

# Non-Motorized Transportation Plan 2021



## BAY CITY AREA TRANSPORTATION STUDY (BCATS)

### DRAFT REPORT

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## **Chapter 1 – Bay City Area Transportation Study Non-Motorized Transportation Plan**

### **Overview**

This non-motorized transportation plan is an effort by the Bay City Area Transportation Study (BCATS) to provide the local road agencies, cities, townships, and other officials a guide on methods to develop a comprehensive, connected, usable, and safe transportation system incorporating the use of non-motorized transportation. This plan was completed in cooperation with the cities of Bay City and Essexville, the Bay County Road Commission, Bay Metropolitan Transportation Authority, the townships of Kawkawlin, Bangor, Monitor, Hampton, Frankenlust, and Portsmouth and was reviewed by members of the Riverwalk/Railtrail Committee and the Michigan Department of Transportation.

This plan includes identifying, prioritizing, and establishing routes for a complete network of non-motorized transportation. This plan also discusses the options for those non-motorized facilities, and how best to develop those facilities. Additionally, this plan will incorporate some goals of the local communities utilizing the existing non-motorized infrastructure.

All roadways, except those where legally prohibited, are available to cyclists, but many have not been designed to be used safely and comfortably by the cycling community. Therefore, bicycles as well as pedestrians and the disabled should be considered in all phases of transportation planning, new roadway design, roadway reconstruction, capacity improvement and transit projects.

Research continues to provide additional criteria for the design of appropriate bicycle facilities. The selection of a bicycle facility may depend on many factors, including vehicular and bicycle traffic characteristics, adjacent land use and expected growth patterns. A complete non-motorized transportation system also improves the livability and health of a community and it also gives its citizen a choice in their mode of transportation. Furthermore, a walkable and bicycle-friendly community helps illustrate the importance of environmentally sustainable practices as well as providing economic investment.

### **Goals and Objective**

This document is intended to be a guide for the communities within and surrounding the BCATS area on ways to provide non-motorized transportation for the public. Additionally, this will encourage the public to make cycling a viable transportation alternative for traveling to and from other nearby communities. With this plan in place, BCATS road agencies will be able to leverage more funding sources to make these non-motorized improvements. All design guidelines for non-motorized facilities in this document are consistent with the current AASHTO specifications as of the approval of this Plan. After full implementation of this Plan, the BCATS will have a continued priority of working towards a safe, connected and complete non-motorized transportation system. With the adaptation of PA 135 of 2010 by the State of Michigan, which



requires a Complete Streets Policy in the State, this document serves as the Complete Streets Policy for the BCATS agencies.

All of the routes and possible non-motorized facilities are recommended treatments and are not binding in any form. It should be noted that various factors may alter any route or a non-motorized facility. It should be understood that if funding cannot be identified for a specific non-motorized improvement or the cost of establishing the facilities would be disproportionate to the need or probable use, then the non-motorized facility is not required to be installed.

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## Chapter 2 – BCATS Non-Motorized Planning Efforts

Since the inception of the Bay City Area Transportation Study (BCATS) in the 1960's, three previous non-motorized plans were adopted, the 1980 Bicycle Plan, the 1995 Non-Motorized Facilities Plan (Bike Report), and the 2011 BCATS Non-Motorized Transportation Plan. Each plan was assembled by BCATS staff and approved by the BCATS Policy Committee.

### **1980 Bicycle Plan**

The 1980 Bicycle Plan looked at 21 specific routes in the Bay City urbanized area and described what improvements needed to be made along those routes, providing cost estimates and specific improvements. On these routes, most of the improvements focused on sidewalks, curb cuts, and separated bicycle paths. The only on-road facilities considered were low volume residential streets and paved shoulders on the routes outside of the cities.

Highlighted results from this plan include the eventual development of Route #20 into the Riverwalk Trail in Veteran's Memorial Park, the addition of wide paved shoulder on Route #13 (State Park Dr) from Old Kawkawlin Rd to the Bay City State Park, and providing a separated shared use path along a portion of Route #9 (Truman Parkway/Wilder Rd) as part of the Bangor Trail. Please refer to the 1980 Bicycle Plan for more route information.

### **1995 Non-Motorized Facilities Plan (Bike Report)**

The 1995 Non-Motorized Facilities Plan (Bike Report) did not focus on any specific routes other than expanding the Riverwalk/Railtrail Loop into what is now a 17 mile non-motorized system of trails through Bay City, Portsmouth and Hampton Townships and an extension through Bangor Township connecting to the Bay City State Park. What the plan did focus on, was providing general information on bicycle facilities and how the development of those facilities could be analyzed, selected, and implemented.

### **2011 Non-Motorized Transportation Plan**

The 2011 Bay City Area Transportation Study Non-Motorized Transportation Plan (NMTP) is the original Non-Motorized Transportation Plan document for the BCATS area. This plan provides a more general overview of non-motorized transportation facilities in the BCATS area. The purpose of the 2011 BCATS NMTP is to provide road agencies, townships, cities, and other local officials a guiding document to use while incorporating non-motorized components in their transportation projects. The 2021 BCATS Non-Motorized Transportation Plan serves as an updated planning document to this original plan from 2011.



### **Bay City Non-Motorized Plan**

The Bay City Non-Motorized Plan was adopted in July of 2017. The plan includes upgrades to many of the city's non-motorized facilities including sidewalks, bike lanes, bike paths, shared-use paths, trails and shared roads. Upgrades to various non-motorized facilities were categorized as low, medium and high cost. This allows the city to implement improvements as annual budgets allow and plan ahead to find ways to fund high-dollar enhancements.

### **Saginaw Bay Blueways Water Trail**

The Saginaw Bay is undoubtedly a unique feature defining Michigan's mitten and is easily seen and recognized on satellite photos of the Earth. The Saginaw Bay Blueways Water Trail offers an incredible up close experience to the natural coastal features surrounding the Saginaw Bay. White sandy beach shorelines, small cottages, and big houses are interspersed by large natural coastal marsh areas and provide a diverse, coastal paddling experience.

The Saginaw Bay Water Trail runs along the southern and western coasts of the Saginaw Bay and bridges the gap from the Thumb Water trail starting at the Quanicassee River (South) to the beginning of the Huron Shores Water Trail (North). Areas include the Hampton Shallows, Saginaw River, Kawkawlin River, The Beaches, The Wildlands, Northern Coastal, and Arenac-Au Gres. These water trails join together to create the Saginaw Bay Blueways Trail. These water trails showcase the beauty and diverse nature of the Saginaw Bay shoreline while providing an abundant access to nature areas/preserves and public parks along the Saginaw Bay coastline. The Saginaw Bay Blueways Water Trail and Saginaw River Corridor, including water trail access locations, can be found in the maps on pg. 25-33. Additionally, a map of the Saginaw Bay Blueways Trail can be found on the Bay County website at this link: <https://www.baycounty-mi.gov/Docs/2014BluewaysTrailMap.pdf>. Also, water-resistant physical copies can be picked up at the Environmental Affairs and Community Development office located on the 5<sup>th</sup> floor of the Bay County Building, 515 Center Avenue, Bay City, MI 48708.



*Figure 1: Saginaw Bay Blueways Water Trail access located at Pinconning Park, in Pinconning, MI*

### **Iron Belle Trail**

The Iron Belle Trail is Michigan's showcase trail that touches hundreds of municipalities and crosses through 48 different Michigan counties. Using existing trails, networks and new connections, the trail extends more than 2,000 miles from Belle Isle in Detroit to the far western tip of the Upper Peninsula, which includes routes for both bicycling and hiking. The Eastern Route of the Iron Belle Trail runs through the heart of Bay City utilizing sections of the amazing



Riverwalk Railtrail, Bangor Railtrail, and through the Bay City State Park. The Iron Belle Trail can be seen in the maps on pg. 25-33.

More information can be found by visiting the Iron Belle website here: [Michigan.gov/Ironbelle](http://Michigan.gov/Ironbelle).

### **Bay City Historic Recreational Corridor**

A Historic Recreational Corridor was designated by Bay City and Bangor Township to run from the Midland Street Historic District along Henry Street to State Park Drive following the original route to the Saginaw Bay beachfront. The Historical Recreational Corridor is planned to be developed along the existing biketrail route which includes a portion of the Iron Belle Trail. There are plans to create the Bay View scenic route offshoot on the Iron Belle Trail that will ultimately reach the Bay City State Park. This will provide many users along the Iron Belle Trail direct access to the Saginaw Bay shoreline and recreational amenities at the Bay City State Park. The Historic Recreational Corridor can be seen in the maps starting on pg. 25.

### **MDOT Bay Region 2019 Map Update**

In August of 2019 MDOT's Bay Region updated their Non-Motorized Transportation plan and maps. The update comes in the form of an East Bay Region map and West Bay Region map showing the existing non-motorized infrastructure and possible linkages between the urban centers. The MDOT Bay Region Non-Motorized Transportation Plan (NMTP) addresses the non-motorized trail system throughout the entire 13 county Bay Region, of which Bay County is included, and it shows options for the +Inter-Regional System. All of the connections described in the Bay Region NMTP - that run through the BCATS area are identified on the BCATS Recommended Non-Motorized Network maps found on pages 25-33. A major goal of the MDOT Bay Region Non-Motorized Transportation Plan update is to identify regional corridors between urban areas.

### **Safe Routes to School**

“Safe Routes to School (SRTS) 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, reduce air pollution, unite neighborhoods, and contribute to students’ readiness to learn in school.” (SafeRoutesMichigan.org). Since 2006, BCATS has participated in Safe Routes to School.



### **Other Regional Non-Motorized Transportation Planning Efforts**

In the past couple of years, several non-motorized plans have been adopted in the area around and including BCATS. The plans include the Tri-County Regional Pathway Study, the MDOT Bay Region Non-Motorized Transportation Plan, the City of Midland Non-Motorized Plan, and the Midland Area Transportation Study Non-Motorized Transportation Plan. Since the first BCATS Non-Motorized Transportation Plan, there is a growing desire for a safe, connected, distinguished, and welcoming network of non-motorized transportation facilities.

The Michigan Department of Natural Resources has recently released an online map to help adventurers locate all types of trails throughout the state of Michigan. “The interactive digital map outlines 4,600 miles of state-managed non-motorized trails, including hiking, mountain biking, fat-tire biking, horseback riding, and cross-country ski trails, as well as rail trails, and water trails for canoeing and kayaking”<sup>1</sup>. The interactive map can be found online at the DNR’s Michigan.gov website or by following this direct link: <https://bit.ly/3jbrKyq>.

The Tri-County Regional Pathway Study looked at ways to connect the trail systems in the Great Lakes Bay Region communities of Bay City, Midland, and Saginaw. It resulted in specific route options connecting the three communities. Routes that connect Midland and Saginaw to Bay City are incorporated into this Plan and are identified on the BCATS Recommended Non-Motorized Network maps found on pages 25-33.

The City of Midland adopted a Non-Motorized Plan in 2009. Although Midland is outside of the BCATS, it is a nearby community that has been progressive in pursuing improvements in non-motorized facilities. They were identified as a bicycle friendly community by the League of American Bicyclist’s in 2010. This plan identifies both on and off road bicycle facilities within the city to create an interconnected system of bike-able locations.

Similarly, the Midland Area Transportation Study (MATS) is in the process of conducting an update to their Non-Motorized Transportation Plan. This plan includes information on non-motorized facilities throughout the entire county of Midland. Utilizing annual average daily traffic counts, the MATS has placed a focus on the prioritization of rural linkages/loops and regional connective corridors.

Finally, the League of American Bicyclist’s proposed various bicycle routes throughout the country; including Bicycle Route 20 which passes through the Bay City Area. More information can be found in Chapter 5 of this document.

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<sup>1</sup> Bingham, E. (2020, October 14). New interactive DNR map helps users find 4,600 miles of trails. Retrieved from <https://www.mlive.com/news/2020/10/new-interactive-dnr-map-helps-users-find-4600-miles-of-trails.html>



## Chapter 3 – Connected Network of Non-Motorized Facilities

### Creating a Connected Network

One essential element for a network of non-motorized transportation facilities is connectivity. To create the network, the routes must be defined prior to developing the system. They should connect non-motorized user's homes to various destinations throughout the area. To make these routes possible, they must incorporate more than just the low volume residential/local roads and separated trail systems. The arterial and collector roads are also needed to provide non-motorized transportation system connectors to the user's destination(s). Once a network of non-motorized facilities is established, it also needs to be maintained just like any roadway. Proper maintenance on the network including on-road bicycle facilities and separated non-motorized facilities (shared use paths, sidewalks, 6' paved shoulders, etc) is essential to providing a reliable and safe network of non-motorized transportation facilities.

### Complete Streets

According to Michigan Public Act 135 of 2010, a Complete Street “means roadways planned, designed, and constructed to provide appropriate access to all legal users in a manner that promotes safe and efficient movement of people and goods whether by car, truck, transit, assistive device, foot, or bicycle.”<sup>2</sup> Part of PA 135 requires that road projects address the complete streets policies.

