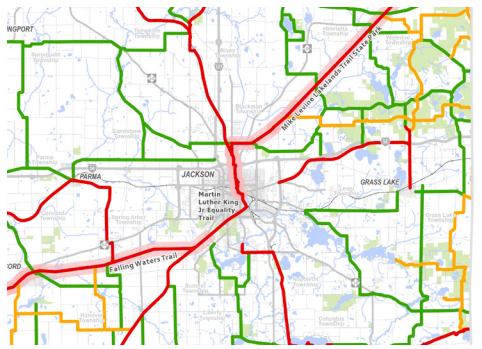
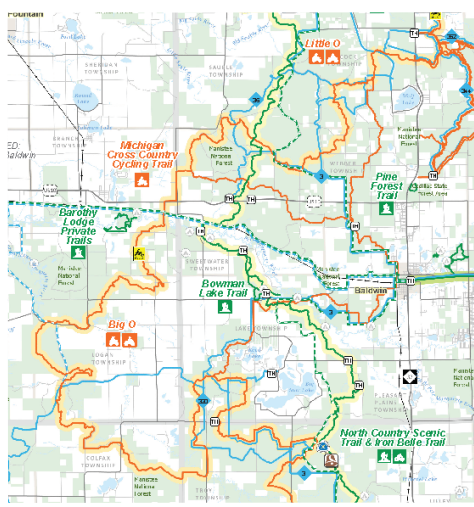
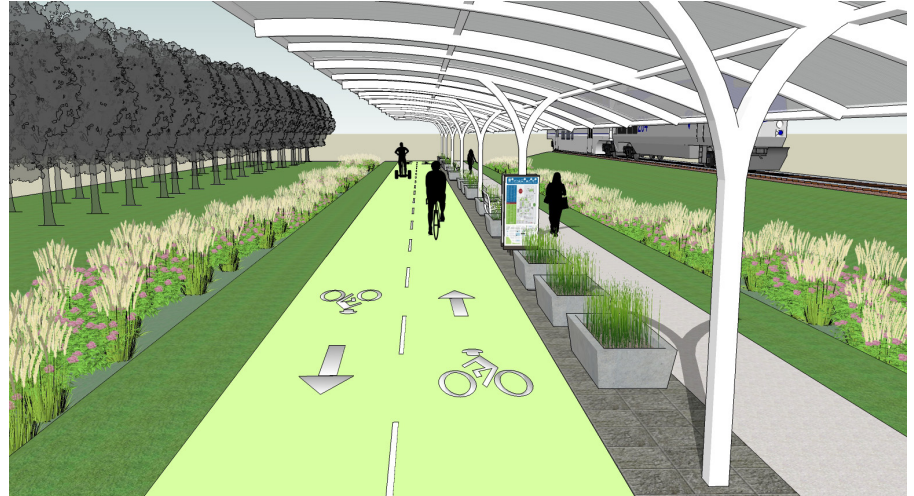
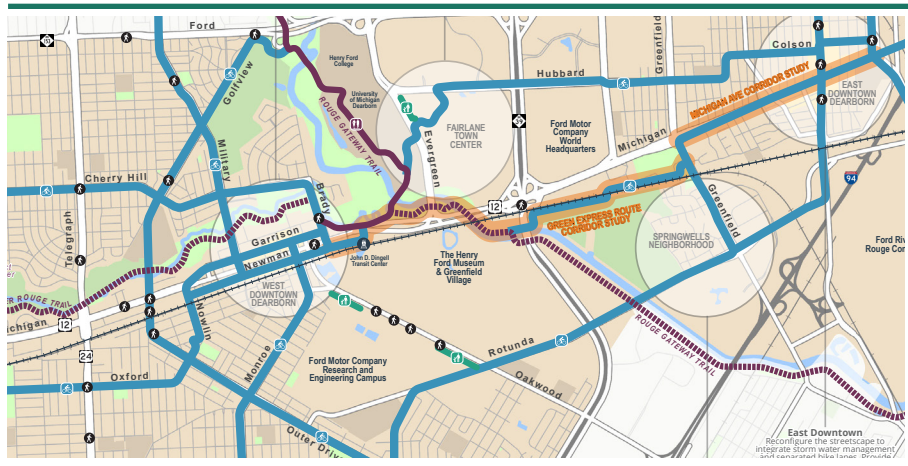


# Firm Qualifications







# The Greenway Collaborative, Inc.

**People First Transportation Planning and Design.** Since 1993 we have focused on the people who walk, bike, take transit, and drive. We believe that our job is to help shape a transportation system that gives people, all people, regardless of their abilities and resources, a safe, comfortable, and convenient means for dignified travel. And we believe that a transportation network is more than a means to a destination, it is a means to an end. That end being a network of captivating and functional places that connect people, promote commerce, and highlight the unique character of each community.

Comprehensive Multimodal Transportation Plans

Grant Assistance

Trail Feasibility Studies

Public Meeting Facilitation

Community Outreach Tools to Encourage Increased Physical Activity

Website Design and Management

Expert Technical Review and Design Consultation

Wayfinding and Signage Plans

Land and Water Trail Planning, Design and Outreach Websites

Bicycle and Trail Maps



102 Nickels Arcade, Ann Arbor, Michigan 48104  
Phone: 734-668-8848 Email: info@greenwaycollab.com  
A Michigan Corporation Established in 1993 - FIN 38-305425

**Our mission is to inspire people, influence transportation and improve places.** We are trusted strategic thinkers, problem solvers, and knowledge leaders who provide council to public agencies, non-profits, and other consultants. Our ultimate goal is to create eminently livable places for all to enjoy.



Norm Cox, PLA, ASLA  
President



Carolyn Prudhomme, PLA, ASLA  
Principal



Visit [www.greenwaycollab.com](http://www.greenwaycollab.com) to download our resumes and get a better understanding of our work. Some of our recent project websites are also housed within [www.walkbike.info](http://www.walkbike.info).



## Planscape Archineer



**Norman Cox, PLA, ASLA**

**President - The Greenway Collaborative**

Norm is a licensed landscape architect, but refers to himself a “Plan-scape Arch-ineer”. His adopted moniker speaks to the way he approaches design. He sees the solutions to great places and streets lie where the fields of planning, landscape architecture, architecture, and engineering overlap.

He understands his job is to design, plan, and program for people, not modes of transportation. That starts with carefully listening to people to identify root issues, then making sure the proposed solutions reflect community consensus.

Norm is recognized as a pioneer and a knowledge leader who is able to transition from a regional plan to designing the details of an intersection. Much of his knowledge comes from being a year-round commuter via foot, bike, and transit.

### **LICENSE**

*Licensed Landscape Architect No.1082  
State of Michigan  
1990*

### **EDUCATION**

*Bachelor of Landscape Architecture 1985,  
with honors  
Michigan State University  
Sigma Lambda Alpha  
National Honor Society*

### **EXPERIENCE**

*President  
Greenway Collaborative  
Ann Arbor, Michigan  
1993 – PRESENT*

*Pollack Design Associates  
Ann Arbor, Michigan  
1988-1992*

*Edward D. Stone, Jr. and Associates  
Fort Lauderdale, Florida  
1986-1987*

### **COMMITTEES**

*League of Michigan Bicyclists, Board of  
Directors, Executive Committee*

*Southeast Michigan Active Transportation  
Committee*

*SEMCOG Transportation Safety Action  
Committee*

*Michigan Pedestrian and Bicycle Safety  
Action Team*

### **RECENT RELEVANT EXPERIENCE**

**Dayton Active Transportation Plan Public Engagement**  
Dayton, Ohio

**Bridge to Bay Trail Wayfinding Implementation**  
St Clair County, Michigan

**Metropark to State Park Pathway Connector Study**  
Brighton, Michigan

**Springboro Bicycle + Pedestrian Plan & 2020 Plan Update**  
Springboro, Ohio

**Bridge to Bay Trail Identification, Wayfinding, and Safety Improvements**  
St Clair County, Michigan

**Livingston County Trails Plan**  
Livingston County, Michigan

**Iron Belle Trail Routing & Feasibility Study**  
Warren, Center Line, Sterling Heights, Michigan

**Jackson City + County Nonmotorized Plan**  
Jackson County, Michigan

**Dearborn Multimodal Plan**  
Dearborn, Michigan

**Regional Trail Connectivity Vision**  
Mason, Lake, Newaygo, & Oceana Counties, Michigan

**MDOT Metro Region & Bay Region Bike Maps**  
Southeast Michigan

## Transportation Planner and Web Guru



**Carolyn Prudhomme**, PLA, ASLA  
Principal - The Greenway Collaborative



### **LICENSE**

*Landscape Architect No. 3901001718  
State of Michigan  
2018*

### **EDUCATION**

*Bachelor of Landscape Architecture 2008,  
with high honors  
Michigan State University  
Sigma Lambda Alpha  
National Honor Society*

### **PROFESSIONAL MEMBERSHIPS**

*Association of Pedestrian and Bicycle  
Professionals  
American Society of Landscape  
Architecture*

### **EXPERIENCE**

*Transportation Planner  
Greenway Collaborative  
Ann Arbor, Michigan  
2008 – PRESENT*

*Student Intern  
Small Town Design Initiative  
Michigan State University  
2007 – 2008*

*Landscape Designer  
Rambo Tree & Landscaping  
Chesterfield, Michigan  
2006*

Carolyn has worked as a non-motorized transportation planner with the Greenway Collaborative since 2008. During her time at the Greenway Collaborative she has been essential in the development of comprehensive non-motorized transportation plans, complete streets plans, bicycle and pedestrian maps and wayfinding, grant application assistance, trail marketing and branding strategies and ADA evaluation and assessment tools. She has worked on projects throughout Michigan and Ohio, specializes in GIS modeling, mapping, website development, as well as public engagement and product production.

