impairments. Funds may be available to develop and implement Total Maximum Daily Loads (TMDLs) and watershed management plans, provide technical assistance, demonstrate new technology, conduct assessments, and provide education and outreach.
 - **Eligible Entities:** Nonprofit organizations, universities, and local, state, and federal governmental agencies.
 - **Amount available:** \$4,000,000 annually; Grants are for 60% of project costs; a 40% matching contribution is required. Federal funds cannot be used for matching.
 - Grant Cycle: One application round per year.

INDIANA BROWNFIELDS PROGRAM FINANCIAL ASSISTANCE

The Indiana Finance Authority (IFA) administers state and federal funding with environmental technical support from IDEM staff as part of the Indiana Brownfields Program. Brownfields are abandoned, idled, or underused properties where environmental contamination, either real or potential, hampers expansion and redevelopment. The IFA offers financial assistance as an incentive to address environmental issues associated with brownfields, such as site assessment and remediation, in order to facilitate brownfield redevelopment.

U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)

www.fhwa.dot.gov

Projects eligible for funding include bridge, roadway, bicycle, and pedestrian infrastructure improvements:

- ➤ Highway Safety Improvement Program
- > Safe Streets and Roads for All (SS4A) Grant Program
- ➤ Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Discretionary Grants
- ➤ Innovative Bridge Research and Deployment (IBRD) Program
- > National Corridor Infrastructure Improvement
- > Recreational Trails Program (RTP)
- > State Infrastructure Banks Program
- ➤ Transportation Alternatives Set-aside Program

U.S. NATIONAL TELECOMMUNICATIONS & INFORMATION ADMINISTRATION (NTIA)

www.ntia.doc.gov

The Broadband Infrastructure Program is a \$288 million broadband deployment program directed to partnerships between a state, or one or more political subdivisions of a state, and providers of fixed broadband service to support broadband infrastructure deployment to areas lacking broadband, especially rural areas.



FUNDING STRATEGIES

INDIANA DEPARTMENT OF NATURAL RESOURCES (DNR)

www.in.gov/dnr

The DNR is a state agency that administers numerous programs impacting historic preservation, outdoor recreation and the environment.

Next Level Trails (NLT) will invest \$150 million - the largest infusion of State trail funding in Indiana history - toward the development of regionally and locally significant trails throughout Indiana. As part of Governor Holcomb's broader Next Level Connections infrastructure program, **NLT** is designed to incentivize collaborative efforts to accelerate trail connections. The Department of Natural Resources will administer the program. NLT funds will be awarded in rounds until all funds have been allocated.

Grant requests require a 20% minimum match via monetary contributions, land value, and in-kind donations of materials and labor. Awarded projects are expected to be completed within four years. Eligible Applicants include local units of government or 501(c)(3) nonprofit organizations. One application per applicant per round. If awarded, the applicant will enter into a State Grant Agreement and must take responsibility for all aspects of the project through completion. Applicants acting in a fiscal pass-through capacity only are not eligible. Additionally, the applicant must fulfill at least one of the following roles:

- > Own (or acquire) the trail corridor
- > Manage and maintain the trail once developed
- ➤ Oversee and manage trail construction through completion

Eligible projects include all non-motorized trail types, but consideration will be given to multi-use trail types. All surface types are eligible and should meet contextual needs. All trails must be open to the public. Preference is given to:

- > Projects that connect multiple cities, towns or counties.
- > Projects that further the completion of the State Visionary Trail System (regionally significant projects only).
- > Projects that connect schools, parks, neighborhoods, commercial centers or local attractions (locally significant projects only).
- > Projects that connect or extend existing trails.
- > Projects that maximize partnerships.
- > Projects that are part of an existing regional, local, or comprehensive plan.
- > Projects on an accelerated timeline.

THE LAND & WATER CONSERVATION FUND

The Land & Water Conservation Fund (LWCF)

was passed by Congress in 1965 to assist eligible governmental units in the provision of new park areas. The LWCF is a matching assistance program. The main source of funding for the LWCF grants comes from federal off shore oil lease revenues. Since the LWCF is a reimbursing program, the project sponsor does not receive the grant funds at the time of application approval. The sponsor must have the local matching 50% of the project cost available prior to the application. The sponsoring park and recreation board is reimbursed 50% of the actual costs of the approved project. Local funding sources used to match the federal assistance may be derived from appropriations, tax levies, bond issues, force account labor, gifts, and donations of land, cash, labor, materials and equipment. Other federal funding sources cannot be used as the local share of a project, except revenue sharing, Community Development Act funds, and Farmers Home Administration loans.

DNR ITP GRANT (INDIANA TRAILS PROGRAM)

The **Indiana Trails Program (ITP)** is a trails program administered by the Department of Natural Resources Division of Outdoor Recreation. Funds for ITP are state dollars rather than federal funds.

All units of government and certain 501(c)3 not-for-profit agencies are welcome to apply. Eligible not-for-profit organizations must have a central mission that focuses on providing public outdoor recreation opportunities and has the capability to maintain the facilities developed with grant funds for a minimum of 25 years. Please contact a program administrator if you have questions regarding your organization's eligibility.

Projects will be eligible if they provide public access to trails. Funds from ITP can be used for:

- > Construction of trails
- > Acquisition of easement or property for trails
- > Development of trailheads and other support facilities (parking, water fountains, benches, signage, etc.)
- > Construction of bridges, boardwalks, and crossings

All facilities should be universally designed to accommodate all people. Facilities, funded through this program must be open to the public without discrimination on the basis of race, color, national origin, age, or disability.