The guiding policy for a Complete Streets Program is to design, operate and maintain designated streets to promote safe and convenient access for all users. The Bay City Area Transportation Study intends to do this in a manner consistent with and supportive of the surrounding community. This can be accomplished by choosing to make improvements from an array of facilities and amenities recognized by the Complete Streets Program. The BCATS Committees support the concept of “Complete Streets” and will implement a policy to review changes of transportation facilities on local streets. The policy recognizes that all streets are different and in each case, user needs must be balanced with the benefit to the entire community.

#### Policy:

1. Sidewalks, shared use paths, street crossings (including under and over passes), pedestrian signals, signs, transit stops, benches, and other facilities will be designed, constructed, operated and maintained so that pedestrians including those with disabilities, can travel safely and independently.
2. The Complete Streets Program will address the need for bicyclists and pedestrians to cross and travel on streets even where there is infrequent use. Therefore, the

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<sup>2</sup> Complete Streets Public Act 135 of 2010 § 10p- 1-a (2010).  
[https://www.michigan.gov/documents/mdot/MDOT\\_2010-PA-0135\\_339674\\_7.pdf](https://www.michigan.gov/documents/mdot/MDOT_2010-PA-0135_339674_7.pdf)



design policy of intersections and interchanges will be to accommodate and to consider the Complete Streets Program for bicyclists and pedestrians in a manner that is safe, accessible and a benefit to the entire community.

3. The Complete Streets Program will consider as a part of any new or reconstruction of designated streets and right of ways the above policy guidelines for the benefit of the entire community and non-motorized transportation.

### **On Road Facilities**

With the exception of the limited access highways, (I-75, US-10, I-75/M-13 Connector, and M-25 from I-75 to the cut off west of Gies Rd) all roads in the BCATS are available for legal use by bicyclists. Unfortunately, many BCATS roads, in their current state, do not offer a “comfortable area” for the majority of bicyclists. The simple adjustment of a lane width or the addition of lane striping could profoundly increase the safety, comfort, and visibility of the non-motorized facility on the roads within the BCATS area. According to the most current version of the AASHTO Guide for Development of the Bicycle Facilities, (2012 as of completion of this plan), many of our roads could be considered a bicycle facility by implementing these cost effective adjustments.

Any and all requirements for on-road bicycle facilities in the BCATS should follow the most current version of the American Association of State Highway and Transportation Officials (AASHTO) [Guide for Development of the Bicycle Facilities](#). Furthermore, the Federal Highway Administration (FHWA) [Bikeway Selection Guide \(2019\)](#) provides a wealth of information on choosing the right non-motorized facility for a range of scenarios. Following is a list of the various options for non-motorized facilities and a brief description of the options and benefits they provide to the non-motorized transportation user.

- **Paved Shoulders**

The addition of paved shoulders can often be the best way to improve a rural road for non-motorized usage. As a side benefit, paved shoulders can also extend the life of the road for vehicular traffic. To accommodate bicycle travel, a paved shoulder should be at least 6 feet wide. The shoulders should be even wider when speeds exceed 50 mph, where truck volumes are high, or where high bicycle usage is expected.

- **Bike Lanes**

The addition of bike lanes to a roadway provides a dedicated area for bicycles. This can increase the bicyclist’s confidence when riding in the roadway and alert the motorist that a bicycle may be in the roadway. Bike lanes should be a one-way facility and carry bike traffic in the same direction as the adjacent motor vehicle traffic. To provide adequate room for a bicyclist, a bike lane should be at a minimum of 4 ft. wide, with a recommended width of 5 ft. from the curb face to the bike lane edge marking. On roads where parking is permitted,



the bike lane should be between the parking lane and the travel lane. Parking should never be allowed on a bike lane.

- **Wide Outside Lane (WOL)**

Where road width does not permit dedicated bike lanes, with or without on-street parking, and where the existing road width allows, re-striping the outside travel lane to a greater width than the inside travel lanes will allow a bicycle to share the road more comfortably with motor vehicles. For example a road consisting of four travel lanes and a center turn lane each 12 feet wide can be adjusted to two 14 ft. curb lanes, two 11 ft. travel lanes and 10 ft. center turn lane. This allows bicyclist more room to ride in the outside lane and the motorist more room to maneuver around them and still provide lane widths within AASTHO and State design guides which must be followed when changing the width of travel lanes.

- **Sharrows**

A sharrow is a type of pavement marking that assist bicyclists in improving their position on the roadway without bike lanes. This reduces aggressive motorist behavior, encourages correct bicycling behavior, and increases the comfort of (and therefore the number of) bicyclists on shared roads. Sharrows can accompany a WOL or used at a bottleneck intersection where road width does not allow for a bike lane. Any sharrows should be centered at least 4 ft. from the curb face on streets where parking is prohibited and 11 ft. from the curb face where on-street parking is allowed. They should clearly show the bicyclist where it is best to ride and alert the motorist to areas where they should expect to see a bicyclist. On routes where sharrows are used, when future road reconstruction or resurfacing occurs, it should not be mandated that bicycle lanes be added if it is not cost effective or feasible due to right of way restrictions or on-street parking issues. However, if there is available space, conversion to a dedicated bike lane should be considered.



*Figure 2: Blue, E. (2010) "Portland Sharrow" [Photograph]. Retrieved from <https://www.flickr.com/photos/ellyblue/4891168111>*

- **Shared Roads**

A shared road is any roadway that is suitable for both motor vehicle and bicycle use without any changes needed to the roadway. These roads should be paved, have a low traffic volume and/or low speed limit, and a low frequency of on street parked cars. For example, a road with an AADT (Annual Average Daily Traffic) of less than 3,000 and a speed limit of 35 MPH or less, and few parked vehicles, is considered a suitable on-road facility for the vast majority of bicyclists. On roads with high speed limits, 40 MPH and above and an AADT below 1,000, the road could be considered a suitable on-road bicycle facility. However, some roads that fit in this category should provide another on-road facility if it is in a high



bicycle use corridor such as a connection to a school, park, trail, or major bicyclist destination.

▪ **Signed Bicycle Route**

A signed bike route is not an actual bicycle facility, but a wayfinding system that can direct bicyclists to specific destinations on a “bicycle friendly” route. The signage should indicate the destination and direction of travel. These routes should not encourage illegal or unsafe behavior such as running stop signs, riding on the wrong side of the road, or sidewalk riding.

▪ **Selection of On-Road Bicycle Facilities**

Not every facility fits every road in every situation. Therefore, each on-road bicycle facility for each road needs to be selected with consideration given to other factors such as speed limit, traffic volume, on street parking, roadway width, and potential bicycle usage to name a few.

**Other Non-Motorized Transportation Facilities**

Besides the on-road bicycle facilities previously discussed, there are several other important non-motorized facilities necessary to provide a complete network for non-motorized transportation.

▪ **Bicycle Parking Facilities**

Providing bicycle parking facilities is important to an overall effort in promoting bicycling. All of the local communities require automobile parking for buildings, but none require bicycle parking areas. As a result, bicycles are haphazardly locked to street signs, light poles, trees, and even benches. Because of this, people can be discouraged from bicycling until adequate parking is available. By providing this amenity, it encourages more riders, which in turn, promotes a healthier lifestyle. Bicycle racks should be designed so they:

- Do not bend wheels or damage other bicycle parts
- Accommodate locks to secure the frame and both wheels
- Do not impede or interfere with pedestrian traffic
- Are easily accessed from the street and protected from motor vehicles
- Are visible to passers-by to promote usage and enhance security
- Have as few moving parts as possible

All townships and municipalities should look at ways of encouraging private development to include bike racks in their initial design. Furthermore, townships should include them by ordinance and be part of their site plan review checklist. Providing a financial incentive for businesses to include bike racks is another way for the municipality to promote their installation.

In addition to bike racks in centralized locations, they are also used in connection with transit systems. Offering bicycle racks on buses can help connect non-motorized transportation with mass transit giving the public the option to travel further. A standard



practice is to put an exterior bicycle rack on the front of a bus. Having the bicycle rack mounted in the front of the bus is usually preferred, as it allows the driver to see the rack and avoids exposing the bike to the bus's diesel exhaust. Generally, bicycle racks on the front of a bus can store two to three bicycles<sup>3</sup>.



*Figure3: This is an example of a bicycle rack mounted on the front of a BMTA fixed route bus. Photo provided by BMTA Staff, 2017.*

- **Shared Use Paths**

A shared use path is an off road facility designed to accommodate multiple forms of non-motorized transportation including walking, running, biking, and skating. These paths tend to be 10 feet to 14 feet wide to allow for two bicycles to pass in opposite directions safely.

- **Sidewalks**

Sidewalks are not generally regarded as a safe facility for bicyclists. Because of the number of driveways, the speed at which bicyclist travel, and the tendency of motorist to not be looking at the sidewalk for high speed traffic, increases the potential for accidents with bicyclists by a factor of five.<sup>4</sup> Sidewalks however do provide an excellent facility for pedestrians. By creating a completely connected system of sidewalks, the needs of the non-motorized user can fully met.

<sup>3</sup> USA, Federal Transit Administration, Transportation Research & Education Center (TREC) at Portland State University. (2017). Manual on Pedestrian and Bicycle Connections to Transit (pp. 67-68). Washington, DC.

<sup>4</sup>William Moritz, University of Washington - "Accident Rates for Various Bicycle Facilities" based on 2374 riders, 4.4 million miles. 1997.



- **Public Transportation**

As many citizens cannot drive or chose not to, public transportation may be the only option for some trips. By adding capacity for bicycles in the forum of bike racks on buses for the fixed routes may encourage more riders to bring their bicycles to continue their journey beyond the reach of the fixed route.

- **Water Trails**

Water trails are another great way for non-motorized user to travel to and from facilities within a community. Here in the Great Lakes Bay Region, water travel is popular with non-motorized water craft like paddleboards, canoes, and kayaks. Water trails include many public access sites that may connect directly with other more traditional non-motorized facilities. For example, the Riverwalk Rail Trail in Downtown Bay City include multiple kayak launch sites that recreational users can take advantage of.

### **ADA Compliance**

Providing access for people with disabilities is a civil rights mandate that is not subject to limitation by project costs, levels of use, or "exceptional circumstances". While the Americans with Disabilities Act (ADA) does not require pedestrian facilities in the absence of a pedestrian route, it does require that pedestrian facilities, when newly constructed or altered, be accessible for all users.

All non-motorized facilities should conform to the Americans with Disabilities Act standards for accessible design. This includes, but is not limited to, sidewalk curb ramps, pedestrian signals, and constructing pathways, sidewalks, and other non-motorized walkways to meet ADA gradient requirements.

### **Non-Motorized Transportation Policies**

BCATS encourages all of its entities; cities, townships, committees, and boards to establish policies that continue to promote and improve a non-motorized transportation network in Bay County and beyond. These policies would not just increase non-motorized transportation, but improve the quality of life for its residents, workers, and enhance visitation to our area. Complete Streets is a great example of non-motorized transportation policy.



### Trail Condition Ratings

In 2018 the Bay County Road Commission developed a strategy for rating the condition of non-motorized trails throughout Bay County. This rating system, designated TRASER (Trail Surface Evaluation and Rating), is specific to asphalt trails. The evaluations must take into account difference between motorized and non-motorized traffic. The surface rating scale is defined below.

TRASER scores of ten and nine are considered to be in excellent condition. These ratings describe any new construction or recent overlay with no apparent issues requiring no treatments or repairs.

TRASER eight through six are considered in good condition with first signs of raveling and cracks associated with surface aging. These conditions can still provide a smooth riding experience.

TRASER five and four are considered to be in fair condition with multiple longitudinal and transverse cracks, distorted pavement, and the occasional pothole. These conditions do not provide a smooth surface and require crack seals and would greatly benefit from a structural overlay like Hot Mix Asphalt (HMA).

TRASER three, two, and one are trail segments in very poor condition. These segments experience alligator cracking, crack erosion, multiple potholes, severe distortions, and overall loss of surface integrity. The prescribed treatments for trail segments with these scores include HMA overlay, heavy rehabilitation, and ultimately full reconstruction with base repair.

Collecting condition assessments on the non-motorized trail systems in the county has been a big step forward in efficiently allocating funds to non-motorized transportation projects. The Bay County Road Commission is mandated by law to spend one percent of their Michigan Transportation Fund (MTF) dollars towards non-motorized transportation services and facilities. For context, in fiscal year 2018 the Bay County Road Commission’s 1% requirement totaled \$120,000. These ventures include non-roadway facilities, on-roadway facilities, and services. Examples of non-roadway facilities are sidewalks within villages and cities, signage/trail markings, and shared-use pathways existing off the edge of the roadway. Some on-road facilities include wide shoulders, pedestrian crossings, and bike lanes. Eligible services may include engineering costs, educational brochures/maps, and planning/surveying services.