### **RECENT RELEVANT EXPERIENCE**

*Dayton Active Transportation Plan Public Engagement  
Dayton, Ohio*

*Bridge to Bay Trail Wayfinding Implementation  
St Clair County, Michigan*

*Metropark to State Park Pathway Connector Study  
Brighton, Michigan*

*Bridge to Bay Trail Website  
St Clair County, Michigan*

*Springboro Bicycle + Pedestrian Plan & 2020 Plan Update  
Springboro, Ohio*

*Bridge to Bay Trail Identification, Wayfinding, and Safety Improvements  
St Clair County, Michigan*

*Livingston County Trails Plan  
Livingston County, Michigan*

*Iron Belle Trail Routing & Feasibility Study  
Warren, Center Line, Sterling Heights, Michigan*

*Jackson City + County Nonmotorized Plan  
Jackson County, Michigan*

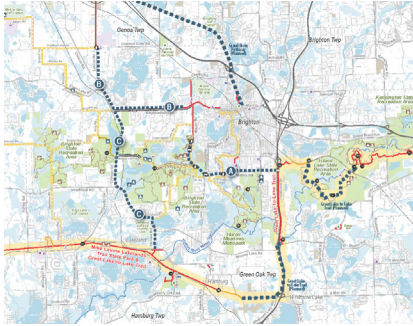
*Dearborn Multimodal Plan  
Dearborn, Michigan*

*Regional Trail Connectivity Vision  
Mason, Lake, Newaygo, & Oceana Counties, Michigan*

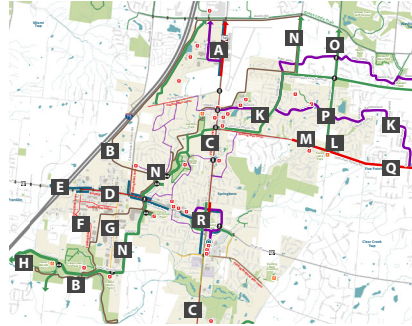
*Cass River Water Trail Website  
Thumb Region, Michigan*

# Nonmotorized Transportation Studies and Plans

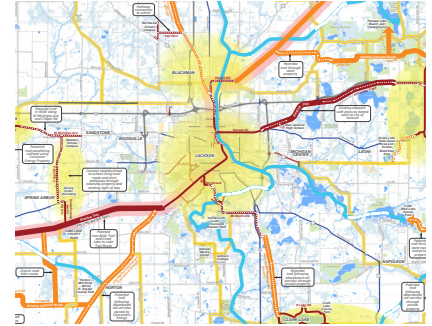
The Greenway Collaborative, Inc has worked on over 30 nonmotorized transportations studies and plans in Michigan and Ohio. Below are a few recent examples.



*Livingston County Trails Plan*



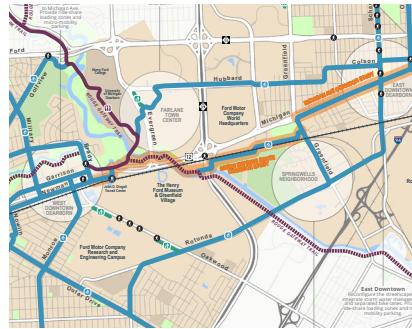
*Springboro Bicycle + Pedestrian 2020 Plan Update*



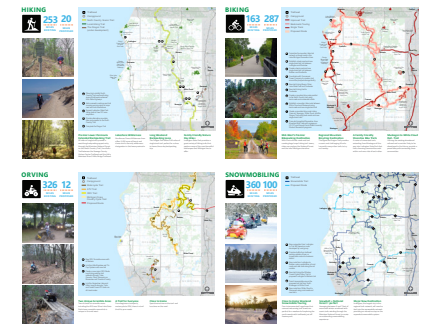
*Jackson City + County Nonmotorized Plan*



*Iron Belle Trail Routing & Feasibility Study*



*Dearborn Multimodal Plan*



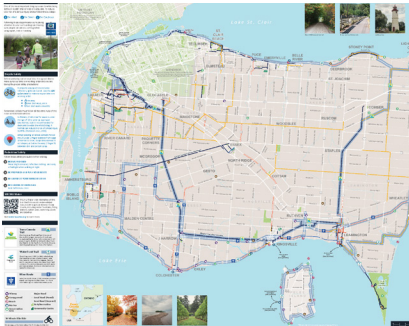
*Regional Trail Connectivity Vision for Mason, Lake Newaygo and Oceana Counties*

<b>Range of Clients</b>	<b>MDOT, Region, County, Large Community, Small Community, Universities, Nonprofits, Health Departments</b>
<b>Types of Work</b>	<b>Corridor, City, County, and Regional Level Planning</b>
<b>Fee Range</b>	<b>\$9,000 to \$200,000</b>

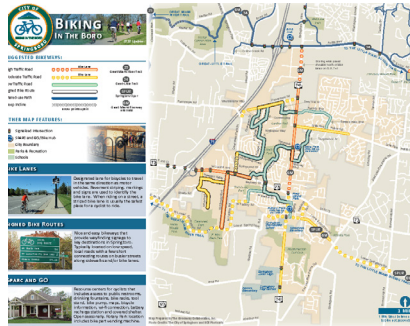
*Click on any of the project names to be directed to the project webpage where you may download the project report and related documents, or visit [www.greenwaycollab.com](http://www.greenwaycollab.com) for a listing of all projects.*

# Nonmotorized Guides and Maps

The Greenway Collaborative, Inc has developed over a dozen print and digital nonmotorized guides and maps in Michigan, Ohio, and Ontario, Canada. Below are a few examples.



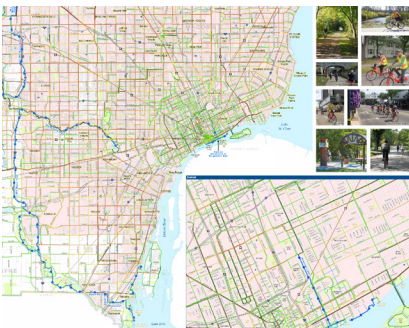
*Essex County Bikeways and Pathways Map*



*Biking in the Boro Map and Pocket Guide (including updates in 2014, 2016, 2018, & 2020)*



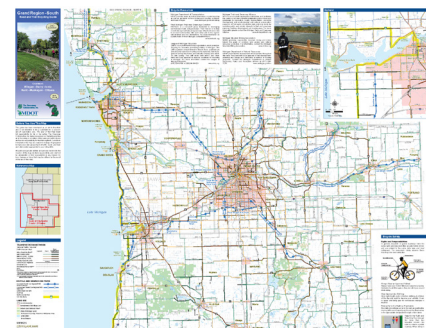
*Huron River Trail Town Website and Kiosk Maps*



*MDOT Metro Region Bicycle Maps (including update in 2018)*



*MDOT Bay Region East & West Bicycle Maps*



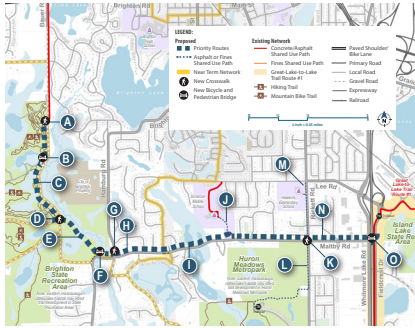
*MDOT Grand Region Bicycle Map*

<b>Range of Clients</b>	<b>MDOT, Region, County, Large Community, Small Community</b>
<b>Types of Work</b>	<b>Trail Maps, Bicycle Guides, Walking Maps, Park Maps, Water Trail Maps</b>
<b>Fee Range</b>	<b>\$4,000 to \$50,000</b>

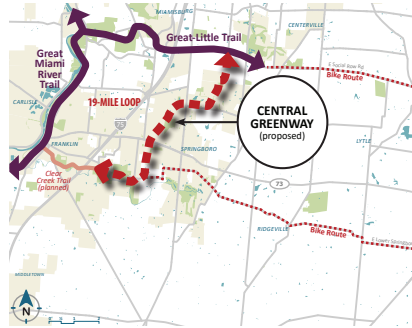
*Click on any of the project names to be directed to the project webpage where you may download the project report and related documents, or visit [www.greenwaycollab.com](http://www.greenwaycollab.com) for a listing of all projects.*

# Trails and Greenway Systems

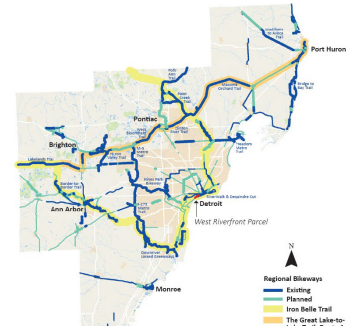
The Greenway Collaborative, Inc has worked on over 20 trail and greenway system plans in Michigan and Ohio. Below are a few recent examples.



**Livingston County Trails Plan**



**Springboro Bicycle + Pedestrian 2020 Plan Update**



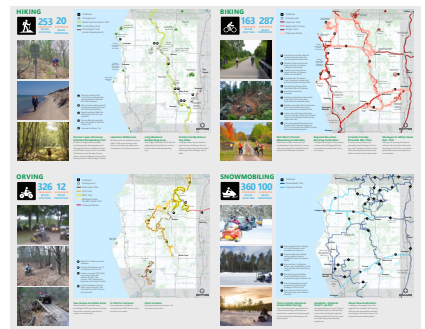
**Ralph C. Wilson, Jr. Foundation Regional Greenway Opportunity Assessment**



**Iron Belle Trail Routing & Feasibility Study**



**Great Lake-to-Lake Trail Route #1 Planning Updates**



**Regional Trail Connectivity Vision for Mason, Lake Newaygo and Oceana Counties**

**Range of Clients** | Region, County, Large Community, Universities, Non-profits

**Types of Work** | Trail Routing, Feasibility, Cost Estimates, Implementation Plans

**Fee Range** | \$8,000 to \$80,000

Click on any of the project names to be directed to the project webpage where you may download the project report and related documents, or visit [www.greenwaycollab.com](http://www.greenwaycollab.com) for a listing of all projects.



# Branding & Wayfinding

The Greenway Collaborative, Inc has worked on a dozen branding and wayfindings projects in Michigan and Ohio. Below are a few examples.



*Bridge to Bay Trail Identification, Wayfinding, and Safety Improvement Plan*



*Biking in the Boro Guide and Identification Signage*



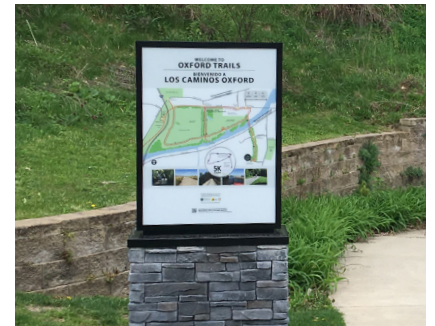
*MTGA Cross State Trail Branding and Marketing*



*Huron River Water Trail Kiosk Maps*



*Grand Region Bike Route & Regional Trail Wayfinding Guidebook*



*Oxford Trail Kiosk*

**Range of Clients** | County, Large Community, Small Community, Non-profit

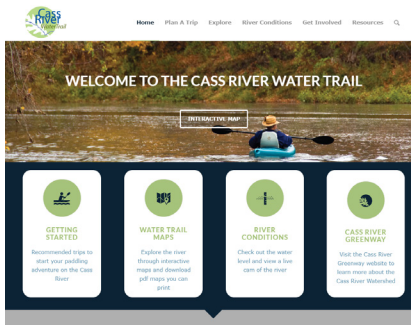
**Types of Work** | Logos, Bicycle Route and Trail Wayfinding Guides, Kiosk Maps

**Fee Range** | \$4,000 to \$50,000

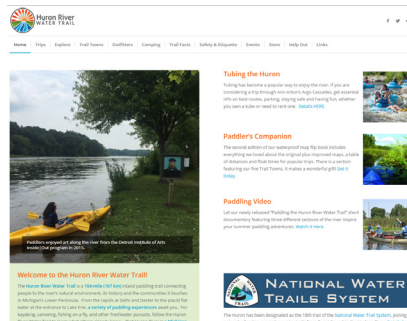
*Click on any of the project names to be directed to the project webpage where you may download the project report and related documents, or visit [www.greenwaycollab.com](http://www.greenwaycollab.com) for a listing of all projects.*

# Websites

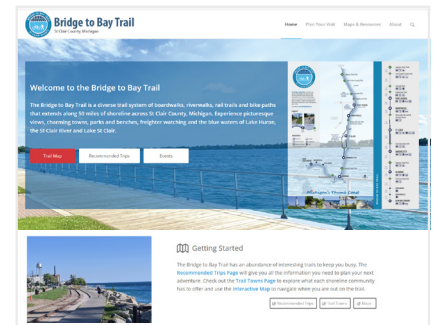
The Greenway Collaborative, Inc has created three trail websites, and hosted a dozen different community websites through WalkBike.Info, a website developed in-house as a communication tool for client projects. All website were developed in Wordpress, including the company's website at [www.greenwaycollab.com](http://www.greenwaycollab.com).



