

RIVER TO RIVER TRAIL PLANNING STUDY



May 2018

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INTRODUCTION

The River to River Trail Planning Study was funded by a grant from Michigan Department of Natural Resources Recreation Improvement Fund (RIF) and matched by the following communities and community members: Cooper Township, Gun Plain Township, City of Kalamazoo/Kalamazoo Parks and Recreation, Friends of the Kalamazoo River Valley Trail, Martin Township, Village of Martin, City of Plainwell, City of Wayland, Allegan County, Kent County, Gun Plain Township, Gaines Charter Township, Byron Township, Wayland Township, Kalamazoo Garden Council, Old Mill Brewpub, and Jim Goodknecht.

The River to River Planning study analyzes potential non-motorized trail routes from Kalamazoo to Grand Rapids that would connect communities as well as improve mobility options and recreation opportunities for the communities. The study examined trail route opportunities and challenges on the ground, held public meetings, and held meetings with stakeholders, regulatory agencies, and the interested public to determine design and use features desired by communities. The study also provides a full map of potential routes.

The recommended trail route of The River to River Trail traverses on privately-owned property and along the previously known Interurban Railroad Line. The route provides a completely off-road trail with beautiful views of the countryside and access to destinations along the route. The route also provides improved mobility options and recreation opportunities for the communities. Most of the recommended route is along the old Interurban Railroad Line that is currently owned by Consumers Energy and leased by International Transmission Company (ITC). Consumers Energy and ITC have been stakeholders in this planning study and provided information about leasing the land for use as a non-motorized trail. The land would cost \$1,000 per mile, per year to lease.

The River to River Trail Plan also examines potential cooperative trail management opportunities, funding opportunities, and establishment of a management structure for fundraising, construction and ongoing management of the trail; the study lists potential trail support facilities, including parking areas, trailhead locations, and signage to enhance the experience along the trail corridor; the River to River Trail Plan provides additional next steps required for the completion of this trail to connect Kalamazoo to Grand Rapids, a significant segment of West Michigan's regional trail network.

PROJECT PURPOSE & GOALS

The objective of the River to River Trail Planning Study is to recommend a preferred route for a non-motorized trail connection from the Kalamazoo County trail system to the Kent County trail system. Specifically, the trail plan looked at a route connecting the existing Kalamazoo River Valley trailhead at D Avenue in Cooper Township north to M-6 connector trail on 68th Street SE in Cutlerville. This trail section would connect multiple communities and improve transportation and recreation opportunities for the people in the surrounding communities.

Project Background & Purpose

A trail connecting Kalamazoo to Grand Rapids along the old Interurban Rail Line has been an interest to local residents and trail advocates for some time. The Kalamazoo River Valley Trail and the Kent Trail systems are both heavily used trail systems. West Michigan has a strong bicycle community with many bicycle groups, organizations and support along with pedestrians of all ages and capabilities looking for a safe, off-road walking and running route. The landscape of the proposed trail along the Interurban Rail Line ranges from prairie and farmland to rolling hills and forests. This varied landscape provides numerous opportunities in communities for outdoor recreation and enjoyment. There are some challenges involved in connecting the communities and these natural resources through private property, leasing property, topography changes, and trail management challenges. The Interurban Rail Line is owned by Consumers Energy and leased to ITC, who have shown interest in leasing the land for use as a non-motorized trail. The Interurban Rail Line would provide the most scenic route of the three proposed routes which makes the route a desirable choice. This planning study looks to determine the development potential as well as the cost to lease the land from Consumers Energy.

Currently bicyclists and pedestrians have limited transportation options when traveling between Kalamazoo and Grand Rapids as well as communities in-between. The main option currently is on-road or running which can be unappealing and unsafe. The River to River Trail will serve as a vital link between communities, enhance access to and appreciation of numerous scenic farming and natural areas, provide a non-motorized transportation option for residents of the nearby communities, and complete an important connection in the state-wide non-motorized trail system as proposed by the West Michigan Trails and Greenways Coalition.

The River to River Trail will create a continuous non-highway route for touring cyclists and long-distance runners from southern to northern West Michigan. In addition to adding transportation options to the communities, a complete River to River Trail would enhance the quality of life for residents and add to the opportunities for visitors to the area.

“There are many ways that trails and greenways affect the local economy including: tourism, events, urban redevelopment, community improvement, property value, health care savings, jobs and investment, and general consumer spending” (Macdonald, 1). Touring bicyclists, runners and hikers play “an important role in Michigan’s tourism industry. Tourists coming to Michigan may take a day trip through a rural section of the Upper Peninsula on a rail trail or...explore an urban environment” (BBC Research and Consulting, 57). For example, “The total annual economic impact of bicycling in Michigan is \$668 million” (BBC Research and Consulting, Infographic). This is made up of retail, bicycling events, and vacations in Michigan. In general, “people who live in communities where it is safe and convenient to engage in active transportation enjoy better overall health, greater economic opportunities, a cleaner environment, lower energy bills and numerous personal and social gains associated with a strong sense of community” (Rails-to-Trails Conservancy, 5). The River to River Trail can only be expected to increase these economic and social benefits.

Goals of the Planning Study

The River to River Trail Planning Study stresses improved access for non-motorized users along the Kalamazoo-Grand Rapids / US-131 Corridor.

The planning study:

- ▶ Advances the completion of an important connecting route from Kalamazoo County to Kent County
- ▶ Improves transportation options for residents along the route to connect with other communities and services
- ▶ Enhances appreciation of local landscapes and natural areas
- ▶ Provides safe alternative transportation
- ▶ Creates more access to recreation opportunities, enhancing quality of life for residents
- ▶ Creates a management structure to fundraise and construct the trails
- ▶ Defines the preferred route and materials for users

Results of the planning study are 1) conceptual trail design and feasibility of alternative routes, 2) preliminary cost estimates for engineering and construction, 3) identification of potential funding sources, and 4) analysis of leasing Consumer's Energy owned property.

PROJECT APPROACH

The methodology used to determine a preferred trail alignment included analysis of potential routes, public meetings, and stakeholder meetings. Wightman and Associates conducted studies utilizing GIS and field visits to map possible routes. The gathered information includes identification of wetlands, floodplains, existing rail corridors, right-of-way widths, grades, utilities, and culverts/bridges. This information was used to create the maps of the route options which were then taken to stakeholder meetings where they were further refined.



Stakeholder & Public Outreach Summary

The community and stakeholder outreach portions of this study intended to bring together the diverse user groups from the communities along with the many agencies that have a stake in the trail. The River to River Trail stakeholder meetings included many of the key stakeholders and agencies but have yet to involve adjacent landowners.

The five stakeholder meetings were held at Plainwell City Hall in Plainwell, MI. The meetings were held on January 11, 2017; February 8, 2017; March 8, 2017; October 11, 2017; and March 14, 2018. The stakeholder meetings brought stakeholders together to review preliminary trail route options and discuss next steps for the feasibility study and beyond. These meetings included the following representatives:

Stakeholder Meeting Representatives	
Allegan County Road Commissioners	Kalamazoo Area Transportation Study (KATS)
Allegan County Parks Commission	Kalamazoo Bicycle Club
Bike Friendly Kalamazoo	Martin Township
Byron Township	Michigan Department of Natural Resources (MDNR)
City of Plainwell	Michigan Department of Transportation - Grand Region (MDOT)
City of Wayland	
Friends of the Interurban Trail	Michigan Department of Transportation - Southwest Region (MDOT)
Consumers Energy	
Cooper Township	Michigan Department of Motor Vehicles - Kalamazoo Transportation Service Center (MDOT)
Dorr Township	
Friends of the Kalamazoo River Valley Trail	The National Park Service
Governor's Office of Urban Initiatives	Plainwell Citizens for Safer Cycling
Gun Plain Township	Village of Martin
International Transmission Company (ITC)	West Michigan Trails and Greenways Coalition

Additional stakeholders include Allegan County, The Disability Network, Grand Valley Metropolitan Council (GVMC), Kalamazoo County Road Commission, Kent County Road Commission, Leighton Township, LIAA, Parallel Solutions, Plainwell Parks & Trees Committee, Rapid Wheelmen, Southwest Michigan First, and Wayland Township.

PROJECT APPROACH

Trail Route Analysis

The project team reviewed field visit notes, stakeholder meeting minutes, public input meeting minutes and opportunities and challenges to determine a preferred trail alignment. Preliminary maps, along with observations of the terrain and a list of opportunities and challenges were reviewed and discussed in the stakeholder meetings. The input gained from these stakeholder meetings refined the alignments considered, which in turn required further investigation on the ground. During these meetings, feedback was given that led to elimination of Route 3 from discussion during the public input meetings.

Public Meetings

Four formally-advertised public meetings were scheduled to solicit feedback from residents, adjacent property owners, stakeholders, and other community partners to help guide the recommendations of this plan. Public meetings were advertised via Facebook, email blasts, and on community websites. Due to the considerable geographic size of the project area, the public meetings were held at strategic locations along the proposed routes. These four sites provided more convenient locations for local residents, property owners, and interest groups along the 35-mile stretch to attend a meeting nearest to them. Meeting locations also allowed for equitable geographic coverage and resulted in more meaningful feedback.

The public meetings featured several interactive stations, display boards, and maps designed to solicit public feedback. Attendees were asked to weigh in on their preferred trail alignment and construction material, how they would use the trail, and ideas for the name of the future trail. Additionally, attendees were prompted to identify challenges, opportunities, and key destinations along the trail on large-sized maps. These comments will be considered during trail planning, design, and construction.

Challenges are locations that may pose a challenge to trail routes through a particular area such as steep slopes, wetlands and water features, and heavy traffic volumes and/or high vehicle speeds.

Opportunities are potential routes which may be more advantageous such as avoiding steep slopes, promoting local businesses, shaded areas, lower traffic volumes and/or vehicle speeds, and scenic areas.

Key Destinations are attractions within close proximity to the proposed trail routes which may be of interest to potential trail users.

The schedule for the public meetings is as shown in the table below. 153 total people signed in at the four meetings.

Public Meetings Schedule				
Meeting	Host	Location	Date	Attendees
1	Cooper Township	Cooper Township Hall 1590 D Ave. W Kalamazoo, MI 49009	Wednesday, May 17, 2017	34
2	Byron Township	Byron Township Hall 8191 Byron Center Ave. SW Byron Center, MI 49315	Wednesday, July 12, 2017	45
3	City of Wayland	Wayland Union HS Fine Arts Center 850 E Superior St. Wayland, MI 49348	Wednesday, August 9, 2017	23
4	Old Mill Brewpub	Old Mill Brewpub 717 E Bridge St. Plainwell, MI 49080	Thursday, September 14, 2017	51
TOTAL				153

PROJECT APPROACH

Digital Engagement Platforms

The River to River Trail Plan planning process incorporated several digital engagement platforms in addition to the community open house meetings. A project-specific website, Facebook page, and an interactive mapping tool were utilized to solicit further input from residents and interest groups who were unable to attend public meetings as well as spread awareness surrounding the planning effort.

Website (r2rtrailplan.org)

The project website was utilized to provide information essential to the planning effort, display public meeting dates and locations, and provide links to the interactive mapping site, project documents, Facebook page, and other resources applicable to the project. In total, the project website received nearly 2,500-page views and was accessed by 1,663 unique users.

Facebook (facebook.com/r2rtrailplan)

Posts on the Facebook page included relevant media articles covering the planning process, Facebook events for each public meeting, reports and other documents produced for this project, and other official announcements. A total of 567 Facebook users liked or followed the page (as of October of 2017). Posts on the page received 1,915 clicks, 715 reactions, and were seen by nearly 19,000 users.



Website
1,663 Users

**Facebook
Page**
19,000 Users

**Mapping
Page**
78 Comments

Interactive Mapping Page (communityremarks.com/rivertorivertrailplan)

An interactive mapping tool was established to allow participants to conveniently post ideas, comments, and images to a website and relate them to specific geographic locations. The prompts provided in this exercise mirrored those issued at the public meetings in order to gather consistent feedback and allow additional opportunities to those who were unable to attend a public meeting. In total, 78 comments were received from this platform. A full list of all comments received from the interactive mapping page and the public meetings is available in appendix D.

Media

A press release was prepared to provide essential information about the project to various local media outlets. Two articles featured on MLIVE.com which provided in-depth coverage of the trail planning process and goals of the public outreach efforts. Additionally, two members of the project team were featured in an interview on the Lori Moore Show, a day-time talk show on the local Kalamazoo CBS-affiliate television station.



PROJECT APPROACH

Map Comments

As previously mentioned, users were asked to provide comments on specific locations along the proposed trail routes to identify challenges, opportunities, and destinations. The list below contains several comments which were most applicable or received the greatest number of votes. A full list of comments is available in appendix D. Comments were sorted by geographic segments of the trail for relevancy. Overall, there were 129 total comments received from the digital and public meeting map exercises.

Southern Segment – Kalamazoo River Valley Trail to Plainwell

Challenges:

- ▶ Steep hill at D Ave. Heading west (affecting Route 2) [4 votes].
- ▶ Fast moving vehicles on Douglas Ave. (Affecting Route 2).
- ▶ Former Interurban traverses near several adjacent residences; property owners are wary of a trail bisecting their property [several comments].
- ▶ Crossing Bridge St. near downtown Plainwell poses a major challenge given volume of traffic, location of transmission towers, and lack of available right-of-way width along the north side of the road [3 votes].

Opportunities:

- ▶ Potential location for a trailhead north of Bridge St. between Maple St. and Acorn St. The City of Plainwell currently owns the vacant property which likely has very little potential for future development.
- ▶ Routes 1 & 1B are much more scenic as they are located off of local streets and traverse through wooded areas [10+ comments].

Key Destinations:

- ▶ Downtown Plainwell shops and stores [7 votes].
- ▶ Thurl Cook Park [3 votes].
- ▶ Plainwell River Trail.
- ▶ Plainwell Ice Cream [3 votes].
- ▶ Old Mill Brewpub [3 votes].

Central Segment – Between Plainwell and Wayland

Challenges:

- ▶ Steep grade and wetland areas with flooding issues along the proposed routes at 110th Ave. south of Martin [3 votes].
- ▶ There are a few landlocked properties north of Martin which are currently used for farming where the former Interurban Line is used as a cross-access for farm equipment [2 votes].
- ▶ Railroad crossing north of 126th Ave.

Opportunities:

- ▶ Potential trailhead location at Veterans Memorial Park in Martin village. The park currently contains a statue but is largely open and could accommodate a small parking lot and other amenities. Also, it could provide access to the local businesses in Martin.
- ▶ A connection to Gun Lake Casino for lodging, entertainment, and food.

Key Destinations:

- ▶ Martin village.
- ▶ Shops in Shelbyville.
- ▶ Gun Lake Casino.
- ▶ Yankee Springs Recreation Area.

Northern segment – Wayland to Kent Trails

Challenges:

- ▶ Right-of-ways are narrow through downtown Wayland which may be difficult for installation of on-street bike facilities to allow trail users to truly feel safe.
- ▶ West Michigan Auto Auction property is bisected by former Interurban Line; re-routing or an access easement would be required.
- ▶ Vehicles tend to travel too fast on Division Ave. from 92nd St. to 68th St. [2 votes].

Opportunities:

- ▶ Connection to Kent Trails by constructing an off-road path on the north side of 68th Street would be ideal [7 votes].
- ▶ A well-designed trail could allow for safer crossing of 68th St. just west of Division Ave. which tends to be very busy and dangerous to pedestrians and bicyclists.

Key Destinations:

- ▶ Wayland City Park (with new splash pad).
- ▶ OpenRoad Brewing.
- ▶ Rabbit River Nature Trail.
- ▶ Leighton Township Park in Moline.
- ▶ Cranker's Brewery.

PROJECT APPROACH

Trail Name

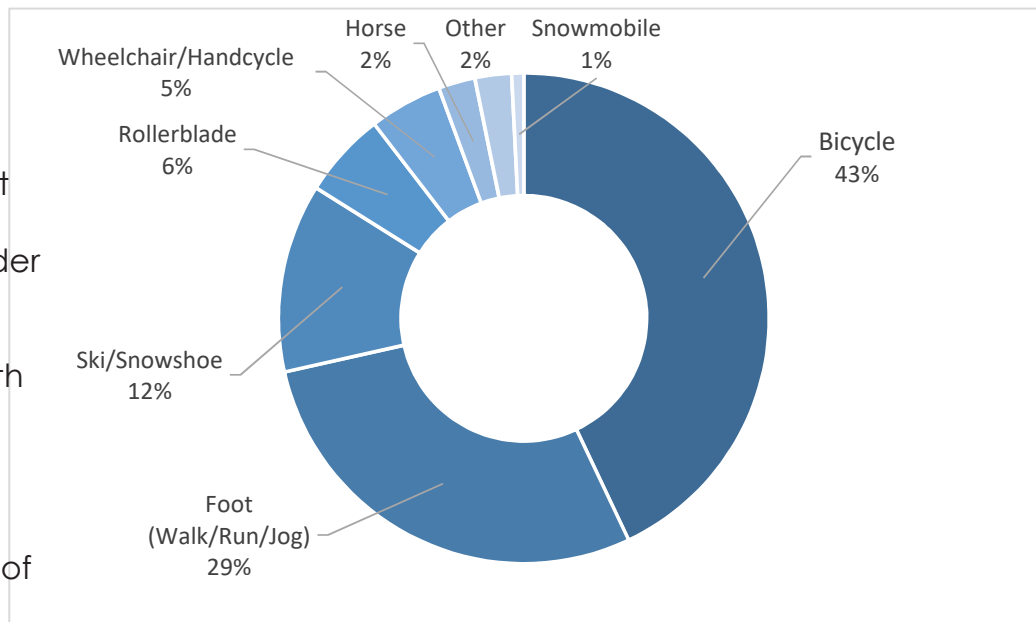
Participants at the public meetings and Facebook followers were asked to help determine the name of the future trail. The top answer choices are listed below:

- ▶ “River to River”, represents connecting the Kalamazoo River in Kalamazoo to the Grand River in Grand Rapids, 17 votes.
- ▶ “Interurban Trail”, the name of the commuter rail line between Grand Rapids and Kalamazoo where the proposed trail is suggested to run, 6 votes.
- ▶ “Kal-Rapids” or “Kala-Rapids”, 5 votes.
- ▶ “Grand Zoo Trail”, 5 votes.

Trail Usage

In an effort to better understand how the future trail may be used, participants were asked to select the ways they would like to use the trail. The purpose was to gain a firmer understanding of what modes of travel should be accommodated in the design of a future trail. In some cases, one mode of travel may directly conflict with another (e.g., snowmobile travel can damage trails making it more difficult for bicyclists and runners).

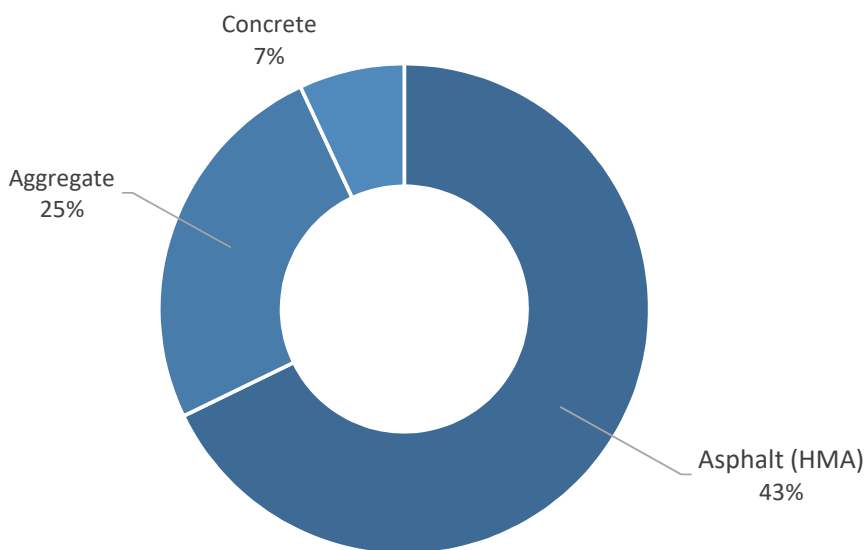
The majority of attendees indicated they would use the trail for cycling (approximately 43%). The second-highest favored form of trail use was by foot (i.e., walking, running, or jogging), garnering just under 30% of selections. Skiing or snowshoeing were other highly-favored activities with 12% of selections. Rollerblading, wheelchair/handcycling, horseback riding, snowmobiling, and other uses together received 6% of votes or less. A breakdown of responses can be found in the graphic to the right.



Trail Material

The planning process considered a range of trail surface materials. Each type of surface may be conducive or prohibitive to certain types of activities. To better understand the public's preference for types of trails, attendees were asked to choose the type of material that should be used to construct the trail. Options were asphalt (HMA), aggregate, and concrete. Each option was explained in further detail including construction and maintenance costs as well as local trail examples for each type.

Overwhelmingly, asphalt was the top choice for public meeting attendees. Over 40% of attendees preferred an asphalt trail to other types. About one-quarter preferred the aggregate option with 7% preferring concrete.



PROJECT APPROACH

Trail Alignment

One of the primary goals of the public outreach effort was to identify the preferred trail alignment. Three routes were presented to the public:

Route 1: Follows former Interurban Rail Line, corridor is currently owned by Consumers Energy and leased by International Transmission Company (ITC).

Route 1b: Alternative route using private properties from D Ave in Cooper Township north to Bridge St in Plainwell.

Route 2: Follows County Road A-45.

Public meeting attendees were asked to review the route alternatives and select their preferred alignment. Route 1b received 43% of votes, Route 1 received 22%, and Route 2 only received 4%, indicating a very clear preference for Route 1 (including 1B) over Route 2. Similar to comments captured from the interactive mapping exercises, Route 1B emerged as the preferred alignment, primarily due to its more wooded and scenic nature. Below are two of the most common general comments received throughout the planning process which succinctly capture the public opinion.

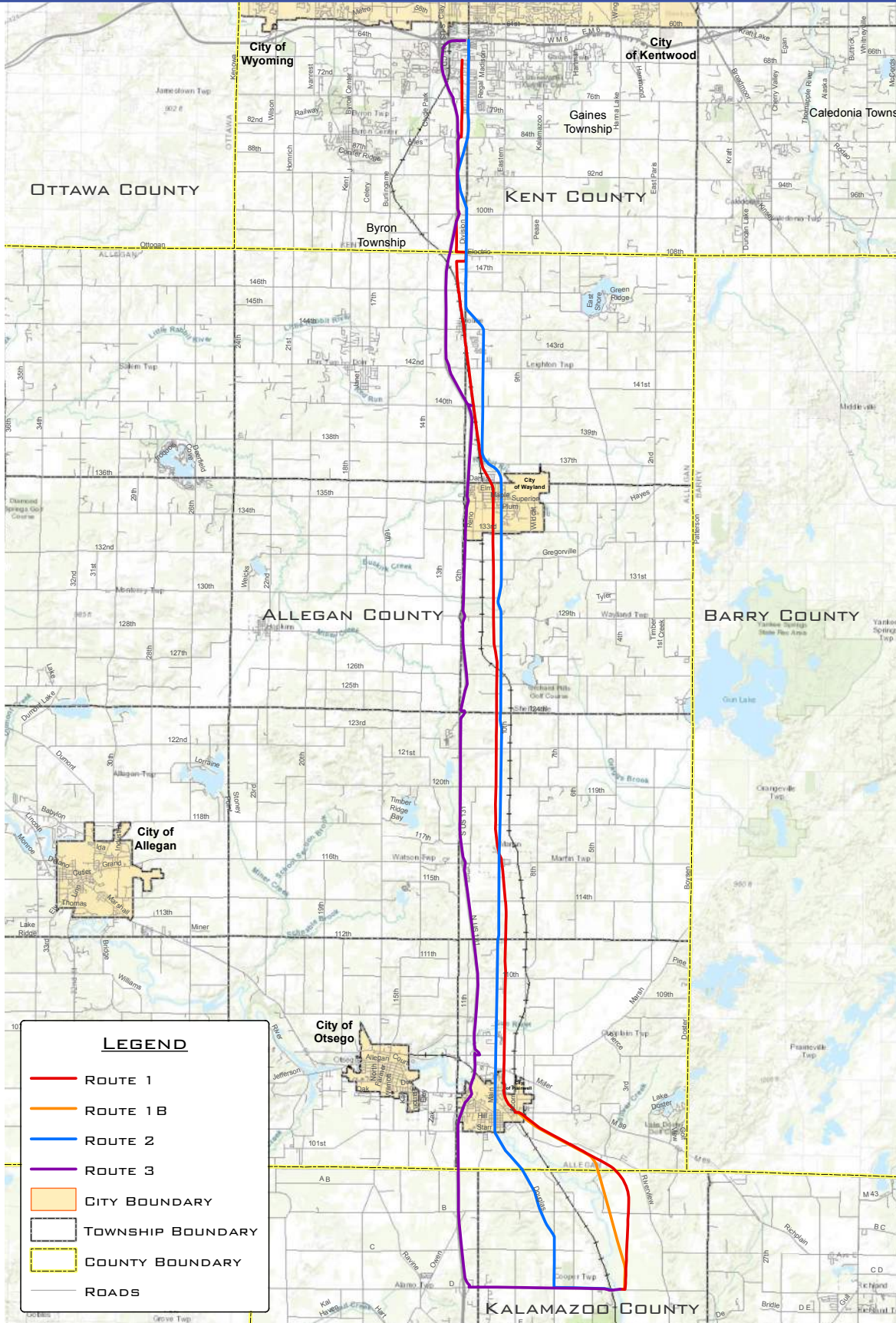
- *“First of all, the overall proposal is fantastic. I like route 1b or 1 as they are not adjacent to a road. More natural experience. I know maintenance costs could increase but I think a better ride experience.” [5 votes]*
- *“I know right-of-ways may be prohibitive, but I would love to see as much of this trail be off-road as possible, i.e. route 1 far preferable to route 2 in my opinion.” [5 votes]*

Common Themes & Other Comments

A clear and evident trend in opinion emerged as the public heavily favored keeping the trail “natural” and as far away from vehicular traffic as possible. More scenic and aesthetic views afforded by the former Interurban/Consumers Energy Line (Route 1) were strongly valued by public meeting attendees which largely led to its emergence over Route 2.

