



West Michigan Shoreline Regional Development Commission

Muskegon/Northern Ottawa Non-Motorized Plan

December 2013

Progressive AE
1811 4 Mile Rd NE
Grand Rapids, MI 49525

Cover Photo Credits

North Bank Trail

Credit: lukasevan on TrailLink.com

Musketawa Trail

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Introduction

The West Michigan Shoreline Regional Development Commission (WMSRDC) is a federal and state designated regional planning and development agency. WMSRDC operates programs in economic development, transportation, homeland security, environmental planning, community development, information and communications, and others. In 1973, WMSRDC organized the Muskegon Area Transportation Planning Program as the Metropolitan Transportation Planning Organization (MPO) Policy Committee. In 2003, when the U.S. Census Bureau expanded the Muskegon Urbanized Area to include northern Ottawa County, WMSRDC, working with the Michigan Department of Transportation, realigned the Metropolitan Area Boundary (MAB) of the MPO and organized the Muskegon/Northern Ottawa MPO, which will be referred to as the MPO throughout the remainder of the document.

WMSRDC undertakes a comprehensive transportation planning program to maintain the eligibility of local governments in the area to receive federal and state transportation funds for street and road improvements, as well as subsidies for mass transit.

The MPO desired to undertake a study to develop a Non-motorized Plan for the MPO area. The study included an examination of existing non-motorized trails within the MPO boundaries and identified new connections to fill in the gaps between existing and proposed, but not yet constructed, trails. This plan is intended to provide a guide for the MPO, Muskegon County, northern Ottawa County, and the various municipalities and townships to develop trail connections that will provide an interconnected system for the entire MPO area. In addition to identifying desirable trail connections, the plan identifies potential funding sources and priorities.

Progressive AE worked with representatives of the MPO to analyze existing data and develop plans identifying these new connections. Input was sought from various MPO partners in development of the plan. The MPO identified these partners and determined the extent of their involvement.

Project Process

To commence the project, Progressive AE met with MPO representatives to collect and review the existing base data, review the project schedule, and begin to identify issues and opportunities as they related to the potential trail connections and alignments. It was determined that the study area would include all of the applicable communities within Muskegon County and northern Ottawa County in the MPO. The base data that was collected included:

- GIS mapping
- Township tax parcel mapping
- MIRIS base data
- Applicable city, village, and township recreational/other master plans
- MPO's Transportation Improvement Plan
- MPO's Long Range Transportation Plan
- Muskegon and Ottawa County Master Plans and Recreation Plans

The various master plans, transportation plans, and recreation plans were reviewed for any pertinent non-motorized transportation components. These components provided the foundation for future recommendations and were included in the Muskegon/Northern Ottawa Non-motorized Plan.

Utilizing the existing base information, Progressive AE completed a complete system reconnaissance within the MPO and performed a review and verification of existing system conditions, as needed. Existing non-motorized transportation facilities and currently planned connections were confirmed for creation of a comprehensive system. Maps illustrating the various existing non-motorized systems were created. In addition, these plans identified potential new non-motorized trail connections.

Progressive AE met with MPO representatives to review the preliminary non-motorized trail connections and support plans/documents. Revisions and corrections to the preliminary plans suggested by MPO representatives were noted. Based on input from the previous tasks, the preliminary non-motorized trail connections and support plans/documents were revised and resubmitted.

The MPO then sent the plans to various municipalities within the study area, as well as pertinent advocacy groups to solicit their input and comments regarding the existing, proposed, and suggested non-motorized trail connection design. Comments, suggestions, and concerns received back from these groups were then incorporated into the final plans.

In addition, preliminary prioritization of various non-motorized trail connections was developed along with preliminary order of magnitude cost estimates. Potential funding sources were identified, as well as potential partners in the development of trial sections.

Finally, mapping of existing and proposed facilities was broken out by community to make the document more usable for each MPO constituent related to their own particular non-motorized facilities.

Facility Types and Definitions

Non-motorized facilities pertinent to the Muskegon/Northern Ottawa MPO Non-motorized Plan were shared use paths, paved shoulders, and bicycle lanes. For purposes of this study, the following AASHTO (American Association of State Highway and Transportation Officials) definitions or guidelines were utilized.