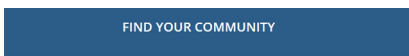
**Cass River Water Trail Website**



**Huron River Water Trail Website**



**Bridge to Bay Trail Website**



**WalkBike.Info**

**Range of Clients** | Non-profits, County, Health Departments

**Types of Work** | Interactive Maps, Document Downloads, Online Input Maps and Surveys, Terrain360 Integration

**Fee Range** | \$15,000 to \$25,000

*Click on any of the project names to be directed to the project webpage where you may download the project report and related documents, or visit [www.greenwaycollab.com](http://www.greenwaycollab.com) for a listing of all projects.*

## Recent Project Examples

The following pages highlight recent project examples. Click on any of the project names to jump to that page in the document. Additional project examples can be found on our website at [www.greenwaycollab.com](http://www.greenwaycollab.com).

- *Dayton Active Transportation Plan Public Engagement*
- *Metropark to State Park Pathway Connector Study*
- *Bridge to Bay Trail Identification, Wayfinding, and Safety Improvement Plan*
- *Livingston County Trails Plan*
- *Iron Belle Trail Route and Feasibility Study*
- *City of Dearborn Multimodal Plan*
- *Springboro 2020 Bicycle and Pedestrian Plan*
- *Regional Trail Connectivity Vision*
- *Jackson City+County Nonmotorized Plan*

# Dayton's Active Transportation Plan

TGC led the community engagement for Dayton's first Active Transportation Plan. Tasks included the following:

- Developed and facilitated multiple stakeholder and focus group meetings and provided materials for the City to facilitate mini-meetings with local groups and clubs, as well as multiple public input materials for pop-up events.
- Identified creative outreach and engagement strategies to ensure the input process included hard-to-reach communities, such as immigrants, youth, and those with barriers to traditional participation.
- Developed a project website as a landing page for public input and project downloads.
- Created all public engagement materials, including paper surveys, online surveys, online input map, and promotional materials.
- Established a social media guide for project promotion.
- Prepared summary infographics of public engagement and comprehensive documentation of all input.

**Client** | City of Dayton  
101 W. Third Street  
Dayton, OH 45402

**Contact** | Susan Vincent  
susan.vincent@daytonohio.gov  
937-333-3683

Keeghan White  
keeghan.white@daytonohio.gov  
937-333-3671

**Dates** | 2022

**Budget** | \$15,000

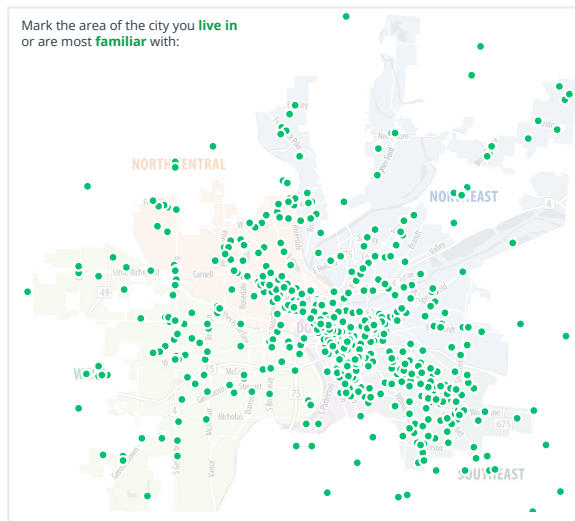
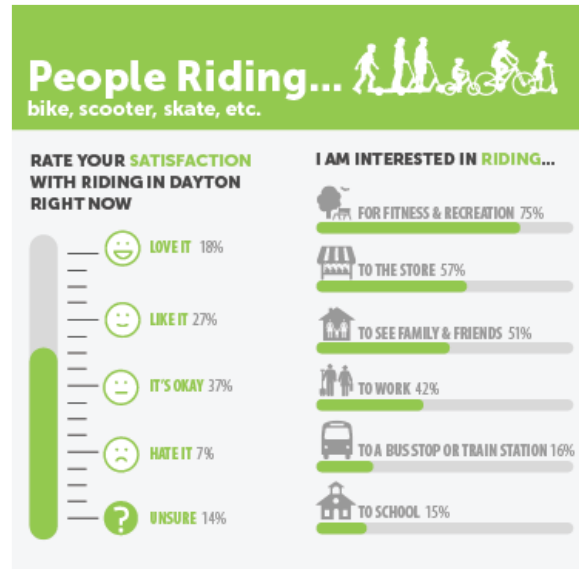
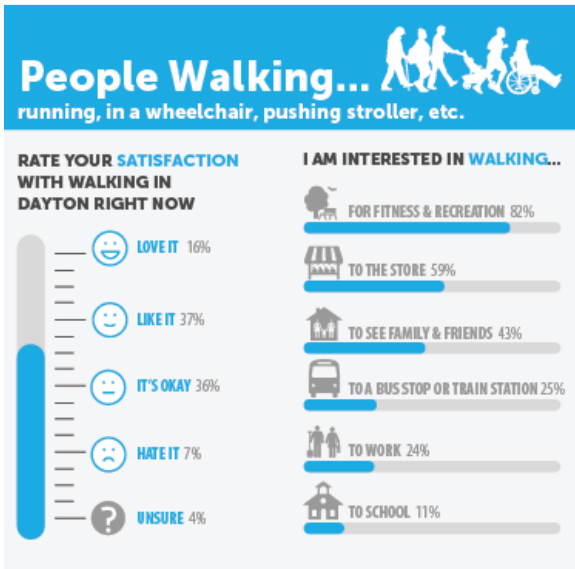
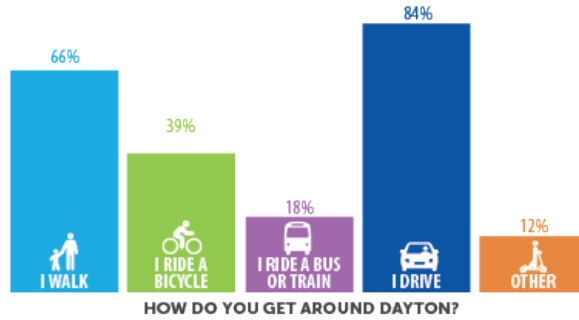
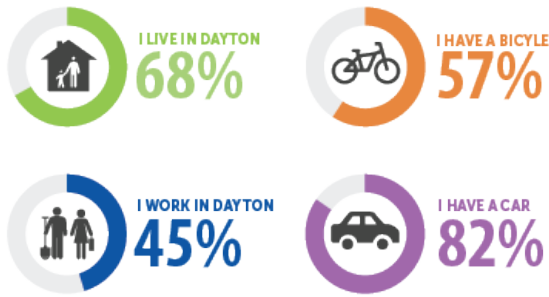
**Personnel** | Norman Cox & Carolyn Prudhomme

*Multilingual web and print materials were used to gather input from immigrant populations in Dayton*

**DAYTON**  
Active Transportation Plan

**YOUR  
VOICE  
MATTERS**

Outreach efforts were focused on reaching a representation cross-section of the community.



# Metropark to State Park Pathway Connector Study

The goal of this project was to provide a safe and efficient non-motorized connection between four large regional parks. Multiple variations of three general routes were evaluated and vetted with stakeholders and the public to determine the preferred route.

TGC led the public engagement process for this project. Tasks included:

- Presenting and vetting proposed routes with stakeholders.
- Meeting with local running and bicycling clubs to collect input.
- Hosting an input booth at the local farmer's market.
- Developing a project website as a landing page for public input and project downloads.
- Creating all public engagement materials, including paper surveys, online surveys, online input map, and promotional materials.
- Established a social media guide for project promotion.

<b>Client</b>	<b>Huron Clinton Metroparks</b> 1300 High Ridge Dr Brighton, MI 48114
<b>Contact</b>	<b>Nina Kelly</b> nina.kelly@metroparks.com 810-494-6043  <b>Jason Bibby</b> Jason.Bibby@metroparks.com 810-494-6031
<b>Dates</b>	2021
<b>Budget</b>	\$14,490
<b>Team</b>	<b>Prime: PEA Group</b> <b>Sub: The Greenway Collaborative</b>
<b>Personnel</b>	<b>Norman Cox &amp; Carolyn Prudhomme</b>



*Public Input was scheduled for existing events, such as running clubs, mountain biking clubs and farmers markets.*

# METROPARK TO STATE PARK CONNECTOR PUBLIC ENGAGEMENT



**4**  
public input events

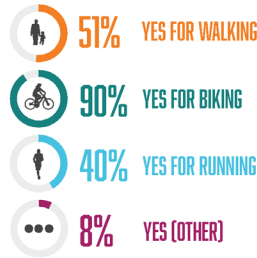


**28**  
online map comments

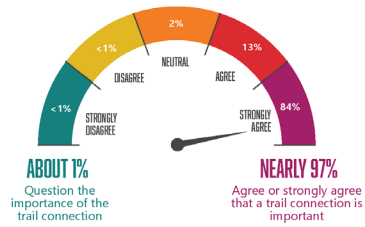


**1000+**  
surveys completed

## WOULD YOU USE THE CENTRAL ROUTE? SELECT ALL THAT APPLY



## IT IS IMPORTANT TO PROVIDE A TRAIL CONNECTION BETWEEN THESE FOUR PARKS



### WHAT DO YOU LIKE ABOUT THE CENTRAL ROUTE?



- 1 Provides a Safe Route
- 2 Connects All the Parks
- 3 Direct Connection
- 4 Connects to Existing Trails
- 5 Easy and Efficient
- 6 Safe Crossing at US-23
- 7 Neighborhood Access
- 8 Avoids Expressway Roundabouts
- 9 Path Separated from Road
- 10 Option for Longer Rides/Trips
- 11 Location
- 12 More Nonmotorized Routes