These non-motorized transportation projects are eligible if they are constructed within a transportation corridor and the project provides reasonable access to services and destinations that would otherwise only be accessible by a motor vehicle. A project that fills a gap in a local



Figure 4: Recently paved section of non-motorized trail located in Bay County, MI (2019).



Figure 5: Section of asphalt showing alligator cracking, indicating poor surface condition in need of repair.



or regional network, or connects the larger network to services or destinations, could be considered a transportation project.<sup>5</sup>

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<sup>5</sup> “Work Creditable Against the Section 10k 1 Percent Expenditure Requirement” PA 51 of 1951 Michigan Compiled Laws (MCL) Sec. 247.660k Guidance document (2019)



## Chapter 4 – Existing Non-Motorized System

### Sidewalks

In Bay City and Essexville, more than 90% of the roads have sidewalks on at least one side of the road. Annually, Bay City reviews the sidewalks in one of the nine city wards and adds additional sidewalks where they are lacking, makes repairs where needed and updates ramps to be ADA compliant. Residents can also make a request to the City to repair, replace, or add sidewalks in front of their property outside the ward planned for a given year. In doing so, the owner will be assessed the cost of the replacement which can be paid over one (1) to ten (10) years. In Essexville, property owners can petition the city to install sidewalks at their own expense which again, can be paid over time.

In the townships, more than 90% of the roads lack sidewalks, including those in subdivisions. Of the townships in BCATS, Monitor Township and Bangor Township have ordinances requiring construction of sidewalks in new subdivisions. Bangor Township's ordinance includes sidewalk requirements along strategic road corridors when an adjacent property undergoes major improvements or a new building is constructed. None of the townships in the BCATS have an ordinance pertaining to bicycle facilities and/or bicycle riders on the roadway.

### Trails

In the BCATS and surrounding area, there are more than 20 miles of non-motorized trails in three (3) separate areas, the Fraser Township Trail, the Hampton Township Nature Trail, and the Bay County Riverwalk and Railtrail.

The Fraser Township Trail utilizes 4 miles of the abandon rail line from north of Sherman Rd to south of Almeda Beach Rd. This trail is crushed limestone and runs adjacent to the Nayanquing Point Wildlife Area.

The Hampton Township Nature Trail is a 2.5 mile crushed limestone path which connects the Finn Rd campground to Knight Road and then continues west along the Saginaw Bay.

The Bay City Riverwalk and Railtrail is a 9.5 mile trail loop that uses a combination of abandoned rail corridors, widened sidewalks, a boardwalk and park pathways. This trail connects both sides of the Saginaw River and runs through Bay City, Hampton Township, and Portsmouth Township.

Connecting to the Railtrail Loop is the Bangor Extension which runs 7.5 miles from the Railtrail Loop at the Liberty Bridge and out to the Bay City State Park (BCSP). This route is considered part of the Bay County Riverwalk/Railtrail system and runs through Bay City and Bangor Township. It connects to the 1.5 mile long Frank Anderson Nature Trail in the BCSP and the



nature trails in the Tobico Marsh Wildlife Area. This entire trail network, with the exception of the nature trails at Tobico Marsh, is paved with asphalt or concrete.

### **On Road Bicycle Facilities**

A limited, unconnected network of on-road bicycle facilities exists within BCATS (see the maps on page 7). Portions of the Bay County Riverwalk/Railtrail do use on-road facilities which include paved shoulders and “Share the Road” signing on low volume residential streets. There are several other roadways in the townships that provide a minimum 4 foot paved shoulder. The Liberty Bridge has a 4 foot concrete infill on the metal grates of the bascule portion of the bridge. This portion of the road is striped to mark the vehicle lane, but not officially identified as a bike lane. Completed during the summer of 2010, widened shoulders were added on Two Mile Road and concrete sidewalks on Kiesel Road that service John Glenn High School and Christa McAuliffe Middle School. These improvements were funded through a Safe Routes to Schools grant. Beyond these examples, the on-road facilities consist of the existing network of low volume residential streets.

Additionally Michigan’s Bicycle Route 20 passes through several existing trails in the BCATS area. U.S. Bicycle Route 20 is an east-west route of just over 300 miles and connects Marine City on the east side of Michigan with Ludington on the west. Outside of Michigan, the route is not yet well-defined, but it is planned to run through Wisconsin, Minnesota, North Dakota, Montana, Idaho, Washington, and Oregon<sup>6</sup>.

### **Completed Non-Motorized Projects**

Over the last 10 years, there have been several projects completed that have expanded, improved or maintained the non-motorized infrastructure in the Bay City urbanized area. A few of the most notable projects are as follows:

Hampton Township Nature Trail: In 2019, Hampton Township completed a new boardwalk with scenic lookouts along the Hampton Township Nature Trail. This includes a new scenic trail at the Finn Road Campground along the Saginaw Bay. Designated as the Saginaw Bay Birding Trail, it provides users with the opportunity to the area’s native flora and fauna. This site also serves as a primary launch site for the coastal water trail.

Christa McAuliffe Middle School Safe Routes to School Project: This project provided the addition of sidewalks along a mile stretch of Kiesel Road in front of the Middle School and John Glenn High School to provide a safe walking area for students traveling to and from school. Part of that project included improving the paved shoulder on Two Mile Road as well as a new pedestrian crossing at the intersection of Euclid Avenue (M-13) and Kiesel Road.

M-84 Bike Lanes: As part of the reconstruction of M-84 in Frankenlust Twp, bike lanes on both sides have been added from Delta Road to Two Mile Road.

<sup>6</sup> The United States Bicycle Route System: Corridor Plan (Map). Adventure Cycling Association. Retrieved from <https://www.adventurecycling.org/routes-and-maps/us-bicycle-route-system/national-corridor-plan/> October 1, 2020.



Sidewalk Replacement and Additions: Bay City has continued its annual sidewalk replacement program to replace deteriorated sidewalks and fill in gaps where they exist. Several townships, including Hampton, Williams, and Bangor, have been adding sidewalks along roads which have higher traffic and in commercial corridors to allow for pedestrians to access these businesses.

Bay-Zil Rail Trail Paving Project: The Bay Area Community Foundation finished paving a significant portion of the Bay-Zilwaukee Rail Trail from the Hotchkiss Road Trailhead North towards Backus Street. The City of Bay City assisted this endeavor by brush-hogging the trail so the asphalt pavement could be laid.



*Figure 6: The photo on the left shows the new section of trail crossing Backus Rd near the old Prestolite factory. The photo on the right is the Hotchkiss Rd Trailhead of the Bay Zil Rail Trail looking north towards Backus Rd.*

Fishing Pier Trail in Bay City: In 2019, Bay City revamped the fishing pier located on the West side of the Saginaw River. Repairs were made to broken railings and benches, fresh paint was applied to the pavilion and railings, and unique lighting was added. Improvements to this part of the Riverwalk/Railtrail will attract more guests and inspire usage of the rest of the non-motorized facilities in the area.

Paved shoulders on Midland Road: Since 2011, between Two Mile Road and 4 Mile Road, Midland Road has been reconstructed. This project added 8 foot paved shoulders along this entire segment and be part of the Midland to Bay City Non-Motorized connection for the Great Lakes Bay Regional Trail Plan.

Paved Shoulders on 1 mile of North Union Rd: In 2014 the reconstruction of North Union Road, between Euclid Ave and Two Mile Road, has added paved shoulders and has also been designated as part of the Midland to Bay City Non-Motorized connection for the Great Lakes Bay Regional Trail Plan.



Non-Motorized Improvement at Bay Metro Transportation Authority: With the Bay Metro Transit Authority taking over full control of the Central Bus Station, various improvements have been made at the station. These improvements include the additions of bike lockers and more bicycle parking options. Furthermore, BMTA has recently added bike racks to buses in their transit service fleet.

Sidewalk Ramp Improvement: With every road resurfacing project, the road agencies (Bay City, Essexville, MDOT, and the Bay County Road Commission), must install sidewalk ramps that meet American with Disabilities Act (ADA) requirements where sidewalks exist and no ramp currently exists. If sidewalks are being installed as part of the project, then ADA ramps must also be installed.

Bay City Riverwalk/Railtrail Resurfacing Projects: Over the last few years, much of the older portions of the 20+ year old Bay City Rail Trail have been resurfaced as part of the maintenance of the trail. Furthermore, recent development in Bay City’s Uptown has yielded more trails to and from businesses and homes in the area.

Township Railtrail Resurfacing Projects: In 2019, township-owned non-motorized trails were resurfaced by the Bay County Road Commission. The Bay County Road Commission repaved a total of 4 miles of trail in Bangor, Portsmouth, and Hampton townships while also replacing bollards with new gates signage and pavement markings.

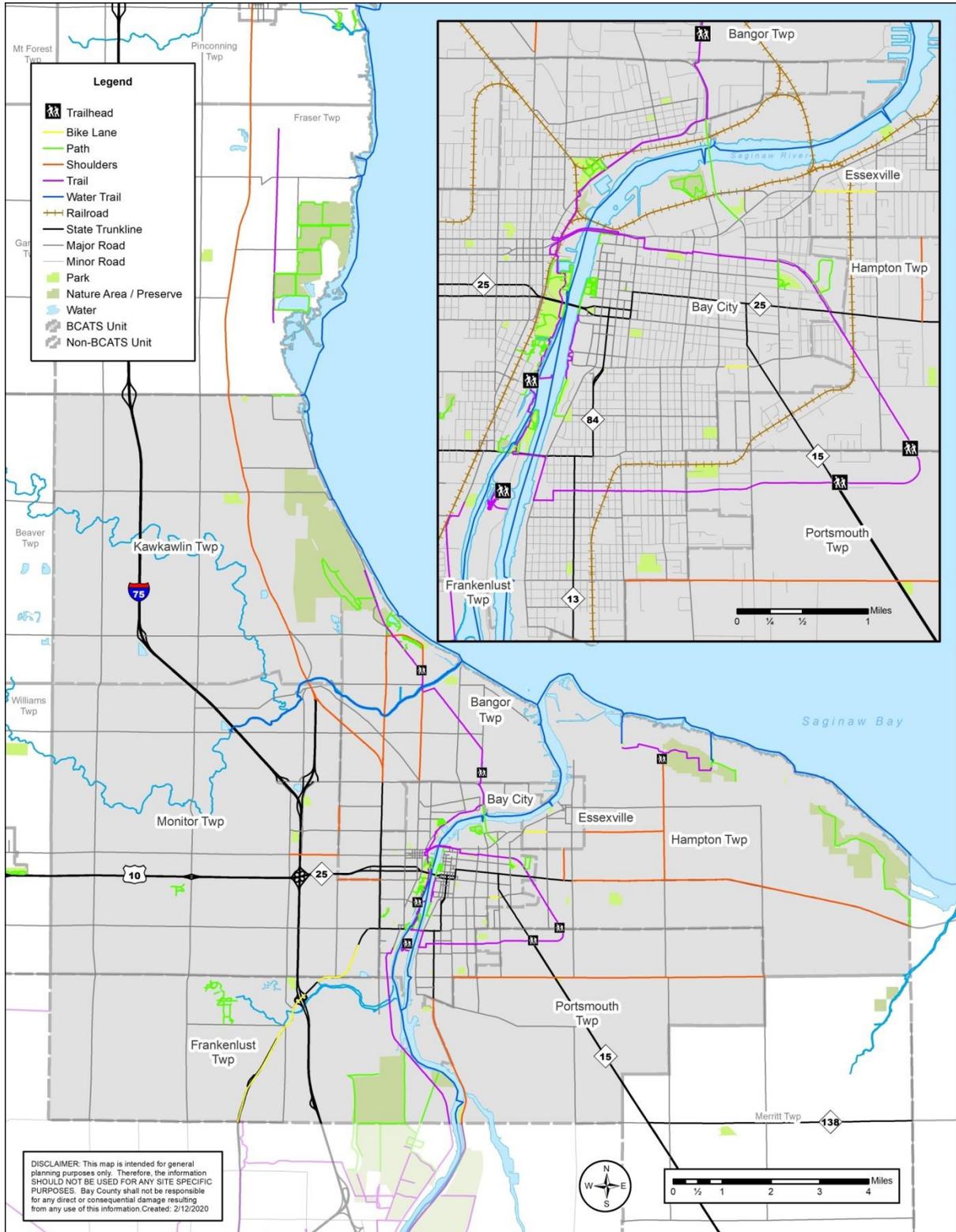
HAWK (High-Intensity Activated CrossWalk) Beacon on Pine Road: In July of 2020, the Bay County Road Commission activated the very first HAWK beacon in Bay County on Pine Road between Ridge Road and Youngs Ditch Road in Hampton Township. Unlike an ordinary three-light traffic signal, the HAWK signal remains dark until activated by a pedestrian. The pedestrian presses the button located on a pedestal next to the sidewalk. This activates the HAWK beacon. When activated by a pedestrian, the HAWK signal will stop traffic at the mid-block pedestrian crossing on Pine Road, allowing them to cross. More information can be found at [www.baycoroad.org](http://www.baycoroad.org).