The ITP will provide a maximum of 80% reimbursement for eligible projects. At the time of application, the applicant must have at least 20% of the total project cost available. Applicants may request a minimum of \$100,000 and maximum of \$400,000 in grant assistance.



U.S. ECONOMIC DEVELOPMENT ADMINISTRATION

www.eda.gov

Through the Travel, Tourism & Outdoor Recreation program, EDA is focused on accelerating the recovery of communities that rely on the travel, tourism and outdoor recreation sectors. \$750 million of EDA's American Rescue Plan funds are allocated to support the following efforts:

State Tourism Grants: \$510 million in non-competitive awards to help states quickly invest in marketing, infrastructure, workforce and other projects to rejuvenate safe leisure, business and international travel.

Competitive Grants: \$240 million to help communities that have been hardest hit by challenges facing the travel, tourism and outdoor recreation sectors to invest in infrastructure, workforce or other projects to support the recovery of the industry and economic resilience of the community in the future.

STATE TOURISM GRANTS

Eligible applicants for EDA's Statewide Planning Grants include Governors, the Mayor of DC, and other applicable Territory leaders or their designees. EDA will send these applicants a formal invitation to apply.

COMPETITIVE TOURISM GRANTS

Eligible applicants for EDA's Competitive Tourism Grants program include a(n):

- ➤ District Organization of an EDA-designated Economic Development District
- > Indian Tribe or a consortium of Indian Tribes
- > State, county, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions
- > Institution of higher education or a consortium of institutions of higher education
- > Public or private non-profit organization or association acting in cooperation with officials of a political subdivision of a State
- > Individuals or for-profit entities are not eligible.

AMERICAN RESCUE PLAN ACT ECONOMIC ADJUSTMENT ASSISTANCE NOTICE OF FUNDING OPPORTUNITY

American Rescue Plan Act Economic Adjustment Assistance Notice of Funding Opportunity (ARPA EAA NOFO) awards funds from \$100,000 to \$10,000,000. Eligible applicants include:

- > State governments
- > Nonprofits having a 510@(3) status with the IRS, other than institutions of higher education
- > City or township governments
- > County governments
- ➤ Native American tribal governments (federally recognized)
- > Private institutions of higher education
- > Special district governments
- > Public and State controlled institutions of higher education

Through this ARPA EAA NOFO, EDA aims to assist communities and regions impacted by the coronavirus pandemic, including historically underserved communities. The pandemic has caused, and continues to cause, economic injury to U.S. communities and regions in devastating and unprecedented ways.

EDA's ARPA EAA NOFO is designed to provide a wide-range of financial assistance to communities and regions as they respond to, and recover from, the economic impacts of the coronavirus pandemic, including long-term recovery and resilience to future economic disasters. Under this announcement, EDA solicits applications under the authority of the Economic Adjustment Assistance (EAA) program, which is flexible and responsive to the economic development needs and priorities of local and regional stakeholders. This is the broadest NOFO EDA is publishing under ARPA and any eligible applicant from any EDA Region may apply. EDA expects to fund a number of projects under this NOFO that support communities negatively impacted by the downturn in the coal economy, supporting transitioning away from coal.

NATIONAL ENDOWMENTS FOR THE ARTS

www.arts.gov

This agency provides grants to organizations for several types of programs related to the arts, including museums, preservation of art forms, etc. Applicable grant programs are listed below:

OUR TOWN is the National Endowment for the Arts' creative placemaking grants program. These grants support projects that integrate arts, culture, and design activities into efforts that strengthen communities by advancing local economic, physical, and/or social outcomes.

Successful Our Town projects ultimately lay the groundwork for systems changes that sustain the integration of arts, culture, and design into local strategies for strengthening communities. These projects require a partnership between a nonprofit organization and a local government entity, with one of the partners being a cultural organization. Cost share/matching grants range from \$25,000 to \$150,000, with a minimum cost share/match equal to the grant amount.

CHALLENGE AMERICA offers support primarily to small organizations for projects in all artistic disciplines that extend the reach of the arts to populations that are underserved. Challenge America features an abbreviated application, a robust structure of technical assistance, and grants for a set amount of \$10,000. Grants require a cost share/match of \$10,000 consisting of cash and/or in-kind contributions. Total project costs must be at least \$20,000 or greater.

INDIANA ARTS COMMISSION

www.in.gov/arts

This state agency offers funding for various art and art education programs. Grant programs include the following:

- > Arts Recovery Program
- > Arts Organization Support
- > Arts Project Support
- > Traditional Arts Indiana Apprenticeship



MAINTENANCE

Maintenance

"A good maintenance program protects public funds invested in bikeways, so that they can continue to be used effectively"

- Chapter 7, AASHTO Guide for the Development of Bicycle Facilities

An Operations and Maintenance Program is essential to extend the life of greenway facilities and to keep the corridor functional. It is important to budget for maintenance needs and keep budgets updated annually to reflect the current market. Maintenance programs should be implemented at a variety of levels: from the overall corridor, to regional entities, to local jurisdictions. On-road facilities can be maintained by local, county, or state agencies as part of the roadway environment. Volunteer efforts are a cost-saving option as well as corporate and organizational sponsorship of designated segments. A vital task within an Operations and Maintenance Program is scheduling regular inspections of the corridor. In addition, implementing an online comment form is a way to capture cyclist and trail user maintenance concerns between regular inspections. Listed below are guidelines to maintaining successful maintenance practices. Recommendations for asphalt trails, on-street facilities, and trail edges are summarized from AASHTO's Guide for the Development of Bicycle Facilities.