TOP 12 ANSWERS

### WHAT DO YOU DISLIKE ABOUT THE CENTRAL ROUTE?



- 1 Nothing
- 2 Along Major Roadway with Traffic
- 3 Need Path Separated from Road
- 4 Maltby is a Busy Road
- 5 Need Connection to Brighton
- 6 Need Connection to Lakelands Trail
- 7 Route into Huron Meadows
- 8 It is Not Built Yet
- 9 Cost
- 10 Ends too soon at Brighton Rec Area
- 11 Expressway Roundabouts
- 12 Disrupt Rural East

TOP 12 ANSWERS

### WHAT WOULD YOU CHANGE ABOUT THE CENTRAL ROUTE?

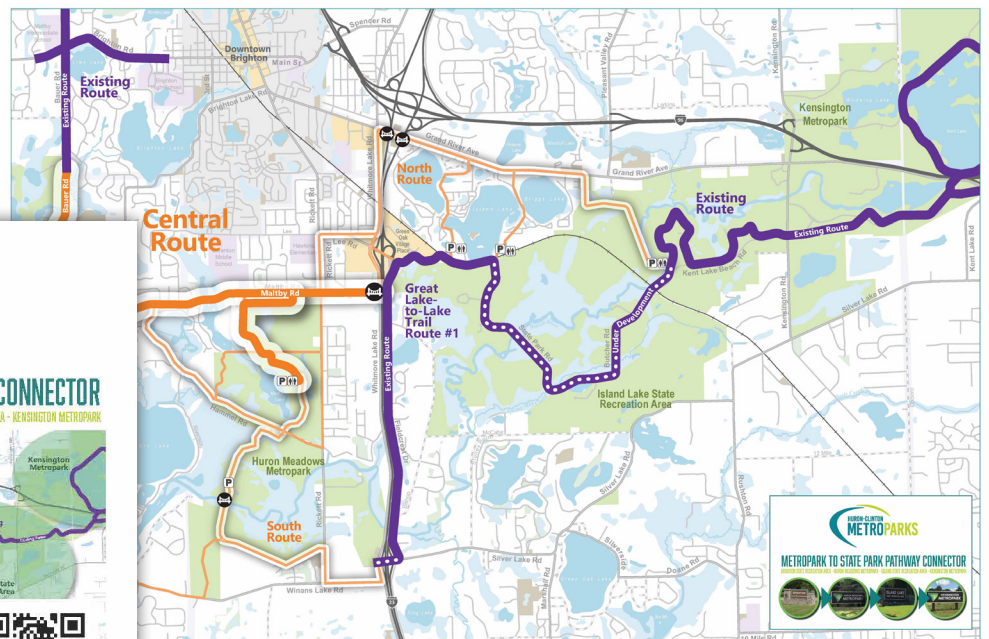


- 1 Nothing
- 2 Separate Path from Road
- 3 Connect to Brighton
- 4 Connect to Lakelands Trail
- 5 Loop in Huron Meadows
- 6 Bike Lanes
- 7 Paved Pathway
- 8 Avoid Major Roadways
- 9 Connect to Bishop Lake
- 10 Build More Trails
- 11 More Trail Amenities
- 12 Loop Routes

### TELL US ANYTHING ELSE YOU FEEL IS IMPORTANT:

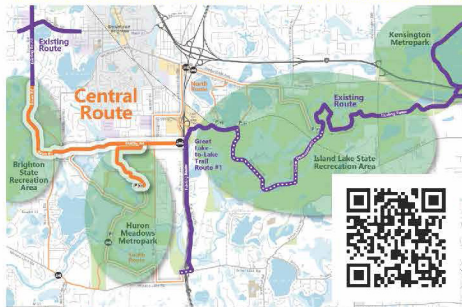


- 1 We Love It
- 2 Please Built It
- 3 Safety is Key
- 4 Added Value to Community
- 5 Separate Path from Road
- 6 Build More Trails
- 7 Thank You
- 8 More Trail Amenities
- 9 Connect to Lakelands Trail
- 10 Signs and Wayfinding
- 11 Paved Trails
- 12 Wide Trails



## METROPARK TO STATE PARK PATHWAY CONNECTOR

BRIGHTON STATE RECREATION AREA - HURON MEADOWS METROPARK - ISLAND STATE RECREATION AREA - KENSINGTON METROPARK



ONLINE INPUT AVAILABLE THROUGH SUNDAY, SEPTEMBER 26<sup>TH</sup>

[WWW.WALKBIKE.INFO/PARKCONNECTOR](http://WWW.WALKBIKE.INFO/PARKCONNECTOR)

The success of the public engagement efforts led to over 1,000 surveys being completed in a span of two-weeks. Summary of the input was provided as an infographic.

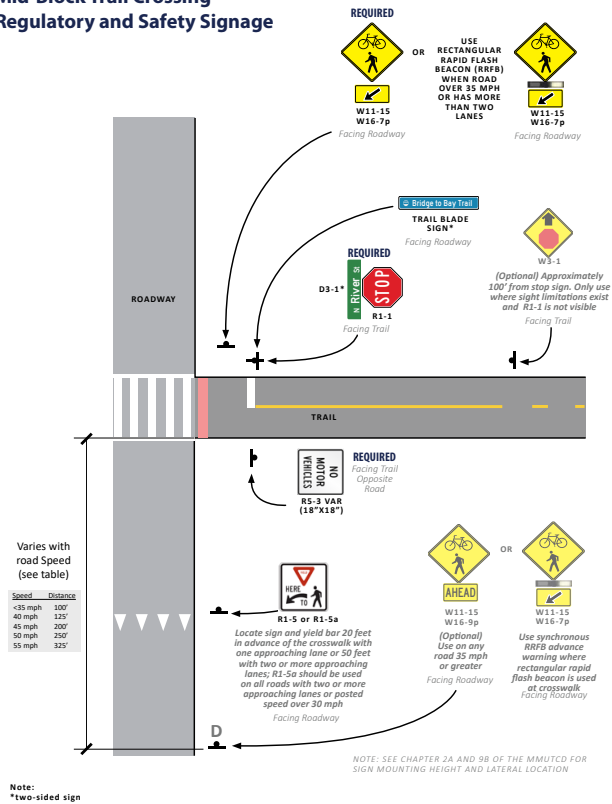
# Bridge to Bay Trail Identification, Wayfinding, and Safety Improvement Plan

The Bridge to Bay Identification, Wayfinding, and Safety Improvement Plan was a major step in unifying all the segments of the Bridge to Bay Trail. The Plan defines what routes fall under the Bridge to Bay Trail heading and looks at how best to sign existing, temporary, and planned segments of trail as it develops. Baseline improvements were proposed for temporary routes to make sure a safe route could be provided.

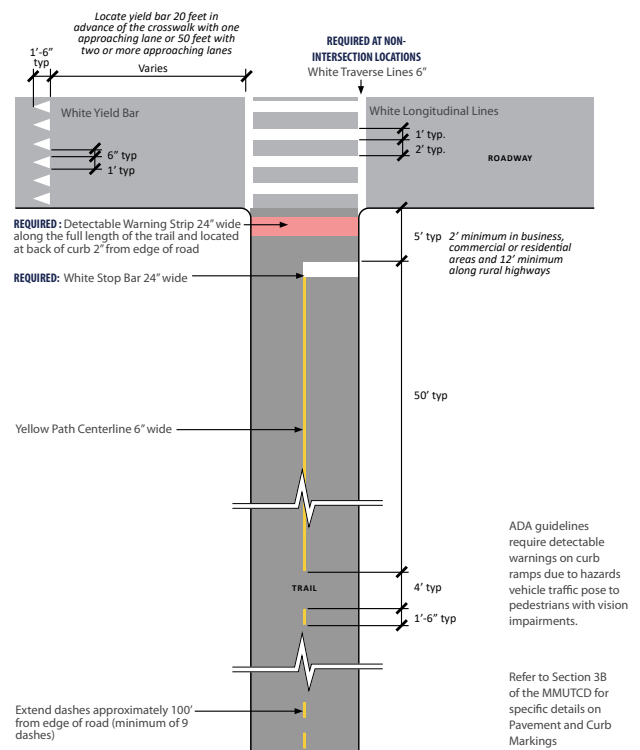
The six-month planning process included: Trail System Definitions, Route Site Analysis, Trail Standards, Baseline Safety Improvements, Sign and Pavement Marking Plan, and Implementation Assistance as needed. The end product provides a resource for St. Clair County, and acts as a model for other trails in the region and state.

<b>Client</b>	<b>Friends of the St Clair River</b> 480 S Water St Marine City, Mi 48039
<b>Contact</b>	<b>Sheri J Faust</b> sfaust@stclaircounty.org 810-730-5998
<b>Dates</b>	<b>2020 to 2021</b>
<b>Budget</b>	<b>\$76,300</b>
<b>Personnel</b>	<b>Norman Cox &amp; Carolyn Prudhomme</b>

## Mid-Block Trail Crossing Regulatory and Safety Signage

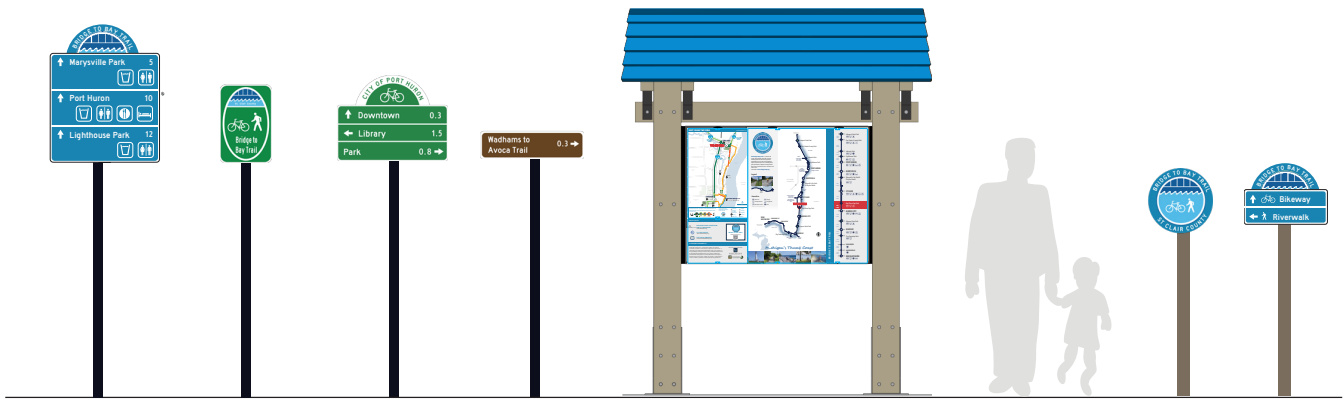


## Detectable Warning and Typical Pavement Markings at Mid-block Trail Crossings



The Signage and Pavement Marking Guide includes standard plans and details that can be incorporated into future trail construction projects by local agencies.