Figure 7: The photo above shows the new HAWK pedestrian crossing on Pine Road between Youngs Ditch Rd looking North to Ridge Road in Hampton Township. This is the very first HAWK signal used in Bay County.



### BCATS Currently Existing Non-Motorized Infrastructure





### **Upcoming Non-Motorized Projects**

In the next 5 years, there are several planned projects to expand or improve the non-motorized infrastructure in the Bay City Area. Many of these projects are part of existing plans and programs as follows:

Paved Shoulders on Midland Road: By 2026, the Bay County Road Commission plans to continue widening Midland Road with 8 foot paved shoulders to ultimately develop the Midland to Bay City Non-Motorized connection for the Great Lakes Bay Regional Trail Plan.

State Park Drive at the Bay City State Park: In the coming years, reconstruction of State Park Drive through the Bay City State Park will add a safer and more complete non-motorized trail system to access the campground and Saginaw Bay shoreline located just off the main road.

Updated Trail Signage: The Bay County Road Commission is planning to install new signage along the non-motorized paths throughout the townships surrounding Bay City. These signs may include stop signs, crossing signs, and road signs at or near trail intersections.

Bay City Sidewalk Program: Bay City will continue its annual sidewalk replacement program to replace deteriorated sidewalks and fill in gaps where they exist, as funding allows.

Historic Recreational Corridor: Plans are in place to repave the Midland Street historic district in Bay City to include updated non-motorized facilities and install historic themed lighting, benches and trash receptacles. The Henry Street State Park Drive corridor connects with part of the Iron Belle Trail to reach other recreational amenities at the Bay City State Park and beyond. This trail will eventually meet the proposed Bay View Route of the Iron Belle Trail that takes users along the Saginaw Bay beachfront at Bay City State Park.



## Chapter 5 – Education and Recommendation

### When to Add On Road Non-Motorized Facilities

There are various ideal times to begin the installation of the non-motorized facilities along the motorized routes. Numerous factors such as funding, road width, drains, and surfacing condition can determine whether or not a non-motorized facility could be installed. Below are a several options for the best time to install such facilities at a minimal extra expense:

- **Reconstruction and Resurfacing Projects** – When a road agency in BCATS has an upcoming reconstruction or resurfacing project on a non-motorized route, that agency should include the recommended on-road non-motorized facility if at all possible. If an alternate non-motorized facility or route is deemed more appropriate during the project development phase, the agency should verify the connectivity and viability with BCATS.
- **Road Restriping and additional Pavement Marking** – The addition of pavement marking or the adjusting of lane striping to incorporate an on-road non-motorized facility should only be completed on a roadway with a surface condition of good or better based on the Pavement Surface Evaluation and Rating (PASER) scale (6 or better). This process can also be used to connect non-motorized facilities that are in existence, but only lack a short connection. It is not recommended to add on-road non-motorized pavement markings to a road in fair or poor condition (PASER scale of 5 or below). The pavement markings will fade and not reach its expected lifespan, coupled with a deteriorating pavement which will not provide a surface suitable for non-motorized traffic. If the pavement is resurfaced, any existing non-motorized pavement markings are replaced.
- **Signed Bicycle Route** – By installing bicycle route signs as a wayfinding system, it can direct bicyclist to specific destinations on a “bicycle friendly” route. The signage should indicate the destination and direction of travel. These routes should not encourage illegal or unsafe behavior such as running stop signs, riding on the wrong side of the road, or sidewalk riding.
- **Additional Funding** – If and when additional funding options become available for the development of Non-Motorized Facilities, the first priorities should be to fill in gaps in the existing system or in the case of large scale funds, to focus on higher cost projects such as development of separated non-motorized trails or road widening to add bike lanes or additional paved shoulders.

### Importance of Continued Maintenance of Existing Non-Motorized Facilities

Maintaining non-motorized facilities in good working order is imperative. Specifically, a yearly maintenance program is recommended for facilities that do not fall into the on-road category. Thankfully the Great Lakes Bay Region is home to many local trail authorities that have a deep interest in maintaining and protecting the non-motorized facilities within the BCATS area. For



example, the Riverwalk Rail Trail Committee at the Bay Area Community Foundation in Bay City takes great pride in their non-motorized systems. Committee members continually work toward interconnectivity between facilities as well as coordination between regional partners.

### **Education of the Public on Non-Motorized Transportation**

The Bay City Area Transportation Study should look to various options to help educate the people of Bay County regarding available Non-Motorized Transportation. Hosting or sponsoring safety forums on the proper ways for motor vehicles and bicycles to share the road. Post information and maps on the BCATS website of non-motorized projects and plans occurring in the area. As new non-motorized resources become available for transportation staff and the public, BCATS staff will work towards making those resources available. For example, public mapping, online surveys, and other appealing online arrangements made available through the internet allow citizens to engage with non-motorized transportation stakeholders in the Great Lakes Bay Region.

### **Recommended Network of Bicycle Facilities**

Since 2011, factors relevant to the proposed network of facilities such as speed limits, populations, and average daily traffic rates have all remained fairly constant. That being said, many of the recommendations from the BCATS 2011 Non-Motorized Transportation Plan are still valid. One notable exception outlined in the Bay City Non-Motorized Plan (2017), is that bike lanes are superior to shared-lane markings/sharrows in terms of safety when it comes to clarity of path for motorists and cyclists alike. Because of this, the City of Bay City specifically endorses bike lanes everywhere that sharrows are recommended, whenever possible<sup>7</sup>.

The following map series show one possible option of a completely interconnected non-motorized transportation network. Since sidewalks are the major facility for pedestrian use, the following map series focuses on the bicycle facilities. The goal of the map series is to connect all major destinations (schools, parks, shopping and employment areas, and other major attractors) for any non-motorized user, with a network of various bicycle facilities.

The maps take into account various factors including existing facilities, traffic volumes, road width, speed limits, on-street parking, and connection to destinations. Existing systems include trails, paved shoulders, and roads with traffic volumes and speeds low enough to easily accommodate shared usage with bicyclists. They also identify roads that currently have the width to provide an on-road bicycle facility as described previously.

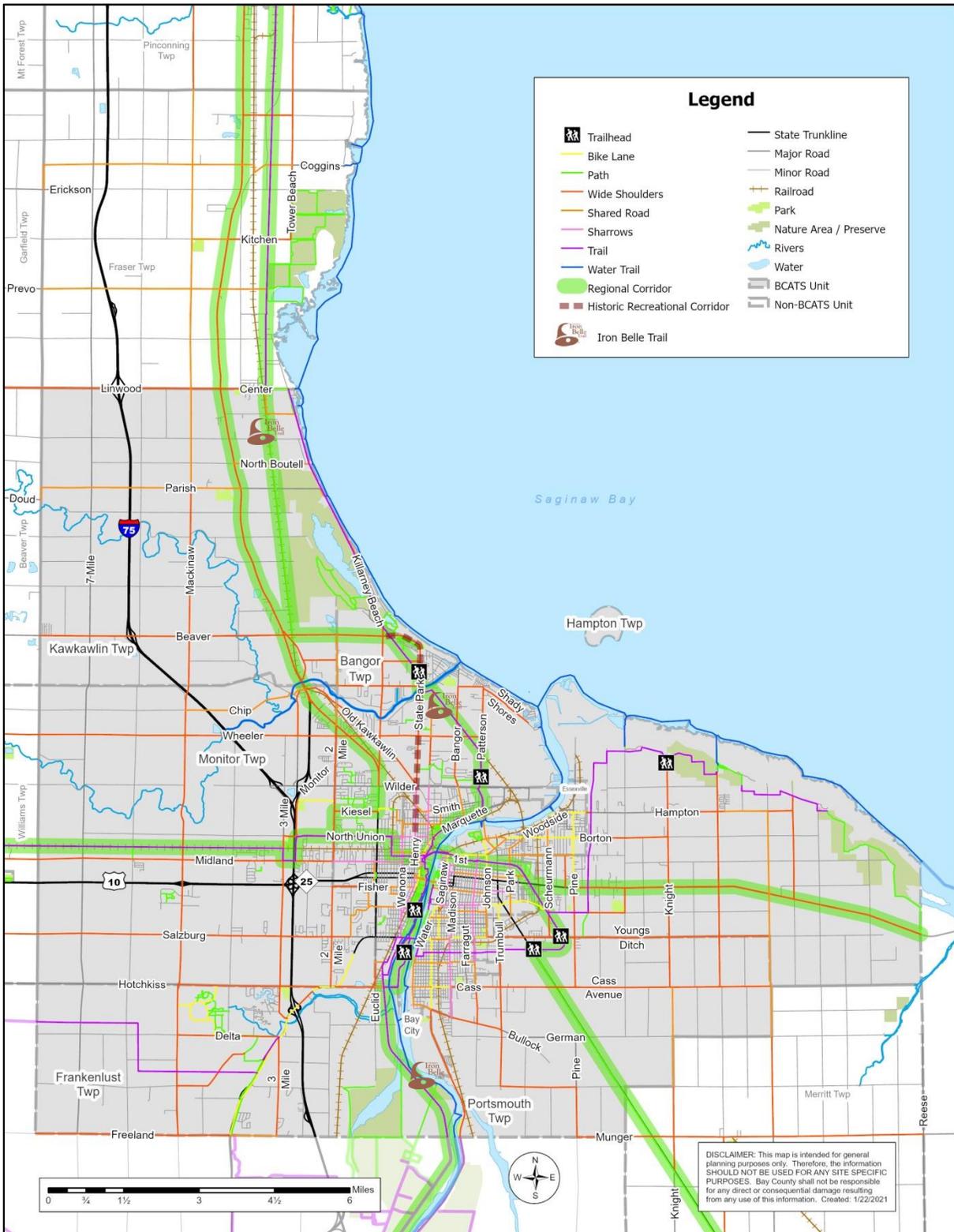
These maps provide only one option for our current system of road and trails and are not finalized or “set in stone.” They do provide roadway options for bicyclists and go a long way towards the completion of a non-motorized transportation system in Bay County. When future roadwork occurs on these identified routes, it provides an opportune time to establish an on-road bicycle facility.

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<sup>7</sup> City of Bay City, Rowe Professional Services Company. (2017). “Bay City Non-Motorized Plan” (p. 25). Retrieved from <https://www.baycitymi.org/DocumentCenter/View/1524/Bay-City-Non-Motorized-Plan---2017>.