ASPHALT TRAILS

Asphalt is a common and durable material for trails and shared-use paths. It has a life of 7-15 years before an overlay is required, and lasts 20-25 years between complete resurfacings. Routine maintenance is important to get the most out of asphalt trails.

- > Surface Repairs
- > Reduce long-term maintenance needs by building to a high pavement standard
- > Use pavement preservation applications at installation to slow deterioration and cracking
- > Prevent edge of surface repair from running longitudinally through a bike lane or shoulder
- > Perform preventive maintenance routinely such as removing intrusive roots
- > Sweep project area clean of debris after repairs
- **Snow Clearance**
- > Remove snow from all travel lanes including bike facilities where practical
- > Remove snow from shared use paths used frequently by commuters
- > Store snow out of the anticipated pedestrian traffic area



MAINTENANCE

ON-STREET FACILITIES/COUNTY ROADS

SWEEPING

> Establish a regular sweeping schedule for roadways and pathways, with attention to seasonal needs, areas of frequent flooding, or vandalism concerns

PAVEMENT OVERLAYS

- > Pave at least 10 feet back on private drives, and 30 feet or to the right-of-way, whichever is less, on unpaved public road connections to prevent gravel from spilling into the anticipated bikeway area
- > Extend over entire roadway including shared bikeways and shoulders to avoid leaving a ridge. If shoulder is in good condition, stop overlay at the edge of the roadway.
- > Correct pavement edge drop-offs
- > Maintain surface of inlet grates and utility covers within 0.25 inches of the pavement surface where bicycle travel is anticipated

SIGNS AND MARKINGS

- > Signs and markings should be kept in readable condition, including those directed at motorists
- > Inspect signs regularly, including retroreflectivity at night
- Replace damaged or defective signs promptly
- Repaint pavement markings as needed

CHIP SEALING

- > Where chip seal is used on road shared with cyclists, a fine mix chip seal sized 3/8 inch or finer should be used
- > Use ¼ inch or finer for second pass
- > Chip seal should not be used on shared use paths separate from the road or asphalt trails

PATCHING

- > Do not place patch part way into the shoulder stop the patch at the edge of the roadway or pave the complete shoulder width
- > Roll the shoulder area after the last pass of the grader
- > Sweep loose materials off the roadway before they adhere to the fresh pavement

UTILITY CUTS

- > When possible, make cuts parallel to the direction of bike travel
- > Backfill cuts flush with the surface in bikeways
- > Compact the overlay properly to reduce settling overtime

FLOOD & STORM **CLEAN-UP**

In addition to routine inspections, seasonal events such as floods and storms require targeted clean-up. When impediments such as standing water, mud washes, or landscape debris cannot be removed from the path in a timely manner, bicycle and pedestrian facilities should be closed or detoured until removal is possible.

- > Remove debris such as glass, rocks, mud washes, fallen trees, limbs, trash
- > Repair eroded areas and put preventative measures in place

VEGETATION MANAGEMENT

TRAIL EDGE

- > Control roots to minimize path surface breakup
- > Adequate sight distances should be maintained at intersections and driveway crossings
- > Prune encroaching trailside shrubs according to natural habit; do not shear as this creates dense growth and increased maintenance over time
- > Do not install leggy or spreading plants in locations where they may spill over into the pathway
- > Cut back intrusive roots or install root barriers
- > Adopt local ordinances to require adjacent landowners control vegetation or allow local agencies to control vegetation originating from private property
- > For additional natural area maintenance guidelines, reference Best Management Practices for Crime Prevention Through Environmental Design in Natural Landscapes by Green City Partnerships

RIPARIAN/STREAM BANK

- > Retain and restore the natural buffer by controlling weeds and planting natives
- > Maintain all layers of the riparian ecosystem to the greatest extent possible: groundcover, understory and canopy. Dense vegetation along one side of the trail is permissible as long as the other side is visually open.
- > Use fences where necessary to keep travel on the pathway and denote controlled river access at strategic locations.
- > Apply erosion control measures where necessary to increase bank stability.
- > Do not mow within the riparian corridor.
- > Leave branches and dead fallen trees in the riparian corridor, but clear such debris from the width of the designated path
- > Repair or replace degraded signage
- > Remove trash and pollutants on a regular schedule







CHAPTER 7



Introduction

The vision of this Corridor Master Plan is to create a nationally attractive amenity that will connect cities, towns, and culturally significant destinations and draw people to explore the greenway, water trail, and adjacent communities. The experience along the Corridor will be comfortable and safe, celebrating its unique character and sense of place.

The following guidelines set the framework for establishing a consistent brand while complying with local, state, and national regulations for bike and pedestrian facilities.

Resources to reference include the Manual on Uniform Traffic Control Devices (MUTCD), National Organization of City Transportation Officials (NACTO), American Association of State Highway and Transportation Officials (AASHTO), and Federal Highway Administration (FHWA), and Public Right-of-Way Accessibility Guidelines (PROWAG).





GUIDING PRINCIPLES

Guiding Principles

Each component in this section seeks to provide connectivity, enhance the greenway experience, and cultivate corridor identity.



CONNECTIVITY

The Wabash River Greenway will be a non-motorized pathway utilizing a variety of materials to provide a continuous route throughout the river corridor. This route will connect existing infrastructure to commercial, rural, and natural areas. Where possible, the route should accommodate accessible slopes and surface material that complies with ADA guidelines.