Concerns also arose during the engagement process. Considerations for equestrian uses, particularly along the southern segment of the trail in southern Allegan County, were discussed. Additionally, several farmers currently use the Interurban Line for access to fields. Planning must consider the lifestyle and occupations of those who live and make their livelihood along the trail.

Lastly, participants were excited to provide ancillary suggestions and considerations for lodging, future trailhead locations, drinking water and restroom facilities, bike repair locations, wayfinding signage, and information kiosks which are critical elements for a successful trail. These comments can help guide further implementation of trail facilities and amenities in the future.



FEASIBILITY OF ROUTES

This section describes the trail alignment alternatives studied and discusses the criteria used in refining these alignments, which eventually led to the preferred alignment. A brief overview of the project area is used as an introduction to the process of determining the alignments. Each of these alignments were reviewed with a list of opportunities and challenges including trail management considerations.

Evaluation of Routes

The period prior to the stakeholder meetings saw alternatives developed internally by project staff and vetted with stakeholders during the stakeholder meetings. The alignments presented at the stakeholder meetings represented a starting point to examine the alignment evaluation process. At this point in the evaluation there were four basic alignments based largely on project staff research, the four alignments are described below. All alignments begin at the north trailhead of the Kalamazoo River Valley Trail on D Avenue in Cooper Township and end at the south trailhead of the Fred Meijer M-6 Trail on Carriage Lane SW in Cutlerville. These routes are shown on a map in appendix A.

Route 1 follows the former Interurban Rail Line. The trail heads east on the south side of D Avenue either on the road, on a paved shoulder, or on a separated non-motorized trail. The trail then heads north along the Interurban Rail Line until reaching E Bridge Street / M-89 in Plainwell. The trail then crosses north across M-89, heads west across the railroad tracks, then head heads north parallel along the railroad tracks behind Old Mill Brewery, until reaching Broad Street and the Interurban Rail Line, and heads northwest along the Interurban Rail Line. The route then heads through downtown Martin, crossing Main Street / A-45 west, heading along the west side for a short while before reaching the Interurban Rail Line and heading northwest along it. The route then crosses through Wayland just to the west of downtown and continues northwest along the Interurban Rail Line, then through downtown Moline, and then crossing through Cutlerville until meeting up and connecting to the Fred Meijer M-6 Trail in Cutlerville.

Route 1b is an alternative route along private properties from D Avenue to downtown Plainwell. The trail heads east on the south side of D Avenue either on the road, on a paved shoulder, or on a separated non-motorized trail. The trail then heads north along private property just west of the Interurban Rail Line until reaching E Bridge Street / M-89 in Plainwell. The trail then meets up with Route 1.

Route 2 follows County Road A-45. The trail heads west on the north side of D Avenue on either the road, on a paved shoulder, or on a separated non-motorized trail. A separate bridge would need to be installed along D Avenue over the Kalamazoo River or the existing bridge would need to be widened to allow for a bike lane. Another option would be to add a safe crossing to the north side of D Avenue. Route 2 then heads north along the east side of Douglas Avenue either on the road, on a paved shoulder, or on a separated non-motorized trail. The route then heads through the center of downtown Plainwell, continues north along the east side of Douglas Avenue / A-45, then through the center of downtown Bradley, and through the center of downtown Wayland. The route then continues north along A-45 / Division Ave through Cutlerville until meeting up and connecting to the Fred Meijer M-6 Trail in Cutlerville.

Route 3 follows the US-131 corridor. The trail heads west on the north side of D Avenue either on the road, on a paved shoulder, or on a separated non-motorized trail. A separate bridge would need to be installed along D Avenue over the Kalamazoo River or the existing bridge would need to be widened to allow for a bike lane. Another option would be to add a safe crossing to the north side of D Avenue. The route then heads north along the east side of the US-131 entrance ramp on a separated, fenced off, non-motorized trail. The trail follows along the east side of US-131 north until turning east and following along the south side of M-6 until meeting up and connecting to the Fred Meijer M-6 Trail in Cutlerville.

Route 3 was considered early in the feasibility study process but stakeholder input regarding the route determined it not to be feasible. It was not included in further refinement of the alignments and it was not presented as a viable option during public input meetings, however, this alignment is described below to fully detail the alignment evaluation process.

FEASIBILITY OF ROUTES

To thoroughly assess possible trail choice alternatives, a feasibility analysis was built by using a set of evaluation criteria. The criteria were developed by considering the goals of the feasibility study, the opportunities and challenges found during site visits, and feedback from stakeholders and public input meetings. Alignments were evaluated by these criteria, which helped the project team recommend a preferred trail alignment.

The feasibility analysis criteria included the following:

- ▶ Topographical feasibility
- ▶ Cost feasibility
- ▶ Scenic experience
- ▶ Safety such as traffic patterns, road speeds and volumes
- ▶ Environmental features such as floodplains and wetlands
- ▶ Social features such as destinations and facilities

The opportunities and constraints of each trail alignment below were developed during public input workshops and project team site visits. They outline the key criteria which helped with the evaluation of the alignment.

Route 1

Follows former Interurban Rail Line, corridor is currently owned by Consumers Energy and leased by International Transmission Company (ITC).

Opportunities:

- ▶ More scenic route as it is located off local streets and traverses through wooded and farming areas.
- ▶ Does not go near any existing houses or properties which provides a more scenic route.
- ▶ Not adjacent to a road which allows for a safer and more scenic route.
- ▶ Uses existing infrastructure which could reduce construction cost.
- ▶ Existing trail corridor so the environment of existing species will not be disturbed by construction of this trail.

Challenges:

- ▶ Crossing Bridge Street near downtown Plainwell poses a major challenge given volume of traffic, location of transmission towers and lack of available right-of-way width along the north side of the road.
- ▶ Steep grade and wetland areas with flooding issues along the proposed routes at 110th Avenue south of Martin.
- ▶ There are a few landlocked properties north of Martin which are currently used for farming where the former interurban Line is used as cross-access for farm equipment which could be a safety concern.

- ▶ Railroad crossing north of 126th Avenue could be a safety concern as well as increase construction cost.
- ▶ Right-of-ways are narrow through downtown Wayland which may be difficult for installation of on-street bike facilities to allow trail users to truly feel safe.
- ▶ West Michigan Auto Auction property is bisected by former Interurban Line; re-routing or an access easement would be required which could increase construction cost.
- ▶ Railing needed for sections of route in Shelbyville area and north of Gun Lake Casino area because of large grade changes which could increase construction cost.
- ▶ Large grade change between 126th Ave and 128th Ave, north of Shelbyville which could increase construction cost.
- ▶ Some areas of the route currently being used for farming and animal grazing could be a safety concern and will require coordination with current users.
- ▶ High speed limit on Riverview Drive in Cooper Township where there will be a road crossing as well as 68th St SW in Cutlerville could be a safety concern.
- ▶ High traffic volume and speed on D Ave in Cooper Township where there will be a road crossing could be a safety concern.

Route 1b

Alternate route using private properties from D Avenue in Cooper Township north to Bridge Street in Plainwell.

Opportunities:

- ▶ More scenic route as it is located off of local streets and traverses through wooded areas.
- ▶ Avoids power lines and sticks closer to the Kalamazoo River which could be a more scenic experience.
- ▶ Not adjacent to a road which could be a safer and more scenic route.

Challenges:

- ▶ High speed limit on Riverview Drive in Cooper Township where there will be a road crossing could be a safety concern.
- ▶ Traverses near several adjacent residences; property owners are wary of a trail bisecting their property; could be a safety concern.
- ▶ Crossing Bridge Street near downtown Plainwell poses a major challenge given volume of traffic, location of transmission towers and lack of available right-of-way width along the north side of the road could be a safety concern.
- ▶ Requires significant tree removal to develop trail route.
- ▶ High traffic volume and speed on D Ave in Cooper Township where there will be a road crossing could be a safety concern.

FEASIBILITY OF ROUTES

Route 2

Follows County Road A-45 (Douglas Ave. / 10th St. / Division Ave. S)

Opportunities:

- ▶ Proximity to downtown Plainwell; route runs right by downtown businesses which provides social features.
- ▶ Possibly reduced construction cost due to use of already graded right-of-way.
- ▶ Possibly more regular grade changes for trail users due to use of already graded right-of-way.
- ▶ Located close to existing destinations and facilities.

Challenges:

- ▶ Railroad crossing north of 126th Avenue could be a safety concern.
- ▶ Steep hill at D Avenue heading west could increase construction cost due to increased topographical grading.
- ▶ Right-of-ways are narrow through downtown Wayland which may be difficult for installation of on-street bike facilities to allow trail users to truly feel safe.
- ▶ Railroad crossing and steep hill at D Avenue could be a safety concern.
- ▶ Fast moving vehicles on Douglas Avenue and 68th St SW makes this route unsafe feeling and unappealing for bike travel.
- ▶ Wetlands / ponds located north of 110th Ave.
- ▶ Steep grade and wetland areas with flooding issues along the proposed route at 100th Avenue, south of Martin.

Route 3

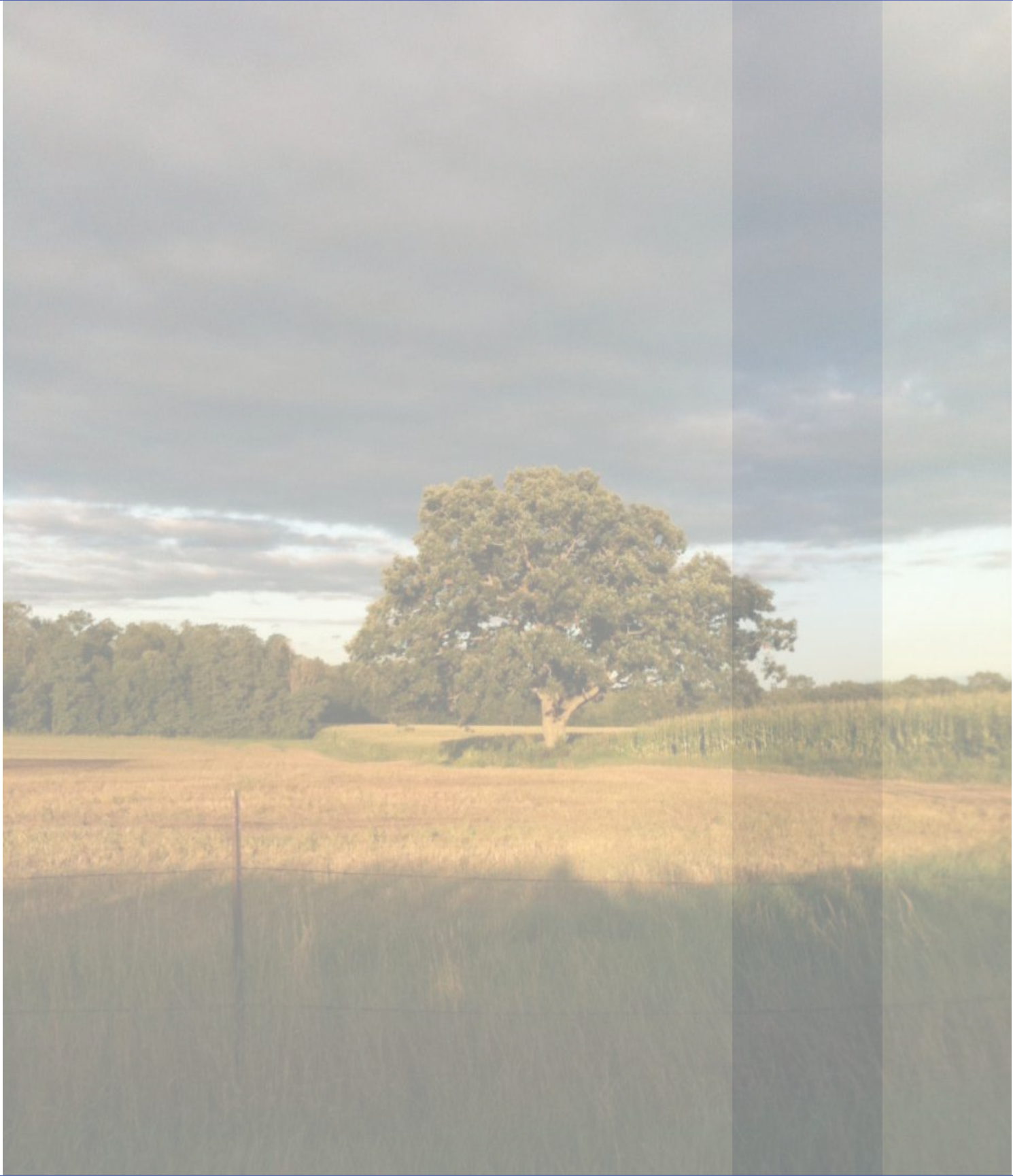
Follows US-131 corridor.

Opportunities:

- ▶ Located close to existing destinations and facilities such as Gun Lake Casino.
- ▶ Only one land owner to coordinate with for use.

Challenges:

- ▶ Crossing Bridge Street near downtown Plainwell poses a major challenge given volume of traffic, location of transmission towers and lack of available right-of-way width along the north side of the road could be a safety concern.
- ▶ Increased topographical grading could increase the construction cost.
- ▶ Many crossings under or around bridges could increase construction cost.
- ▶ Not appealing to be so close to fast moving vehicles and loud noises.



PREFERRED TRAIL ROUTE

The preferred trail alignment for the River to River Trail is Route 1 with alternative Route 1b. Based on the aforementioned feasibility criteria, this alignment represents the most feasible option for completing this section of the regional West Michigan trail system, connecting Kalamazoo to Grand Rapids and many communities in between and providing residents and visitors with the most rewarding trail experience. This alignment considered future trail connections that would enhance the experience of the River to River Trail and provide an important connection in the state-wide non-motorized trail system as proposed by West Michigan Trails and Greenways Coalition.

The preferred route provides an excellent user experience, is buildable, cost effective, scenic and logically sited to connect Kalamazoo to Grand Rapids. There are no significant environmental impediments, but the lands are privately owned and will need to be leased on a yearly basis.

Preferred Trail Route Description

Alignment 1 and 1b is an alternative route along private properties from D Avenue to downtown Plainwell. The trail heads east on the south side of D Avenue either on the road, on a paved shoulder, or on a separated non-motorized trail. The trail then heads north along private property just west of the Interurban Rail Line until reaching E Bridge Street / M-89 in Plainwell. The alignment then meets up with Route 1 and crosses north across M-89, heads west across the railroad tracks, then heads north parallel along the railroad tracks behind Old Mill Brewery, until reaching Broad Street and the Interurban Rail Line, and heads northwest along the Interurban Rail Line. The route then heads through downtown Martin, crossing Main Street / A-45 west, heading along the west side for a short while before reaching the Interurban Rail Line and heading northwest along it. The route then crosses through Wayland just to the west of downtown and continues northwest along the Interurban Rail Line, then through downtown Moline, and then crossing through Cutlerville until meeting up and connecting to the Fred Meijer M-6 Trail in Cutlerville.

Opportunities:

- ▶ More scenic route as it is located off local streets and traverses through wooded and farming areas.
- ▶ Not adjacent to a road which allows for a safer and more scenic route.
- ▶ Avoids power lines and sticks closer to the Kalamazoo River which could be a more scenic experience.

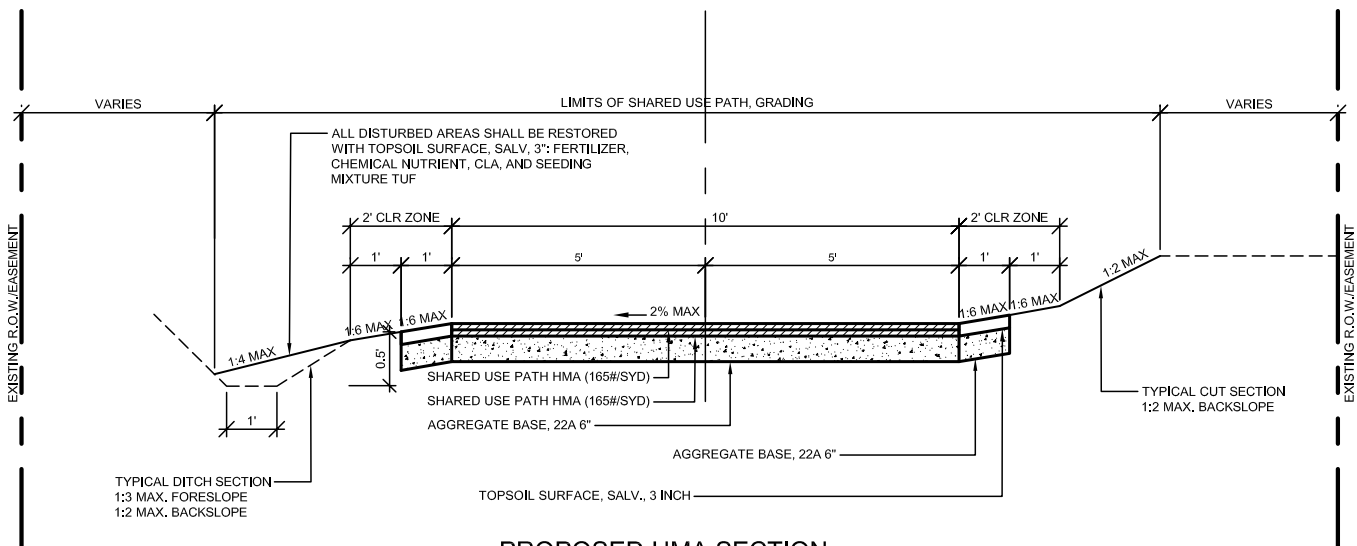
Challenges:

- ▶ Crossing Bridge Street near downtown Plainwell poses a major challenge given volume of traffic, location of transmission towers and lack of available right-of-way width along the north side of the road.
- ▶ Steep grade and wetland areas with flooding issues along the proposed routes at 110th Avenue south of Martin.
- ▶ There are a few landlocked properties north of Martin which are currently used for farming where the former interurban Line is used as cross-access for farm equipment which could be a safety concern.
- ▶ Railroad crossing north of 126th Avenue could be a safety concern as well as increase construction cost.
- ▶ Right-of-ways are narrow through downtown Wayland which may be difficult for installation of on-street bike facilities to allow trail users to truly feel safe.
- ▶ West Michigan Auto Auction property is bisected by former Interurban Line; re-routing or an access easement would be required which could increase construction cost.
- ▶ Railing needed for sections of route in Shelbyville area and north of Gun Lake Casino area because of large grade changes which could increase construction cost.
- ▶ Large grade change between 126th Ave and 128th Ave, north of Shelbyville which could increase construction cost.
- ▶ Some areas of the route currently being used for farming and animal grazing could be a safety concern and will require coordination with current users.
- ▶ High speed limit on Riverview Drive in Cooper Township where there will be a road crossing as well as 68th St SW in Cutlerville could be a safety concern.
- ▶ Traverses near several adjacent residences; property owners are wary of a trail bisecting their property which could be a safety concern.
- ▶ Requires significant tree removal to develop trail route.

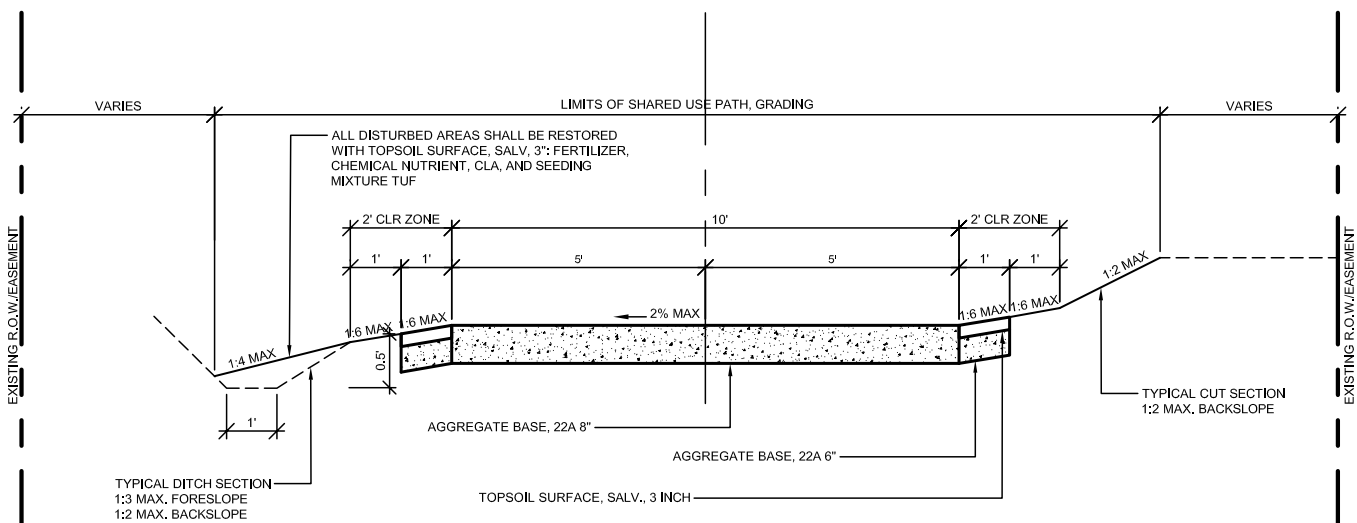
PREFERRED TRAIL ROUTE

Typical Trail Cross Section

The proposed HMA and Aggregate cross sections below depict a typical area along the trail. It is a 10 ft wide trail, with a 1 ft gravel shoulder, and a 1 ft grass shoulder. The HMA pavement section consists of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. The Aggregate section includes 8" of limestone or crushed concrete.



PROPOSED HMA SECTION

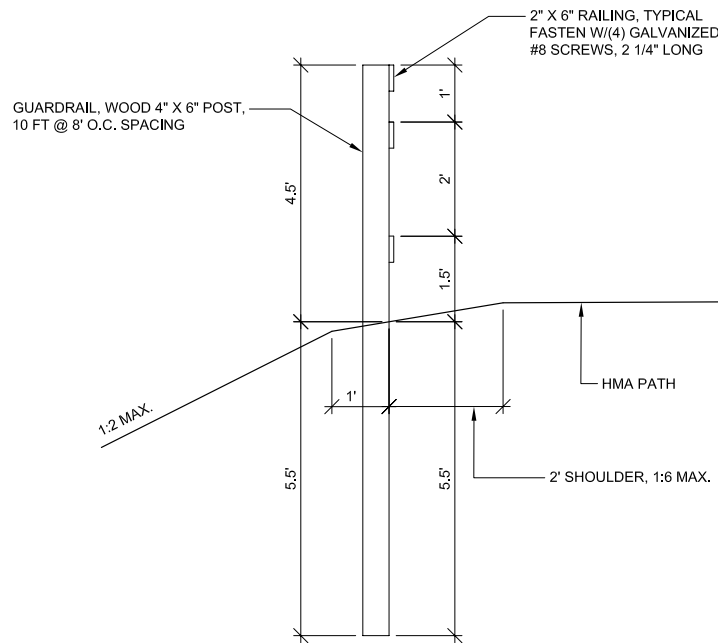


PROPOSED AGGREGATE SECTION

Typical Trail Guardrail Detail

The cross section above depicts a typical guardrail below the trail. Guardrail is recommended in areas where a 5-foot shoulder with max slope of 1V:6H cannot be provided, or where there is a body of water or steep drop off. The following are rules of thumb for providing guardrail.