*It was a challenge to provide wayfinding for a trail that is actively under development. The overview map became the organizing element for the wayfinding plan. It can be implemented and easily updated as new trail projects are completed.*

**TGC has been involved with the Bridge to Bay Trail for the past 20 years and we are continuing our work in 2022:**

- Website Promotion and Coordination with Tourism Sites
- Custom Graphic Development and Kiosk Order Support
- Assistance with Planning Trail Summits
- Trail Planning Support Services for Local Units of Government
- General and Strategic Planning Assistance for the Entire Trail

# Livingston County Trails Plan

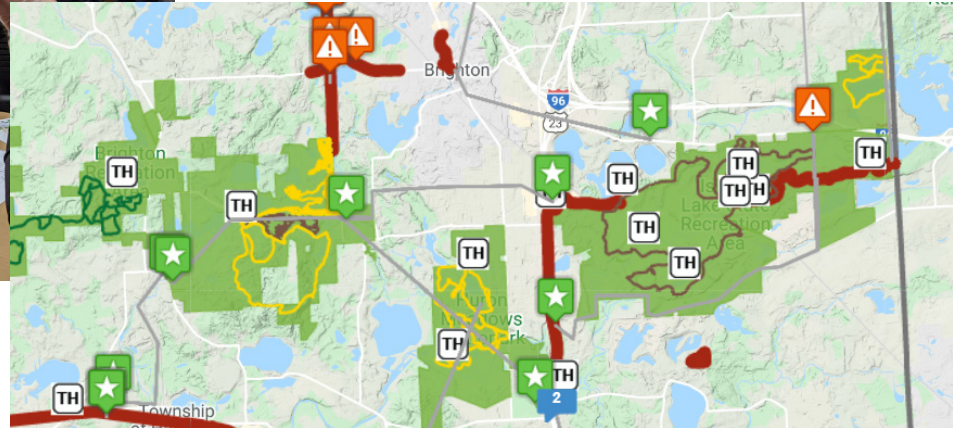
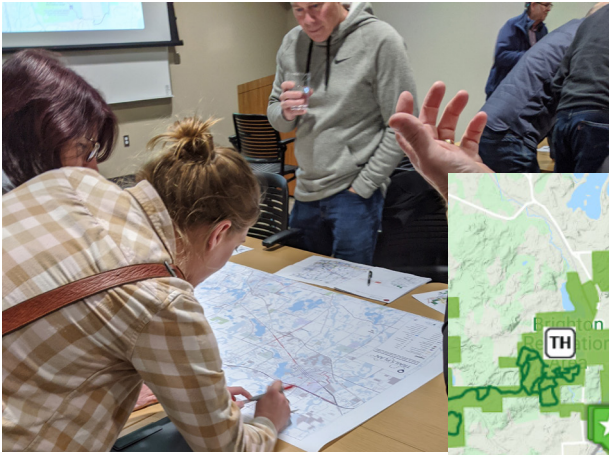
Livingston County Trails Plan is a comprehensive study involving the identification, mapping, and analysis of trail networks throughout the County. The plan identifies priority routes that make the most meaningful connections and will be the focus for near-term investments.

Elements of the planning process include inventory/analysis, development of a GIS trail database, a trail summit, a gap and feasibility study of potential routes, identification of priority routes, and cost estimates.

<b>Client</b>	<b>Livingston County Planning Department</b> 304 E Grand River Ave, Suite 206 Howell, Mi 48431
<b>Contact</b>	<b>Kathleen Kline-Hudson</b> KKline-Hudson@livgov.com
<b>Dates</b>	<b>2019 to 2020</b>
<b>Budget</b>	<b>\$24,555</b>
<b>Personnel</b>	<b>Norman Cox &amp; Carolyn Prudhomme</b>



*A near-term network that focuses on how to improve safety and connectivity for what is out there right now along with priority routes that focus on providing new connections that link major population centers to park and recreation areas and regional trails.*



*Public engagement techniques that seamlessly integrate online and in person public input.*

### Cost Estimate for Maltby Road - Bauer Road Trail

Item	Description	Quantity	Unit	Unit Price	Cost
1	Site Clearing and Rough Grading	18,047	LF	\$20	\$360,940
2	11' Wide Asphalt Path, Base, and Grading	18,047	LF	\$75	\$1,353,525
4	Basic Crosswalk with Signs	4	EA	\$5,000	\$20,000
5	14' Wide Concrete Plank Boardwalk	1,848	LF	\$1,000	\$1,848,000
6	14' Wide Concrete Deck Pedestrian Bridge	170	LF	\$4,000	\$680,000
7	14' Wide Bridge over Expressway	1	ea	\$5,000,000	\$5,000,000
8	Landscaping and Site Amenities	19,402	LF	\$20	\$388,040
Subtotal of Construction Costs					\$9,650,505
Contingency				20%	\$1,930,101
<b>Construction Total *</b>					<b>\$11,580,606</b>
Engineering & Design				10%	\$1,158,061
Construction Administration				4%	\$463,224
Construction Observation				6%	\$694,836
<b>Subtotal of Total Soft Costs</b>					<b>\$2,316,121</b>
<b>Total Project Cost</b>					<b>\$13,896,727</b>

**Notes:**

- Boardwalk and bridge costs are based on a concrete deck surface. While this is more expensive initially, the seasonal and long-term maintenance is substantially less than a wood deck structure.
- Landscaping and Site Amenities are general allowances for basic items such as site restoration, benches, signage, and trash receptacles.
- The percentages identified in the soft costs are general rules of thumb. Smaller projects and projects requiring substantial engineering or extensive soil testing may have higher soft costs.
- It is assumed that there is a 66' ROW, as the extent of the ROW could not be confirmed with the existing GIS information.
- Cost estimate only includes priority route - proposed pathways to nearby schools and parks are not included in estimate

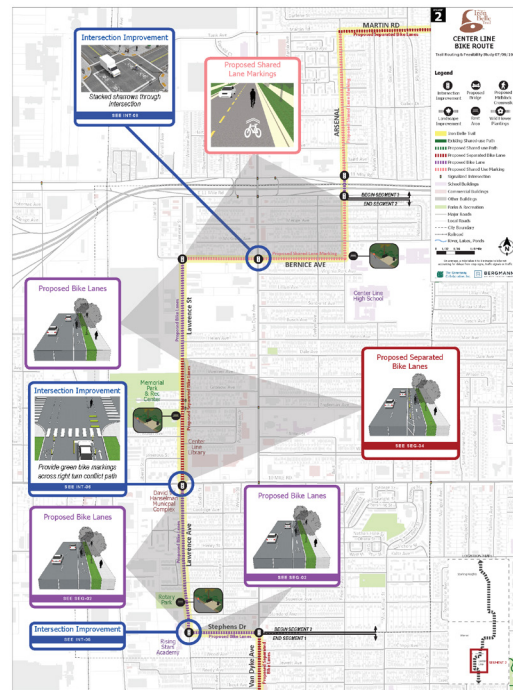
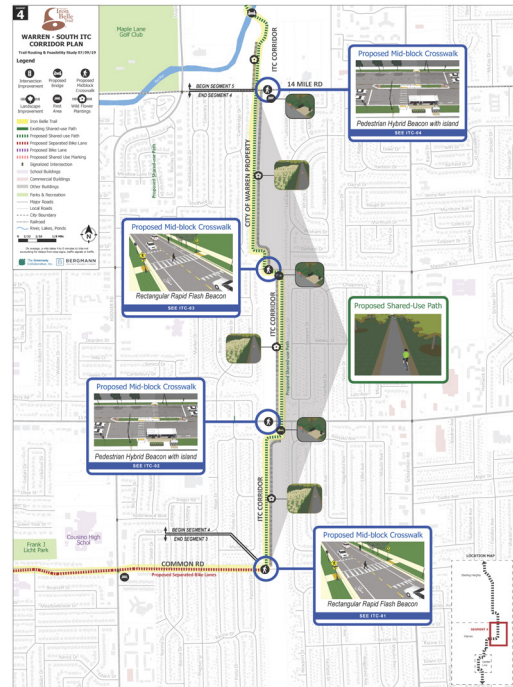
*Implementation oriented recommendations with planning level cost estimates for priority routes*

# Iron Belle Trail Route and Feasibility Study

The Iron Belle Trail Routing and Feasibility Study examined potential alignments for the Iron Belle Trail in Center Line, Warren, and Sterling Heights. The purpose of this project was to collaboratively develop a trail route through all three communities to close the southern Macomb County gap in the Iron Belle Trail network and safely link the greatest number of local community and county assets.

Numerous stakeholder meetings, online input maps, and a community workshop were all used to gather input and reach a consensus on the proposed route. The proposed route showcased community assets and provided a safe, comfortable, and easy route to navigate through the community's of Warren, Center Line, and Sterling Heights.

The plan defined a clear implementation strategy so the proposed route may be implemented in an efficient and timely manner. The route was divided into 7 segments, with a breakdown of costs and detailed information for each segment.