GREENWAY EXPERIENCE

The greenway is much more than land and water pathways linking destinations together - it can promote enjoyment and local stewardship through public art installations, festivals and events, and curated opportunities for relaxation and socializing.



CORRIDOR IDENTITY

The repetition of the colors, patterns, and textures drawn from the logo and signage family contribute to the consistent character along the length of the corridor. This cohesive look is the framework for strong branding efforts and consistent messaging as the greenway weaves its way through the many jurisdictions included in this master plan.

General Accessibility (PROWAG)

The following recommendations reference Proposed **Guidelines for Pedestrian** Facilities in the Public Right-of-Way by PROWAG.



CLEAR WIDTH

- > Pedestrian access routes shall have 4'-0" minimum continuous clear width
- > Where the clear width of pedestrian facilities is less than 5'-0", passing spaces shall be provided at an interval of 200' maximum. Passing spaces shall be 5'-0" x 5'-0" minimum and are permitted to overlap pedestrian access routes

GRADING

- > Where sidepaths and trails are within a street or highway right-ofway, the grade of pedestrian access routes shall not exceed the general grade established for the adjacent roadway.
- > Where pedestrian access routes are not contained within a street or highway right-of-way, the maximum grade of a shared use path shall be 5 percent
- > The cross slope shall be 1% minimum to 2% maximum, except at pedestrian street crossings without yield or stop control, or midblock crossings
- > Where pedestrian access routes are contained within pedestrian street crossings without yield or stop control, the cross slope shall be 1% minimum to 5% maximum
- > Where pedestrian access routes are contained within midblock crossings, the cross slope shall be permitted to equal the street or highway grade

*Where grading compliance is precluded by federal, state, or local laws to preserve threatened or endangered species, the environment, or archaeological, cultural, historical, or significant natural features, compliance is required to the extent possible



SURFACES

- > Surfaces of pedestrian access routes and spaces shall be firm, stable, and slip resistant
- > Pedestrian access route surfaces must be generally planar and smooth. Surfaces should be chosen for easy rollability. Surfaces that are heavily textured, rough, or chamfered, and paving systems consisting of individual units that cannot be laid in a plane will greatly increase rolling resistance and subject pedestrians who use wheelchairs, scooters, and rolling walkers to the stressful and often painful effects of vibration
- > Surface discontinuities shall not exceed 0.50 inch (13 mm) maximum. Vertical discontinuities between 0.25 inch (6.4 mm) and 0.5 inch

- (13 mm) maximum shall be beveled at 1:2 maximum. The bevel shall be applied across the entire level change.
- > Surface openings or gaps must be minimized in order to ensure a smooth surface on shared-use paths. Utility covers and drainage grates can be hazards and, for the safety of all users, must be treated. Special treatment is necessary where shared use paths cross railroad crossings, both freight and nonfreight for the safe passage of wheeled mobility devices, as well as bicycles and other users. The AASHTO Bicycle Facilities Guide recommends that railroad crossings be smooth and be designed at an angle between 60 and 90 degrees to the direction of travel in order to minimize the danger of falls.
- > Where pedestrian access routes cross rail tracks at grade, the route surfaces shall be level and flush with the top of rail at the outer edges of the rails, and the surface between the rails shall be aligned with the top of rail
- > Flangeway gaps shall be no more than 2.5 inches maximum on non-freight rail track and 3 inches maximum on freight rail track
- > Horizontal openings in gratings and joints shall not exceed 0.5 inch maximum. Elongated openings shall be placed so that the long dimensions is perpendicular to the dominant direction of travel
- > Curb ramps shall be the width of the shared-use path







Trail Types

OFF-ROAD FACILITIES (AASHTO)

In natural and urban areas, off-road facilities are preferred as they provide a more enjoyable environment by decreasing the stress on pedestrians navigating a vehicular corridor. Off-road facilities may parallel the road separated by a buffer, or may route through established nature preservation areas or follow the banks of the Wabash River and adjoining tributaries. These areas may include paved and unpaved paths, however the preferred surface for the greenway corridor is asphalt to provide access to the greatest range of users. Unpaved trails should use firm, stable, slip-resistant surface materials and be a flat as possible. Off-road facilities proposed in this plan include:

TRAIL

Trails are a common facility type normally found traversing woods and meadow landscapes, farm land and parks. They are very popular among users since they provide the greatest exposure to natural landscapes, fresh air, and the changing seasons. Additionally, trails are generally further removed from other modes of transportation, creating a safer environment and more pleasurable experience.