- Slopes 1V: 3H or steeper, with a drop of 6 feet or greater
- Slopes 1V: 3H or steeper, adjacent to a parallel body of water or another substantial obstacle
- Slopes 1V: 2H or steeper, with a drop of 4 feet or greater
- Slopes 1V: 1H or steeper, with a drop of 1 foot or greater



TRAIL GUARDRAIL DETAIL

PREFERRED TRAIL ROUTE

Cost Estimates

Cost estimates for the trail construction were calculated by comparing the trail construction cost of recent nearby completed trail projects. These construction costs were then scaled to a per Linear foot estimate to apply to our cost estimate for this trail. For ease of estimating as well as understanding for the communities, the trail was broken up into 10 sections, each section representing a community the trail crosses through. The project team created a one-page handout for each community to present at a regular community meeting that helped explain the rough Linear foot pricing, material, and route per section of trail along with some general trail funding information. A member of the project team attended each of these meetings to help answer questions as needed. These one-page handouts with cost estimates can be found in appendix E. Costs were based on 2017-2018 costs and should be increased by 4% each year beyond.

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in the estimates are pavement markings, traffic control signage, and regulatory signage. One kiosk with signage and bench were included in each estimate. Additional restrooms and parking for trailheads were not included. Utility work (sewer, water, electric) is not included with the scope of this estimate. The cost estimate per community is listed in the table on the next page and described in more detail on the following pages. Additional right of way costs will depend upon the land value and the willingness of the owners to allow easements.



Cost Estimate per Community			
Community Name	HMA Surfacing	Limestone Aggregate Surfacing	Approximate Segment Length
Cooper Township 1b	\$ 1,139,000.00	\$ 895,000.00	3.35
City of Plainwell	\$ 598,000.00	\$ 490,000.00	1.50
Gun Plain Township	\$ 2,266,000.00	\$ 1,779,000.00	6.70
Village of Martin	\$ 404,000.00	\$ 322,000.00	1.00
Martin Township	\$ 1,554,000.00	\$ 1,175,000.00	5.20
Wayland Township	\$ 2,074,000.00	\$ 1,736,000.00	4.70
City of Wayland	\$ 508,000.00	\$ 400,000.00	1.40
Leighton Township	\$ 1,115,000.00	\$ 844,000.00	3.60
Dorr Township	\$ 905,000.00	\$ 688,000.00	2.90
Byron Township	\$ 1,712,000.00	\$ 1,319,000.00	5.40
TOTALS:	\$ 12,275,000.00	\$ 9,648,000.00	35.75



PREFERRED TRAIL ROUTE

The section of the trail that crosses through **Cooper Township** includes a total of 3.35 miles of trail along the alternate route 1b along private property. The trail extends from D Ave, just west of the Interurban Rail Line, north to the northern township border at Baseline Road. **The total estimate 2018 project cost including design and construction engineering is \$1,139,000. The project cost for limestone aggregate surface rather than HMA is \$895,000.**

The section of the trail that crosses through the **City of Plainwell** includes a total of 1.5 miles of trail primarily along Consumers Energy property. A small portion of the trail will parallel M-89. The trail extends north/northwest from the West City Line at Locust Street (south of M-89) to the northern border of the city just south of Miller Road. **The total estimate 2018 project cost including design and construction engineering is \$598,000. The project cost for limestone aggregate surface rather than HMA is \$490,000.**

The section of the trail that crosses through **Gun Plain Township** includes two sections for a total of 6.7 miles of trail along Consumers Energy property. The first section extends the trail from Baseline Road north to the City of Plainwell and the second from the City of Plainwell north to 112th Avenue. The estimate includes a tunnel under 110th Street. **The total estimate 2018 project cost including design and construction engineering is \$2,266,000. The project cost for limestone aggregate surface rather than HMA is \$1,779,000.**

The section of the trail that crosses through the **Village of Martin** includes a total of 1 mile of trail along Consumers Energy property. The trail extends from the Village Line south of Templeton Street north to 10th Street. **The total estimate 2018 project cost including design and construction engineering is \$404,000. The project cost for limestone aggregate surface rather than HMA is \$322,000.**

The section of the trail that crosses through **Martin Township** includes two sections for a total of 5.2 miles of trail along Consumers Energy property. The first section extends the trail from 112th Avenue north to the Village of Martin and the second from the Village of Martin north to 124th Avenue. **The total estimate 2018 project cost including design and construction engineering is \$1,544,000. The project cost for limestone aggregate surface rather than HMA is \$1,175,000.**

The section of the trail that crosses through **Wayland Township** includes for a total of 4.7 miles of trail along Consumers Energy property. The trail extends from 124th Avenue north to the City of Wayland. Bridges are included over the railroad just north of 126th Avenue and Buskirk Creek just north of 129th Avenue. **The total estimate 2018 project cost including design and construction engineering is \$2,074,000. The project cost for limestone aggregate surface rather than HMA is \$1,736,000.**

The section of the trail that crosses through **City of Wayland** includes a total of 1.4 miles of trail primarily along Consumers Energy property. The trail extends from the south City limit, just west of S Main Street, to the northern City limit just west of Park Street. The property currently has a varying width gravel trail present. **The total estimate 2018 project cost including design and construction engineering is \$508,000. The project cost for limestone aggregate surface rather than HMA is \$400,000.**

The section of the trail that crosses through **Leighton Township** includes a total of 3.6 miles of trail along Consumers Energy property. The trail extends from the southern township border just west of Lilac Street and travels north until it intersects with the western township border north of 142nd Street. **The total estimate 2018 project cost including design and construction engineering is \$1,115,000. The project cost for limestone aggregate surface rather than HMA is \$844,000.**

The section of the trail that crosses through **Dorr Township** includes a total of 2.9 miles of trail along Consumers Energy property. The trail extends from the eastern township border just north of 142nd street and travels north until it intersects with the northern township border at the county Line. **The total estimate 2018 project cost including design and construction engineering is \$905,000. The project cost for limestone aggregate surface rather than HMA is \$688,000.**

The section of the trail that crosses through **Byron Township** includes a total of 5.4 miles of trail along Consumers Energy property. The trail extends from the eastern township border north of 142nd Street to the north, through Moline, and ends at the northern Township Line at the County Line west of Division Ave. **The total estimate 2018 project cost including design and construction engineering is \$1,712,000. The project cost for limestone aggregate surface rather than HMA is \$1,319,000.**

TRAIL SUPPORT FACILITIES

Highly visible and friendly trailheads and trail access points at both the north and south ends of the River to River Trail will be necessary to ensure the River to River Trail is inviting and accessible to residents and visitors alike. Trailheads help orient users to the local area and can be designed to fit with the natural and cultural surroundings of the local area. There are many opportunities for safe, clear trail access points to the River to River Trail that will help connect residents and visitors alike to the trail.

The following are recommendations to consider as the project moves into the design phase. The listed opportunities below are to be understood as potential locations and recommendations and not be misconstrued as final decisions. Each of the following categories will need further development during the design and engineering phases which will include feasibility of the potential trailhead facilities and trailhead locations as well as signage design, location and quantity. These facilities have not been included in the project estimates.

Trail support facilities include trailheads, directional, regulatory and interpretive signage, and other trail amenities (e.g. site furnishings, trash cans, lighting). Trail support facilities for the River to River Trail should allow for safe, easy access to the River to River Trail while also helping to connect trail users to other attractions in the area.

Potential Trailhead Locations

The River to River Trail's southern terminus will be at the north trailhead of the Kalamazoo River Valley Trail which is on the south side of D Avenue and on the west side of the Kalamazoo River. The Kalamazoo River Valley Trail continues south, leading users into the City of Kalamazoo and beyond. The northern terminus of the River to River Trail will be at the west side of Division Avenue South, connecting to the Fred Meijer M-6 Trail. The M-6 Trail continues west to Kent Trails leading users into the City of Grand Rapids and beyond.

This study recommends utilizing the existing Kalamazoo River Valley Trail north trailhead parking area for accessing the River to River Trail from the south by developing a partnership and maintenance agreement with the Kalamazoo County Parks Department. It also recommends utilizing the existing Fred Meijer M-6 Trail south trailhead parking areas for accessing the River to River Trail from the north by developing a partnership and maintenance agreement with Kent County Parks Department. Both existing parking areas should be sufficient for meeting the demand of users starting their trip along the River to River Trail from the south or the north. This study also recommends adding kiosks to all trailheads that include information and maps about the River to River Trail and nearby destinations as well as trailhead locations within the southern, central, and northern segments of the trail. Improvements to or creation of trailhead amenities were not included in the cost estimates and would be estimated on a project by project basis. The potential trailhead locations are listed below.

Southern Segment

Undeveloped Property in Plainwell: The City of Plainwell currently owns the vacant property located on the north side of Bridge Street between Acorn Street and Maple Street. The location has easy access to Plainwell shops, restaurants, breweries and the Plainwell River Trail. The River to River Trail is accessible from the park via Acorn Street, Maple Street and Bridge Street.

Thurl Park in Plainwell: The park contains parking, sheltered picnic tables and restroom facilities. The location has easy access to Plainwell shops, restaurants, breweries and the Plainwell River Trail. The River to River Trail is accessible from Thurl Park via Oak Street.

Central Segment

Veteran's Memorial Park in the Village of Martin: The park currently contains a statue but is largely open and could accommodate a small parking lot and other amenities. The location provides access to downtown Martin shops and restaurants. This park has restrictions on its use and will need further review when developing trailhead locations in future phases.

Martin High School in the Village of Martin: The school has ample parking that could be shared. The location provides access to downtown Martin shops and restaurants. The River to River Trail is accessible from the high school via Templeton Street.

Northern Segment

Wayland City Park in Wayland: The park contains parking areas, restroom facilities, drinking fountains and a picnic shelter. The location provides access to downtown Wayland shops, restaurants and breweries. The River to River Trail is accessible from Wayland City park via Cherry Street and W Maple Street.

142nd Street Park and Ride in Wayland: The 142nd Street Park and Ride has ample parking. The location provides access to Bysterveld Park. The River to River Trail is accessible from the Park and Ride via 142nd Avenue.

Brewer Park in Byron Township: The park contains ample parking, restrooms, shelters and picnic areas. The location provides access to Byron Township shops and restaurants. The River to River Trail is accessible from Brewer Park via 84th Street SE.

Trailhead parking, lighting, and an informational kiosk are recommended to serve trail users at all proposed trailheads. The informational kiosk, with a map and informational signage about the River to River Trail, would be provided to inform users of amenities and nearby destinations in the area.

TRAIL SUPPORT FACILITIES



Proposed South Trailhead for River to River Trail, located at Kalamazoo River Valley Trail North Trailhead in Kalamazoo



Potential Trailhead Location: Undeveloped Property in Plainwell



Potential Trailhead Location: Martin High School in Martin



Potential Trailhead Location: Wayland City Park in Wayland



Proposed North Trailhead for River to River Trail, located at Fred Meijer M-6 Trail South Trailhead

TRAIL SUPPORT FACILITIES

Additional Considerations

Other trail support facilities proposed for the River to River Trail are viewsheds at stop-offs along the trail. These stop-offs would provide resting points for users as well as a place for activities such as bird watching, picnicking, and wildlife viewing, along with amenities such as benches, interpretive signage, and wildlife viewing scopes. Improvements to or creation of additional trail support facilities were not included in the cost estimates and would be added on a project by project basis.

Below is a list of potential stop-off locations:

- ▶ A deck overlooking Gun River at the historic Interurban Rail bridge crossing north of 106th Avenue.
- ▶ A stop-off between 106th Avenue and 100th Avenue. Area is composed of rolling forests and fields and sandy dunes.
- ▶ An overlook at 110th Avenue. From this viewpoint one can see miles down the trail from the north and south.
- ▶ A stop-off north of 114th Avenue would showcase the big open spaces and fields.
- ▶ A stop-off between 114th Avenue and 116th Avenue would showcase the big open fields.
- ▶ A stop-off at 128th Avenue would showcase rolling hills, forests and fields.
- ▶ A stop-off at 130th Avenue would showcase fields, forests and big open skies.

Access Management

Managing how the River to River Trail trailheads are accessed will be important to ensure safety near and along adjacent roadways. A combination of trail crossing markings, signage, pavement markings, and landscape will need to be used in locations where the trail crosses roadways. Layout of trail access points will need to be designed block vehicle access. This can be done through a combination of trail alignment, landscape, and barricades. Although bollards work well as barricades to block vehicular access to trails, they should only be used when necessary as they can be an obstacle for trail users and bicyclists.

Signage Plan

A signage plan will enhance usage of the River to River Trail. Wayfinding signage, regulatory signage and interpretative displays are essential for a complete trail user experience. The types of signage recommended has been broken down into the following categories:

1. US Hwy 131
2. Trailheads
3. Overlook / Stop-offs
4. Regulatory (along trail and cross roads)

Signage along US Highway 131 corridor includes potential signage alerting highway users of approaching on and off ramps to and from River to River Trail trailheads. Wayfinding signage along main roads off Hwy 131 approaching trailheads could also be considered. Signage will meet MDOT standards for recreation signage. These signs have not been included in the cost estimates.

The trailheads will have a mix of regulatory signage (on posts) and orientation and informational signage (in kiosks). The objective of the orientation and informational signage is to increase comfort and confidence in navigating the trail systems and improve travel within and between trail systems. Quick Response (QR) codes could be utilized on the kiosks signs. QR codes would link to a central website that would provide a range of information such as current events, nearby communities, and recent news. QR codes are beneficial because they allow the user to get updated information about the trail without trail management having to update all the Kiosks which would be costly. These signs have not been included in the cost estimates. It should be noted that signage for the trailheads including orientation and informational signage should provide interpretive information and maps in a variety of alternative formats, such as auditory, large print, braille, pictures and QR codes so to be universally accessible.

The overlook / stop-offs will have potential for interpretative signage kiosks. The significance of the old Interurban Rail Line could be highlighted. Sign panels (up to 24" x 36") can be fabricated from either aluminum or laminated and mounted to posts. The objective of this signage is to improve the user experience. These signs have not been included in the cost estimates. Signage for the overlook areas should also provide interpretive information and maps in a variety of alternative formats, such as auditory, large print, braille, pictures and QR codes so to be universally accessible.

Regulatory signage along the trail will include mile markers, regulatory, and wayfinding signage. The objective of this type of signage is to enhance the safety of people, vehicles and property, and to improve travel within and between trail systems. Mile markers will be provided at a spacing determined by the trail group. Regulatory signs include stop ahead, stop signs, curve ahead, and street signs. Wayfinding signage include pointing out landmarks, destinations, and village/city/township limits. These are included in the cost estimates for each community.

EXAMPLE TRAIL SUPPORT FACILITIES





TRAIL MANAGEMENT STRATEGY

The success of the River to River Trail will likely come through strong community support and cooperation between several public jurisdictions and community-based organizations. This is because maintenance cost can often limit a community's ability to build and expand trails.

Maintenance Costs

Maintenance costs along regional trail systems are substantial. While implementation grants are offered for trail construction, there are fewer funding options to pay for ongoing maintenance and operation costs. Example maintenance costs from nearby communities can help gage pricing for the River to River Trail. For example, over the past decade along the Kalamazoo County Trails, an average of \$3,000 per mile per year was dedicated to maintenance costs. Below is an example maintenance task list along with the frequency and cost that communities can estimate for a 20-year period.

Estimated 20-Year Maintenance Costs				
Maintenance Task	Frequency per year	Cost per Mile	Frequency per 20-years	Cost per Mile per 20-years
Litter Pickup	Weekly	\$ 1,000.00	1040	\$ 1,040,000.00
Trash Collection	Weekly	\$ 1,000.00	1040	\$ 1,040,000.00
Pruning	1 time / year	\$ 2,000.00	20	\$ 40,000.00
Crack Sealing	1 time / year	\$ 1,000.00	20	\$ 20,000.00
Tree Root Cutting	1 time / year	\$ 1,000.00	20	\$ 20,000.00
Aggregate Grading	2 times / year	\$ 750.00	40	\$ 30,000.00
Mowing	3-4 times / year	\$ 1,000.00	70	\$ 70,000.00
HMA Seal Coat	1 time / 3-5 years	\$ 15,000.00	5	\$ 75,000.00
HMA Mill and Resurface	1 time / 30 years	\$ 48,000.00	1	\$ 48,000.00
TOTAL ESTIMATED MAINTENANCE COSTS PER MILE PER 20 YEARS				\$ 2,383,000.00

In addition to the maintenance costs for the trail, communities should plan for the cost of \$1,000 per year, per mile to lease the land from Consumers Energy. That cost plus the maintenance costs are shown below.

Estimated 20-Year Maintenance & Lease Costs				
Maintenance Task	Frequency per year	Cost per Mile	Frequency per 20-years	Cost per Mile per 20-years
Consumer's Energy Easement	1 time / year	\$ 1,000.00	20	\$ 20,000.00
TOTAL ESTIMATED MAINTENANCE & LEASE COSTS PER MILE PER 20 YEARS				\$ 2,403,000.00

Trail Authority

The establishment of the River to River Trail Authority would create a local government entity to take on the ongoing responsibility of planning and construction of the River to River Trail, the maintenance of the trail and seeking funding for the trail. As organization of a River to River Trail Authority moves forward, the group to organize and distribute funds for maintenance tasks.

“Friends of” & Other Grassroots Groups

A “Friends of” group is a group of people who have an interest in the River to River Trail and volunteer their time, services, and support to enhance the trail corridor. These groups often attend to low-skill maintenance tasks, community outreach and coordination of volunteer efforts.

FINAL RECOMMENDATIONS & NEXT STEPS

The purpose of the River to River Trail feasibility study is to outline a preferred alignment for a multipurpose trail connecting Kalamazoo to Grand Rapids, outline potential trailhead locations, trail support facilities locations, and provide information about trail management and funding strategies.

This feasibility study shows many ways to advance the progress of the River to River Trail, but there are many next steps for remaining phases of work. These steps include hiring a prime consultant, engineered designs and further design development for the trail and trail facilities, fund seeking, leasing agreement for Consumers Energy land, and working on cooperative trail management partnerships. Currently, the municipalities are working together to develop a trail authority for construction of the trail. There will need to be a commitment from the municipalities, agencies and organizations for the design and permitting phases of the River to River Trail to go smoothly.

The steps below show that implementation of the River to River Trail will take years to complete. It should be realized that the stakeholder group soon to be authority should continue to gain support for the River to River Trail and meet on a regular basis to discuss progress. This will greatly assist the group with seeking competitive implementation funding at the state level.

Endowments & Trust Funds

Endowments and Trust Funds "...can be set up to aid funding for acquisition, construction or maintenance, and can be administered by a nonprofit group or local commission. Funds can be contributed to a trust fund from government sources, private grants and gifts. One contributor to the [Rails to Trails Conservancy] Listserv notes that transparency is important with a trust fund, stating, 'If you do set up a dedicated endowment for land management, I would recommend keeping the endowment's books open to the public and [providing] members and donors with annual financial reports for the endowment.'" (Rails-to-Trails, Financing & Funding)

Potential Approval Agencies & Permitting

Development of non-motorized facilities on or adjacent to the road right-of-way will require close cooperation with the road agencies. State roads will require MDOT approval, local roads will require various county Road Commissions approval. If grant funds are used, the funding agency will be involved in approval. The various county Drain Commissions will be involved for soil erosion permits. MDEQ will be involved with any culvert or bridge work.

Leasing of Land & Shared Access

The leasing of the Consumers Energy property will be necessary in order to complete the long-term vision for this Kalamazoo to Grand Rapids trail. In particular, the Consumers Energy property will be essential to ensuring a safe and welcoming trail experience. This property will provide the safe, off-road, and scenic experience requested during public input and stakeholder meetings.

The team needs to reach out to begin working with private landowners of the Coggan Family Legacy Trust in order to move ahead with Route 1b. Discussion will also need to occur with private citizens who already hold leases with Consumers Energy to work on shared access agreements.



FINAL RECOMMENDATIONS & NEXT STEPS

Grant Opportunities

There are numerous funding sources that can be utilized for trail or pathway projects. One of the most comprehensive places to locate information on funding is the Michigan Trail and Greenways Alliance website; www.michignatrails.org. Many grant applications require that the community applying have a current 5-year recreation plan on file, because of this, each community that has a current recreation plan or if part of a larger plan should adopt this plan as part of their recreation goals. Typically, funding will come from the following categories listed below:

Federal: Grants like MDOT Transportation Alternatives Program (TAP) which is a competitive grant program that uses federal transportation funds designated by Congress for specific activities that enhance the intermodal transportation system and provide safe alternative transportation options. Grant applications are due quarterly.

State: Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

County: Recreation Millage.

Local: Special fund, private & corporate sponsorship and donations.



The following is a specific list of federal funding opportunities for trails and pathways:

Congestion Mitigation and Air Quality (CMAQ): The CMAQ program funds transportation projects or programs that will contribute to the attainment or maintenance of National Ambient Air Quality Standards. In the past CMAQ funds have been used for trail and pathway programs that will reduce the number of trips by automobile.

Transportation Alternatives Program (TAP): TAP is a competitive grant program that uses federal transportation funds designated by Congress for specific activities that enhance the intermodal transportation system and provide safe alternative transportation options. These options include facilities for pedestrians and bicyclists, including traffic-calming and other safety improvements, and safe routes for non-drivers. TAP funding requires matching funds of at least 20% of the eligible project cost.

Safe Routes to School (SR2S): SR2S is an international movement—and now a federal program—to make it safe, convenient, and fun for children, including those with disabilities, to bicycle and walk to school. When routes are safe, walking or biking to and from school is an easy way to get the regular physical activity children need for good health. Safe Routes to School initiatives also help ease traffic jams and air pollution, unite neighborhoods, and contribute to students' readiness to learn in school. Mini Grants and Major Grants are available that range from \$5,000 to \$200,000.

The Michigan Department of Natural Resources (MDNR) has numerous grant opportunities for recreation projects. All of these grants require that the local unit of government have a current 5-year recreation plan on file with the DNR.

DNR Natural Resources Trust Fund: Can be used for land acquisition or project development. Minimum match requirement of 25%. No minimum or maximum grant request for acquisition projects. For development projects there is a \$15,000 minimum and \$300,000 maximum grant request.

DNR Land and Water Conservation Fund: This grant may be used for development projects only. Match requirement is 50%. \$30,000 minimum and \$300,000 maximum grant request.

DNR Recreation Passport: This grant may be used for development projects only. Match requirement is 25% minimum. \$7,500 minimum and \$150,000 maximum grant request.

FINAL RECOMMENDATIONS & NEXT STEPS

Engineered Designs

The next project phase for the River to River Trail is to garner detailed engineered designs, working towards 75% engineered designs. This phase should also identify the lead agency for trail implementation.

There are several areas that will require further research during the trail design phase:

- ▶ Designs and specifications for trail amenities (e.g. benches, picnic areas, signage for Hwy 131, signage for trailheads and signage for overlooks).
- ▶ Designs and layout of trailheads and of rest areas / overlooks.
- ▶ Locations and design needs for fill, design over wet areas, and installation of railings at higher trail elevations.
- ▶ SHPO (State Historic Preservation Office) investigation as part of grant funding.

It is likely that final design submission for the trail will occur once implementation funds are secured.

The last steps of the R2R Trail project will include construction and then post construction maintenance.

Closing

The River to River Trail will be a great project, serving West Michigan communities and visitors. By removing a major non-motorized transportation barrier, it will become a vital transportation corridor for hikers, bicyclists, and others. Let's keep expanding our regional trail to connect system communities in West Michigan!