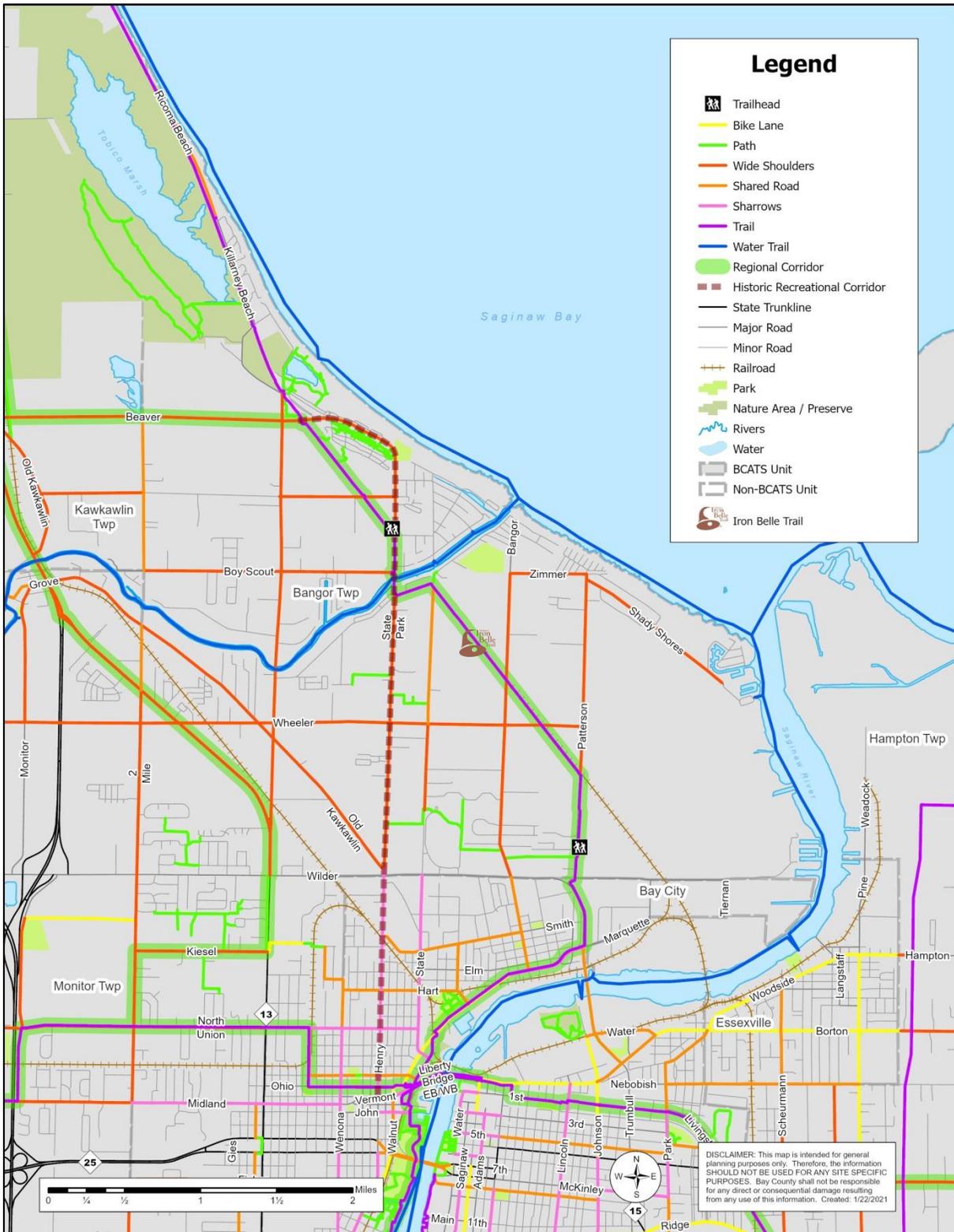


### Recommended BCATS Non-Motorized Network: BCATS Urbanized Area



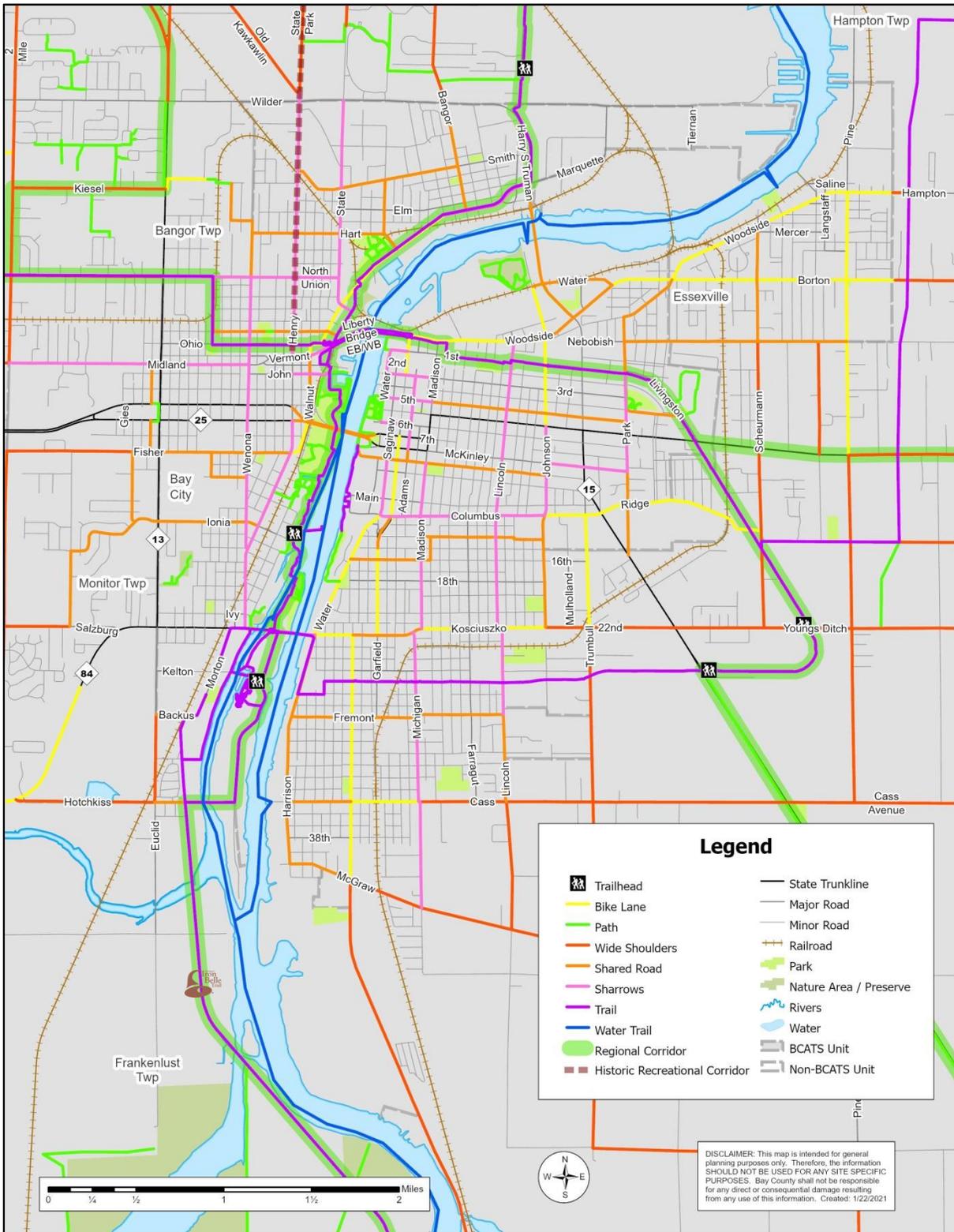


### Recommended BCATS Non-Motorized Network: Bangor Township



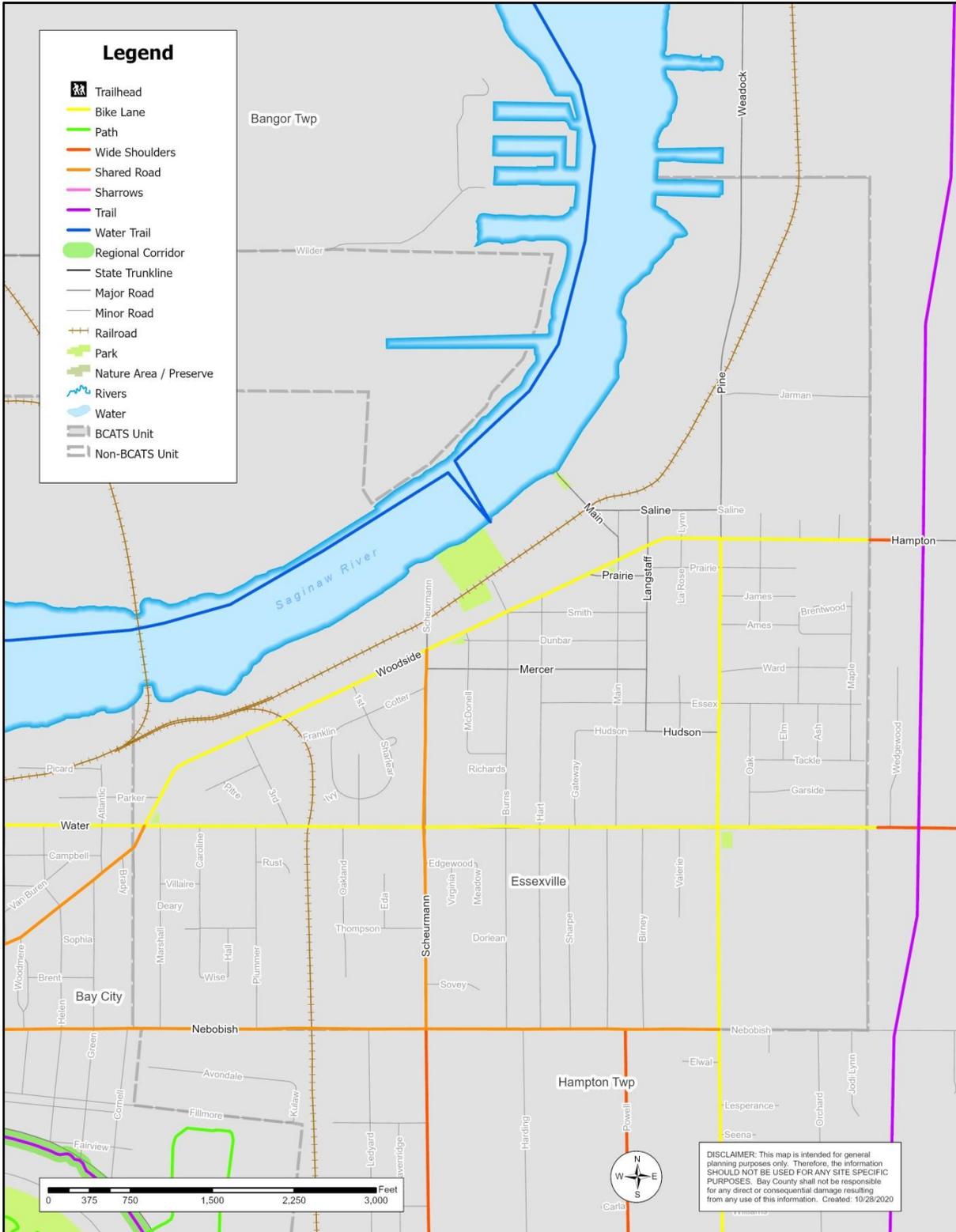


### Recommended BCATS Non-Motorized Network: City of Bay City



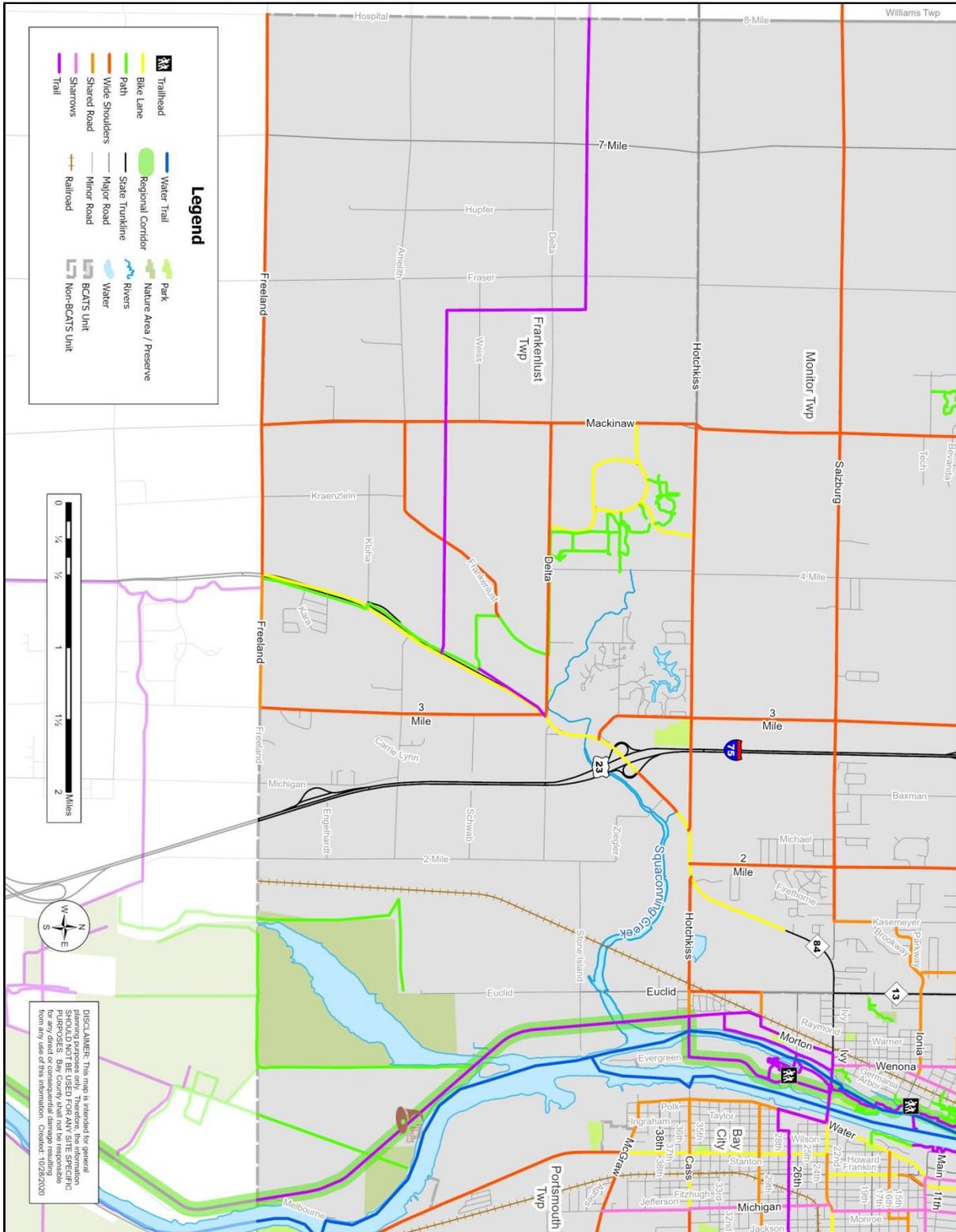


### Recommended BCATS Non-Motorized Network: City of Essexville



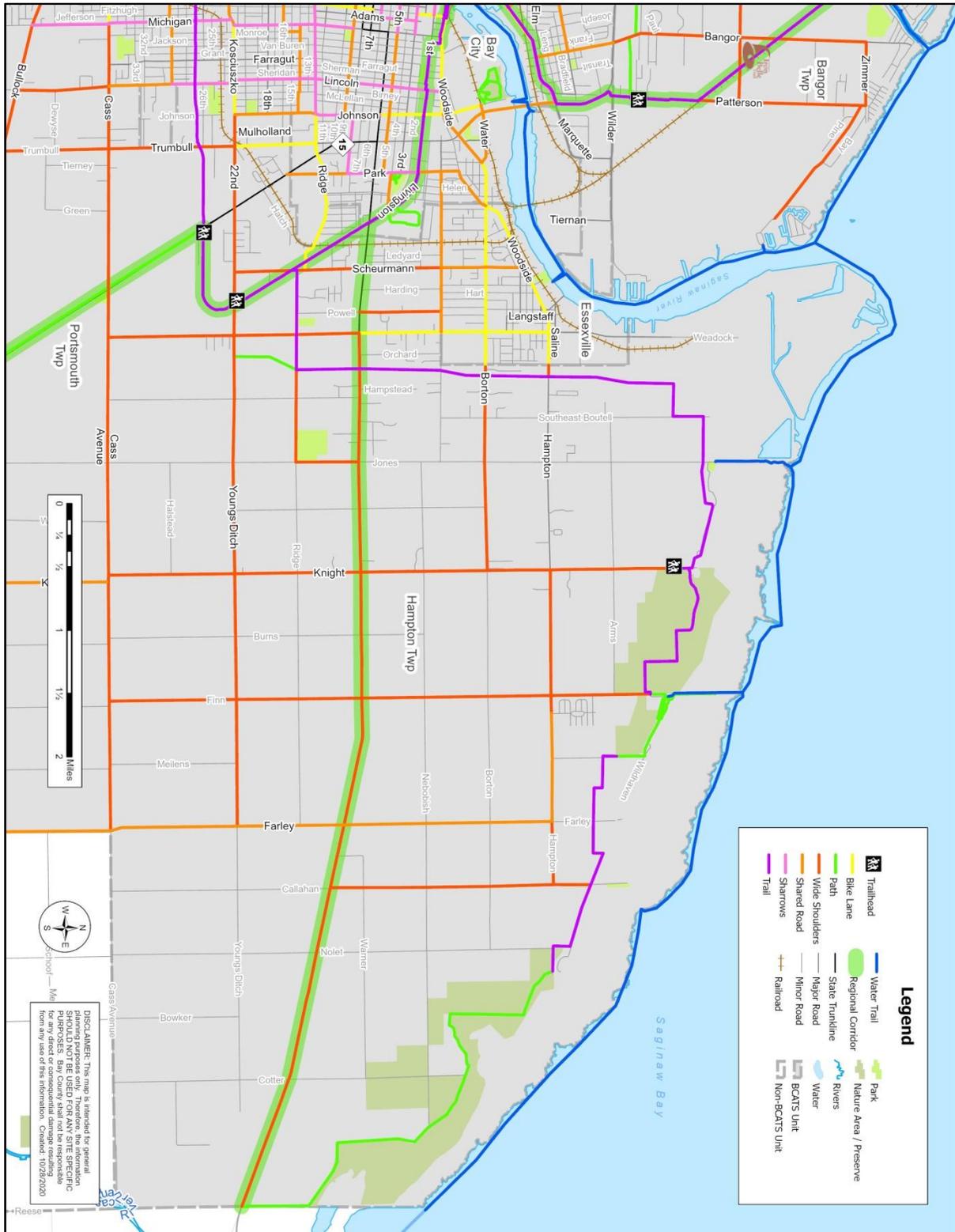


**Recommended BCATS Non-Motorized Network: Frankenlust Township**



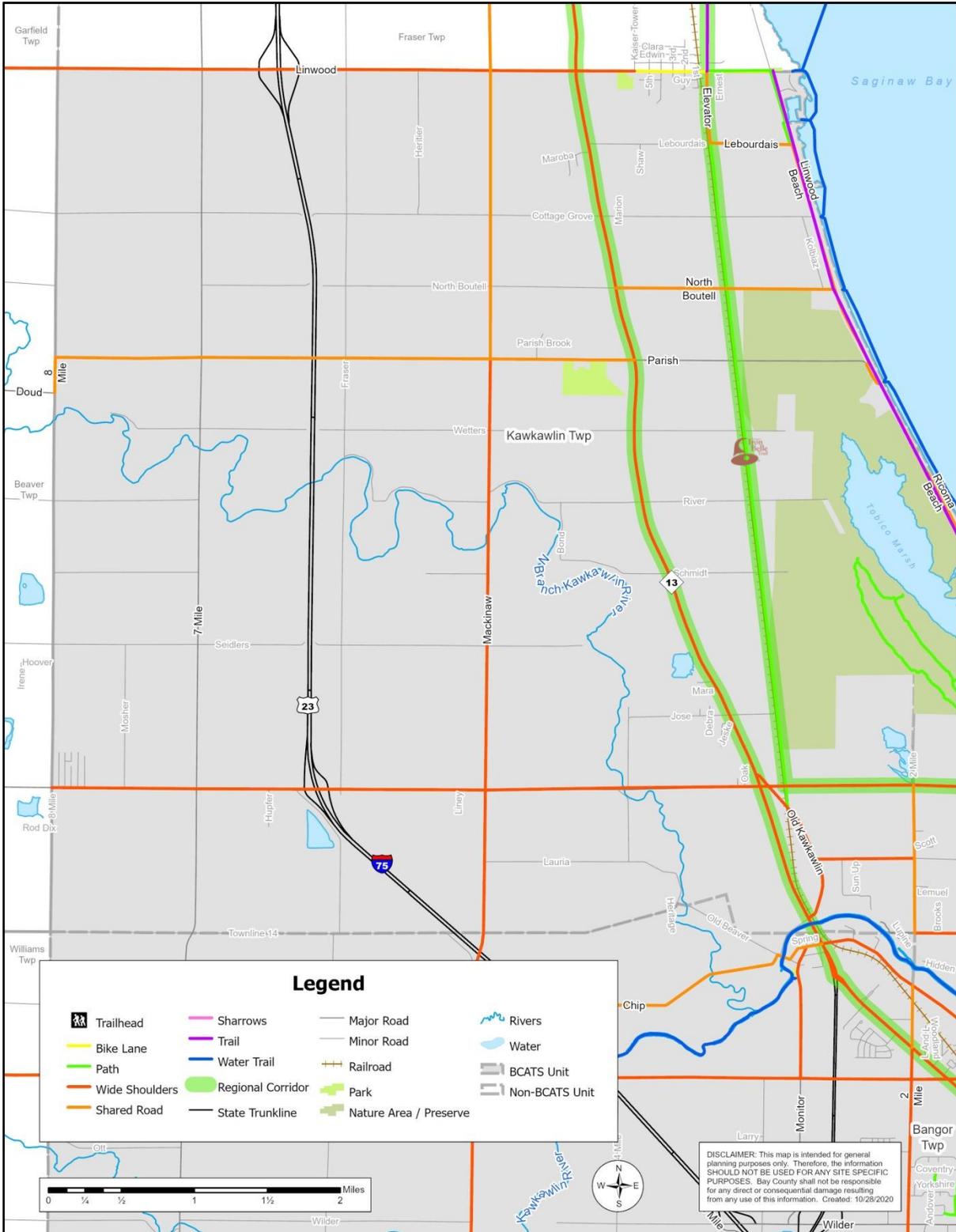


**Recommended BCATS Non-Motorized Network: Hampton Township**



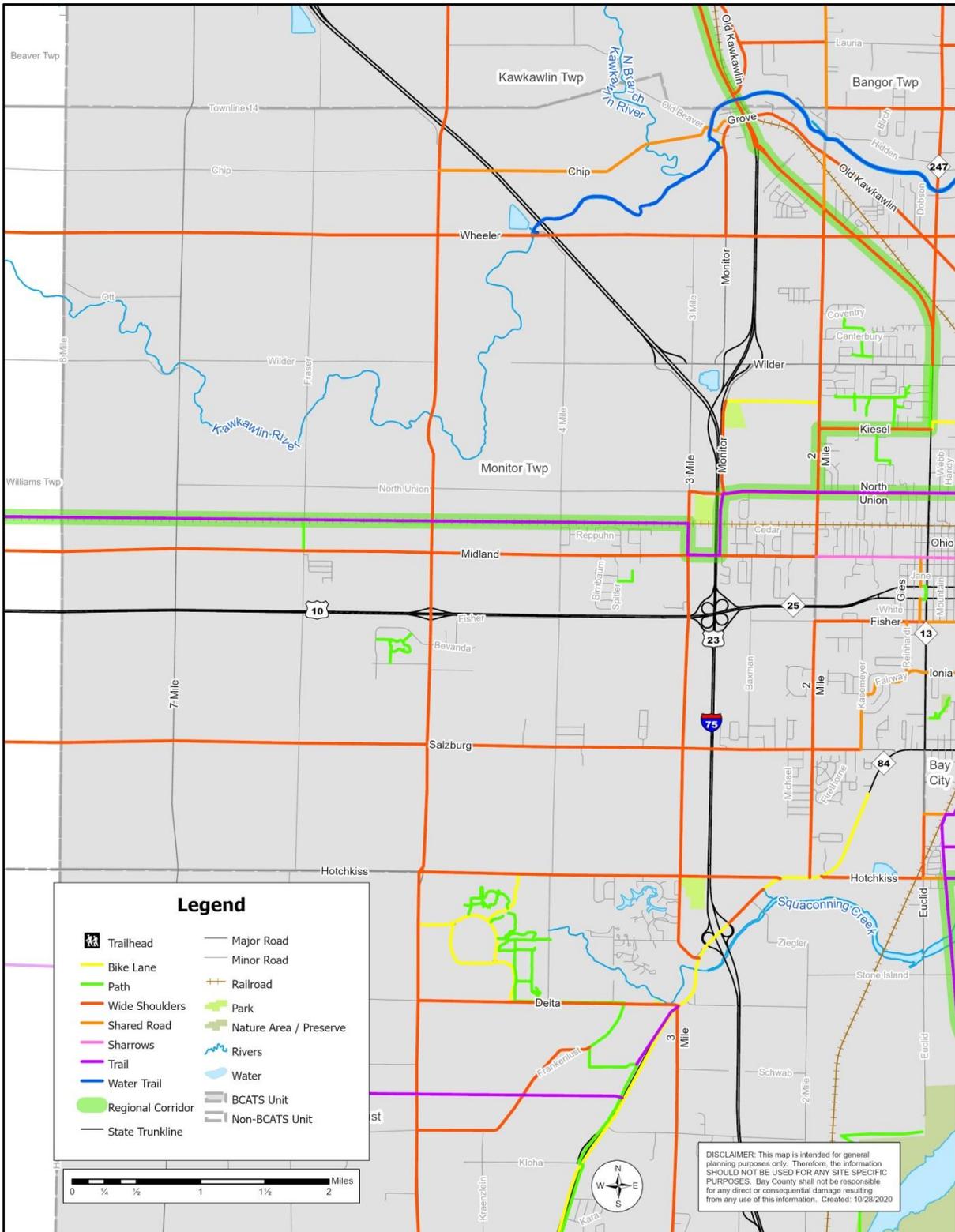


**Recommended BCATS Non-Motorized Network: Kawkawlin Township**



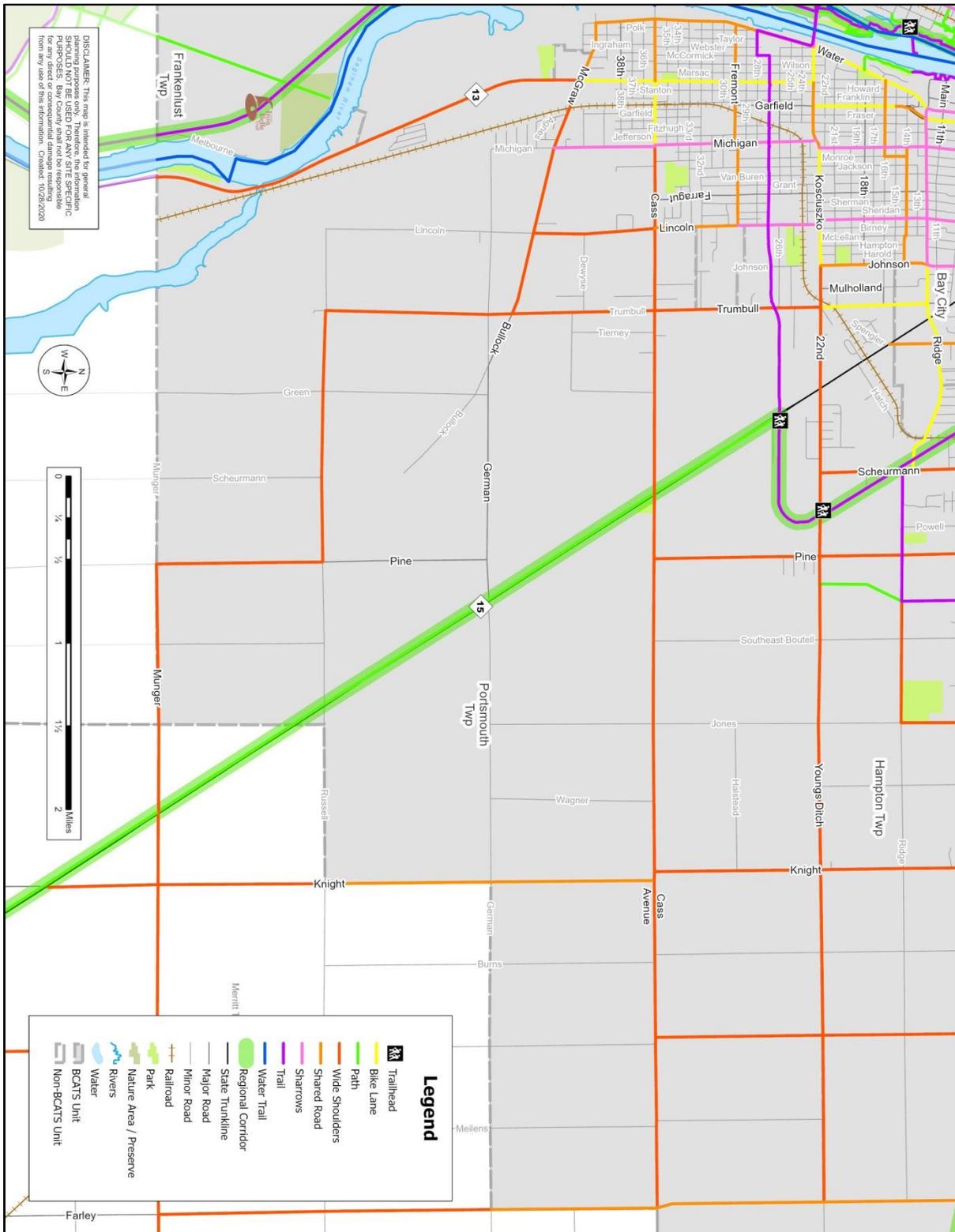


### Recommended BCATS Non-Motorized Network: Monitor Township





**Recommended BCATS Non-Motorized Network: Portsmouth Township**





## Chapter 6 – Safety of Non-Motorized Transportation Users

From design, to maintenance, to visibility, to education of all users, safety is continually a top concern for a non-motorized network. From 2015 through 2019 in the BCATS, there have been 171 reported traffic accidents involving bicyclists (92) or pedestrians (79). Six of these traffic crashes were fatalities with another 19 crashes (8 bicyclists and 11 pedestrians) causing incapacitating injuries. More than 67% (65 bicycles and 50 pedestrian) of all the non-motorized crashes within BCATS were within 0.01 miles (52.8 ft.) of an intersection and more than 86% (80 bicycles and 68 pedestrian) were within 0.03 miles (158.4 ft.) of an intersection.

Of those 171 non-motorized traffic accidents, 128 (68 bicycle and 60 pedestrian) or 75% were on Federal Aid Eligible Roads or at an intersection of a local road and a Federal Aid Eligible Road. Many of these non-motorized accidents could have been avoided with the proper education of either the drivers or non-motorized user. In the case of bicyclists and/or pedestrians, education on the proper use of the roadway and the rights of the bicyclist in the roadway is essential. This has led to new legislation in Michigan to help protect on-road non-motorized users.

### Michigan’s Three-Foot Passing Laws

In 2018, Michigan passed three new laws to help provide safety for bicyclists on the roadways<sup>8</sup>. These new laws fall under Public Act 277 of 2018, Public Act 279 of 2018, and Public Act 280 of 2018.