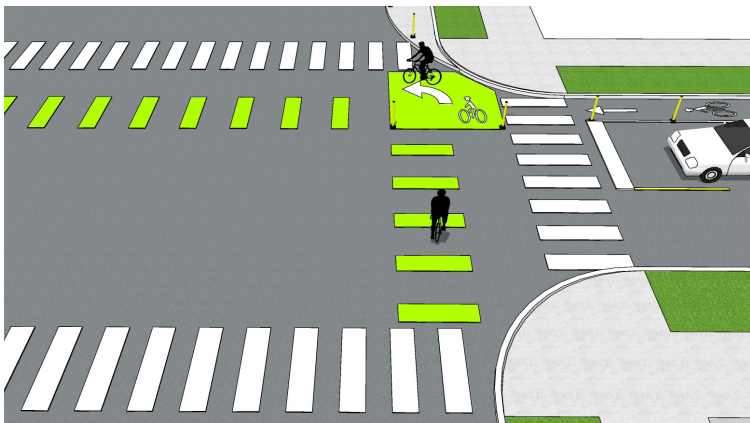
*The Implementation Plan and Funding Strategy present a five-year plan to fully implement the project, including recommended tasks to undertake over the next nine months.*

<b>Client</b>	<b>Macomb County Department of Planning &amp; Economic Development</b> 1 S Main, 7th Floor Mount Clemens, MI 48043
<b>Contact</b>	<b>Amanda Minaudo</b> 586-469-1551 Amanda.minaudo@macombgov.org
<b>Sub-Consultant</b>	<b>Bergman Associates</b>
<b>Dates</b>	<b>2018 to 2019</b>
<b>Budget</b>	<b>\$30,000 Center Line</b> <b>\$42,000 Warren &amp; Sterling Heights</b>
<b>Personnel</b>	<b>Norman Cox &amp; Carolyn Prudhomme</b>

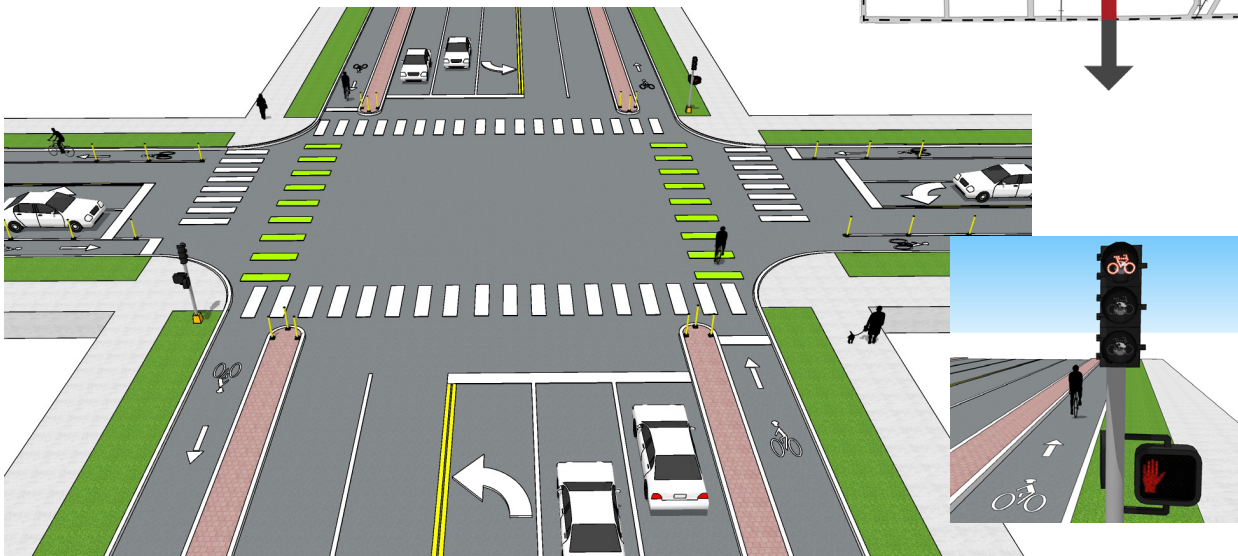
Corresponding to each of the seven segments, detailed cost estimates were prepared. Typical plans and unique intersection treatments had detail sheets prepared to help develop the estimates.



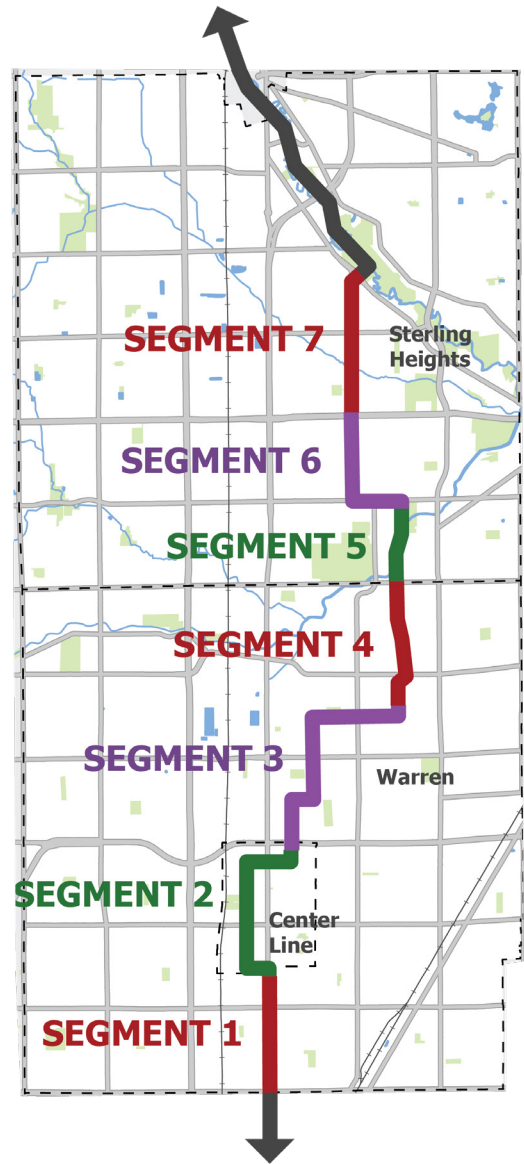
Signed bike routes on residential roads



Protected bike lanes with intersection turn box



Bike signal with green bike markings across intersection



# City of Dearborn Multimodal Plan

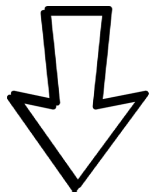
The City of Dearborn Multimodal Plan will help define current and future community needs and desires for people who walk, bike, ride, and drive. The plan will be used by the City to respond to the growing demand for alternative forms of travel and to promote safe and comfortable transportation options throughout the City.

The planning process was structured to create a transportation plan that puts people first. A robust public engagement plan was undertaken to reach out to minority groups across the community in different languages and cultures.

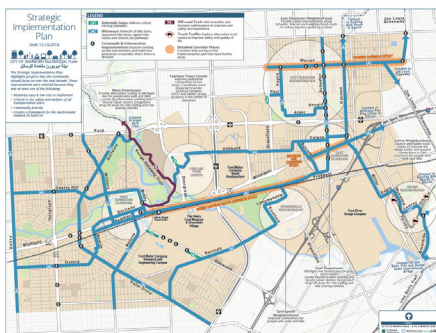
The plan is both visionary and pragmatic with both near-term recommendations and a long-term vision that reflects desires and priorities driven by stakeholder input. Flexibility is built into the plan given the rapidly changing nature of transportation.

<b>Client</b>	<b>City of Dearborn</b> 16901 Michigan Ave Dearborn, MI 48126
<b>Contact</b>	<b>Mohamed Ayoub, Project Manager and former Senior Planner for City of Dearborn</b> (734) 467-3210 (City of Westland, MI) ayoubmoh66@gmail.com
	<b>Kaileigh Bianchini (current contact)</b> kbianchini@ci.dearborn.mi.us
<b>Sub-Consultant</b>	<b>livingLab</b> Bergman Associates
<b>Dates</b>	<b>2018 to 2019</b>
<b>Budget</b>	<b>\$179,835</b>
<b>Personnel</b>	<b>Norman Cox &amp; Carolyn Prudhomme</b>

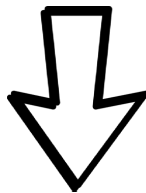
## Immediate Focus



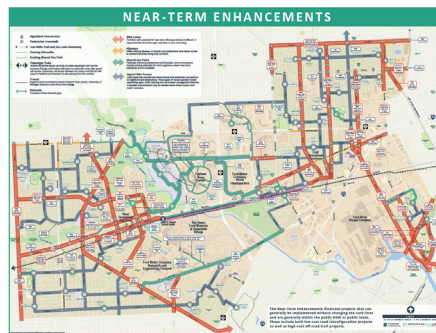
### 1 Strategic Implementation Plan



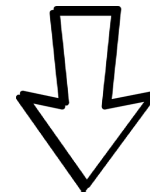
## Implement As Opportunities Present Themselves



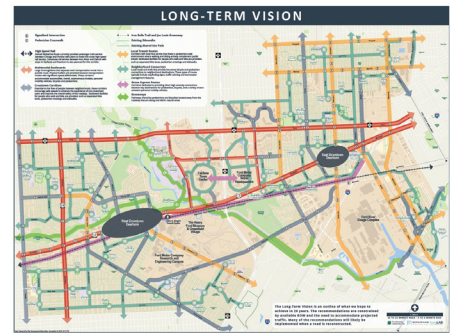
### 2 Near-Term Enhancements



## Incorporate Into Major Construction Projects



### 3 Long-Term Vision



*Project implementation phasing that establishes a functioning network quickly, identifies easy to implement projects with road resurfacing or restriping, and sets a long-term vision for road reconstruction projects*

**Minimum**

Used on lower speed and volume roads where space is limited.

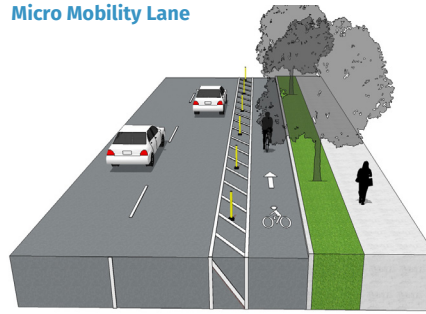
**Basic Bike Lane Or  
Micro Mobility Lane**



**Better**

Often implemented with a road re-striping or resurfacing project

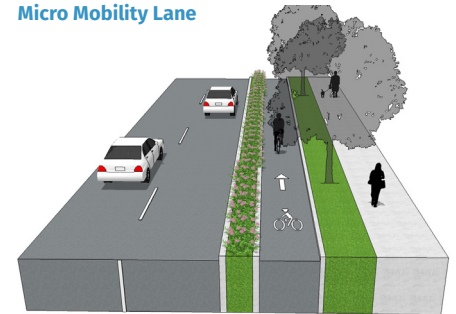
**Buffered Bike Lane Or  
Micro Mobility Lane**