Additional Resources

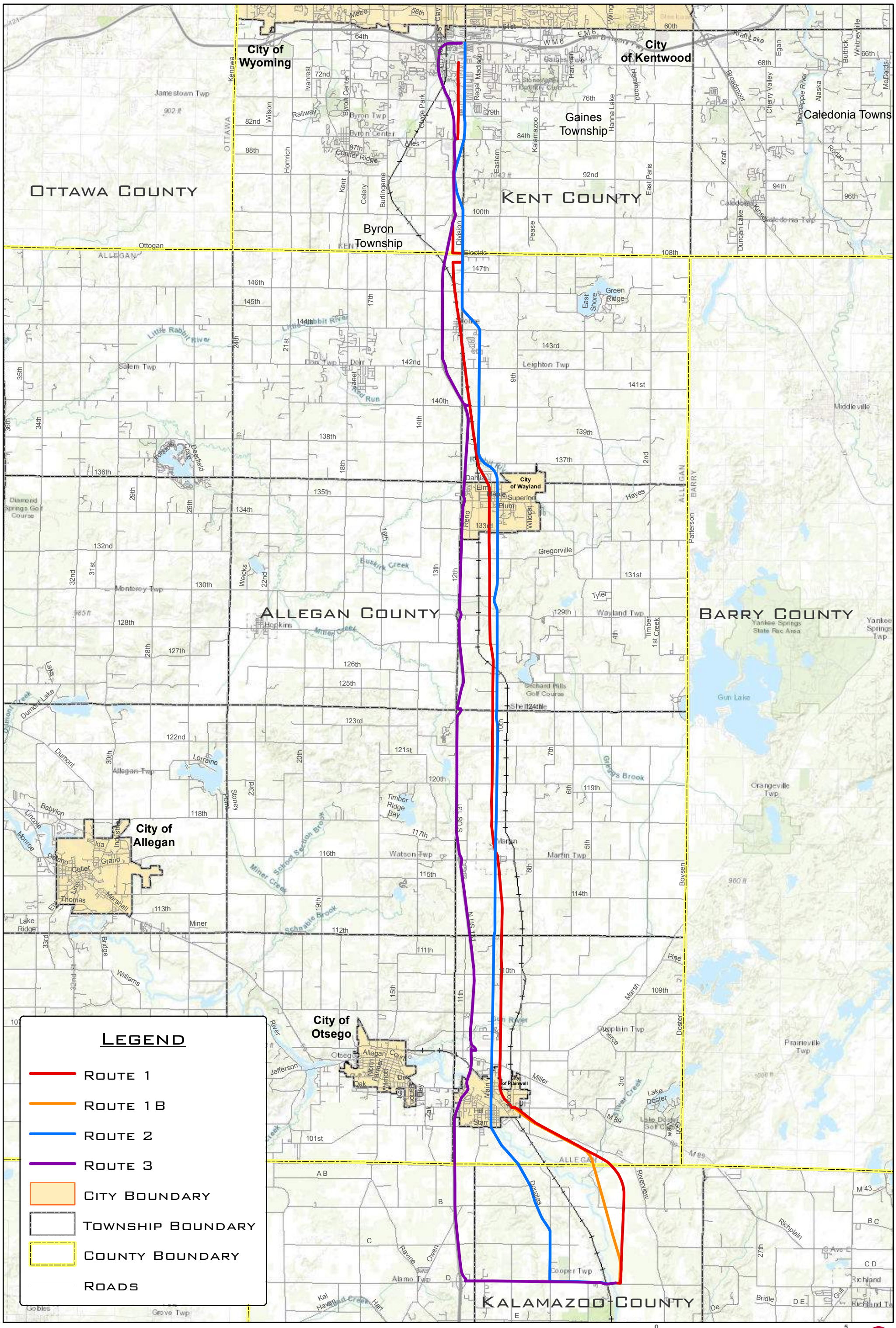
Please see the resources section of this document for more information about Michigan recreation authorities and trail implementation and funding resources.



APPENDICES

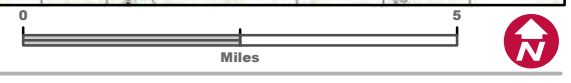
APPENDIX A

Trail Alternatives Map



LEGEND

- ROUTE 1
- ROUTE 1B
- ROUTE 2
- ROUTE 3
- CITY BOUNDARY
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY
- ROADS



APPENDIX B

Stakeholder Meeting Minutes

MEETING 1 MINUTES

PROJECT: TRAIL PLANNING PROJECT
DATE OF MEETING: JANUARY 11, 2016
SUBJECT: MEETING 1

On Wednesday January 11, 2017, trail stakeholders and partners met at Plainwell City Hall at 2pm to discuss the development of a trail that will connect the Kalamazoo River Valley Trail with the Kent County Trails system and eventually to the Grand River Greenway Trail. Below are the minutes from that meeting.

1. Overview of the trail project
 - There are 3 routes we are investigating, each are about 42 miles in length.
 - Route Option #1:* US-131 MDOT right-of-way
 - Route Option #2:* Following County Road 45: Douglas Ave to 10th St (Co Rd 45) to Division St (Co Rd 45) to 12th St (Co Rd 45) to Division Ave S
 - Route Option #3:* Off road following Consumers/ITC lines
2. Collection of Team contact data
 - Please sign in at the front, update any missing or incorrect information
 - Please add anyone to the list who you feel would make a good partner in this project
 - Groups we identified that we would like to add to add to the contact list:
 - Grand Rapids bike groups
 - Grand region MDOT team
 - Spoke Folks
 - ADA groups
3. Scheduling of Meetings 2 through 5 and the public hearing time period
 - Meetings will be the second Wednesday of the month.
 - We set the schedule for upcoming meetings as follows:
 - Meeting 2: February 8, 2017 at 2pm at Plainwell City Hall**
 - Meeting 3: March 8, 2017 at 2pm at Plainwell City Hall
 - Public Information Gathering Time Period: (6 months, 4 meetings, set for April – September).
 - Meeting 4: October 11, 2017 at 2pm at Plainwell City Hall
 - Meeting 5: November 8, 2017 at 2pm at Plainwell City Hall
4. Review of the Champion/Representative Roles
 - You represent your community and constituents, please keep them updated and keep us updated on their feedback
5. Discussion of Project Website
 - We reviewed the project website that will be live in the next few weeks. This website will be live throughout the whole process so that we can gain immediate feedback about what is on people's minds and trends. In the upcoming weeks, you will receive the link to the website to distribute as well as place on all your sites (facebook, etc.) We will also provide blurbs or other plugs you can send out along with the link.
 - The main page scrolls down to all the different areas of the site.
 - As you scroll down you will see areas for community input, notifications for public meetings, background information on the project, a contact form (an email for the project will be set up), news (when articles about this project appear in publications), a link to the projects facebook page, etc.

MEETING MINUTES CONT.

- The mapping area of the site is very interactive, we will set up custom data layers with icons. We will be able to use this mapping feature to gain information and feedback from the local community.

6. Trail discussion & questions

- We had a great discussion of the trail and answered questions.
- Discussed how the phone app “Strava” could be used to show a heat map of areas that are heavily (or not so heavily) used for recreation activities such as biking, running, walking, etc.
- It was discussed that it is possible and may be more advantageous to combine the 3 routes if that appears more advantageous.
- The importance of amenities and passing as close to towns as possible for ways to stop and then bring in commercial sales
- Discussed how jurisdictions along the way may have an influence on the route chosen
- The City of Wayland already have right-of-way secured. They want it on Consumer’s Energy right-of-way. In Wayland township, some property owners are not as interested in having the trail on Consumer’s Energy right-of-way, they may want their section closer to 131.
- An example of how the route was decided for the Kalamazoo River Valley Trail was shared. They divided into teams. The City of Kalamazoo to the west was 1 team, Parchment/Kalamazoo Township and Cooper township were another team and the City of Comstock was the last team. They worked on community trails routes (zoomed into their own community and work out that ideal path) and then they came together to patch all the individual trail routes together. This is a Grass roots approach, it was discussed rather this would work for our trail design/layout discussion.
- We were reminded to think about this project in terms of connectivity, that this is a regional project.
- Zoom into your own community and work out your ideal path. Then come together to patch them all together.
- The state of Michigan is working on doc to qualify for official state trail town and also pure Michigan trail town document, stay tuned.
- Do not think about money at this point in the process, “Dream”
- Corridor along 127 is similar to the corridor along 131 if you need help envisioning the possible trail path.
- The following are links we discussed during the meeting that will be useful to you:
 - Michigan Trails: <http://trailsmichigan.com/>
 - Trail Towns: <https://www.trailtowns.org/>
 - Public GIS Map: <https://wightman-assoc.maps.arcgis.com/apps/webappviewer/index.html?id=f72d14c6c4764abf8028e26abc0717c2>

7. Champion Task: Update community decision makers

- The following are the Champion tasks for Meeting 2:
 - a. Come prepared with public meeting ideas (intent would be different geographical areas to get a cross section of information)
 - b. Start compiling a list of destination/attractions along the trail (to be placed on the website map)
 - c. Share map with your constituents to get their input
 - d. Think about pros and cons of the different trail routes

Any corrections or additions, please forward them to me.
Suzannah Deneau, sdeneau@wightman-assoc.com

MEETING 2 MINUTES

PROJECT: TRAIL PLANNING PROJECT
DATE OF MEETING: FEBRUARY 8, 2017
SUBJECT: MEETING 2

On Wednesday February 8, 2017, trail stakeholders and partners met at Plainwell City Hall at 2pm to discuss the development of a trail that will connect the Kalamazoo River Valley Trail with the Kent County Trails system and eventually to the Grand River Greenway Trail. Below are the minutes from that meeting.

1. Get to know you question & introductions: Did you get a chance to check out the GIS website?
 - About 30-50% of the group did some investigating into the GIS website.
 - It was discussed how notes were added to show conflicts with certain routes. The conflicts pointed out are from a structural point of view, i.e., locations where bridges would need to be installed, locations where the path runs through wetlands, etc.

2. Project Branding Discussion
 - Discussion of what to call this project. The project may not necessarily follow the interurban line so “Interurban Trail” may not be the most appropriate name for the project.
 - We talked about how the name of group does not need to be the same as the name of the trail, we would like to get a name for the planning effort as soon as possible so that we can begin to build the website and blurbs.
 - i. Possible planning effort names that were suggested:
 - Maybe keep it Interurban for now until we receive grants/private donors
 - River to River (Kalamazoo River to Grand River) – This received a lot of positive feedback
 - The idea of integrating the trail naming process within the public input meetings to gain feedback was discussed.
 - i. This idea received good feedback
 - ii. Public naming contest was brought up. It would be similar to a contest a zoo threw for the naming of a baby elephant 40 years ago. It would be a way to get school and the public involved.
 - iii. Possible trail names that were suggested:
 - Kalamazoo-Grand Valley Trail
 - West Michigan Trail
 - Kal-Rapids
 - We discussed whether the group would like a planning effort logo
 - i. The logo can help with referencing the project, it can make it easier for the group to gain a domain name
 - ii. The Conesus from the group was “yes, we should have a logo”
 - iii. Logos will be developed for the planning effort with the name “River to River”

3. Public Meeting Rough Dates & Locations Discussion
 - 6 months, 4 meetings, set for April – September
 - Discussed setting linear locations, times, dates and target audience
 - Location & Date Ideas:
 - Cooper Township in May
 - Byron Township in July
 - Wayland in August
 - Allegan County Fair in September
 - The target audience at each of these meeting would be people in the surrounding communities. Each community leader in the meeting location would oversee reaching out to their constituents.

MEETING MINUTES CONT.

- Discussed setting out a sign-up sheet at our March stakeholders meeting so that we could all sign up volunteer at the various public meetings
 - Idea was brought up to install trail head signs. These signs would be placed at the D Ave trailhead in Kalamazoo and the M-6 trailhead in Grand Rapids. The signs would say something like “Would you like to continue this trail?” and would information about dates and locations of public input meetings as well as pictures.
4. Public Meeting Format Discussion
- There will be interactive stations
 - There will be welcome stations that will include a sign-in sheet with instructions as well as a display board with purpose and goals of planning project
 - There will be large roll out maps that will allow the public to mark challenges, opportunities and destinations with sticker dots.
 - Are there any other ideas of what you would like to see on the maps and/or questions you would like to answered?
 - “How would you use the trail and where”
 - “My favorite place” vs. “Positive aspect”
 - Idea is that people will not be constrained to answering the question in reference to areas near the trail, they may list places like a splash pad, a brewery or a library that are not necessarily immediately connected to the trail.
 - A place where the public can donate funds and/or time with/to the group
 - This will be set up through the website
5. Project Website Discussion
- The project website will be up in March
 - Ideally the website will be handed off to a “friends of the trail group” when the planning project is complete.
 - The website will host an interactive mapping feature that will match the layout of the maps for the public meetings
 - Is there any other content that you would like to see on the website?
 - Graphic showing funds collected for the trail
 - “How Can I Help?” link. Maybe this holds the PayPal account, volunteer opportunities, etc.
 - The website will have a Survey Monkey link; what would you like to include in the survey?
 - Simple questions and trail name ideas
6. Trail Authority Discussion
- Handout was distributed with of information about Authorities
 - We can have other communities come in and discuss Authorities in more depth if the group is interested.
 - It was discussed that the tribe cannot join the authority but they can be a donor
 - We basically just need to know if the group is interested. Go back and talk with your continuants and let the group know what you think and/or any questions you have.
7. Trail Routes Pros and Cons Discussion
- US-131 under and overpass work is unlikely to be approved, however it does not cost anything to be in the right-of-way.
 - Bike trail running right next to US-131 sounds icky. It was noted that we can look at the existing trail running along M-6 for a reference of scale.
 - US-131 route is a good option if it is our only option but it’s not ideal because it does not go provide quiet areas, retail areas, etc. Also, it is not appealing for a leisure activity / ride.
 - How will the trail get across 100th street? Will the trail need run along US-131 at that point? Would we install an overpass across the highway? Interest in the idea of combining the 3 existing corridors.
 - Not liking the idea of riding the US-131 route.
 - Tribe supports the project. They own all the property from GLC to city limits (Reno Drive). They are interested in installing a trail spur and/or portion of the trail route

MEETING MINUTES CONT.

- At Reno Drive and 133rd St on the Interurban trail route, the property owner south of Wayland said he is not interested in a trail running through his property. He has a lease with Consumers. Quite a few property owners have lease agreements with Consumers
- Reviewed pictures in Kalamazoo at D avenue looking North which show consumers prop vs. actual old Interurban trail.
- Okay with a small section of the route being along route 1 (US-131)
- Feels like the cheapest option will be route 3 (Interurban) from a constructability standpoint
- In the City of Wyoming, there is a paved section of the interurban trail currently.
- Off road trail option is our high focus/first choice whenever possible.
- User group is more than just bikers, because of this we should try to minimize amount of trail that goes on roadways so that the trail feels comfortable enough for every user group to use.
- Not everyone is going to go the whole route. People will be use little pieces, some will never use the whole trail.
- Would like safe, good looking, user friendly, quality trail. Trail along US-131 does not provide this. You would be reducing the number of users drastically.
- Entrance points to trail would be reduced with the US-131 route.

List of attendees:

Jennifer Antel
Ray Antel
Anne Armstrong Cusack
Megan Arndt
Larry Brown
Suzannah Deneau
Maxwell Dillivan
Laura Fredrickson

Brandy Gildea
Jim Goodknecht
Tom Hooker
David Jirousek
Dennis Kent
Ron Kopka
Donald Lowell
Tim McLean
Michael Mencarini

Kati Santee
Debbie Sewers
Denise Siegel
Denise Smith
Jeff Sorensen
Larry Stehouwer
Paul Wells
Erik Wilson

Any corrections or additions, please forward them to me. If you didn't check your name off of the sign-in sheet and we missed you, please let me know. Thank you.

Suzannah Deneau, sdeneau@wightman-assoc.com

MEETING 3 MINUTES

PROJECT: RIVER 2 RIVER TRAIL PLANNING PROJECT
DATE OF MEETING: MARCH 8, 2017
SUBJECT: MEETING 3

On Wednesday, March 8, 2017, trail stakeholders and partners met at Plainwell City Hall at 2pm to discuss the development of a trail that will connect the Kalamazoo River Valley Trail with the Kent County Trails system and eventually to the Grand River Greenway Trail. Below are the minutes from that meeting.

1. Introductions
2. Overview of Pros and Cons – Jim Goodknecht
 - Overview of project from the ground with photos from the road
 - It was pointed out that it is 2.5 times more likely that an accident will occur when a trailway crosses many driveway
 - 110th has a large grade issues
3. Discussion of 5-Year Recreation Plan Requirements
 - Need an approved 5-Year Recreation plan to be eligible for grant applications from the MDNR
 - Kalamazoo County has a plan that covers all of the Townships
 - Submittal is due to the MDNR by 3/1 in order to apply for funding in the same year
 - Parts of a Rec Plan
 - Community Description
 - Administrative Structure
 - Inventory of ex. Parks, natural areas, and recreation facilities
 - Description of planning process and public input
 - Goals and objectives
 - Action Program (Schedule)
4. Planning Project Logos
 - This is the logo that was chosen with minor modifications:



5. Public Meeting Dates & Locations
 - Cooper Township Hall, Wednesday, May 17, 2017, 5-7 pm
 - Byron Township Hall, Wednesday, July 12, 2017, 5-7 pm
 - Wayland Union High School Fine Arts Center, Wednesday, August 9, 2017, 5-7 pm
 - Plainwell City Hall, Thursday, September 14, 2017, 5-7 pm
 - Allegan County Fair September, September 8-16, 2017, everyday 11am-10pm

MEETING MINUTES CONT.

- The target audience at each of these meeting would be people in the surrounding communities. Each community leader in the meeting location would oversee reaching out to their constituents.
- Attendees signed up for volunteering at meetings, **contact Max Dilivan, williams&works, (616) 224-1500, Dillivan@williams-works.com if you are interested in helping out at any of the events.**
- Darcy to check with Allegan County Historic Society to see if we can have a table within their building so we would not be required to man the booth the entire fair. We would focus on having people to man the table from 2-6 pm everyday and on weeks. This may be more doable for the group.

6. Project Website and Facebook Premiere

- Website: www.r2rtrail.org
- Facebook: www.facebook.com/r2rtrailplan
- If you haven't looked at the website or followed the facebook page, please do so!

7. Cooper and Byron Township Signage

- Suzannah to investigate trail head signs to advertise planning project and public meeting dates and locations. The signs would say something like "Would you like this trail to continue North and South?" and would provide information about dates and locations of public input meetings as well as pictures.
- See last page for example of signage.

8. Champion Tasks

- Update your Community decision makers
- Tell everyone about the public meetings
- Share links to the website and Facebook page

List of attendees:

Ray Antel

Don Black

Larry Brown

Suzannah Deneau

Maxwell Dillivan

Darcy Doezema

Brandy Gildea

Jim Goodknecht

Michael Mencarini

John Morrison

Paul Selden

Debbie Sewers

Denise Siegel

Larry Stehouwer

Mike VanDenBerg

Paul Wells

Any corrections or additions, please forward them to me. If you didn't check your name off of the sign-in sheet and we missed you, please let me know. Thank you.

Suzannah Deneau, sdeneau@wightman-assoc.com

APPENDIX C

Public Meeting Results Boards

Would you like to see this trail continue north?



Find out how:
www.r2rtrailplan.org

Check us out on Facebook @R2RTrailPlan

Or come give us your input in person!

	WHEN	WHERE
Public Meeting #1	Wednesday, May 17, 2017	Cooper Township Hall 1590 D Avenue West Kalamazoo, MI 49009
Public Meeting #2	Wednesday, July 12, 2017	Byron Township Hall 8191 Byron Center Ave SW Byron Center, MI 49315
Public Meeting #3	Wednesday, August 9, 2017	Wayland Union High School Fine Arts Center 850 E Superior St Wayland, MI 49348
Public Meeting #4	Thursday, September 14, 2017	Plainwell City Hall 211 N Main St Plainwell, MI 49080

HOW WOULD YOU LIKE TO USE THIS TRAIL?



Place a dot next to the ways you feel you would like to use this trail.

BICYCLE

107

FOOT (WALK/RUN/JOG)

71

SKI/SNOWSHOE

31

ROLLERBLADE

14

WHEELCHAIR/HANDCYCLE

12

HORSE

6

OTHER

6

SNOWMOBILE

2



WHAT TYPE OF TRAIL SHOULD WE BUILD?

4

Trails come in all different surfaces. Place a dot next to your top choice of what material should be use to construct this trail.

78

ASPHALT (HMA)



Examples: Kalamazoo River Valley Trail (pictured left) and Plaster Creek Trail (pictured right)

- >> \$2.00 per square foot (\$2,000 for 100 foot length by 10 foot wide trail)
- >> PROS: Best initial surface (smooth, no cracks), and cheaper than concrete in initial cost.
- >> CONS: Requires crack sealing and patching after a few years, milling and resurfacing after about 20 years, maintenance and repair will likely require paid contractor services (or a contractor who is willing to volunteer services), and edges have a tendency to crack with vegetation growth.



Examples: Kal-Haven Trail (pictured left) and Fred Meijer Clinton-Ionia-Shiawasee Trail (pictured right)

- >> \$1.00 per square foot (\$1,000 for 100 foot length by 10 foot wide trail)
- >> PROS: More natural looking, good for flat areas, softer on joints, cheaper initial installation cost, yearly maintenance and repairs are much less expensive, lifespan is much longer, and much of maintenance can be done by volunteers.
- >> CONS: Annual maintenance needed to regrade, add gravel, and possibly weed control; difficult to maintain consistent surface quality; tends to erode in rain events; migrates on steep slopes; difficult to ride bikes on slopes and in loose gravel; and very difficult to meet ADA surface standards.



Examples: Fred Meijer Standale Trail (pictured left) and Butterworth Trail (pictured right)

- >> \$4.20 per square foot (\$4,200 for 100 foot length by 10 foot wide trail)
- >> PROS: Requires least amount of maintenance, will last longer than HMA (nearly twice as long), best ADA surface long-term, material does not wash out during heavy rains or break apart, cleaner surface during and after rain events (keeps trail users clean as well and less wear and tear on bikes), does not put tons of gravel in creeks and natural areas after rain events, and is good for steep slopes.
- >> CONS: More expensive (initial installation), harder on joints for runners, and is less natural looking.

29

AGGREGATE



Examples: Kal-Haven Trail (pictured left) and Fred Meijer Clinton-Ionia-Shiawasee Trail (pictured right)

- >> \$1.00 per square foot (\$1,000 for 100 foot length by 10 foot wide trail)
- >> PROS: More natural looking, good for flat areas, softer on joints, cheaper initial installation cost, yearly maintenance and repairs are much less expensive, lifespan is much longer, and much of maintenance can be done by volunteers.
- >> CONS: Annual maintenance needed to regrade, add gravel, and possibly weed control; difficult to maintain consistent surface quality; tends to erode in rain events; migrates on steep slopes; difficult to ride bikes on slopes and in loose gravel; and very difficult to meet ADA surface standards.



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- >> CONS: More expensive (initial installation), harder on joints for runners, and is less natural looking.

8

CONCRETE



Examples: Fred Meijer Standale Trail (pictured left) and Butterworth Trail (pictured right)

- >> \$4.20 per square foot (\$4,200 for 100 foot length by 10 foot wide trail)
- >> PROS: Requires least amount of maintenance, will last longer than HMA (nearly twice as long), best ADA surface long-term, material does not wash out during heavy rains or break apart, cleaner surface during and after rain events (keeps trail users clean as well and less wear and tear on bikes), does not put tons of gravel in creeks and natural areas after rain events, and is good for steep slopes.
- >> CONS: More expensive (initial installation), harder on joints for runners, and is less natural looking.

WHICH ALIGNMENT DO YOU PREFER?