1. House Bill 4198 approved by former Gov. Rick Snyder found in Public Act 277 of 2018 provides that, “[N]ot less than 1 hour of information concerning the laws pertaining to bicycles, motorcycles, and other vulnerable roadway users, including pedestrians, and shall emphasize awareness of their operation on the streets, roads, and highways of this state. The laws of this state pertaining to awareness of bicycles, motorcycles, and other vulnerable roadway users, including pedestrians, shall also be incorporated into other subject areas of the curriculum where appropriate.”
2. House Bill 4185 approved by former Gov. Rick Snyder found in Public Act 279 of 2018 provides that, “The driver of a motor vehicle overtaking a bicycle proceeding in the same direction shall pass at a safe distance of at least 3 feet to the left of that bicycle or, if it is impracticable to pass the bicycle at a distance of 3 feet to the left, at a safe distance to the left of that bicycle at a safe speed, and when safely clear of the overtaken bicycle shall take up a position as near the right-hand edge of the main traveled portion of the highway as is practicable.”

<sup>8</sup> Gursten, Steven M. “Drivers Must Give MI Bicyclists 3-Foot Safe Distance by Law.” Michigan Auto Law, 2 July 2018, [www.michiganautolaw.com/blog/2018/07/02/3-foot-safe-distance-drivers-passing-bicyclists/](http://www.michiganautolaw.com/blog/2018/07/02/3-foot-safe-distance-drivers-passing-bicyclists/).



3. House Bill 4265 approved by former Gov. Rick Snyder found in Public Act 280 of 2018 provides that, “The driver of a vehicle overtaking a bicycle proceeding in the same direction shall [only in the limited circumstances when passing on the right is permitted under MCL 257.637(1) and (2) – which is not affected by House Bill 4265] pass at a distance of 3 feet to the right of that bicycle or, if it is impracticable to pass the bicycle at a distance of 3 feet to the right, at a safe distance to the right of that bicycle at a safe speed.”

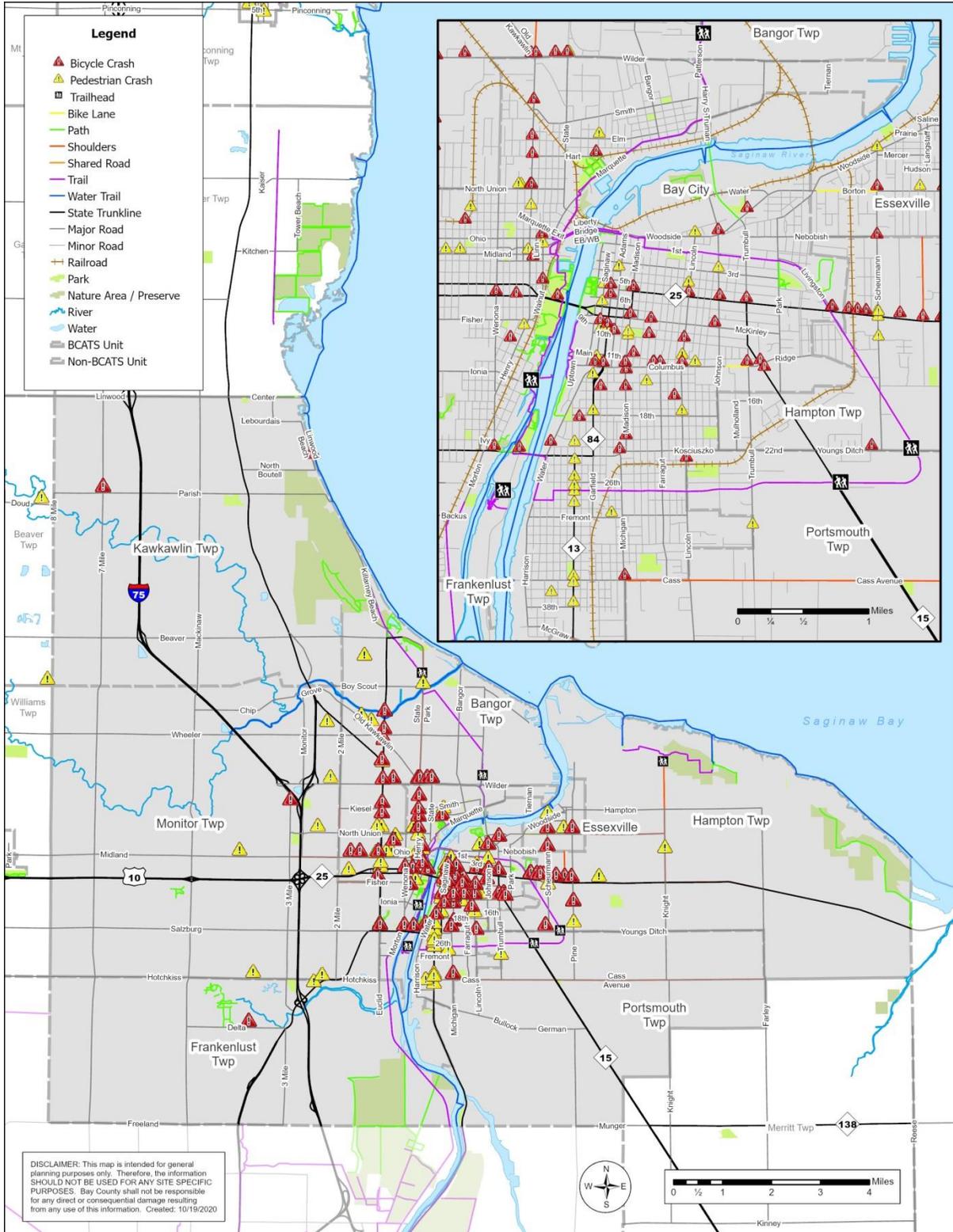


Ultimately these new laws help decrease the number of crashes between motorists and bicyclists by forcing motorists to be increasingly aware of bicyclists sharing the roadways. Of course there are many ways in which crashes between motorists and bicyclists or pedestrians can be limited or avoided altogether. Apart from improving the education of non-motorized users and their rights, simply providing a clearly defined non-motorized facility can further protect the motorist and the non-motorized user. For example, a striped bike lane on a collector road tells