Shared Use Path: A bikeway physically separated from motor vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Most shared use paths are designed for two-way travel.

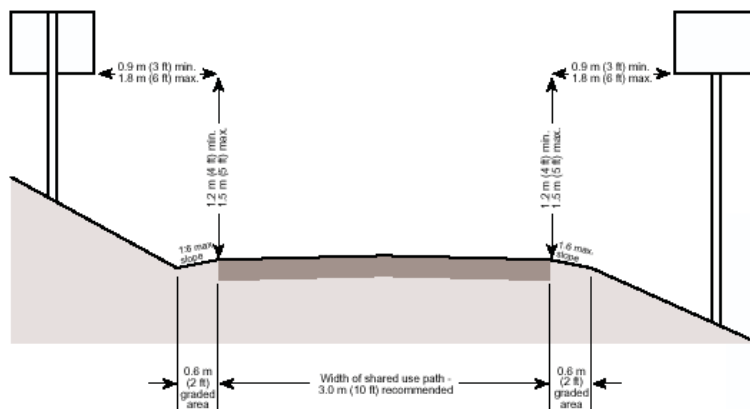
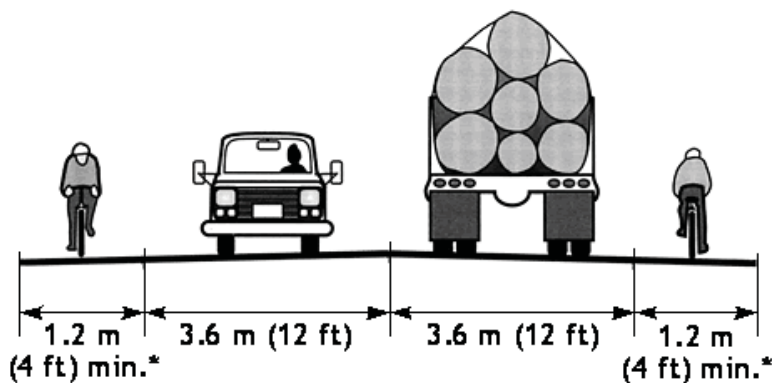


Figure 17. Cross Section of Two-Way Shared Use Path on Separated Right-of-Way

Paved Shoulder: Five feet is recommended from the edge line with a minimum of four feet.

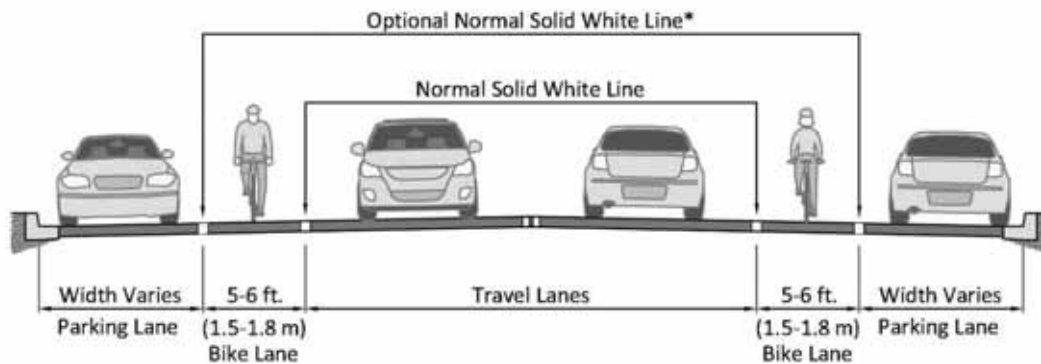
(Source: AASHTO Guide for the Development of Bicycle Facilities)



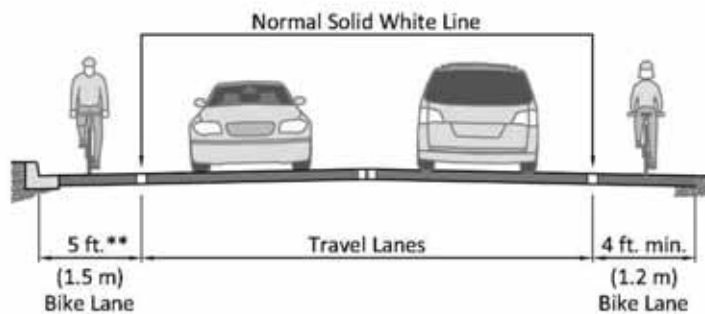
*** Min 1.5 m (5 ft) from face of guardrail, curb or other roadside barrier**

(Source: www.fhwa.dot.gov)

Bicycle Lane: A portion of roadway that has been designated for preferential or exclusive use by bicyclists by pavement marking and, if used, signs. It is intended for one-way travel, usually in the same direction as the adjacent traffic lane, unless designed as a contra-flow lane.