Place a dot next to your preferred alignment

16

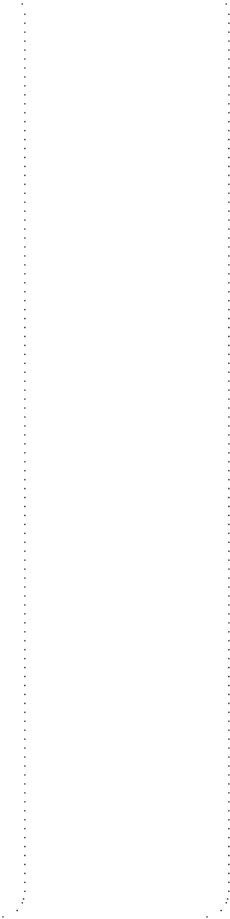
ROUTE 1
FORMER INTERURBAN/CONSUMERS ENERGY

55

ROUTE 1B
FORMER INTERURBAN LINE (SOUTHERN SEGMENT)

3

ROUTE 2
DOUGLAS AVE/A-45/DIVISION AVE



APPENDIX D

Public Input Comment Summary

Comment Number	Comment Location ID	District ID	Comment Date	Name	Email	Lat	Long	Upvotes	Downvotes	Reply	Comment Type	Comment
11	74	North	3/23/2017 6:32	Andrew Triggs	andrew.triggs@gmail.com	42.84089	-85.6725	7			Opportunities	I'd love to see this part of the M-6 trail diverted off of 68th with this construction. There has to be a way for the trail to cross 131 without having to ride on the road.
100	86	North	5/18/2017 19:06	Steve Gortsema	steve.gortsema@gmail.com	42.82499	-85.6669	5			Challenges	I know right-of-ways may be prohibitive, but I would love to see as much of this trail be off-road as possible, i.e. route 1 far preferable to route 2 in my opinion.
17	81	South	4/25/2017 13:27	Tom Duisterhof	tomd@gordonwater.com	42.41566	-85.5744	5	1		Opportunities	First of all the overall proposal is fantastic. I like route 1B or 1 as they are not adjacent to a road. More natural experience. I know maintenance costs could increase but I think a better ride experience.
19	85	North	5/18/2017 16:19	Jon Schneider		42.81225	-85.7289	4			Opportunities	It would be nice if the trail could be extended south from here! I understand that it might not be possible, though.
42	48	South	3/10/2017 15:29	Jim Goodknecht		42.40549	-85.5823	3			Information	East B Avenue view is SE
2	14	South	3/8/2017 6:53	Anonymous		42.37972	-85.6003	2			Opportunities	Consider 17th street vs Douglas
59	19	South	3/8/2017 7:02	Anonymous		42.3789	-85.5809	2			Challenges	RR crossing and steep hill at D Avenue near end of KRVT
1	20	South	3/8/2017 18:27	Jim Goodknecht	goodpair@earthlink.net	42.44296	-85.6315	2			Challenges	Bringing the trail down the sidewalk is a bad idea. The sidewalk is narrow and is used for pedestrians. It cannot be widened because of power poles and private property. In addition you have an entrance to The Old Mill, a very busy driveway, going into the Mill parking lot and further west Plainwell Ice Cream which is like a zoo from April to October. This area would be extremely problematic. There needs to be a well engineered crossing of M-89 with maybe an island in the center of M-89 and user operated flashing lights with appropriate advanced signage and signage at the crossing. The trail could then continue north on Consumers property parallel to Acorn St and then cross Acorn at a point to line up with Broad Street again using Consumers Energy ROW. There would need to be a pedestrian crossing of the Grand Elk Railroad to access Broad Street.
5	23	North	3/9/2017 11:07	Bruce Patrick	Bruce@openroadbrewing.com	42.67234	-85.6329	2			Opportunities	Bringing the trail through Wayland will be great for Wayland businesses. Open Road Brewery downtown Wayland fully supports the effort. Keep up the good work!
14	77	Central	4/19/2017 20:59	Jon Bush	jbushwmu@gmail.com	42.48045	-85.6326	2			Opportunities	106th to 110th is an excellent section of trail. It includes a historic Interurban rail bridge over the Gun River, a nice set of sandy dunes, and a view of rolling hills and a horse farm. The trail is already intact and usable. There is an access point that comes off the trail just south of 110th that could conceivably bypass the elevation issue at 110th. The 110th to 112th section is also very pretty. It rises above a creek for awhile then and connects nicely to the trail at 112th. The trail then proceeds with little elevation variation to Martin, going past the somewhat visible ruins of the old Monteith Junction railroad station (just north of 114th).
15	78	Central	4/19/2017 21:00	Jon Bush	jbushwmu@gmail.com	42.51399	-85.6369	2			Opportunities	This is a beautiful view off the trail just north of 114th.
16	79	South	4/19/2017 21:07	Jon Bush	jbushwmu@gmail.com	42.44577	-85.6348	2			Opportunities	There is good access to the trail at ThurI Cook Park, along with decent parking. Sherwood Park (playground, portable restrooms, scenic trestle bridge, Veterans' Memorial, Deans' Ice Cream) is only a short walk away.
61	18	South	3/8/2017 7:00	Anonymous		42.37687	-85.582	1			Challenges	RR crossing and steep hill
62	22	Central	3/9/2017 8:21	Jim Goodknecht	goodpair@earthlink.net	42.49353	-85.6375	1	1		Challenges	The elevation of 110th Street is significantly higher than the Consumers Interurban roadbed and will require a culvert going under 110th.
30	31	South	3/10/2017 10:22	Jim Goodknecht	goodpair@earthlink.net	42.44297	-85.6326	1			Destinations	Plainwell Ice Cream is a landmark in Plainwell. People come from around the state to sample all the wonderful flavors they offer.
91	47	South	3/10/2017 15:27	Jim Goodknecht		42.40535	-85.5728	1			Information	Consumers Route at E B Avenue facing South
42	59	Central	3/11/2017 10:56	Jim Goodknecht	goodpair@earthlink.net	42.53639	-85.6413	1			Destinations	Village of Martin. Offers many services for users of the River 2 River trail which is projected to go through downtown Martin.
63	61	South	3/11/2017 11:53	Jim Goodknecht	goodpair@earthlink.net	42.44287	-85.6297	1			Challenges	A well engineering crossing of M-89 at this location needs to be implemented. M-89 is approximately 38 feet wide at this point. Crossing could include an island along with user operated traffic signal or flashing yellow lights. Appropriate signs in advance of the crossing and at the crossing must be part of the design.
7	63	North	3/11/2017 11:59	Christopher Jensen	cajensen.esq@gmail.com	42.80655	-85.5364	1			Opportunities	Existing trail to Caledonia here. possibility to route trail south through Yankee Springs Rec Area?
98	70	South	3/12/2017 8:17	Jim Goodknecht		42.443	-85.6436	1			Information	River 2 River Trail will be connected to downtown Plainwell across a railroad trestle and along a paved walkway along the Kalamazoo River. Pedestrian/bike tunnel underneath 131 (similar to the one on the west side just north of downtown Grand Rapids) and run the trail off 92nd St which sees little to no traffic.
8	71	North	3/15/2017 21:14	Anonymous		42.7972	-85.6687	1			Opportunities	
9	72	North	3/15/2017 21:15	Anonymous		42.79742	-85.691	1			Opportunities	If the trail were to be run underneath US-131 at 92nd Street, the trail could begin traveling north here which is owned by MDOT.
10	73	North	3/15/2017 21:36	Anonymous		42.8114	-85.6979	1			Opportunities	Utilize the Byron Public Schools property and create a safe crosswalk facility for bikes and pedestrians to get across 84th Street safely to reach the trailhead at Douglas Walker Park. This would reach the Kent Trails network.
12	75	North	4/7/2017 19:52	Cate		42.68493	-85.4591	1			Opportunities	This sounds great!!!
18	83	North	5/5/2017 8:31	Seth		42.83695	-85.6672	1			Opportunities	Staying off Division is a good idea, so use Route 1
47	84	South	5/17/2017 20:04	Matthew Bradley	mcbBrad61@gmail.com	42.44208	-85.6421	1			Destinations	Plainwell Diner is no more. In July of 2017, however, The Barb Wire Cafe will "rise from the ashes" at that location.
20	91	South	7/8/2017 10:20	Anonymous		42.41636	-85.7565	1			Opportunities	Why not a camping spot with two or three sites with a water pump?
21	92	Central	7/9/2017 13:21	chuck morgan	tayburlin@yahoo.com	42.63737	-85.6808	1			Opportunities	Why not use the old railroad bed from Byrron to Hopkins instead of inhaling carbon monoxide along m131 all the way to Kalamazoo? More serene and scenic.
102	14	South		Anonymous		42.37972	-85.6003			yes		Is it possible to go along the river between D Ave and Plainwell on the west side where they worked on the river and left paths for their equipment
3	15	South	3/8/2017 6:54	Anonymous		42.37865	-85.5523				Opportunities	Consider D and Riverview to Plainwell
60	16	South	3/8/2017 6:56	Anonymous		42.38258	-85.5818				Challenges	steep hill on D ave for cyclist also RR crossing needed
4	17	South	3/8/2017 6:58	Anonymous		42.37383	-85.5905			1	Opportunities	follow N Westnedge to D avoid hill
103	17	South				42.37383	-85.5905			yes		Agree! D Ave hill is way too steep for a trail
104	17	South				42.37383	-85.5905			yes		This proposed route follows mostly existing roads all the way to Grand Rapids. This allows the the bicyclist to inhale as much car exhaust as is possible compared to the other routes. If that is what you want to do on your day off, then vote for this route. I prefer to be away from roads when exercising as much as possible. The scenery is much better, the route more interesting, and the air cleaner.
104	18	South				42.37687	-85.582			yes		This location for a trail is simply not feasible. There are sections of this hill that exceed a 10% gradient which is outside the abilities of 85% of users and would not pass ADA guidelines.
105	18	South				42.37687	-85.582			yes		I agree and would probably not use the trail, at all, if it followed douglas. Too many other great trails. However, the trail does already cross the Railroad at the trail head on D ave at the river.
28	21	South	3/9/2017 5:15	Jim Goodknecht	goodpair@earthlink.net	42.44299	-85.6317				Destinations	Very unique restaurant constructed from an old grain mill. Inside has exposed beams and the old grain chutes. Owner has preserved the inner workings during construction. Beer is brewed on site and there is tasting room. Food is also very good.
106	22	Central								yes		Does an alternate possibility allow for the building up of the trail to the height of 110th street to avoid the expected higher cost of building a culvert large enough for bicycle traffic?

Comment Number	Comment Location ID	District ID	Comment Date	Name	Email	Lat	Long	Upvotes	Downvotes	Reply	Comment Type	Comment
107	22	Central								yes		Kevin, as an old biker dude, building up the Interurban roadbed to the height of 110th Street on the north and south sides would require a substantial amount of fill dirt, not to mention guard rails due to the elevation of the trail. A ramp would be required to meet all ADA requirements. I certainly am not an engineer but it would seem that a tunnel would be less costly and eliminate trail users having to cross 110th Street. In the near future, this will be "engineered" by a company much smarter about this stuff than I am. Thanks for taking the time to become involved in this process - Jim
83	28	South	3/10/2017 5:40	Jim Goodknecht	goodpair@earthlink.net	42.37596	-85.5792				Information	Existing Kalamazoo River Valley Trail heading East across the D Avenue Bridge over the Kalamazoo River toward proposed River to River trail going north toward Plainwell.
29	32	South	3/10/2017 10:45	Jim Goodknecht	goodpair@earthlink.net	42.44278	-85.6418				Destinations	Downtown Plainwell has a good selection of retail businesses, restaurants, banks, a jeweler, drugstore, and so forth. There are numerous areas to access view of the Kalamazoo River and the Millrace that passes the old Plainwell Paper Company which houses the Plainwell City Hall along with several businesses.
31	33	South	3/10/2017 10:56	Jim Goodknecht	goodpair@earthlink.net	42.44467	-85.6425				Destinations	The Plainwell City Hall is located in the old Plainwell Paper Company building. It is highly suggested that visitors go inside and view some of the unique displays and the buildings unique interior.
32	39	South	3/10/2017 14:16	Jim Goodknecht	goodpair@earthlink.net	42.44476	-85.638				Destinations	Deans Ice Cream is an old ice cream parlor offering creative cones, sundaes & other desserts. They also have burgers and fries. The building is located directly on the Kalamazoo River. Stop by and get a ice cream treat and relax in Sherwood Park which is located right next door.
84	40	South	3/10/2017 15:12	Jim Goodknecht		42.43891	-85.6222				Information	Consumers crossing 8th St. facing NW
85	41	South	3/10/2017 15:17	Jim Goodknecht		42.43815	-85.6219				Information	Interurban crossing 8th St. facing SE
86	42	South	3/10/2017 15:18	Consumers crossing Riverview		42.43117	-85.6035		1		Information	Consumers crossing Riverview facing NW
87	43	South	3/10/2017 15:20	Interurban crossing Riverview		42.43112	-85.6039				Information	Interurban crossing Riverview facing NW
88	44	South	3/10/2017 15:23	Jim Goodknecht		42.42498	-85.5874				Information	Consumers crossing 4th St. facing SE
89	45	South	3/10/2017 15:25	Jim Goodknecht		42.42037	-85.5882				Information	Interurban Crossing 4th St. facing NW. Note old rails in foreground.
108	45	South				42.42037	-85.5882			yes		Gee, somebody took a pick in my front yard! I own and maintain this small piece of the old railway.
109	45	South				42.42037	-85.5882			yes		Although this shot is beautiful, the view is actually looking south east, and it is taken from the front yard of a house where the old interurban line used to cross. This house was built at an old train stop, but is not a single family residence and this proposed path would bisect their front yard.
110	45	South				42.42037	-85.5882			yes		Well, currently it is used by horse traffic only. In this case, it the bicyclists who wish to usurp its use from the equestrians.
90	46	South	3/10/2017 15:26	Jim Goodknecht		42.42006	-85.5882				Information	Interurban Crossing at 4th Street facing SE
93	49	South	3/10/2017 15:30	Jim Goodknecht		42.37642	-85.5739				Information	At D Avenue facing North Both Consumers and Interurban parcels are separated
111	49	South				42.37642	-85.5739			yes		I don't want to ride under power lines if I can avoid it. Other routes avoid these.
35	52	South	3/11/2017 8:20	Jim Goodknecht	goodpair@earthlink.net	42.44524	-85.6419				Destinations	Fanny Pell Park in downtown Plainwell adjacent to the Plainwell City Hall. Nice place to relax by the Kalamazoo River.
112	52	South				42.44524	-85.6419			yes		Located north of downtown, where the Mill Race and Kalamazoo rivers meet. Fannie Pell Park is a one acre landscaped park located at the northern end of the Central Business District on Main Street. The park contains a gazebo (frequently used for weddings), picnic tables, canoe and kayak landing, and City Hall entrance.
36	53	South	3/11/2017 8:27	Jim Goodknecht	goodpair@earthlink.net	42.44411	-85.6436				Destinations	Plainwell Paper Company Redevelopment Project
37	54	South	3/11/2017 9:29	Jim Goodknecht	goodpair@earthlink.net	42.44683	-85.653				Destinations	Borgess Pipp Hospital. A full service hospital with an Emergency Room.
38	55	Central	3/11/2017 9:39	Jim Goodknecht	goodpair@earthlink.net	42.63038	-85.6575		1		Destinations	Gun Lake Casino. Numerous restaurants, hotel rooms, and games of chance a short distance from the River 2 River Trail.
40	57	Central	3/11/2017 9:42	Jim Goodknecht	goodpair@earthlink.net	42.59448	-85.6424		1		Destinations	Shelbyville Tavern directly adjacent to the proposed River 2 River Trail. Excellent Food!
41	58	Central	3/11/2017 9:46	Jim Goodknecht	goodpair@earthlink.net	42.46892	-85.6418				Destinations	4 Roses Restaurant. Excellent food. Located a short distance from the proposed River 2 River Trail.
113	58	Central				42.46892	-85.6418			yes		This is not a bike friendly road.
6	60	South	3/11/2017 11:34	Jim Goodknecht	goodpair@earthlink.net	42.42028	-85.5881			1	Information	Beautiful section of the old Interurban Railroad. View is at 4th St./19th St., looking SE.
114	60	South				42.42028	-85.5881			yes		Yep, pretty spot, runs right over Silver Creek as well where many fisherman catch trout. Unfortunately, if you turn around, you will see that this path runs right through the center of the front yard of one of the houses along this proposed route, which is probably not what that family would prefer.
115	61	South				42.44287	-85.6297			yes		Please conduct actual gap studies of the current traffic on the roadway to assess what kind of gaps exist now. Helps measure what level of investment is needed
43	62	South	3/11/2017 11:58	Jim Goodknecht	goodpair@earthlink.net	42.4427	-85.6418				Destinations	Downtown Plainwell looking North
116	63	North				42.80655	-85.5364			yes		I also support moving the proposals east to pass through Caledonia via the Paul Henry Trail. Would nicely link Yankee Springs into the network.
117	63	North				42.80655	-85.5364			yes		Another vote for a connection to Yankee Springs!
118	63	North				42.80655	-85.5364			yes		Love the idea of connecting this area eventually, but may not be practical to be part of this project.
44	64	South	3/11/2017 12:00	Jim Goodknecht	goodpair@earthlink.net	42.44395	-85.6419				Destinations	Downtown Plainwell
45	65	South	3/12/2017 5:33	Jim Goodknecht	goodpair@earthlink.net	42.44276	-85.6428				Destinations	Hicks Park located directly on the Kalamazoo River. Accessed via walkway from Plainwell City Hall under the M-89 bridge, and along side the river. Located downtown on West Bridge Street. Hicks Park is the oldest park within the city, dating back to 1903, and was named after Joseph Hicks, Plainwell's first Mayor. This beautifully landscaped one acre park is located in the Central Business District, and offers accessible walkways with seating, picnic tables, grills, and a children's playground.
119	74	North				42.84089	-85.6725			yes		I was here Tuesday, and the trail disappeared at 68th street. I had no idea I was supposed to be on the sidewalk. Luckily the cars on 68th street were courteous to me on the road. Would love to see a proper path or at least sharrow.
13	76	North	4/13/2017 16:53	Toni Marcoux	Tonim1968@icloud.com	42.67638	-85.5773				Opportunities	I would love a walk path close to Dorr. Run or bike and not have to worry about traffic.
120	79	South				42.44577	-85.6348			yes		Dog Park coming Spring 2018 to this location.
99	80	South	4/25/2017 6:00	Gino Schafer		42.37659	-85.5742				Opportunities	I prefer this rout to avoid the power lines and stick closer to the river.
121	81	South				42.41566	-85.5744			yes		1 or 1B are natural rides. I mistakenly referred to 2.
122	81	South				42.41566	-85.5744			yes		I would agree. I like 1 or 1B. Prefer 1 because it uses infrastructure already available and somewhat maintained. Might be less costly and more speedy to put up! My bike is ready to hit these trails!!!!
46	82	North	4/28/2017 14:30	Phil Doorlag		42.67559	-85.6458				Destinations	City of Wayland recently constructed a splash pad in their City Park.
64	87	Central	6/24/2017 18:57	Anonymous		42.61476	-85.6444				Challenges	Route 1 will run through my neighbors yards within 100 feet of the house. This does not make anyone feel safe. This is south of wayland all the way to Martin.
123	87	Central				42.61476	-85.6444			yes		There are numerous studies that show that trail development does not bring crime and in fact creates a safer more community focused atmosphere. Oftentimes trails are met with kind of criticism, which is very understandable from adjacent landowners, but time after time landowners actually become the strongest proponents of the trail because of the sense of community and benefits that the trail brings. Many communities are looking forward to the completion of the this trail, bringing transportation and recreation opportunities to the area. Trails are the future!
124	87	Central				42.61476	-85.6444			yes		It might be helpful if some current owners of property adjacent to trails would offer to talk with concerned landowners.
65	88	North	6/30/2017 16:03	Jenifer		42.84133	-85.6671				Challenges	Most of the time the only way to cross 68th street right here is to cross 2 lanes of traffic and then wait in the left turn lane until you can cross the other 2 lanes.
48	90	South	7/7/2017 20:04	Alice		42.36159	-85.7449				Destinations	I'd love to see this trail continue to the city of Allegan. Allegan is worker by hard to restore its existing city while growing and adding attractions. There is now zip lining and other things downtown in the works.

Comment Number	Comment Location ID	District ID	Comment Date	Name	Email	Lat	Long	Upvotes	Downvotes	Reply	Comment Type	Comment
66	93	South	7/9/2017 16:38	Kevin Patmore	kpat66@gmail.com	42.41072	-85.5844				Challenges	This route will take the trail right through the back yard of families who live out here for the peace and quiet. Route 1 does not come near any existing houses.
125	93					42.41072	-85.5844			yes		The Musketawa Trail has a similar path near farmland between Marne and Ravenna. The noise from air cannons sounding to keep birds away from fields was louder than anything I have ever heard from humans using the trail. Persons using the trail would be on bikes, rollerblades, skateboards and will likely cause no more disruption than the occasional passing ambulance.
67	94	South	7/9/2017 16:41	Kevin Patmore	kpat66@gmail.com	42.42137	-85.5887				Challenges	This a beautiful and scenic part of the route. Unfortunately, in this location, it runs at an angle right through this families front yard. They are set back about 200 feet from the road where the proposed trail would cross their drive about half the way to their house, bisecting their front yard.
68	95	South	7/9/2017 16:43	Kevin Patmore	kpat66@gmail.com	42.42618	-85.592				Challenges	This trail is currently used by the neighbors in the area for horseback riding under permission of the owners along the trail. Will accommodations for the continued use on horseback be permitted under the proposed trail use?
126	95	South		Jerry		42.42618	-85.592			yes		If horses are allowed on soft surfaces like pea gravel or crushed limestone, no one else will enjoy the trail due to horse hoof damage. You might as well just design a horse trail. I recently tried to bike the Pere Marquette trail from Reed City to Baldwin but had to give up and ride back on roads. The gravel trail was unfit due to horse damage and no one seems to care.
127	95	South		Kevin Patmore		42.42618	-85.592			yes		Well, currently it is used by horse traffic only. In this case, it the bicyclists who wish to usurp its use from the equestrians.
128	95	South		Kevin Patmore		42.42618	-85.592			yes		My wife loves the idea of designing a horse specific trail. Although that is exactly what she has now. Me, I prefer the find a way to do both so we can all enjoy the rural outdoors.
129	95	South		Jim Goodknecht		42.42618	-85.592			yes		Kevin, thanks for your input. Concerns regarding the trail accommodating horses was communicated during the public meeting held in Cooper. The planning group will certainly add this to their lists of things to review during the planning process.
69	96	South	7/9/2017 16:44	Kevin Patmore	kpat66@gmail.com	42.43115	-85.6038				Challenges	Speed limit here is 55mph. Cars regularly are going 60 mph and above.
101	97	South	7/9/2017 16:53	Kevin Patmore	kpat66@gmail.com	42.41858	-85.5762				Opportunities	Proposed Route 1 is preferred in this area by the people and families who live along Proposed Route 1B as it keeps the trail further from the houses. Although Rte 1 may be locally more picturesque, it possible it will introduce disturbances in a quiet and secluded area.
70	98	South	7/9/2017 16:59	Kevin Patmore	kpat66@gmail.com	42.41674	-85.5749				Challenges	Proposed Route 1 is preferred by the neighbors who live along this part of Proposed Route 1B. Route 1B would come very close to several of the properties and in one case would bisect a front yard. Proposed Route 1 does not introduce these close passings through this very quiet area but rather runs through remote farming areas.
71	99	North	7/11/2017 7:38	Anonymous		42.76565	-85.6676				Challenges	bisects Auto Auction West Michigan property
22	100	South	10/9/2017 13:09	Anonymous		42.44307	-85.6302				Opportunities	Potential trail head location
72	101	South	10/9/2017 13:52	Anonymous		42.44764	-85.6344				Challenges	Contaminated site
49	102	North	10/9/2017 14:00	Anonymous		42.6721	-85.6484				Destinations	Skate park near downtown Wayland
50	103	North	10/9/2017 14:00	Anonymous		42.67803	-85.6355				Destinations	Rabbit River Nature Trail
23	104	North	10/9/2017 14:09	Anonymous		42.84266	-85.676				Opportunities	Trailhead and MDOT Park-and-Ride near US-131 north of 68th Street
51	105	North	10/9/2017 14:19	Anonymous		42.84051	-85.675				Destinations	Cranker's Brewery
73	106	North	10/9/2017 14:23	Anonymous		42.83845	-85.6633				Challenges	Traffic volumes and speeds are very high along Division Avenue between 68th Street and 84th Street
74	107	North	10/9/2017 14:26	Anonymous		42.79498	-85.6675				Challenges	Vehicles traveling too fast (Division Ave. near 92nd)
24	108	North	10/9/2017 14:36	Anonymous		42.78258	-85.6684				Opportunities	A spur off 100th Street over to Byron Center would be a great idea!
52	109	North	10/9/2017 15:15	Anonymous		42.73786	-85.6601				Destinations	Leighton Township Park (near downtown Moline)
25	110	North	10/9/2017 15:17	Anonymous		42.72432	-85.6669				Opportunities	Rideshare parking lot off 142nd Ave. Could be a future trailhead.
53	111	North	10/9/2017 15:19	Anonymous		42.72329	-85.6786				Destinations	Bysterveld Park (county park)
54	112	North	10/9/2017 15:20	Anonymous		42.7246	-85.7052				Destinations	5 Lakes Brewing Company near Dorr
55	113	North	10/9/2017 15:21	Anonymous		42.67325	-85.6434				Destinations	OpenRoad Brewing Company in downtown Wayland
56	114	North	10/9/2017 15:29	Anonymous		42.62322	-85.5392				Destinations	Gun Lake and Yankee Springs (connect via spur in the future)
75	115	Central	10/9/2017 15:31	Anonymous		42.61124	-85.6442				Challenges	Railroad crossing
26	116	Central	10/9/2017 15:33	Anonymous		42.59418	-85.6374				Opportunities	Lodging for bikers looking to do multi-day treks (Comfort Inn Suites off 124th near Shelbyville)
57	117	Central	10/9/2017 15:34	Anonymous		42.59423	-85.6362				Destinations	Artsy shops in downtown Shelbyville
76	118	Central	10/9/2017 15:38	Anonymous		42.56444	-85.6439				Challenges	Landlocked parcel to the west used for farming; local farmers use this part of the Interurban to get farm equipment onto the site
27	119	Central	10/9/2017 15:42	Anonymous		42.53984	-85.6414				Opportunities	Veteran's Memorial Park in downtown Martin could be a future trailhead
77	120	Central	10/9/2017 16:59	Anonymous		42.50599	-85.6375				Challenges	Farmers use Interurban Trail south of 112th Ave to access landlocked farms
78	121	Central	10/9/2017 17:00	Anonymous		42.49495	-85.6417				Challenges	Wetlands/ponds make Route 2 difficult north of 110th Ave
79	122	Central	10/9/2017 17:02	Anonymous		42.49229	-85.6373				Challenges	Flooding issues with wetlands nearby Route 1 south of 110th Street
80	123	Central	10/9/2017 17:03	Anonymous		42.48382	-85.6375				Challenges	Dirt bikers use this section of the Interurban Trail south of 110th Street near Plainwell
58	124	South	10/9/2017 17:06	Anonymous		42.44297	-85.633				Destinations	Nancy's Kitchen Cafe in Plainwell
81	125	South	10/9/2017 17:07	Anonymous		42.43741	-85.6214				Challenges	Proposed trail runs through residential property near the house
82	126	South	10/9/2017 17:10	Anonymous		42.40096	-85.6145				Challenges	Fast moving vehicles on Douglas Ave make this road unappealing for a bike trail
102	127	North	10/9/2017 17:11	Anonymous		42.67325	-85.6434				Challenges	Right-of-way width through Downtown Wayland is narrow and would be difficult to accommodate an on-street bike lane that made anyone feel safe