the bicyclist where and in which direction they should ride their bike. It also provides the motorists with a visual cue that alerts them that bicyclists are likely to be in the roadway, thus improving the visibility of the non-motorized user. Facilities like protected bike lanes and wide outside lanes/paved shoulders increase the distance between motorists and bicyclists. Again, signed bicycle routes and non-motorized pavement markings increase the motorist’s awareness of bicyclists that may be on the roadway.

For more information on traffic crashes, please visit Michigan Traffic Crash Fact’s website at [MichiganTrafficCrashFacts.org](http://MichiganTrafficCrashFacts.org).



### BCATS Non-Motorized (Bicyclist or Pedestrian) Involved Traffic Crashes: 2015 – 2019





### BCATS Non-Motorized (Bicyclist or Pedestrian) Involved Fatal or Seriously Injured Traffic Crashes: 2015 – 2019





## Chapter 7 – Non-Motorized Transportation Public Survey

### Background

During the update to the BCATS Non-Motorized Transportation Plan, staff developed a non-motorized transportation public survey. This survey was intended to allow for public input in the non-motorized transportation planning process. Ultimately, this survey allows transportation planning staff, city and township officials, and other transportation agencies to better understand the public's opinion and overall use of the non-motorized transportation facilities within Bay City and the surrounding area.

### Survey and Sampling

The survey was developed with questions that primarily focused on travel behavior and attitudes towards the existing non-motorized facilities as well as what types of improvements may be desired by the community. Additional survey questions were available that allowed the respondents to add non-motorized facilities into a GIS database. With these questions, users could create non-motorized facilities by either dropping a point or drawing lines on an interactive web-map.

The survey was published online to the BCATS homepage on the Bay County website from the beginning of October, 2020 until December, 2020. The survey was also sent to the BCATS Policy Committee which includes township officials and other community leaders. Furthermore, the survey was made available to the public and notifications were sent to local agencies, bike shops, fitness and recreational centers, community foundations, and shared on the Bay County Facebook page. The BCATS Non-Motorized survey was even featured on a short segment of WNEM TV5 morning news.