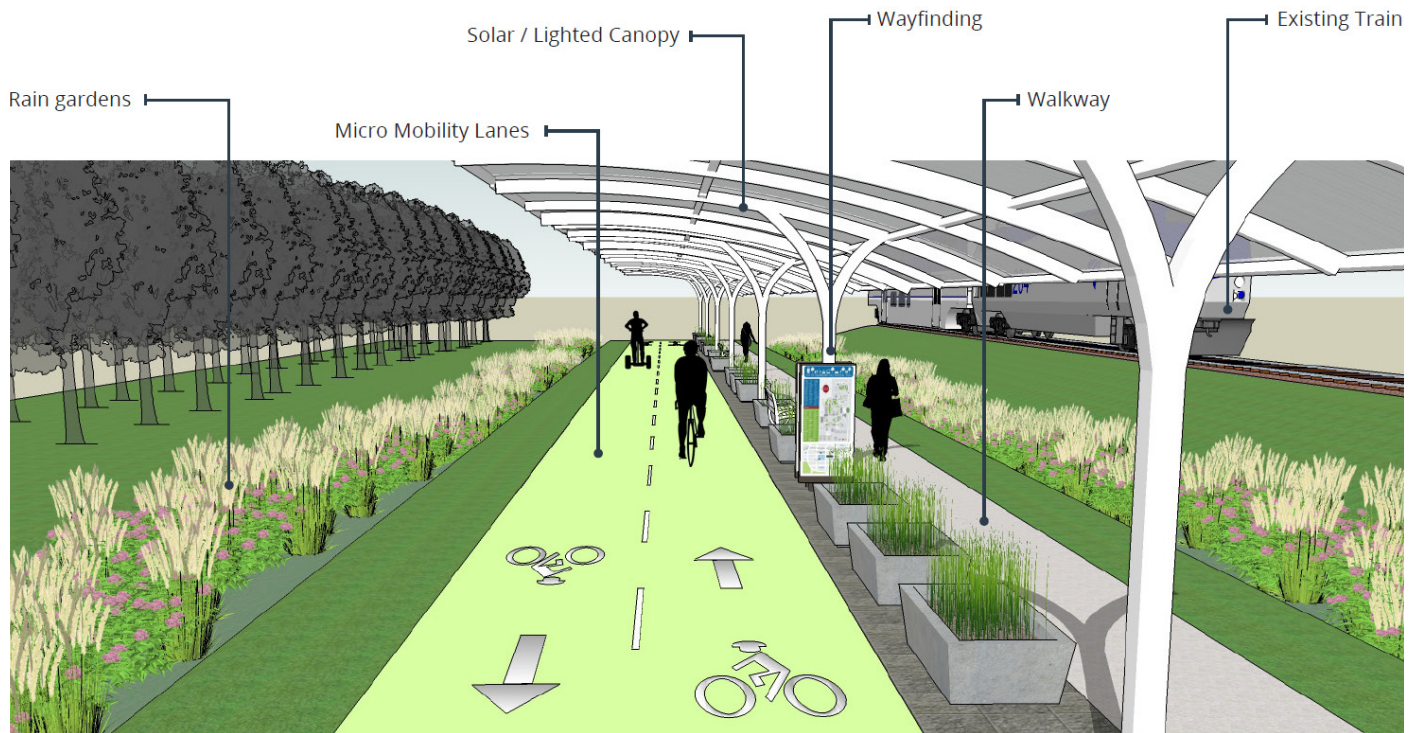
**Preferred**

Typically implemented as part of a road reconstruction project.

**Separated Bike Lane Or  
Micro Mobility Lane**



*A goal of this plan is to remain flexible as the system and technology changes. Several of the recommended facilities can transition over time from relatively inexpensive and easy changes made with paint in the near-term to more expensive and complex changes that could be accomplished when done in concert with a more significant infrastructure project such as when a road is being completely rebuilt.*



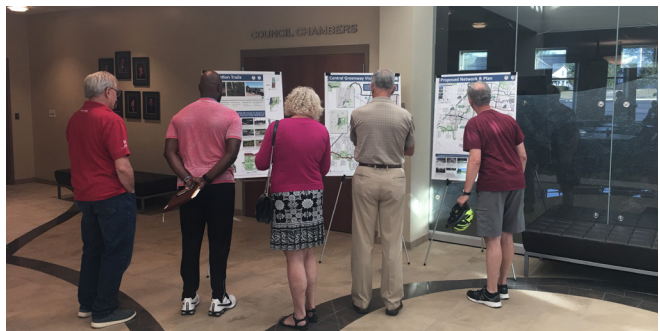
*In response to the growing impacts of autonomous vehicles, an all-season community concourse for people who walk, bike, or use micro mobility vehicles was proposed.*

# Springboro 2020 Bicycle and Pedestrian Plan

Since the adoption of the 2013 Bicycle and Pedestrian Plan there were a lot of significant changes nationally, regionally and locally that warranted revisiting the plan. The 2020 update of the plan identifies community priorities and provides detailed recommendations on where to focus future improvements.

The recommendations were based on input received from workshops, surveys, and online. The plan updates focused on expanding the existing bicycle and pedestrian network and providing more family-friendly routes and recreational opportunities. A central greenway was proposed to help connect the city's parks and provide a nonmotorized spine through the city. Additionally, specific park improvements, complete street improvements and policy and programs updates were recommended.

The implementation plan breaks down the Central Greenway into 12 segments that include planning level cost estimates and detailed recommendations.

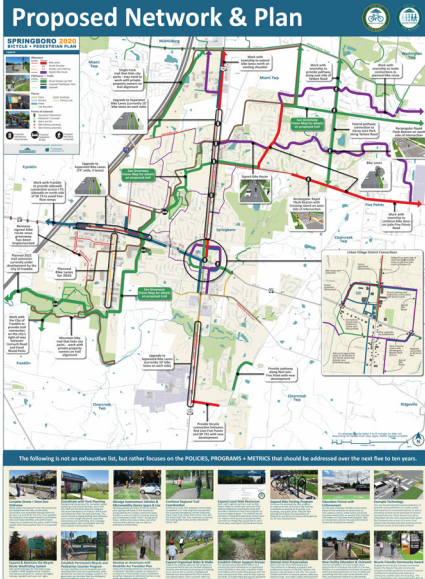
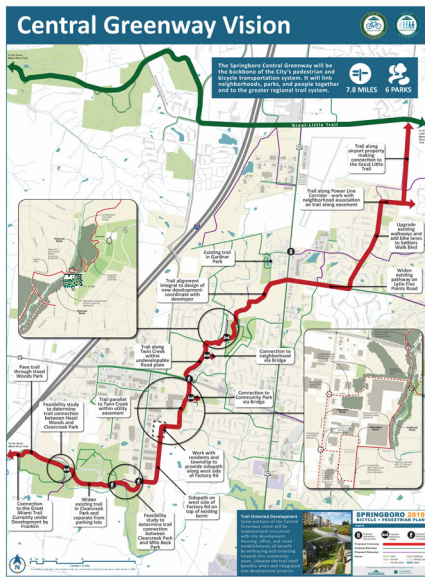


<b>Client</b>	<b>City of Springboro</b> <b>320 West Central Ave</b> <b>Springboro, OH 45066</b>
<b>Contact</b>	<b>Dan Boron</b> <b>danb@cityofspringboro.com</b> <b>937-748-6183</b>
<b>Dates</b>	<b>2019 to 2020</b>
<b>Budget</b>	<b>\$49,595</b>
<b>Personnel</b>	<b>Norman Cox &amp;</b> <b>Carolyn Prudhomme</b>

*TGC was also involved with the 2013 Bicycle and Pedestrian Plan and has been involved in continuing services every year which include:*

- *Sub-consultant on the City's Mater Plan*
- *Development and updates of the Biking in the Boro Pocket Guide*
- *Trail alignment and feasibility studies*
- *Cost estimates and implementation*
- *Bike route wayfinding and trail signage*
- *GIS and graphic support*
- *Trail marketing and branding*
- *Grant assistance*





The infrastructure recommendations are organized into three areas; The Central Greenway Vision, Recreational Trails and Proposed Network

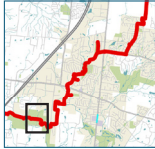
IMPLEMENTATION

### Segment B: Clearcreek Park

Two options have been considered for the Greenway connection through Clearcreek Park. The preferred route recommends building a new 11' wide pathway through the middle of the park with a rectangular rapid flash beacon at W Lower Springboro Road to E Milo Beck Park and some minor road crossing at access roads within the park.

The alternative route would include widening the existing asphalt path that follows W Lower Springboro Road around the parks perimeter.

The advantage of the proposed routes is it would complement the existing walking path system giving the park users more walking and running options.



#### Cost Estimate for Preferred Route

Item Description	Quantity	Unit	Unit Price	Cost
1 Site Clearing and Rough Grading	600	LF	\$10	\$6,000
2 11' Wide Asphalt Path, Base, and Grading	3,000	LF	\$75	\$225,000
3 Culvert Allowance	1	EA	\$5,000	\$5,000
4 Site Restoration and Landscaping	3,000	LF	\$10	\$30,000
5 Trail Amenities	3,000	LF	\$10	\$30,000
6 Crosswalk Markings & Signs	2	EA	\$2,500	\$5,000
<b>Subtotal of Construction Costs</b>				<b>\$301,000</b>
Contingency			20%	\$60,200
<b>Construction Total</b>				<b>\$361,200</b>
7 Engineering & Design			10%	\$36,120
8 Construction Administration			4%	\$14,448
9 Construction Observation			6%	\$21,672
<b>Subtotal of Total Soft Costs</b>				<b>\$72,240</b>
<b>Total Project Cost</b>				<b>\$433,440</b>



IMPLEMENTATION

Trail segment pages structured to grant applications

# Regional Trail Connectivity Vision

The Regional Trail Connectivity Vision looks at opportunities for developing a recreational trails network across Mason, Lake, Oceana, and Newaygo Counties. Some of the major trail types that were considered include hiking trails, on-road and mountain bike trails, ORV trails, and snowmobile trails.

A summit was held with key stakeholders across the region to develop a consensus trail vision and identify organizational capacities to implement the vision.

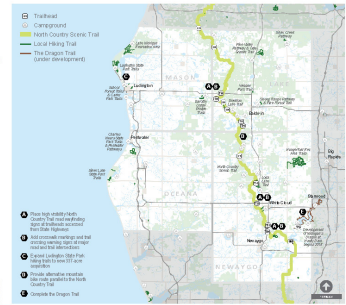
The vision is a strategic plan on how to leverage existing and proposed trail elements to promote economic growth in the region. The plan also provides a clear way forward on the next major trail investments.

<b>Client</b>	<b>Mason County Growth Alliance</b> 5300 W US 10 Ludington, Michigan
<b>Contact</b>	<b>Spence Riggs, former PM for MCGA</b> spenceriggs@gmail.com
	<b>Jodi Nickols (current contact)</b> The Right Place, Inc 231-742-3328
<b>Sub-Consultant</b>	<b>livingLab</b> Williams & Works
<b>Dates</b>	2018 to 2019
<b>Budget</b>	\$50,000
<b>Personnel</b>	Norman Cox & Carolyn Prudhomme

*The overarching goal of this Plan is to leverage existing trail assets and plan new connections as a tool for sustainable economic growth for Lake, Mason, Newaygo, and Oceana counties.*

## HIKING

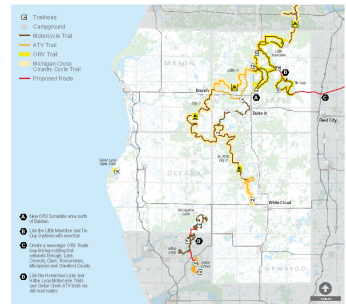
**253 20**  
MILES EXISTING PROPOSED



- Proctor's Lane Peninsula Extended Backpacking Trail** - A 10-mile trail connecting Proctor's Lane, Mason County State Trail, and the Dragon Trail. This trail would provide a route for backpackers and hikers looking for solitude in the area.
- Lakeview Wilderness** - A 10-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for hikers looking for solitude in the area.
- Long Weekend Backpacking Loop** - A 20-mile trail connecting Lakeview, Mason County State Trail, and the Dragon Trail. This trail would provide a route for hikers looking for solitude in the area.
- Family Friendly Nature Day Hike** - A 5-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for families looking for a fun day hike.