APPENDIX E

Community One Pagers



River to River Trail Plan

Cooper Township

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes one section for a total of **3.35 miles of 35 total miles** of trail along Consumers property in Cooper Township. The trail extends from D Ave, just west of the Kalamazoo River, north to the northern township border

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 3.35 miles

Estimated Construction Cost in 2018: \$252,000 per mile

Limestone Reduction: -\$62,000 per mile

Additional Estimated Construction Cost for Alternate Route 1b in 2018: \$34,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate. Also calculated was the reduction for utilizing limestone in lieu of asphalt.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

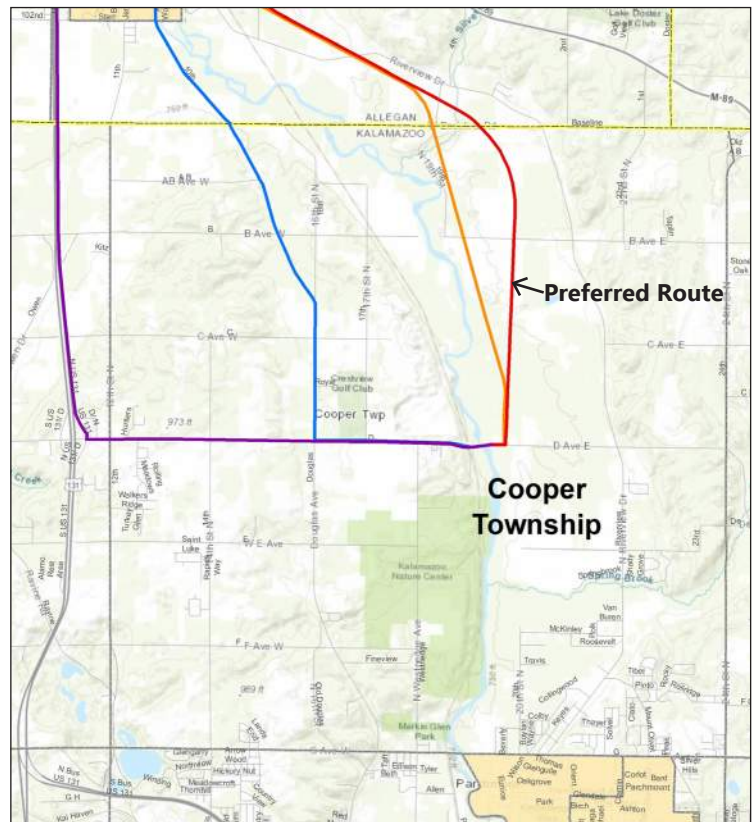
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2trailplan.org

[facebook.com/r2trailplan](https://www.facebook.com/r2trailplan)

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

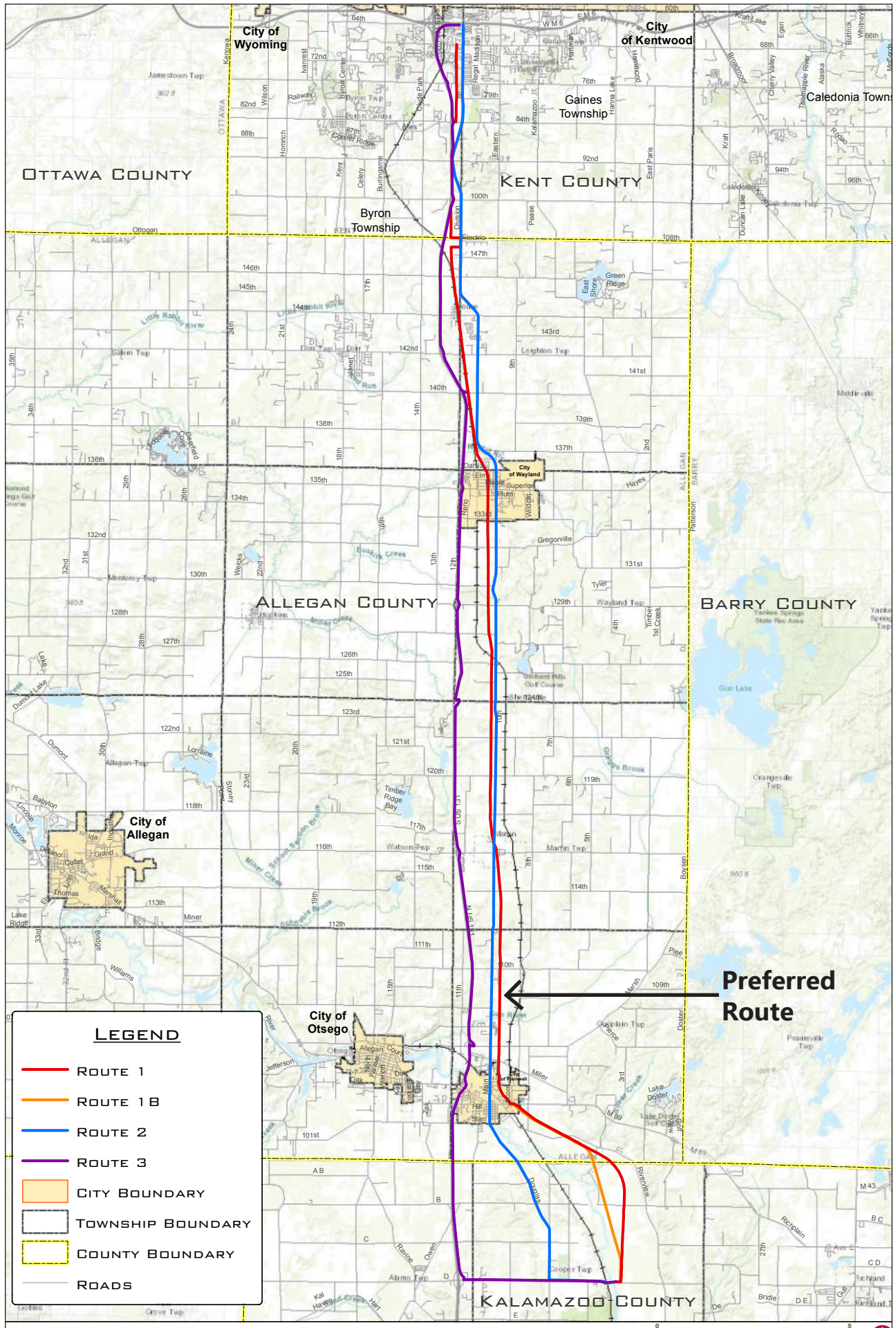
Federal - Grants like MDOT Transportation Alternatives Program (TAP) which is competitive grant program that uses federal transportation funds designated by Congress for specific activities that enhance the intermodal transportation system and provide safe alternative transportation options. Grant applications are due quarterly.

State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.





River to River Trail Plan

City of Plainwell

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes two sections for a total of **1.5 miles of 35 total miles** of trail primarily along Consumers property in the City of Plainwell. A small portion of the trail will parallel M-89. The trail extends from the West City line at Locust St. (south of M-89) and follow the route to the north/northwest to the northern border of the city just south of Miller Rd..

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 1.5 miles

Estimated Construction Cost in 2018: \$335,000 per mile

Limestone Reduction: -\$60,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate. Also calculated was the reduction for utilizing limestone in lieu of asphalt.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

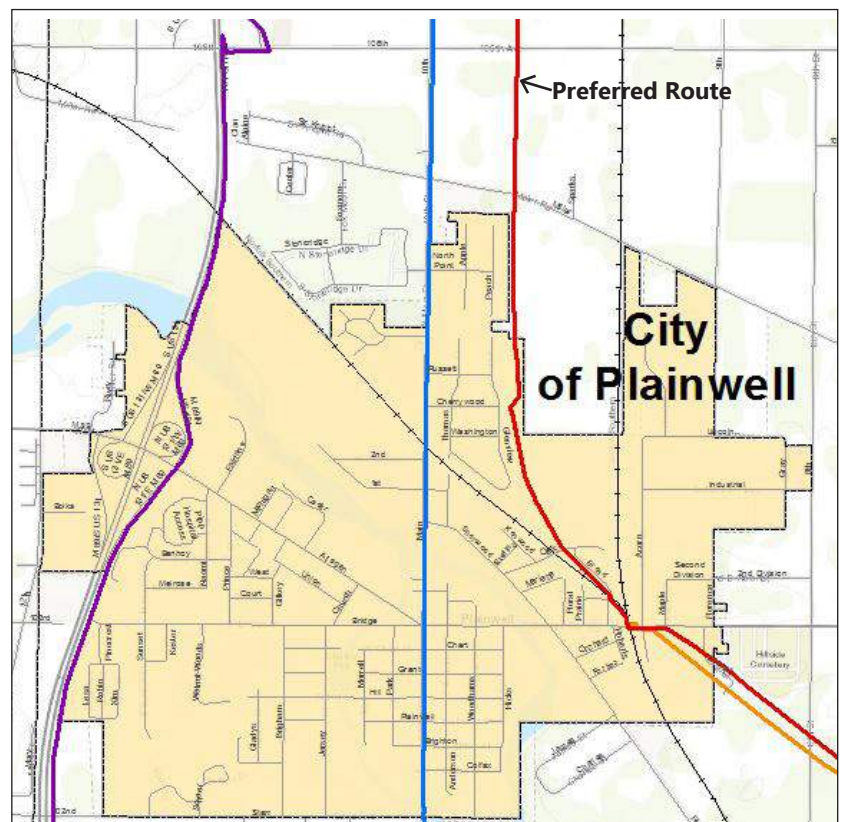
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2trailplan.org

facebook.com/r2trailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

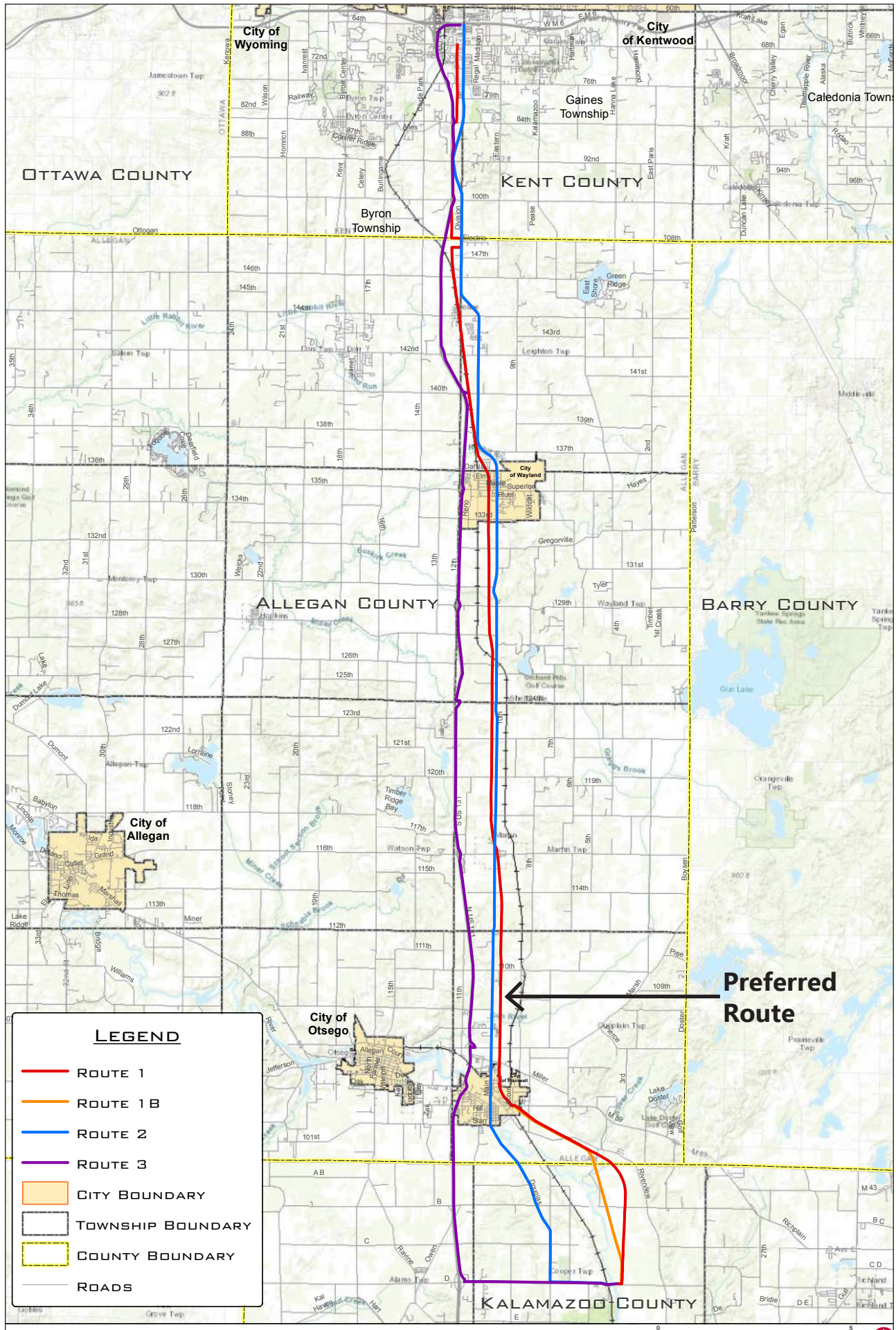
Federal - Grants like MDOT Transportation Alternatives Program (TAP) which is competitive grant program that uses federal transportation funds designated by Congress for specific activities that enhance the intermodal transportation system and provide safe alternative transportation options. Grant applications are due quarterly.

State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.





River to River Trail Plan

Gun Plain Township

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes two sections for a total of **6.7 miles of 35 total miles** of trail along Consumers property in Gun Plain Township. The first section extends the trail from Baseline Road north to the City of Plainwell and the second from the City of Plainwell north to 112th Avenue.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 6.7 miles

Estimated Construction Cost in 2018: \$284,000 per mile

Limestone Reduction: -\$61,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The north section will require a pedestrian tunnel. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate. Also calculated was the reduction for utilizing limestone in lieu of asphalt.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

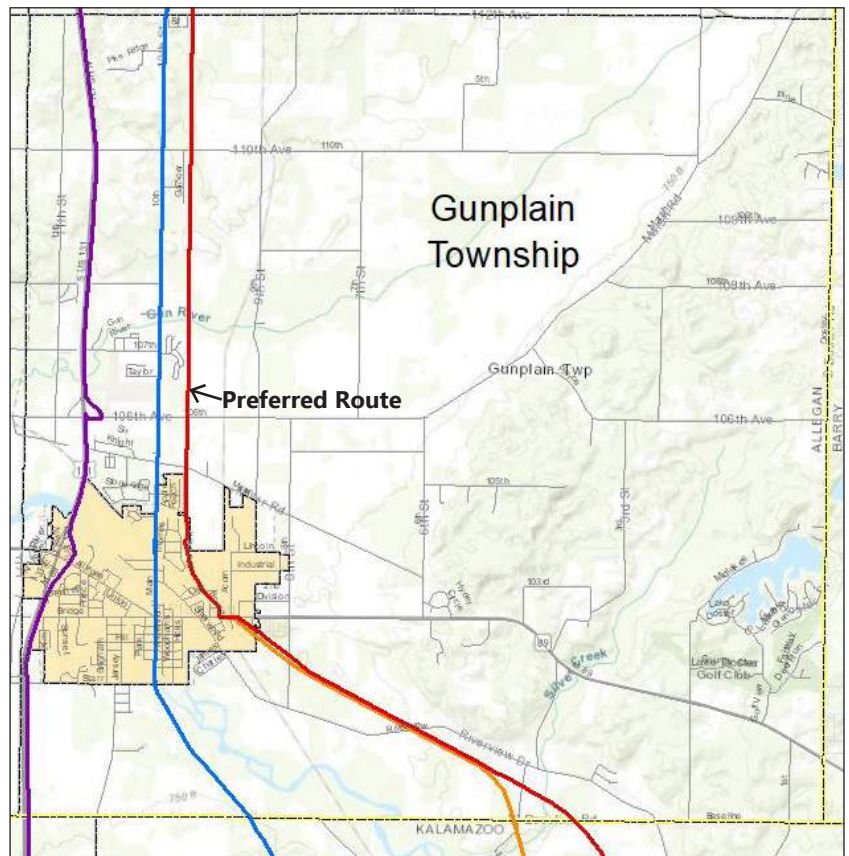
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2rtrailplan.org

facebook.com/r2rtrailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

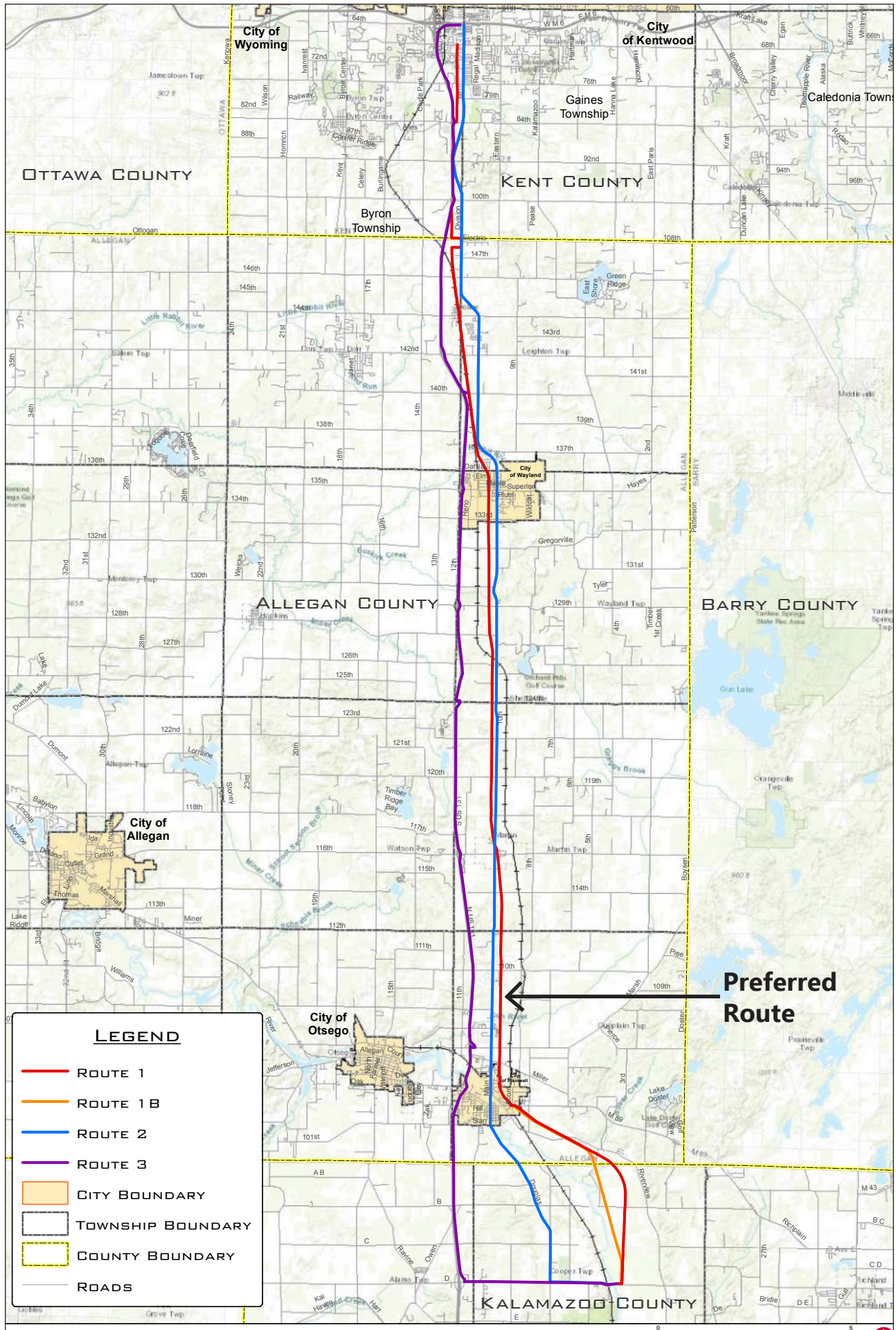
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State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.