### Response

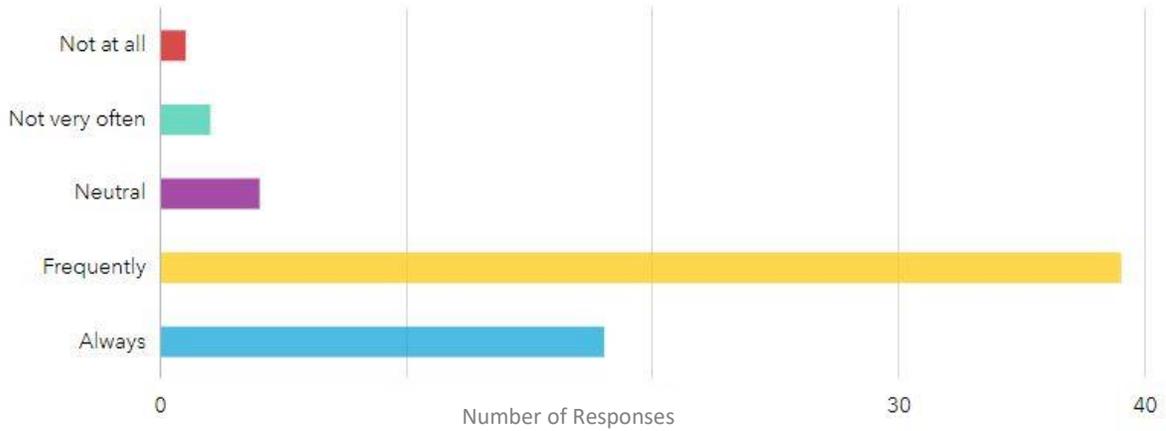
The survey returned 65 responses from multiple types of community members. A complete list of the survey results can be found at <https://arcg.is/0mSD0T> or by contacting BCATS staff directly.

Some key takeaways from the survey results are that many respondents have strong feelings on the safety of the non-motorized transportation facilities in the area. Specifically, about half of respondents are interested in bicycling but have concerns that deter their use of bicycling facilities. The other half of the respondents are enthusiastic and confident while using the bicycling facilities. Furthermore, many respondents have shared that they love their non-motorized transportation facilities and the beautiful scenery they provide. Specifically most respondents say they use paved trails, complete streets, trailheads, and sidewalks frequently. On the other hand approximately half of the respondents have stated they never use the water trails.

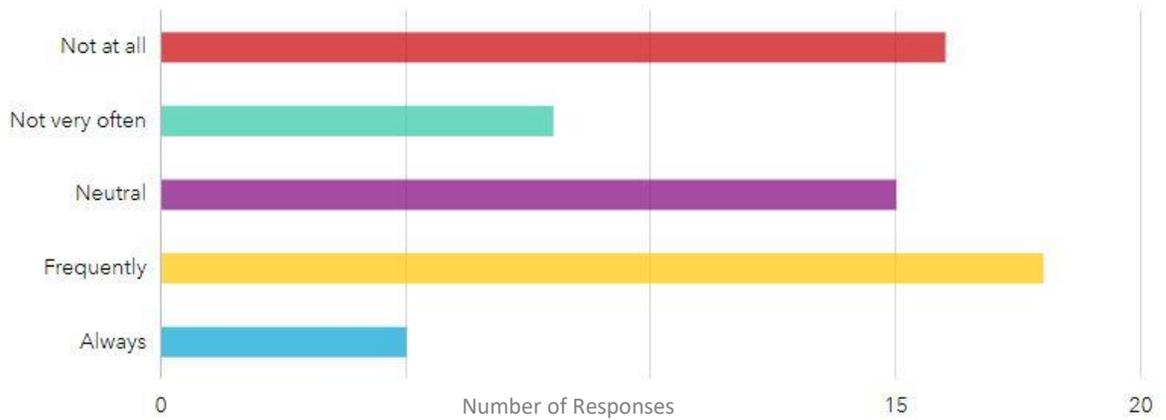


*How frequently are these non-motorized facilities used by you or your community?*

- *Paved Trails:*



- *Water Trails:*

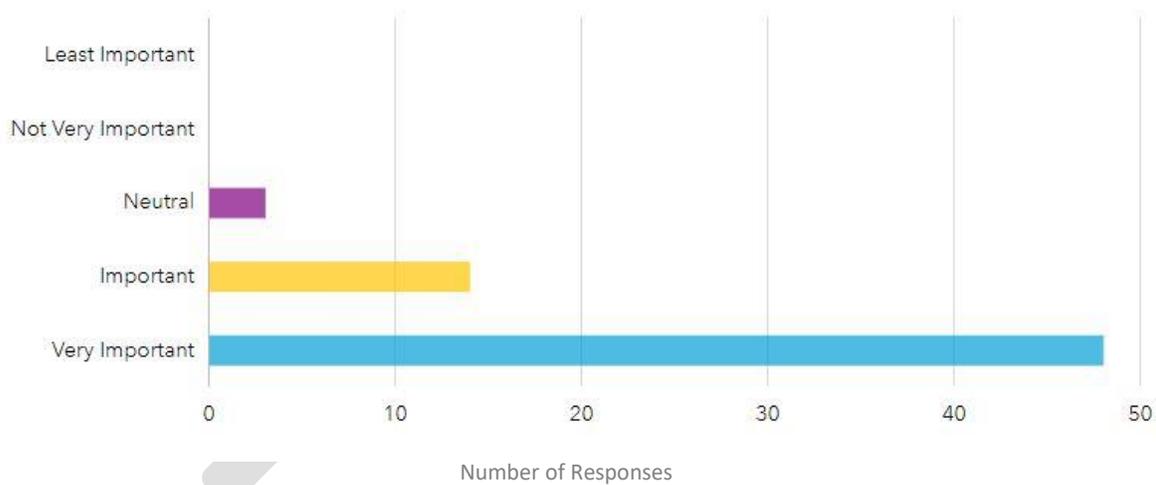




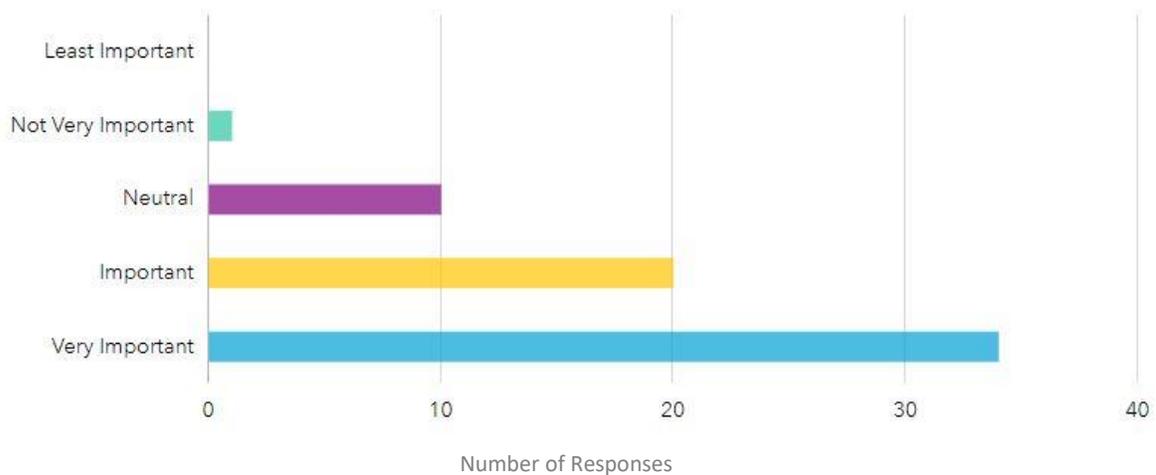
According to the survey results, the most important improvements in supporting walking and bicycling in the Bay City area is maintenance of existing facilities, improved connections between non-motorized facilities, improved intersections and improved street lighting.

*How important do you think the following improvements would be in supporting walking and bicycling in the Bay City area?*

- *Maintenance of sidewalks, bike lanes, bike, routes/greenways:*

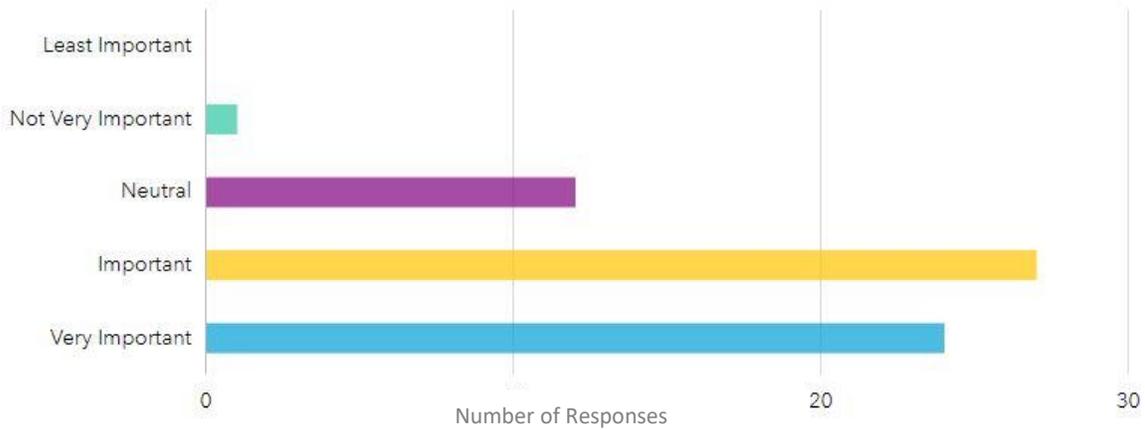


- *Improved connections between sidewalks, bikeways and transit:*

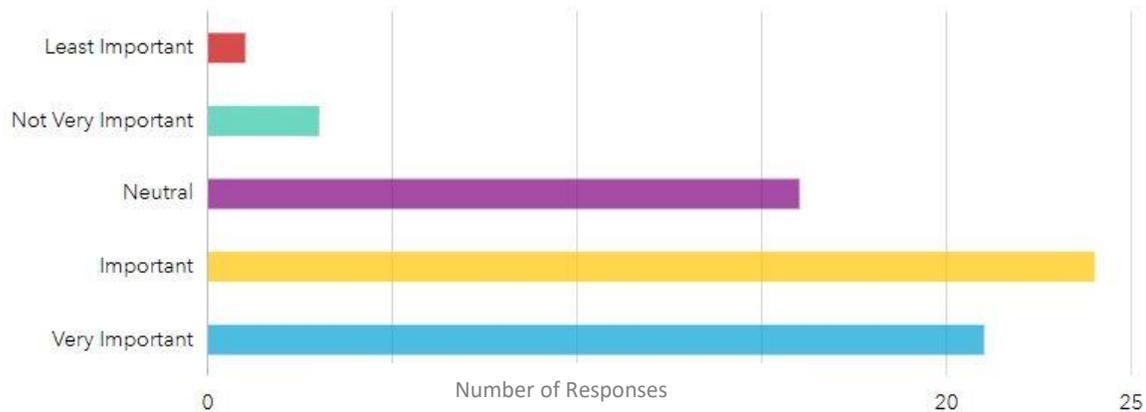




- *Better intersections (pedestrian signals/crosswalks):*



- *Better street lighting:*



The survey respondents were asked to provide some additional information on their favorite non-motorized transportation facilities as well as the specific qualities that made those facilities their favorite. Ahead, you will see a word cloud showing keywords from their responses. Again, a complete set of survey results along with more questions and responses can be found on the [BCATS homepage](#) or at the following website <https://arcg.is/0mSD0T>.





## Additional Resources:

### Bay County Transportation Planning & GIS:

*Bay County Building – 515 Center Avenue, Suite 504 Bay City, MI 48708-5941*  
*[www.baycounty-mi.gov/Transportation/Default.aspx](http://www.baycounty-mi.gov/Transportation/Default.aspx)*

Ryan Smith, Transportation Planner/GIS Technician

Phone: (989) 895-4245

Email: [SmithR@baycounty.net](mailto:SmithR@baycounty.net)

### Michigan Department of Transportation:

*MDOT Bay Region Office – 5859 Sherman Road Saginaw, MI 48604*

Jay Reithel, Region Planner

Phone: (989) 574-1432

Email: [ReithelJ@michigan.gov](mailto:ReithelJ@michigan.gov)

Brian Stark, Transportation Planner

Phone: (989) 780-2799

Email: [StarkB1@michigan.gov](mailto:StarkB1@michigan.gov)

### Bay County Road Commission:

*Administrative Building – 2600 E. Beaver Road Kawkawlin, MI 48631*  
*[www.baycoroad.org](http://www.baycoroad.org)*

Administration

Phone: (989) 686-4610

Fax: (989) 686-4620

Jim Lillo, Engineer-Manager

Phone: Ext. 224

Email: [JLillo@baycoroad.org](mailto:JLillo@baycoroad.org)

### Great Lakes Bay Region Trail Group:

*[www.greatlakesbaytrails.com](http://www.greatlakesbaytrails.com)*

Rob Eggers, President

Email: [RobE@spicergroup.com](mailto:RobE@spicergroup.com)

Cathy Washabaugh, Vice President

Email: [catbeck@aol.com](mailto:catbeck@aol.com)

### Riverwalk Rail Trail Committee/Bay Area Community Foundation:

*Pere Marquette Depot – 1000 Adams Street, Suite 200 Bay City, MI 48708*  
*[www.bayfoundation.org](http://www.bayfoundation.org)*

Kirsten Hellebuyck, Communications Program Officer

Phone: (989) 893-4438

Email: [KirstenH@bayfoundation.org](mailto:KirstenH@bayfoundation.org)