Above: Panhandle Pathway, tunnel under US 24

Far Left: Cattail Trail, West Lafayette

Left: Panhandle Pathway in the fall



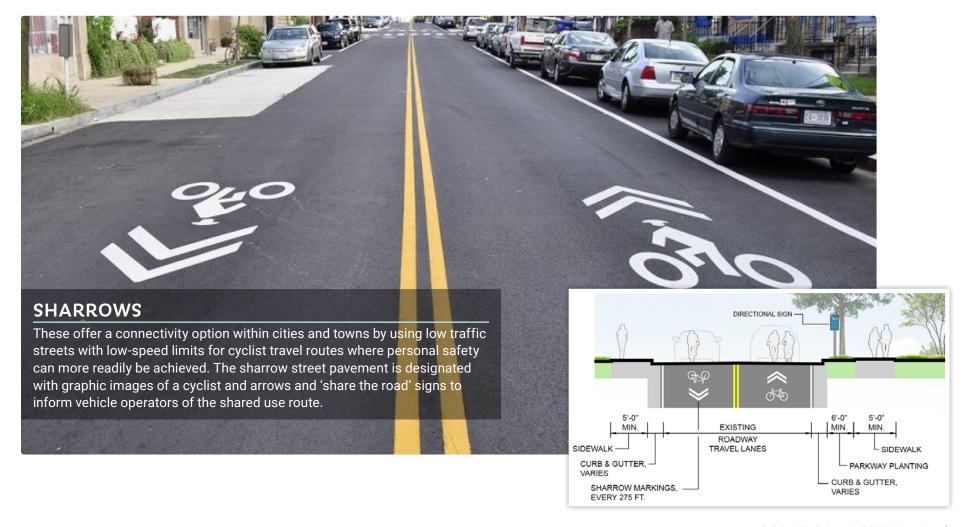
This is a popular corridor facility designed within the right of way of existing streets and roads. Physical separation from automobile traffic makes these corridors appealing for recreation and commuting. The physical separation typically includes a curb at roadside and a park strip of grass or other herbaceous vegetation and oftentimes will include street trees and landscape between the curb and the side path.

RECOMMENDATIONS FROM AASHTO'S GUIDE FOR THE DEVELOPMENT **OF BICYCLE FACILITIES, 2012 INCLUDE:**

- > Minimum width for two-directional paved path is 10'0"
- > Shoulder clearance should be 2'-0" minimum, or 3-0" minimum where signage occurs
- > Where a path is adjacent to parallel bodies of water or downward slopes of 1:3 or steeper, a clearance of 5'-0" is desirable. Depending on the height and conditions, a physical barrier may be applied
- > Desirable vertical clearance is 10'0"
- > Minimum recommended distance between roadway and path is 5'-0". Where a paved shoulder is present, the distance begins at the outside edge of the shoulder
- > Where distance of separation is less than five feet, a physical barrier or railing should be provided
- ▶ A sidepath along a high-speed highway should have a separation greater than 5′-0″.
- > Physical barriers should not impede sight visibility at intersections

ON-ROAD FACILITIES

In order to connect long rural distances along the 90 mile Wabash River Greenway Corridor, on-road facilities are utilized to weave connectivity through streets in Trail Towns and across the miles in the country. Though not as desirable as trails and sidepaths, on-road facilities allow the option to work around difficult topography and challenging land acquisitions to increase interconnectivity within the greenway system. Proposed on-road facilities include sharrows, rural signed bike routes, road crossings, and bridge crossings.





RURAL SIGNED BIKE ROUTE

This facility utilizes existing roadways with lower traffic counts. Cyclists utilize the vehicle travel lanes in a shared transportation arrangement. Where warranted, traffic speed limits are reduced to improve cyclist safety. 'Share the Road' signs inform vehicle operator awareness of the cycling route and the increased propensity of a cyclist in the shared travel lane.





ROAD CROSSINGS

The intersection of on-road and off-road facilities results in the need for safe and visible street crossings for greenway users. Marked and signalized crossings are typically found in urban areas with well-developed pedestrian infrastructure accommodating a variety of users. Different types of pedestrian road crossings are determined by several factors including location, speed, sight visibility, and traffic volume.



Crosswalks – This crossing application uses white reflective markings typically arranged in parallel lines or a ladder pattern to signal to drivers that the area is a designated pedestrian crossing. This is applied at intersections and should be used in conjunction with any additional pedestrian signalization.



Rectangular Rapid Flashing Beacon (RRFB) or HAWK Beacon (High **Intensity Activated CrossWalk Beacon) –** Both the RRFB and the HAWK Beacon are systems that contain warning signs and flashing lights that are activated by the user. Some systems use pole-mounted roadside signage while others employ overhead arms that cover the width of the roadway. These are useful in areas where it is important to maintain traffic flow while providing safe accommodations for inconsistent streams of cyclists and pedestrians.



Mid Street Crossings - Crossing in the middle of a street requires an increase in safety measures as drivers have a reduced pedestrian awareness than when the crossing is at an intersection. Strategies employ signalized crossings such as the RRFB or the HAWK Beacon, as well as PED-XING pavement markings and stop bars.

BRIDGE CROSSINGS

Greenway corridors inevitably encounter mobility obstacles that can include major roads and highways, active railroads, rivers, and streams. If the mobility obstacles are significant enough to pose a personal risk, bridge crossings are planned to eliminate the safety challenges. Bridge crossings over streams, rivers and railroads that utilize existing transportation infrastructure will normally have physical separations between the biking/walking lane and automobile traffic. This can be provided in several ways as described in the following:



Raised Curb - In lower traffic situations, this may be accomplished with a curb.





Crash Barrier - In more heavily traveled circumstances, a knee-wall, typically embellished with railings, provides a greater level of physical separation.

Separated Pedestrian Bridge - If a roadway bridge structure can accommodate, engineers will add a cantilevered path to the bridge structure to provide the desired connectivity. When that is not possible, the solution becomes a separate adjacent bicycle/ pedestrian bridge next to the existing bridge.