City of Wyoming

City of Kentwood

OTTAWA COUNTY

KENT COUNTY

Byron Township

Gaines Township

Caledonia Township

ALLEGAN COUNTY

BARRY COUNTY

City of Allegan

City of Wayland

City of Otsego

KALAMAZOO COUNTY



River to River Trail Plan

Village of Martin

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes one section for a total of **1 mile of 35 total miles** of trail along Consumers property the Village of Martin. The trail extends from the Village line south of Templeton Street north to 10th Street.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 1 mile

Estimated Construction Cost in 2018: \$340,000 per mile

Limestone Reduction: -\$69,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate. Also calculated was the reduction for utilizing limestone in lieu of asphalt.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

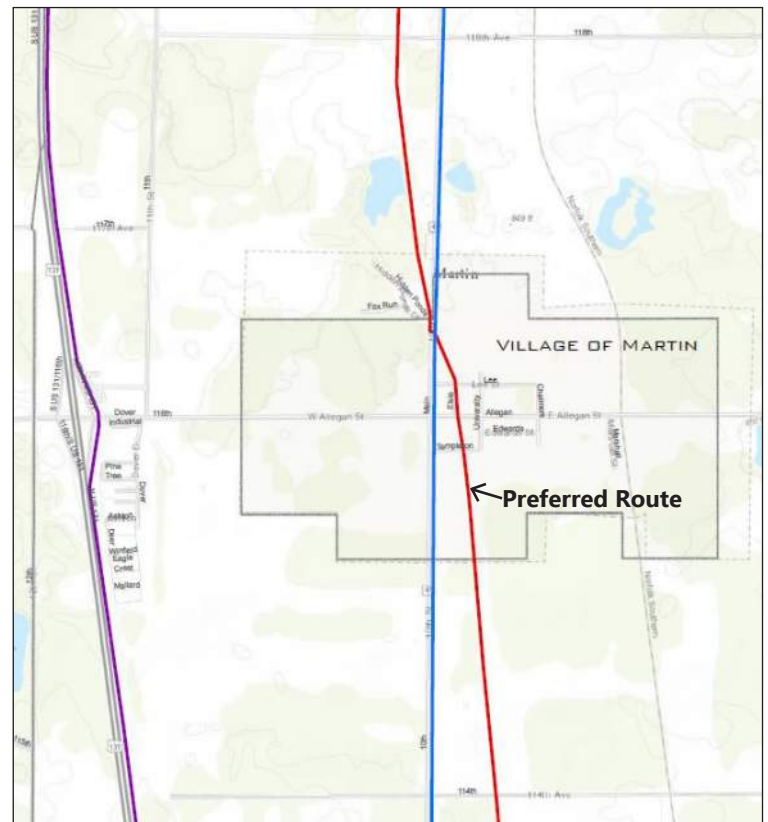
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2trailplan.org

facebook.com/r2trailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

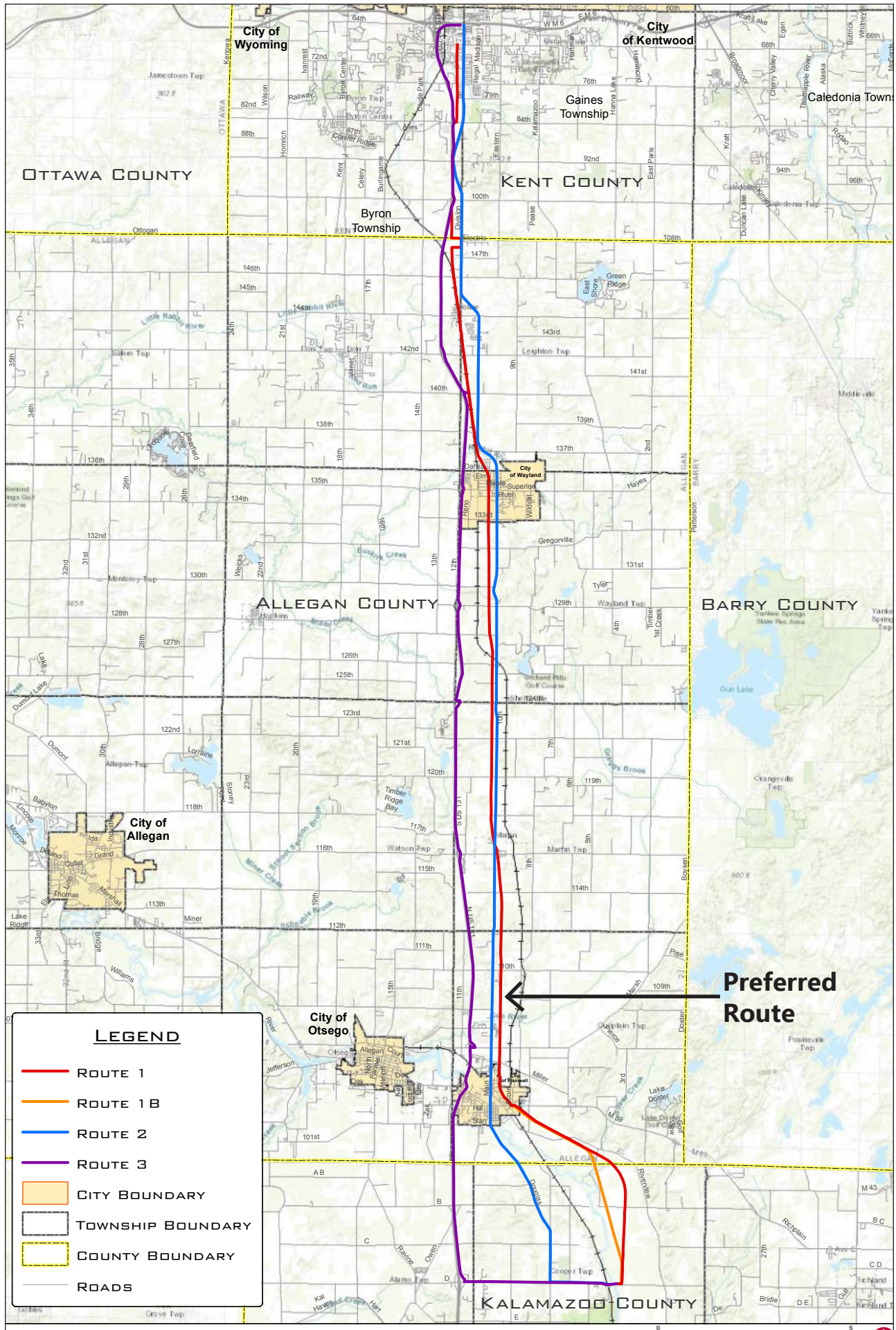
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State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.



City of Wyoming

City of Kentwood

OTTAWA COUNTY

KENT COUNTY

Byron Township

Gaines Township

Caledonia Township

ALLEGAN COUNTY

BARRY COUNTY

City of Allegan

City of Wayland

City of Otsego

KALAMAZOO COUNTY



River to River Trail Plan

Martin Township

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes two sections for a total of **5.2 miles of 35 total miles** of trail along Consumers property in Martin Township. The first section extends the trail from 112th Avenue north to the Village of Martin and the second from the Village of Martin north to 124th Avenue.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 5.2 miles

Estimated Construction Cost in 2018: \$251,000 per mile

Limestone Reduction: -\$61,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate. Also calculated was the reduction for utilizing limestone in lieu of asphalt.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

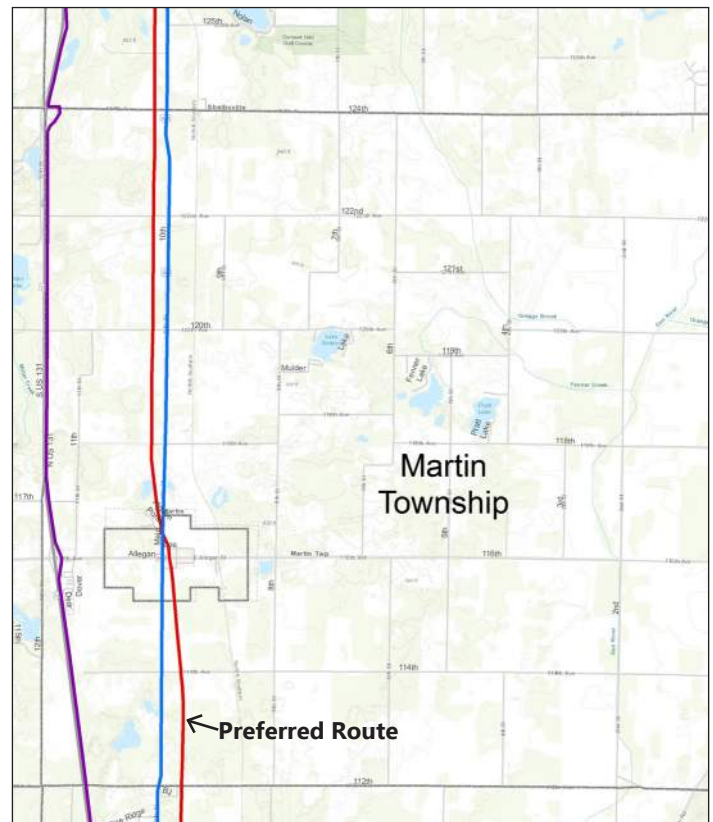
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2rtrailplan.org

[facebook.com/r2rtrailplan](https://www.facebook.com/r2rtrailplan)

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

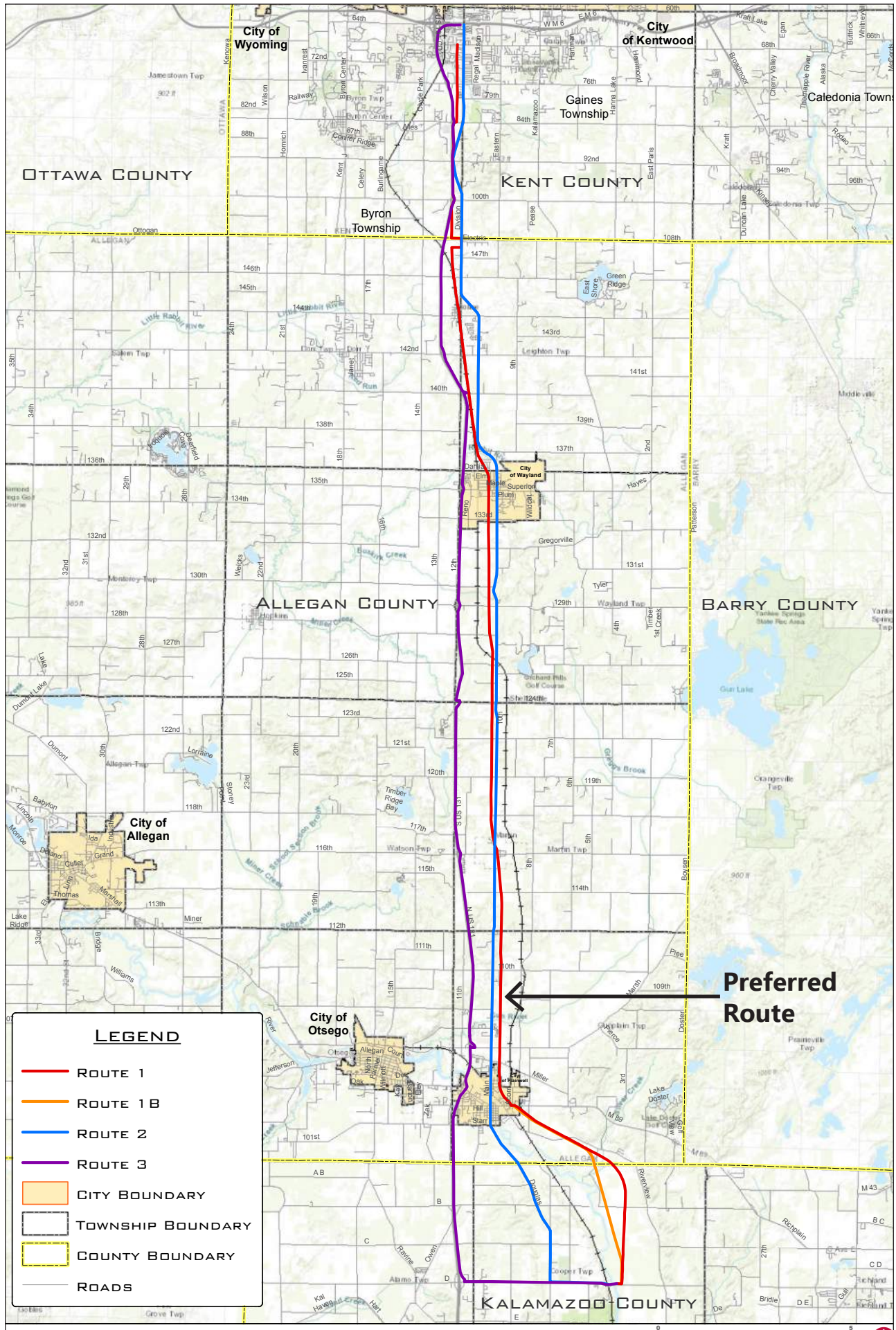
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State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.



City of Wyoming

City of Kentwood

OTTAWA COUNTY

KENT COUNTY

Byron Township

Gaines Township

ALLEGAN COUNTY

BARRY COUNTY

City of Allegan

City of Wayland

City of Otsego

KALAMAZOO COUNTY



River to River Trail Plan

Wayland Township

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes one sections for a total of **4.7 miles of 35 total miles** of trail along Consumers property in Wayland Township. The trail extends from 124th Ave north to the City of Wayland. Bridges are included over the railroad just north of 126th Ave and Buskirk Creek just north of 129th Ave.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 4.7 miles

Estimated Construction Cost in 2018: \$371,000 per mile

Limestone Reduction: -\$60,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate. Also calculated was the reduction for utilizing limestone in lieu of asphalt.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

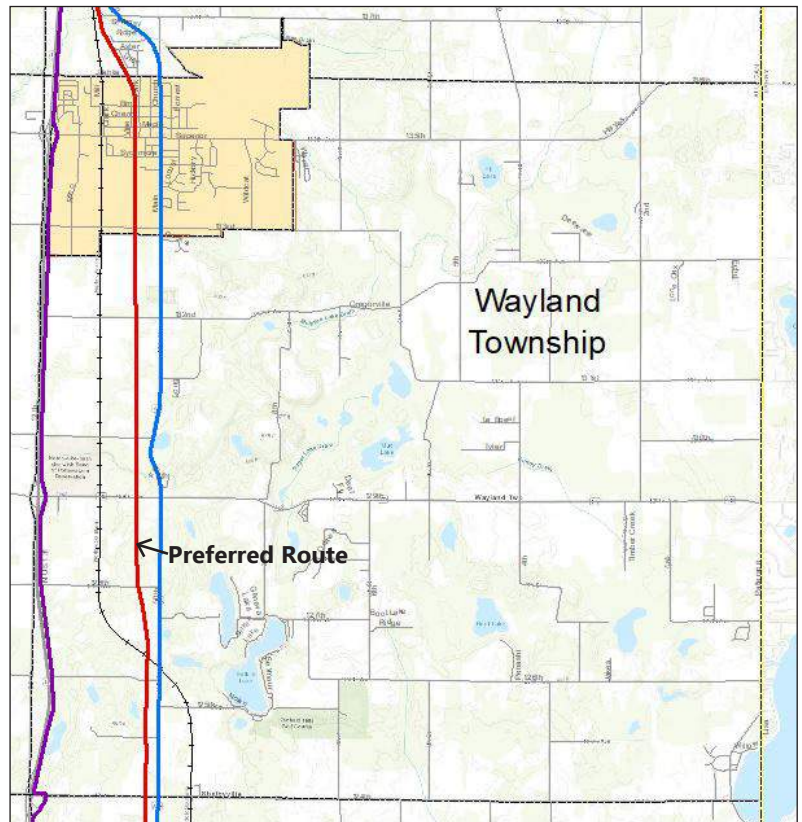
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2rtrailplan.org

facebook.com/r2rtrailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

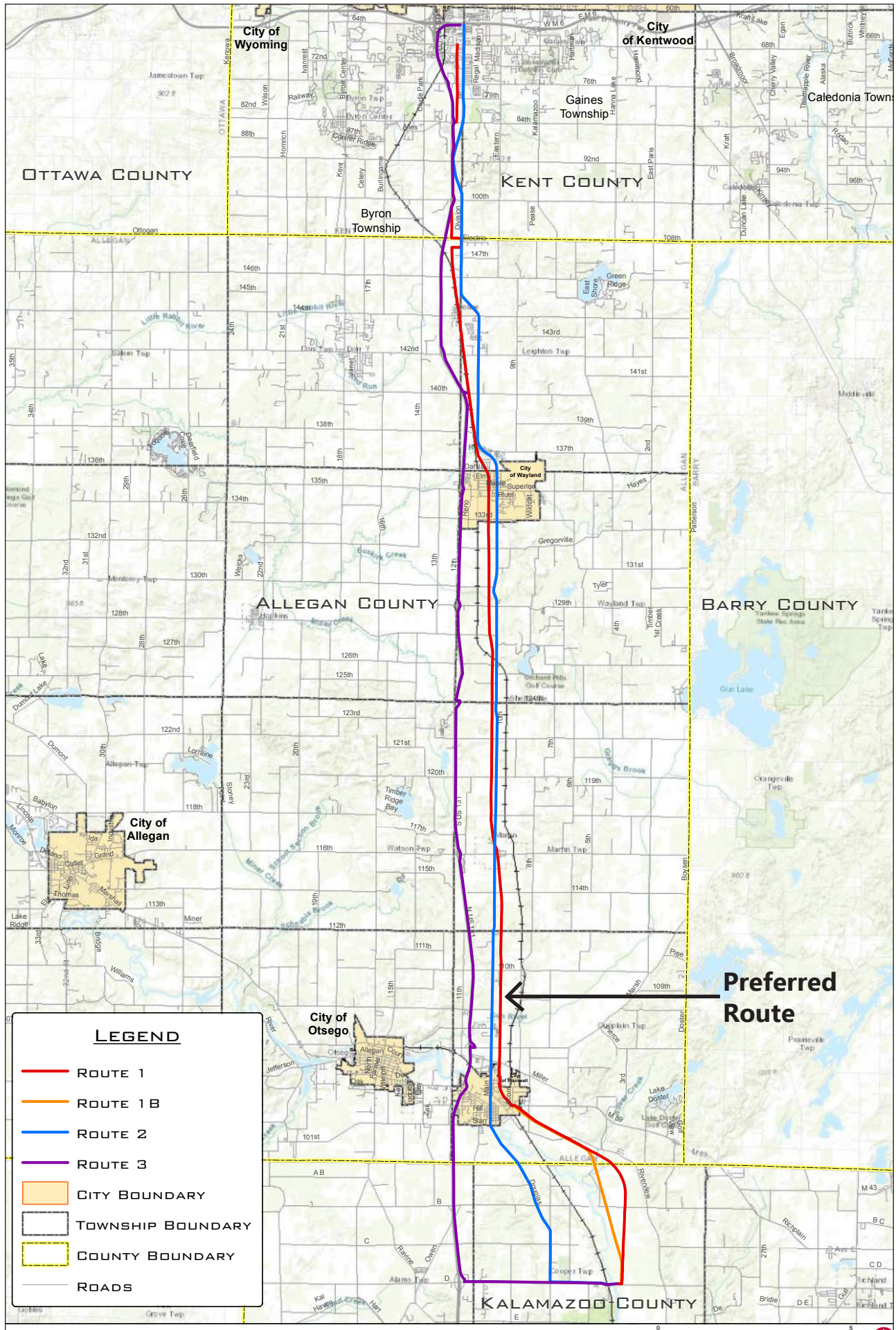
Federal - Grants like MDOT Transportation Alternatives Program (TAP) which is competitive grant program that uses federal transportation funds designated by Congress for specific activities that enhance the intermodal transportation system and provide safe alternative transportation options. Grant applications are due quarterly.

State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.





River to River Trail Plan

City of Wayland

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes one section for a total of **1.4 miles of 35 total miles** of trail along Consumers property in City of Wayland. The trail extends from the south City limit, just west of S Main Street, to the northern City limit just west of Park St. The property currently has a varying width gravel trail present.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 1.4 miles

Estimated Construction Cost in 2018: \$305,000 per mile

Limestone Reduction: -\$65,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate. Also calculated was the reduction for utilizing limestone in lieu of asphalt.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

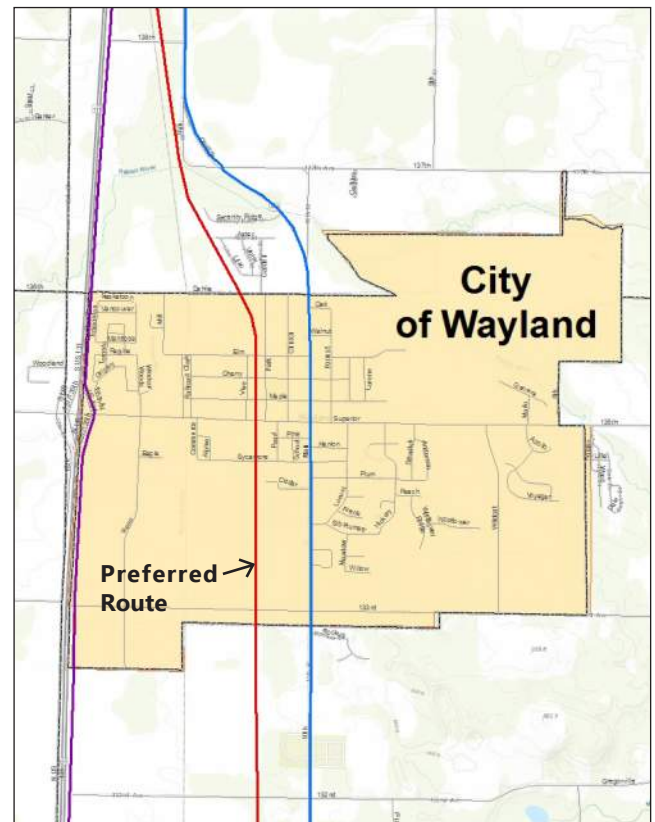
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2rtrailplan.org

facebook.com/r2rtrailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

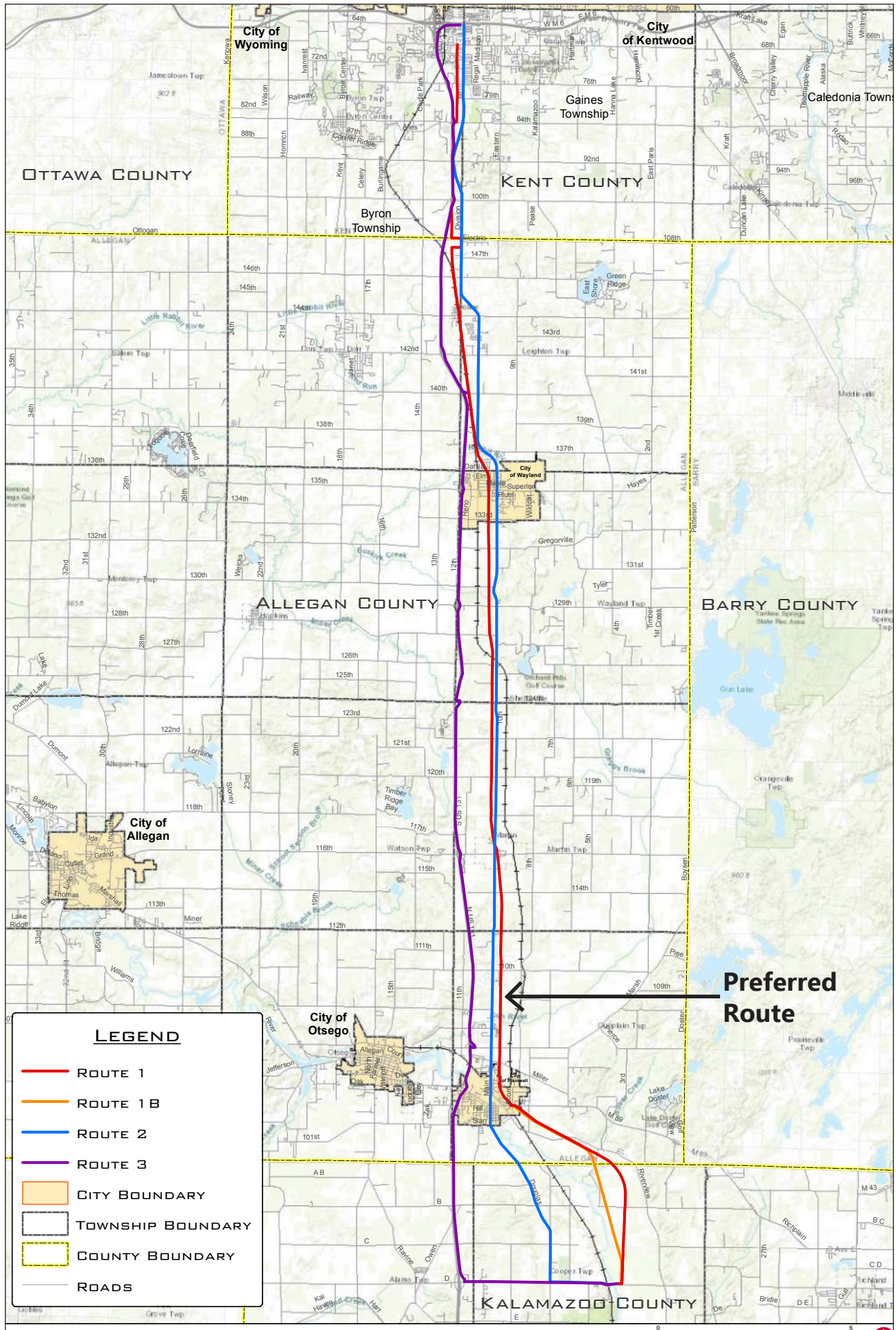
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State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.