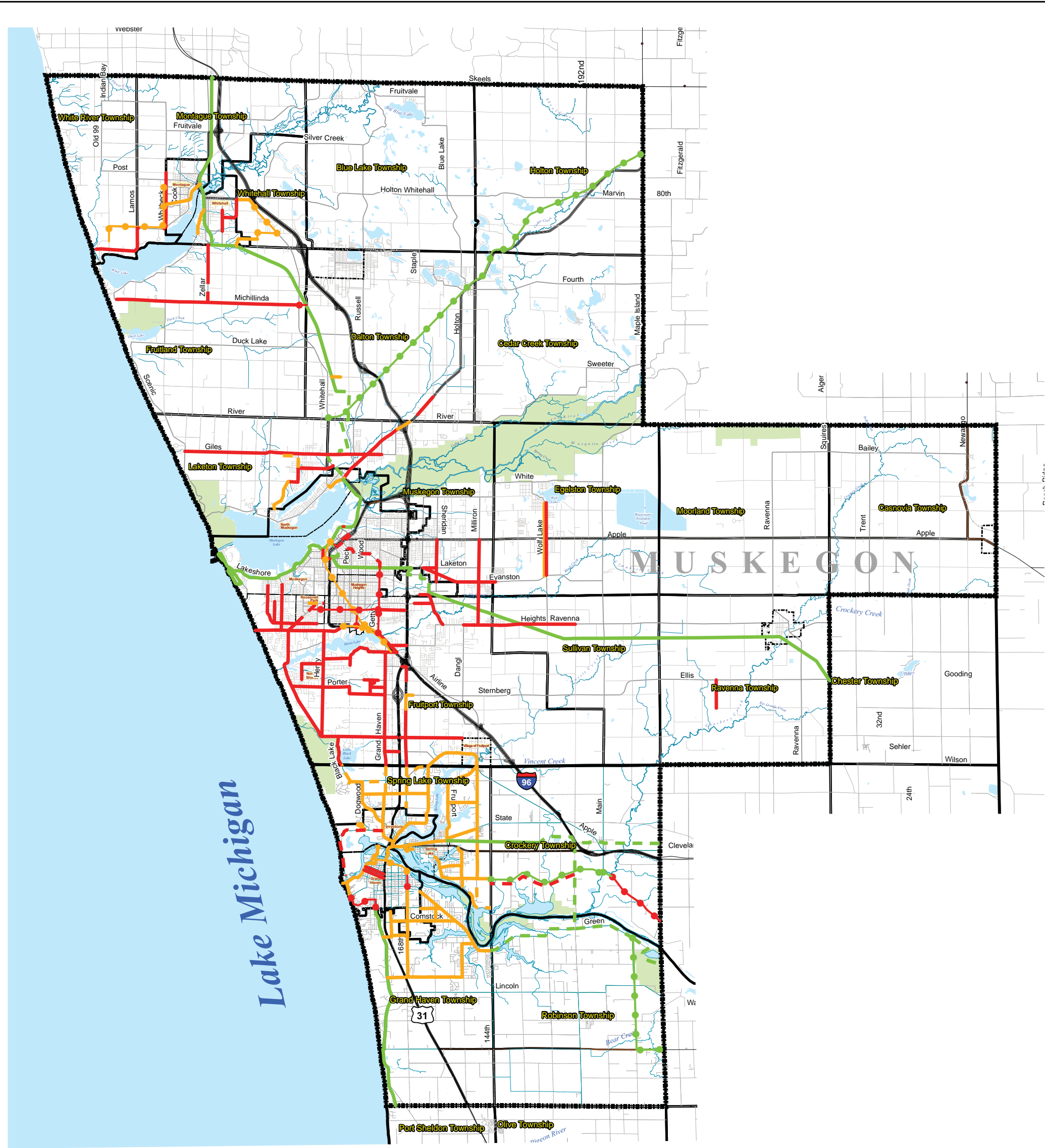
On Street Parking



Parking Prohibited

(Source: www.fhwa.dot.gov)

The types of cross-sections and non-motorized facilities illustrated above are currently in use within the study area and/or are planned. These may provide guidance in future development of regional and local shared use paths, paved shoulders and bike lanes.