RECOMMENDATIONS FROM AASHTO'S GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES, **2012 INCLUDE:**

- > Minimum width for twodirectional paved path is 10'0"
- > Shoulder clearance should be 2'-0" minimum, or 3-0" minimum where signage occurs
- > Desirable vertical clearance is 10'0"
- > Physical barriers should not impede sight visibility at intersections
- > Routes utilizing a bridge or underpass should maintain a shoulder clearance of 2'0" on each side of the pathway across the structure
- > At bridge deck transitions, the height of the path surface should match the height of the bridge deck





TRAILHEADS

A primary goal for providing destination recreation trails is to improve public health through more active living recreation and commuting. Providing personal convenience within the system is a key means to promoting public use and improving public health. Trailheads deliver that convenience by providing parking immediately adjacent to the corridor where one can park, grab their backpack to launch their hike, or hop on their bike and hit the trails. Trailheads have other functions as well and can include bike parking and repair stations, public restrooms and trash facilities, rest areas with shade structures, drinking fountains and wayfinding to merchant offerings, lodging, dining, and entertainment venues.

- users at ...
- Keep right, always pas the left
- Give audible warning v passing
- Maintain single file
- · Keep pets on leash
- · Clean up after your p

Carl 1-800-367-7623 for magnismum

REST AREAS

Rest areas and overlooks provide places to stop, eat, drink, enjoy the shade or take in the view. They can also offer interpretive signage and wayfinding information. Depending on the location, rest areas can vary in size from small seating areas, to overlooks, and pavilions. Typically, these areas have benches or tables and may include a bike repair station, drinking fountain, trash facilities, or shade structure.

SHADE STRUCTURES **& SHELTERS**

Shade structures and shelters provide trail users protection from rain and sun and can be located at trailheads or rest areas. Structures should be informed by the area's context and be designed in a style and color complementary to the Wabash River Greenway brand. Siting and enhancement guidelines are outlined below:

- > Orientation should provide maximum protection from the elements
- Consider ADA access when locating structure, whether on grass, concrete, asphalt, etc.
- > Structure should be located adjacent to the bike and pedestrian facilities as well as the parking area
- > Low maintenance plants may be used to provide additional screening or indicate main entry points
- > Other amenities, including benches, picnic tables, and trash facilities, should be considered in the design



SEATING

Seating areas provide a place for trail users to rest, meet up, or watch for a glimpse of wildlife within nature preserves or the Wabash itself. Seating areas should be provided at intervals along the greenway according to the following:

- A standard style and color coordinating with the Wabash River Greenway brand is to be used to provide continuity throughout the counties in which the greenway is located
- > Locate benches at all gateways, trailheads, and rest areas
- Set back all seating at least 3' from the edge of the trail or paved bike facility
- Grade the seating area to drain away from the trail



RESTROOMS

Restrooms should be provided at specific areas in conjunction with a trailhead. Factors to consider are available land, size of trailhead, anticipated bike and pedestrian traffic, proximity of existing restrooms, and anticipated frequency of use. Public restrooms require consistent maintenance and service programs should be evaluated as part of the planning process.

- > Restrooms should be located at all major access points
- Restroom architecture should be in keeping with the Wabash River Greenway brand, and buildings should be buffered from adjacent private properties
- Directional signage should be provided indicating directions to trail town destinations or to get back on the greenway path



Access to drinking water is a necessity to keep trail users safe from dehydration. In urban areas, sources of drinkable water should be located along the greenway at a spacing of 5 miles or less. In rural areas where drinking water access is more than 5 miles apart, signage should be placed at potable water sources that indicate the distance to the next access point.

- Drinking water should be available at all major access points
- A water fountain with a spigot for filling bottles and a pet drinking bowl is recommended
- > Provide advance sign notice of water fountains along trail





SIGNAGE & WAYFINDING

The variety of signage types are developed to fulfill at least one of three roles - confirm greenway identity, direct trail users through wayfinding, and present information about greenway rules, safety, or details about significant sites adjacent to the route.

Identity

- > Establish greenway branding
- > Create facility awareness for potential users
- > Highlight key locations and entrances for the greenway corridor

Wayfinding

- > Establish information about the corridor through system maps
- > Direct users to key components of the system (trailheads, parking lots, restrooms, etc)
- > Create awareness of potential destinations both within the greenway corridor and the surrounding communities
- > Confirm to users that they are still on the correct route

Informational

- > Provide rules and regulations regarding safety
- > Include universal pictograms where possible to help communicate to a diverse audience
- > Communicate significance of historic, cultural, or natural sites along the greenway









Roadway signs are placed parallel to roads at regular intervals or where major roads cross the trail. Typically used where the greenway facilities are visible from the road, these signs communicate with drivers at a variety of speeds and serve to bring recognition to the Wabash River Greenway. Signage should keep a 3 foot minimum clear distance from a roadway and care should be taken during placement so that line of sight at intersections or access drives is unobstructed.



KIOSK

A kiosk is often found at trailheads and major entry points to the greenway system. It displays both high-level and detailed information, suitable for active trail users or for those who wish to study the area up close. Typical items found at a kiosk are regional and local maps of the corridor, a list of nearby attractions, and indicators for parking and restrooms.

DIRECTIONAL

Directional signs serve to point greenway users in the proper direction at intersections and decision points throughout the corridor. These should be placed a sufficient distance from the decision point to allow for safe recognition and reaction times to the provided information. Care should be taken so that the turn or points of interest are obvious - signs should not be placed next to access routes or side paths that could be confused with the primary route.



Confirmation signs should be used in conjunction with directional signage and located after a turn to indicate greenway users are still on the correct route. They should also be located at intervals along long stretches of straight route, especially in rural areas, to confirm a turn has not been missed.