City of Wyoming

City of Kentwood

OTTAWA COUNTY

KENT COUNTY

Byron Township

Gaines Township

Caledonia Township

ALLEGAN COUNTY

BARRY COUNTY

City of Wayland

City of Allegan

City of Otsego

KALAMAZOO COUNTY



River to River Trail Plan

Leighton Township

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes **3.6 miles of 35 total miles** of trail along Consumers property in Leighton Township. The trail extends from the southern township border just west of Lilac Street and travels north until it intersects with the western township border north of 142nd Street.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 3.6 miles

Estimated Construction Cost in 2018: \$261,000 per mile

Limestone Reduction: -\$64,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

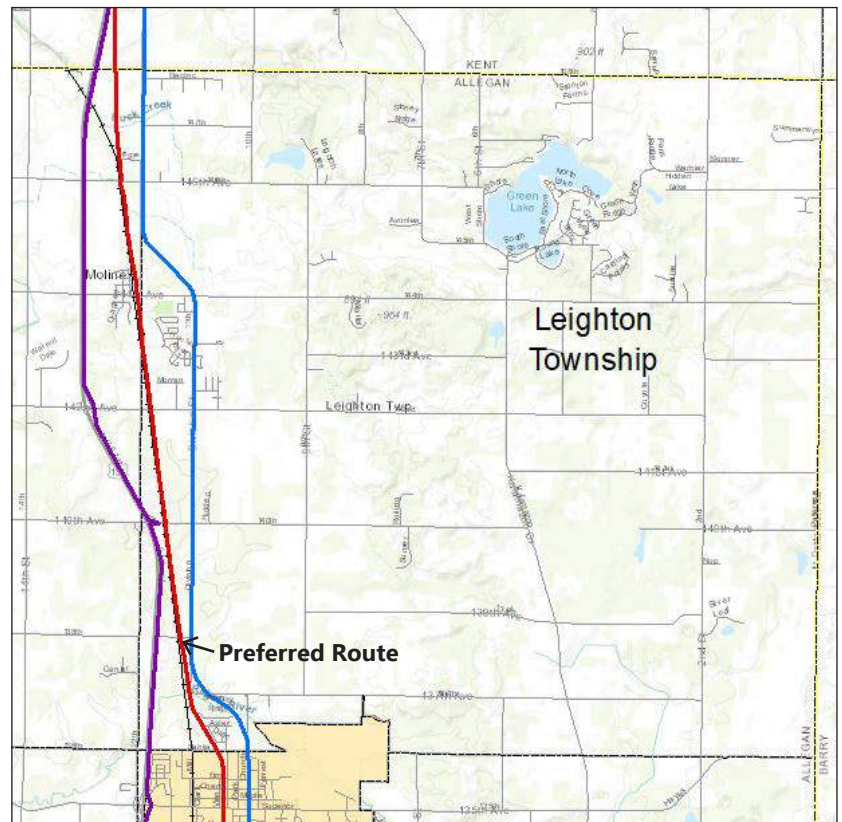
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2trailplan.org

facebook.com/r2trailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

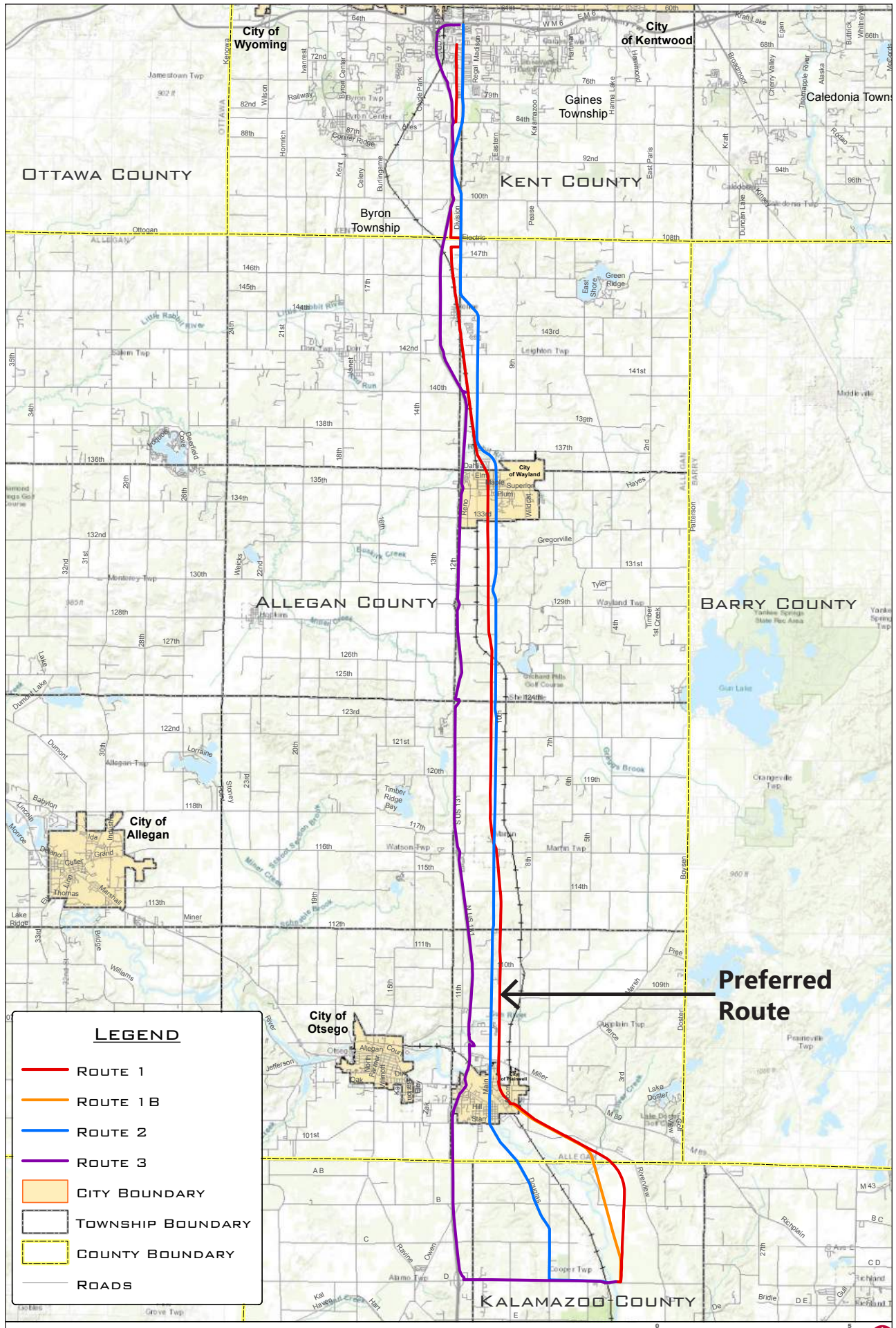
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State - Grants like Michigan Natural Resources Trust Fund (MNRTF) which is provided for development projects for public outdoor recreation such as trails, campgrounds, ball fields, tennis courts and restrooms. Grant applications are due April 1st and is a 1-year process.

Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.



LEGEND

- ROUTE 1
- ROUTE 1 B
- ROUTE 2
- ROUTE 3
- CITY BOUNDARY
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY
- ROADS

Preferred Route



River to River Trail Plan

Dorr Township

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes **2.9 miles of 35 total miles** of trail along Consumers property in Dorr Township. The trail extends from the eastern township border just north of 142nd street and travels north until it intersects with the northern township border at the county line.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 2.9 miles

Estimated Construction Cost in 2018: \$263,000 per mile

Limestone Reduction: -\$63,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

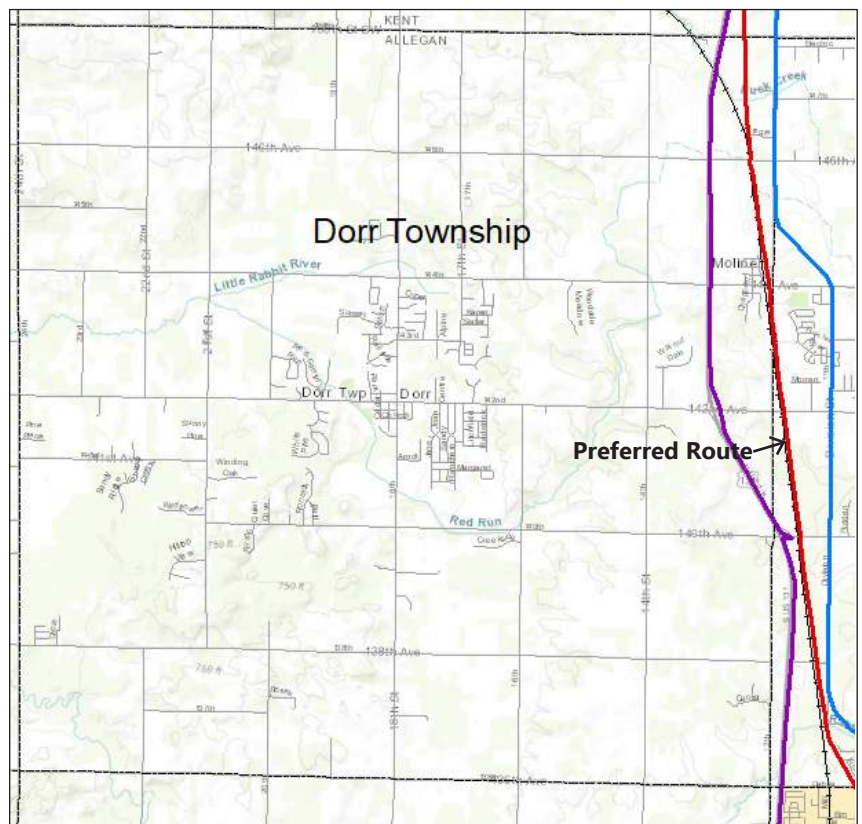
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2trailplan.org

facebook.com/r2trailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

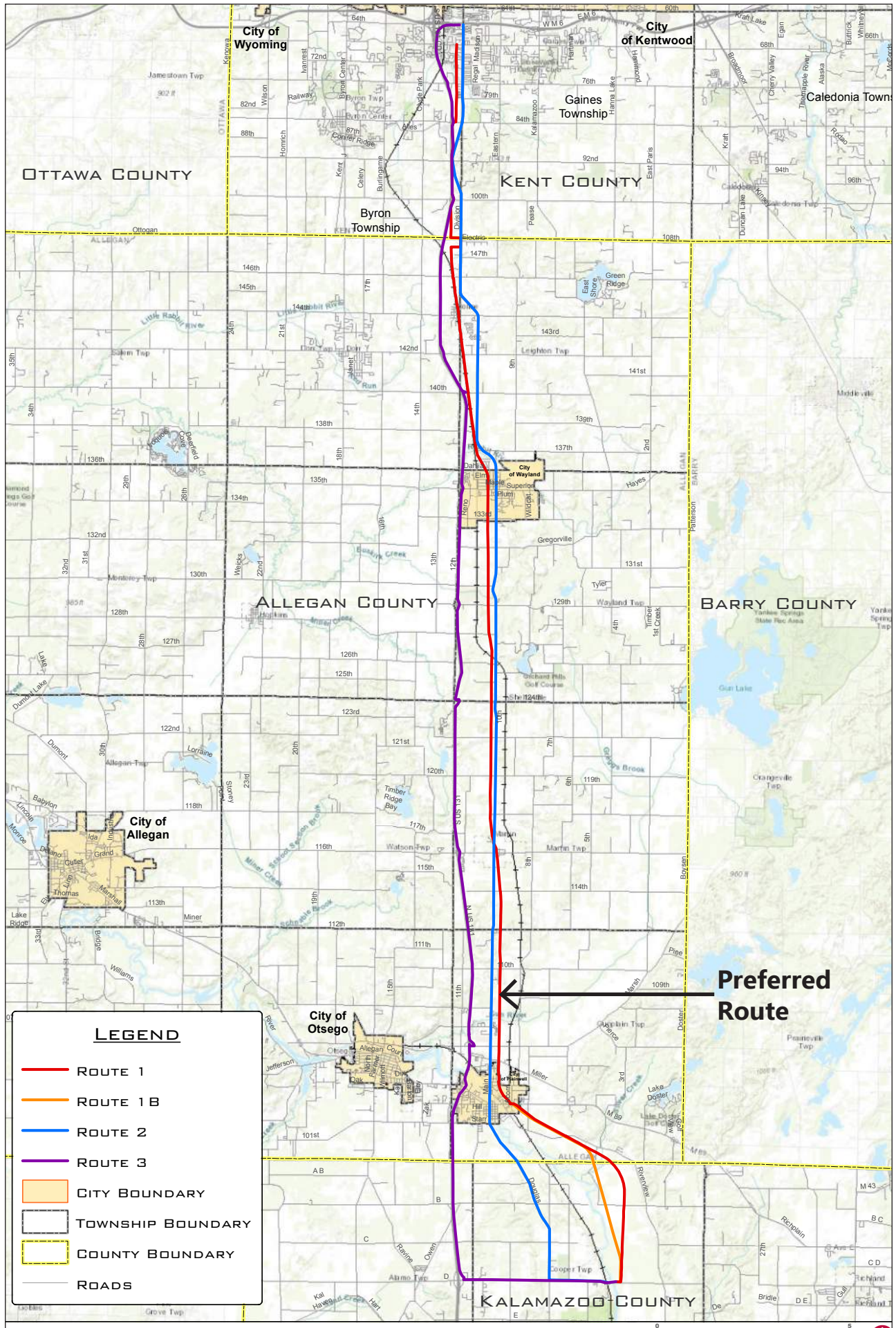
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Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.



LEGEND

- ROUTE 1
- ROUTE 1 B
- ROUTE 2
- ROUTE 3
- CITY BOUNDARY
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY
- ROADS

Preferred Route



River to River Trail Plan

Byron Township

The Interurban Trail is a **35-mile trail** that will connect the Kalamazoo River Valley Trail with the Kent County Trail System and eventually to the Grand River Greenway Trail following the previously known Interurban Railroad line mostly owned by Consumers Energy.

This section of the project includes **5.4 miles of 35 total miles** of trail along Consumers property in Byron Township. The trail extends from the eastern township border north of 142nd Street to the north, through Moline, and ends at the northern township line at the county line west of Division Ave.

Goals

Project goals include creating a trail that provides a **regional connection** to existing trail systems that is attractive, safe, secure and affordable as well as **provide opportunities for recreation and healthy living**. Trails also provide **economic benefits** including tourism, urban redevelopment, increased property values, health care savings, jobs and investment, and general consumer spending. Starting on January 18, 2017, there has been 4 stakeholder meetings and 4 public input meetings with approximately 150 attendees. The 3 trail routes have been reviewed via the public input sessions, consensus was to peruse route three and work with Consumers Energy to lease the land.

Individual Segment Rough Pricing

Length: 5.4 miles

Estimated Construction Cost in 2018: \$267,000 per mile

Limestone Reduction: -\$61,000 per mile

Assume 4% inflation after 2018

Construction includes all earth work and drainage improvements needed to construct a 10 ft wide trail, 1 ft of gravel shoulder, and 1 ft grass shoulder. The pavement section would consist of 6" of aggregate base, 1.5" of HMA 36A base, and 1.5" of HMA 36A wearing surface. Also included in this estimate are pavement markings, traffic control and miscellaneous signage. Utility work (sewer, water, electric) is not included with the scope of this estimate.

Next Steps:

Work on funding opportunities, a schedule and commitment from the communities.

Call to Action:

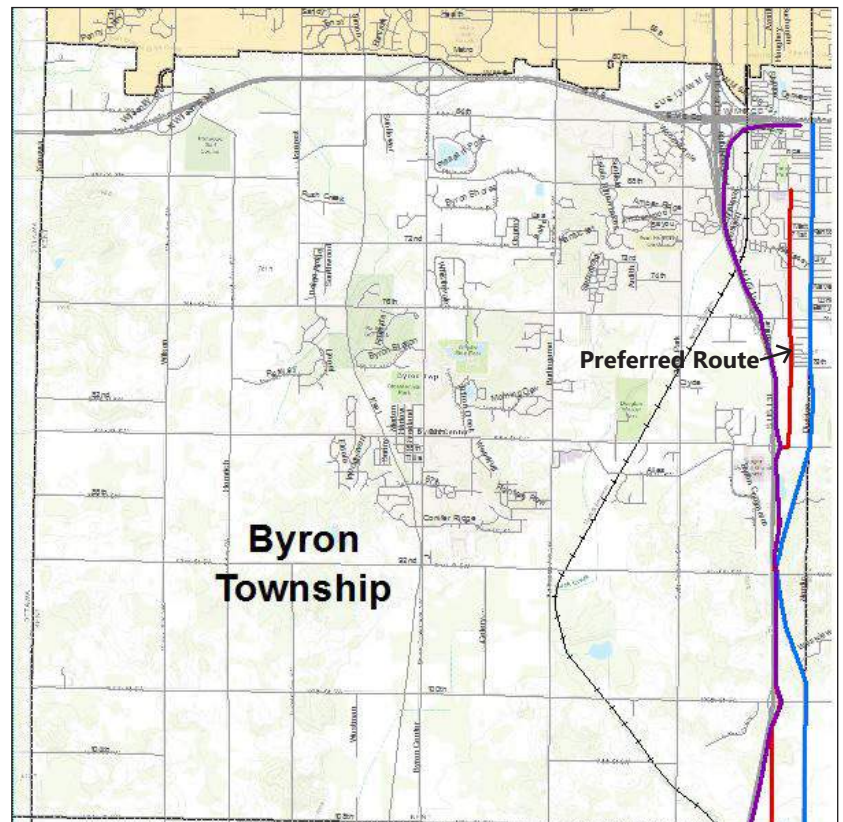
Consider how you will work together with other communities to develop and maintain the trail.

Digital Engagement Platforms:

r2trailplan.org

facebook.com/r2trailplan

communityremarks.com/rivertorivertrailplan



Potential Funding Sources

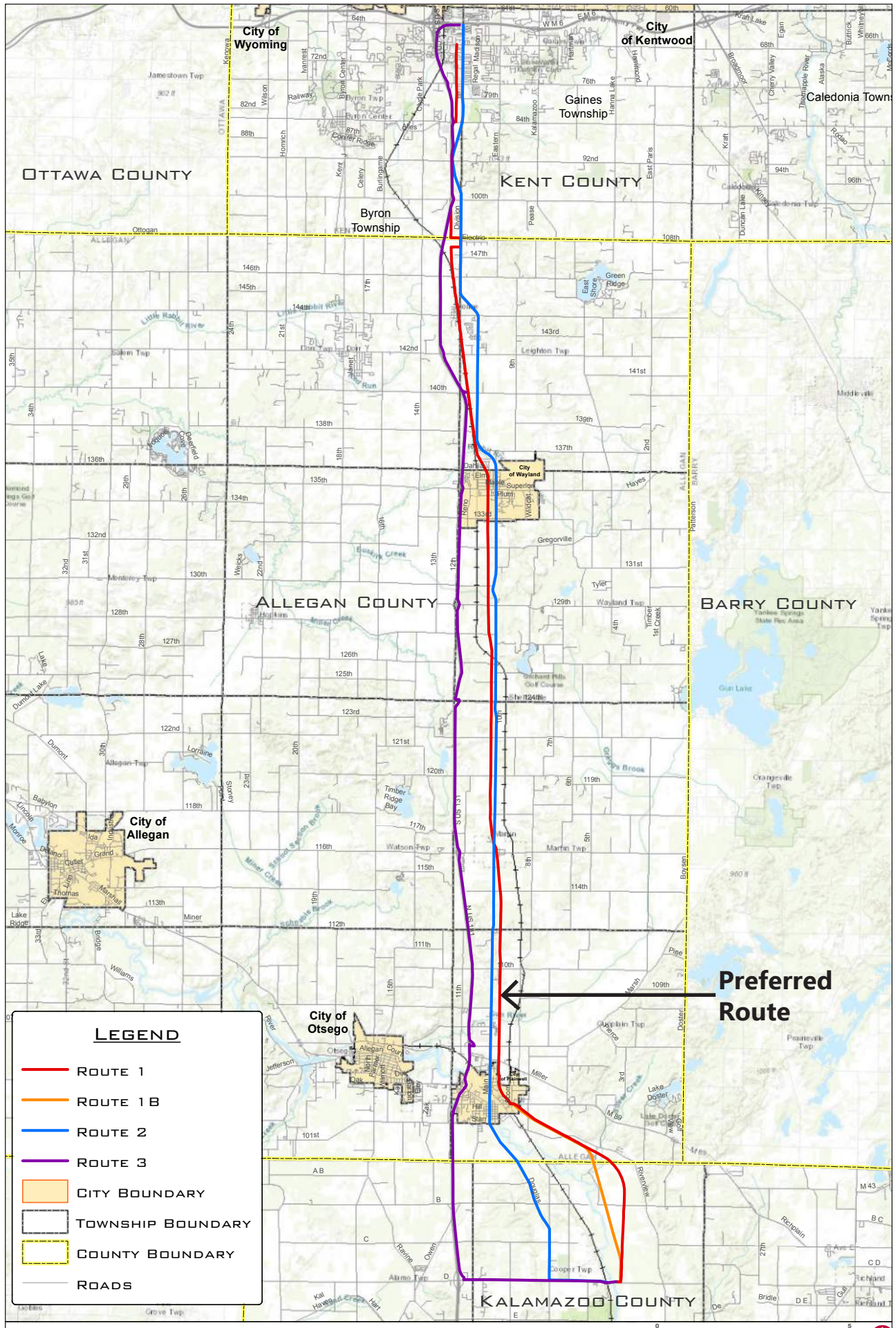
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Trail Authority - Two or more school districts, villages, cities, townships, or counties who have come together to improve and maintain recreation through acquisition, construction, maintenance, or improvement methods. To be an authority, the group must prepare articles of incorporation.

County - Recreation Millage.

Local - Special fund, private & corporate sponsorship and donations.



LEGEND

- ROUTE 1
- ROUTE 1 B
- ROUTE 2
- ROUTE 3
- CITY BOUNDARY
- TOWNSHIP BOUNDARY
- COUNTY BOUNDARY
- ROADS

Preferred Route

REFERENCES

- BBC Research and Consulting & MDOT. Bicycling in Michigan Infographic. MDOT, March 20, 2015, Web. www.michigan.gov/documents/mdot/MDOT_InfographicStatewide_465400_7.pdf. February 2, 2018
- BBC Research and Consulting & MDOT. Community and Economic Benefits of Bicycling in Michigan. MDOT, March 20, 2015, Web. www.michigan.gov/documents/mdot/MDOT_CommAndEconBenefitsOfBicyclingInMI_465392_7.pdf. February 2, 2018
- Legislative Council, State of Michigan. Corridor Improvement Authority Act, Act 280 of 2005. Web. www.americantrails.org/resources/economics/economic-benefits-trails-macdonald.html. February 2017
- Macdonald, Stuart. Evidence of Many Varieties of Economic Benefits Linked to Trails. Web. www.miplace.org/globalassets/media-documents/placemaking/community-development-guide/corridor-improvement-authority-pa-280.pdf. February 13, 2017
- Michigan Economic Development Corporation. Corridor Improvement Authority. Web. www.miplace.org/globalassets/media-documents/placemaking/community-development-guide/corridor-improvement-authority-pa-280.pdf. February 13, 2017
- Michigan Municipal League. Economic Development Tools - Corridor Improvement Authority. Web. www.mml.org/resources/publications/one_pagers/FS%20Economic%20Development%20Tools%20-%20CIA.pdf. February 20, 2017.
- Michigan Trails & Greenways Alliance. Summary of Funding Sources. Web. michigantrails.org/resources/trail-toolkit/funding/. March 15, 2017.
- Rails-to-Trails Conservancy. Active Transportation Beyond Urban Centers. January 1, 2011, Web. www.railstotrails.org/resourcehandler.ashx?id=4141. February 2, 2018
- Rails-to-Trails Conservancy. Financing and Funding. January 1, 2011, Web. www.railstotrails.org/build-trails/trail-building-toolbox/acquisition/financing-and-funding/. March 28, 2018



RESOURCES

Michigan Recreation Authority Examples:

Greater Berrien Springs Recreation Department: gbsrd.org

River Country Recreation: rivercountryrecreation.org

City of Traverse City and Garfield Township Recreational Authority: www.garfield-twp.com/jtrecauthority.asp

Iron Ore Heritage Recreation Authority: ronoreheritage.com

Trail Implementation and Funding Resources:

Michigan Trails and Greenways Alliance: www.MichiganTrails.org

Rails-to-Trails Conservancy: www.railstotrails.org/

Complete Streets: www.MichiganCompleteStreets.WordPress.com

Recreation Authority Resources:

www.legislature.mi.gov/documents/mcl/pdf/mcl-act-321-of-2000.pdf

www.mml.org/resources/publications/mmr/issue/mar-apr2012/recreation-authorities.html