EXISTING AND FUTURE BIKEWAY FACILITIES

REGIONAL SHARED USE PATH

PROPOSED REGIONAL SHARED USE PATH

CONCEPTUAL REGIONAL SHARED USE PATH

LOCAL SHARED USE PATH

PROPOSED LOCAL SHARED USE PATH

CONCEPTUAL LOCAL SHARED USE PATH

PAVED SHOULDER ≥ 4 FEET

PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE

CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE

N

0

2

4

Miles

progressive

ae

WSRDC

WEST MICHIGAN SHORELINE

REGIONAL DEVELOPMENT COMMISSION

Existing Non-motorized Facilities

Existing Non-motorized Facilities

Through data collection and review of existing documents, as well as on site review, existing non-motorized facilities were identified. These generally fell into three categories; existing regional shared use paths; existing local shared use paths; and existing paved shoulders of 4' width or greater or bike lanes. Regional shared use paths are facilities such as the Hart Montague trail that interconnect various parts of the study area. Local shared use paths are facilities such as the Lakeside Trail in the Village of Spring Lake.

For purposes of this plan, the study area was broken into three sub-areas. The sub-areas are North Muskegon County Sub-area, South Muskegon County Sub-area, and Northwest Ottawa County Sub-area. The municipalities with existing non-motorized facilities in each sub-area are:

North Muskegon County Sub-area

- City of Montague
- City of Whitehall
- Dalton Township
- Fruitland Township
- Montague Township
- Whitehall Township
- White River Township

South Muskegon County Sub-area

- City of Muskegon
- City of North Muskegon
- City of Norton Shores
- City of Roosevelt Park
- Egelston Township
- Fruitport Township
- Laketon Township
- Muskegon Township
- Ravenna Township
- Sullivan Township
- Village of Fruitport
- Village of Ravenna

Northwest Ottawa County Sub-area

City of Ferrysburg
City of Grand Haven
Crockery Township
Grand Haven Township
Spring Lake Township
Village of Spring Lake

In the North Muskegon County Sub-area the most notable existing non-motorized facilities are the Hart Montague Trail and the Fred Meijer Berry Junction Trail. These regional shared use paths enter the sub-area at the north county line in Montague Township and continue through Montague and Whitehall into Fruitland Township and Dalton Township. In addition, important local shared use paths exist in the City of



Existing paved shoulder in North Muskegon County Sub-area

Montague, the City of Whitehall, Whitehall Township, and Dalton Township to supplement these regional shared use paths. Paved shoulders provide non-motorized opportunities in Montague Township and White River Township as a means of getting from Montague out to the channel where White Lake connects to Lake Michigan. Paved shoulders also provide non-motorized opportunities within the City of Whitehall, Fruitland Township, and Dalton Township.



Existing local shared use path in South Muskegon County Sub-area

There are numerous existing regional shared use paths, local shared use paths, and paved shoulders in the South Muskegon County sub-area. A notable regional shared use path is the Lakeshore Trail, which traverses the south side of Muskegon Lake, from its northeast tip all the way to Lake Michigan. Another is along Laketon Avenue, from downtown Muskegon to US-31. In addition, the Musketawa Trail

runs from southeast Muskegon, through Fruitport, Sullivan, and Ravenna townships to the east limits of the study area and beyond. Local shared use paths exist in a few locations in this sub-area. Short sections occur in Laketon Township, North Muskegon, Muskegon Township, and Fruitport Township. In comparison, there are numerous paved shoulders for non-motorized activities through the South Muskegon County sub-area. In particular, Norton Shores and Muskegon Township have several such facilities. To a lesser extent, Laketon Township, Egelston Township, Fruitport Township, and Sullivan Township have paved shoulders that can be used for non-motorized transportation.