## ORVING

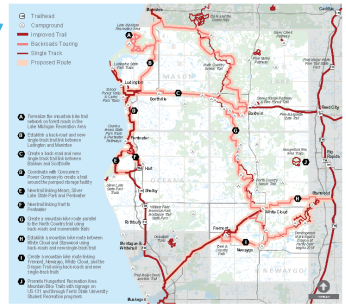
**326 12**  
MILES EXISTING PROPOSED



- Two Unique Scenic Areas** - Two 10-mile trails connecting Proctor's Lane and the Dragon Trail. These trails would provide scenic views of the area.
- A Trail for Everyone** - A 10-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for hikers of all abilities.
- Close to Home** - A 5-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for hikers looking for a fun day hike.

## BIKING

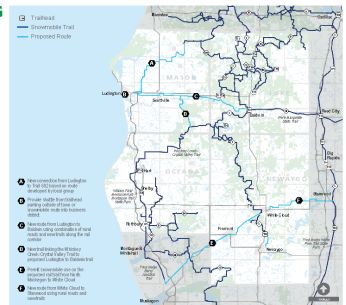
**163 287**  
MILES EXISTING PROPOSED



- Mid-West's Premier Scenic Trail** - A 10-mile trail connecting Proctor's Lane and the Dragon Trail. This trail would provide scenic views of the area.
- Regional Mountain Biking Trail** - A 10-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for mountain bikers.
- A Family Friendly Scenic Day Hike** - A 5-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for families looking for a fun day hike.
- Mapletope to White Cloud Trail** - A 10-mile trail connecting Mapletope and White Cloud. This trail would provide a route for hikers looking for a fun day hike.

## SNOWMOBILING

**360 100**  
MILES EXISTING PROPOSED



- Close to Home Weekend Snowmobiling** - A 5-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for snowmobilers looking for a fun day hike.
- Scenic to National** - A 10-mile trail connecting Proctor's Lane and the Dragon Trail. This trail would provide scenic views of the area.
- Major New Destination** - A 10-mile trail connecting Lakeview and the Dragon Trail. This trail would provide a route for hikers looking for a fun day hike.

# A TRAIL FOR EVERY SEASON AND EVERY MOOD

*This is a vision for a connected network of trails for every season and every mood and builds upon the outstanding ORV, snowmobile, motorcycle, ATV, hike, bike, equestrian, x-country ski, snowshoe, and water trails in West Michigan.*



## SHARED USE PATH PRIORITIES



SEPARATED PAVED TRAIL

*The trails vision balances large transformational trail projects with near-term cost-effective investments that can make an impact quickly. The many partners who were involved in the development of this plan are committed to a collaborative implementation effort.*

# Jackson City+County Nonmotorized Plan

Jackson City + County Nonmotorized Plan brings together many efforts that have taken place over the years and builds upon those plans to craft a compelling and implementable vision that reflects the community consensus.

The plan recommendations are based on the input received during two robust public engagement sessions that included workshops across the county, surveys, and online options. The plan focuses on the links that connect communities and major destinations within the County as well as communities in adjacent counties. The plan strives to be visionary and pragmatic, understanding that feasibility and cost are key to implementation.

<b>Client</b>	<b>Region 2 Planning</b> 120 West Michigan Ave, 9th Floor Jackson, Michigan 49201
<b>Contact</b>	<b>Grant Bauman</b> GBauman@mijackson.org 517-745-9041
<b>Sub-Consultant</b>	<b>livingLab</b>
<b>Dates</b>	<b>2019 to 2020</b>
<b>Budget</b>	<b>\$99,965</b>
<b>Personnel</b>	<b>Norman Cox &amp; Carolyn Prudhomme</b>

### Brooklyn

The Brooklyn area is an important anchor in the Greater Irish Hills region with a walkable downtown. It is within biking distance to Watkins and Hayes State Parks, Columbia Central High School and MIS.

## Brooklyn Nonmotorized Network

#### Priorities

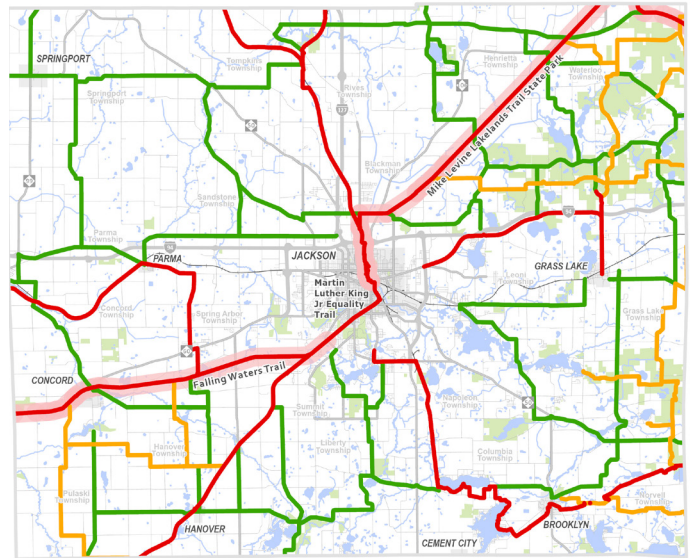
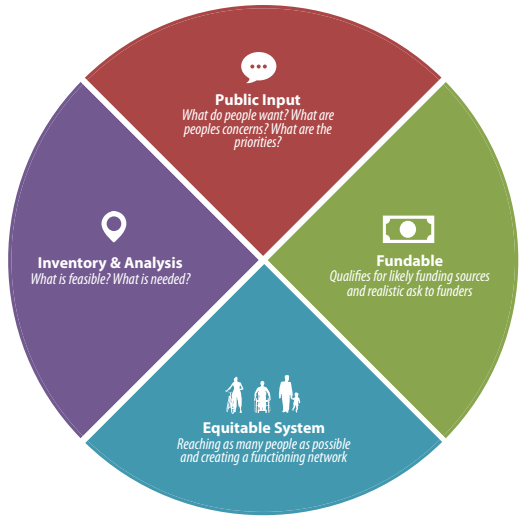
- Complete sidewalk gaps
- Improved crosswalks so they are ADA compliant and provide safe routes to schools
- Provide trail connections to Watkins Lake State Park, Hayes State Park, Columbia Central High School/Columbia Lake, Clark Lake Spirit Trail and the Michigan International Speedway

Main Street in Brooklyn

- 1 Complete sidewalk gaps on Mill, King, Marshall, Tiffany, Constitution, Water and S Main
- 2 Paved shoulder on Mill St/Case and Riverside
- 3 Trail following abandoned rail corridor, in private property, connecting to Columbia Central High School and Lake Columbia
- 4 Unpaved trail following abandoned rail corridor, in private property, connecting to Watkins Lake State Park
- 5 Bike route on local roads
- 6 Bike route on local roads
- 7 Sidepath along Monroe Pike connecting to the Michigan International Speedway
- 8 MDOT plans to provide enhanced paved shoulders on Wampiers Lake Road
- 9 Improve crosswalk - rectangular rapid flash beacon with in-road pedestrian signs
- 10 Improve crosswalk - detectable warning, curb ramps, high visibility markings, signs
- 11 Improve crosswalk - detectable warnings and in-road pedestrian signs
- 12 New crosswalk with in-road pedestrian signs

*Report structured to have sections extracted and incorporated into local plans and support specific projects*

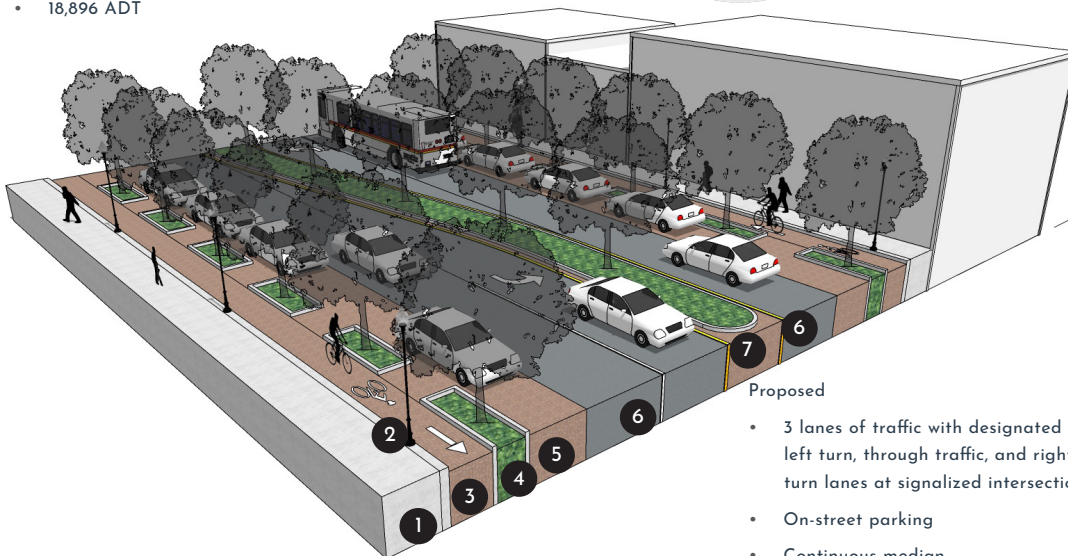
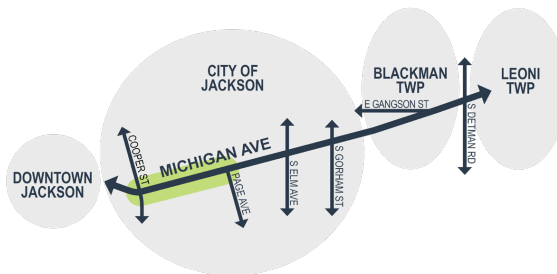
The Priority Routes and Trails are the result of a process that considered; the Public Input; the Inventory & Analysis; requirements of Funders; and the desire to create an Equitable System.



## Michigan Avenue Cooper Street to Page Ave

### Existing Conditions

- 100' wide right-of-way
- 5 lanes of traffic
- Some on street parking
- 18,896 ADT



### Proposed

- 3 lanes of traffic with designated left turn, through traffic, and right turn lanes at signalized intersections
- On-street parking
- Continuous median

The implementation plan includes: Funding Strategy Overview; Priority Trail Implementation Strategy; and Priority Trail Cost Opinions. They are intended to be the foundation for preparing individual trail grant applications and an overall plan to building the system.