MILE MARKERS (URBAN & RURAL)

Mile markers are set at specific increments along the greenway so that users can determine their location and distance traveled. Two styles of markers are proposed for the Wabash River Greenway - one for urban facilities and the other for rural areas. This distinction is made to enhance the character the greenway in higher traffic areas, while providing a cost-effective option along most of the corridor. The urban marker has a limestone base carved with the mileage and county in which the user is located. A panel featuring brand colors and the Wabash River Greenway logo rises above the limestone to catch the eye of greenway users. The rural marker is a simplified version, consisting of a branded metal post inscribed with the mileage and county.





INFORMATIONAL

Informational signs include trail rules and regulations, and educational and interpretive signs. Regulatory signs communicate greenway safety and rules to facility users and are located at trailheads, greenway access parking areas, and where the route intersects local trail networks. Educational and interpretive signage can be found at trailheads and at appropriate locations relative to historical, cultural, or natural sites of significance. All informational signage should be placed at least 3 feet from the road or greenway facility and the area in front of the sign should be paved to allow users a place to stop and read out of the main path of travel.

CO-BRANDING EXISTING SIGNAGE

Within the greenway corridor, several trails constructed by local jurisdictions already exist along the Wabash River. Examples include the Little Turtle Waterway, Delphi Historic Trails, the Wabash Heritage Trail, and Covington Circle Trail. The proposed routing of the greenway seeks to utilize existing infrastructure while bridging gaps to create a cohesive regional network. Where the greenway coincides with an existing trail, the local trail signage shall incorporate the Wabash River Greenway logo while retaining its unique trail identity and character.



CONSTRUCTED ELEMENTS

A primary benefit of destination recreation trails is the up close and personal exposure of greenway users to enjoying the ever-evolving beauty, nature, geology, wildlife, vistas and promontories along the way. Constructed elements can enhance those experiences in a myriad of ways: bridges serving as crossing portals with elevated views; overlooks offering an 'off the trail' pause point to observe wildlife; and sculptural geologic formations constructed, not by man, but by the mighty Wabash and its tributaries.



OVERLOOKS

Locations with long-range vistas or nature-based attractions are great places for an overlook. Overlooks should be planned at select locations where greenway users will likely want to stop to take in the view. The structures should be designed to be completely off the pathway so as not to conflict with bike and pedestrian traffic. Guardrail materials such as cable fencing or wire mesh panels should be used where possible to decrease view obstruction while maintaining a high level of safety.



PEDESTRIAN BRIDGES

Pedestrian-only bridges are a beneficial type of infrastructure to enhance the safety of both greenway users and drivers. It is agreed that reducing points of conflict between cyclists, pedestrians, and drivers aides the perception that greenway facilities are easy to access and are more likely to be utilized by potential visitors. Many of these bridges reuse old abutments or restore abandoned railway river crossings – extending the life of these existing structures is typically more cost-effective than construction of a brand new pedestrian bridge.



GEOLOGIC FORMATIONS

Indiana is known internationally for its limestone. Wabash means 'water over white stones', which in the days of the French fur traders, was clear water flowing over Indiana limestone. The Wabash and its tributaries have carved beautifully sculpted stone formations to be enjoyed from the water and the Greenway. One is Black Rock, a beautifully maintained Niches Land Trust property. Williamsport Falls in Warren County is another: Indiana's tallest waterfall.

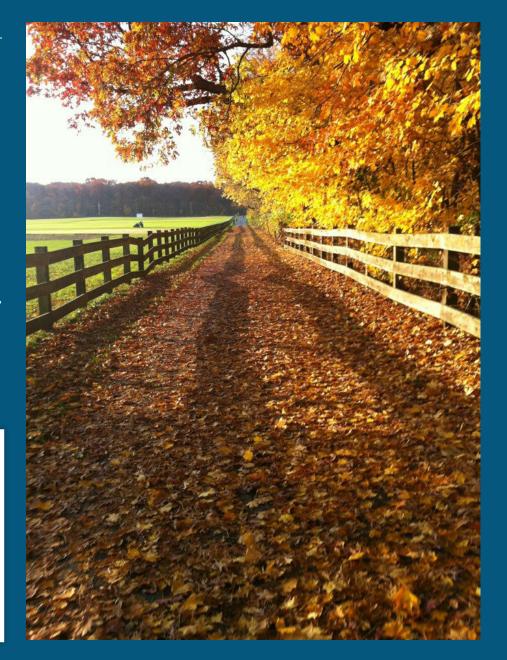
HANDRAILS & GUARDRAILS

Handrails and guardrails serve as barriers to protect from potential hazards or a dangerous condition. A guardrail is typically used to protect high-speed wheeled users from varying conditions such as an embankment or a highway. A handrail is a safety measure to protect greenway users, especially children, from slipping through the railing. A handrail also provides a gripping surface for stabilization and mobility. Both guardrails and handrails should be designed to local and national standards, with a few key guidelines listed below.

- > Protective railings should be 42" height minimum
- Openings between horizontal or vertical members on railings should be constructed so that a 6" sphere cannot pass through the lower 27". For the portion higher than 27", openings may be spaced such that an 8" sphere cannot pass through
- Where a cyclists' handlebar may come in contact with a railing or barrier, a smooth, wide rub-rail may be installed at a height of about 36" to reduce the likelihood that the handlebar will be caught by the railing
- A minimum clear zone of 10' is required between the railings when railing are on both sides of the greenway facility
- ➤ Aesthetic designs should conform to the overall branding with consistent colors and materials throughout the corridor











BOARDWALKS

Boardwalks are elevated structures that allow users to pass through wetlands, sensitive ecological environments, and unstable soils. Protected nature areas, floodway regulations should be considered before locating a boardwalk within the greenway corridor. Building in wetlands and delicate ecological environments is discouraged. Boardwalks should correspond to the surrounding context and may be low to the ground or several feet in the air. Structures may be constructed of a durable material such as wood planks, recycled material planks or concrete decking. Railings may be constructed of wood, metal, or cables in keeping with the overall brand.

- > Curb rail of 6" in height is to be used when the boardwalk is less than 30" above the finish grade
- > Railing of 42" to 54" in height measured from the walking surface is to be used when the boardwalk is more than 30" above finish grade
- Minimum clearance between boardwalk railings is 12', width of boardwalk should match or exceed that of the adjoining pathway
- Minimum clearance above anticipated 10year storm elevation measure from the lowest structural member is 12"

LANDSCAPE & VEGETATION

Research has documented the personal and mental health benefits of time spent immersed in nature. The Wabash River Greenway provides users with a vast amount of exposure to natural resources. Within the corridor's ninety river miles and 235 route miles of trails, the shade of mature Indiana trees, forests and woodlands abound. The Greenway is routed through, to and along over forty land trust nature preserves, and parks, all complimented with the continuous band of riverbank shade trees up and down the Wabash and its tributaries. Preservation of these natural resources is a priority of this project. As the Wabash River Greenway moves to implementation, additional opportunities to add landscape to the corridor will be identified and completed, including habitat restorations to support wildlife diversity and improve the water quality of Indiana's River.

PROTECTION OF EXISTING VEGETATION (PRESERVE MATURE TREE CANOPY)

One of the benefits of the greenway is the miles of route that wind through mature wooded areas. A priority in constructing the greenway is to preserve as much of the existing mature tree canopy as possible, especially along the banks of the Wabash River. Tree protection efforts to be utilized include: protection fencing at the dripline, avoiding trenching in favor of tunneling near root systems, and minimizing material storage and construction activity next to trees marked to be preserved.





VEGETATED SCREENING

Landscape screening may be desired to buffer adjacent land uses, such as private residences. This may be achieved with dense plantings, a fence, or a combination thereof. When the screening is along an active trailway, it is important to consider maintaining safe viewshed distances and heights when determining an adequate level of buffering.

- > Trees should be trimmed to provide a minimum of 8' vertical overhead clearance
- > Pathway lighting should not be obstructed by tree canopies
- > Avoid solid and opaque fencing
- > Preferred height of screening is 48" in areas where safety concerns or land use of the screened property do not dictate more intense measures

PLANT PALETTE

ORNAMENTAL LANDSCAPE BEDS

Ornamental landscape beds will be placed where appropriate, from denoting trailhead and access entry points to enhancing signage and wayfinding placement. Existing landscape beds shall be maintained and combined with proposed plantings where feasible.

- > Preferred minimum width of landscape beds is 6'
- > Planting material may include deciduous trees, shrubs, perennials, and groundcovers
- > Light poles should be incorporated into landscape beds where appropriate

To present a cohesive greenway corridor, ornamental landscape beds should incorporate several of the following species:



Grasses

- > Switchgrass
- > Feather Reed Grass
- > Little Bluestem

Shrubs

- > Juniper
- > Boxwood
- > Virginia Sweetspire

Perennials

- > False Indigo
- > Blue Star Amsonia
- > Cone Flower
- > Black-eyed Susan
- > Daylily
- **>** Lavender
- > Sage
- > Sedum



Groundcovers

- > Pennsylvania Sedge
- > Gro-Lo Sumac





PERIMETER CORRIDOR PLANTINGS

The perimeter corridor shall be defined as all landscape areas along the greenway facilities, within the public right-of-way, access easements, or public nature areas.

Plantings shall be characterized by informal groupings of plants, utilizing a wide range of species to encourage biodiversity. Plants shall form ecological plant communities in response to the surrounding environment and may consist of a mix of hardy natives and non-native species. However, native species are preferred as they typically require less maintenance once established, thus requiring less energy and costs associated with maintenance. New plantings shall utilize native plant materials to meet design requirements where feasible. Plant arrangement shall focus on creating irregular yet graceful outlines to form corridor edges that support wildlife and provide visual interest.

Bioswales shall be located along the greenway corridor where they are beneficial to the drainage and filtration of stormwater runoff. They shall incorporate runoff into vegetated channels located in the public right-of-way and shall consist of a mix of native species that can tolerate periods submerged in water as well as drought. Perforated underdrains and overflow systems shall be incorporated into the bioswale design where necessary to prevent standing water for periods exceeding 48 hours.







LIGHTING

Phases of the trail should be evaluated for lighting needs. Items to consider include safety needs and concerns, facility function, and available maintenance workforce and budget. It is expected that lighted segments will be contained to urban portions of the greenway where there is a high number of trail users. Lighting should be incorporated at trailheads, decision points, intersections, pedestrian road crossings, and near commercial areas.

- > Lighting should be at pedestrian scale
- > Place lighting outside of tree canopies
- > Space lighting so that the cast light of one fixture reaches that of the next to reduce contrast between lit and shadowed areas.
- > Illuminate ingress and egress routes of trailheads and greenway access points
- > Solar powered lighting may be used where utility connectivity is not feasible and there is sufficient sun exposure
- > Maintain broken and burnt-out light fixtures promptly



Photos courtesy of