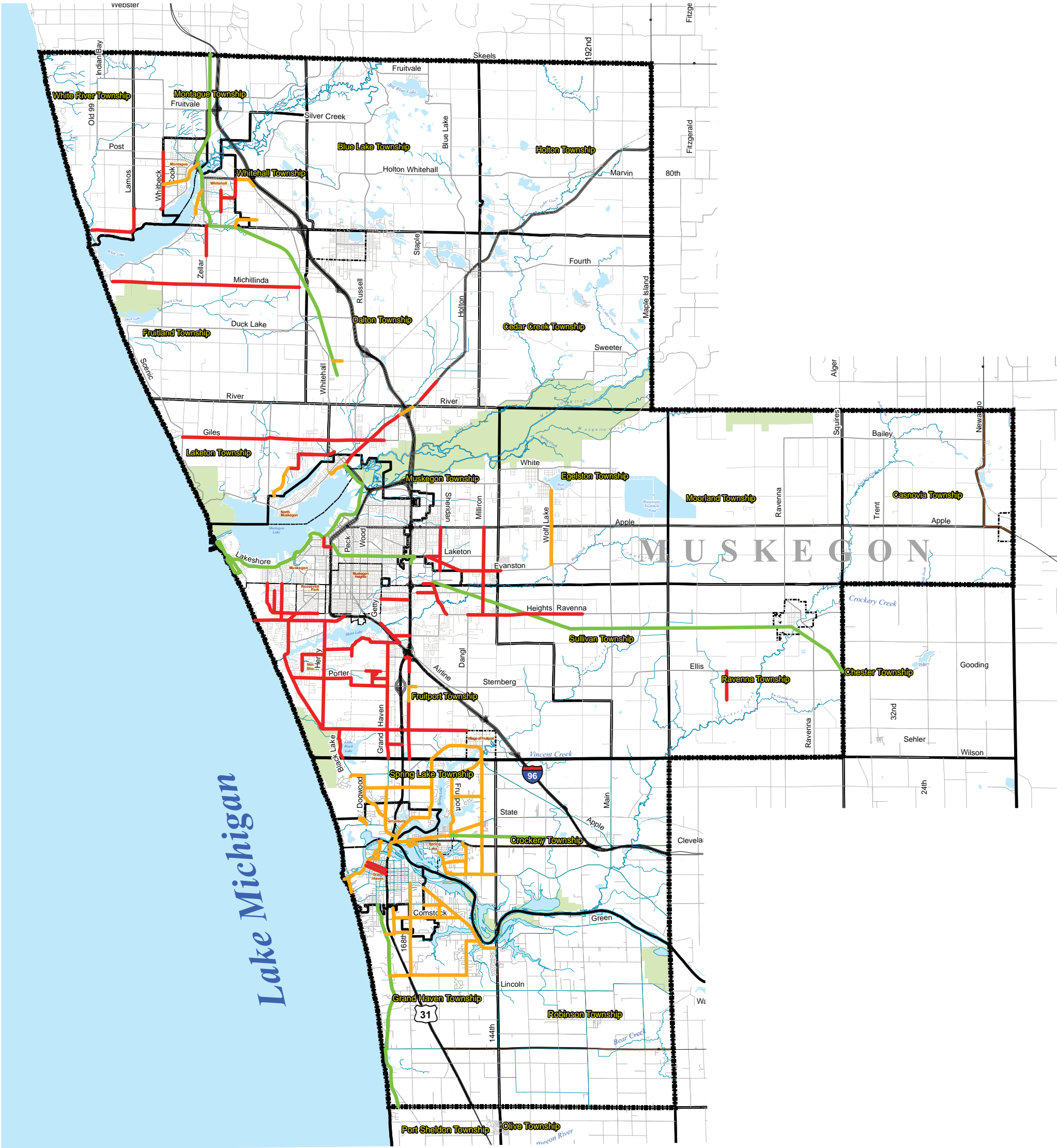
Existing regional shared use path (North Bank Trail) in Crockery Township.

The Northwest Ottawa County sub-area has numerous non-motorized facilities, in particular in the area concentrated around Grand Haven, Spring Lake, and Ferrysburg. The North Bank Trail is a regional shared use path through portions of Spring Lake and Crockery Townships. In addition, the trail along Lakeshore Drive in Grand Haven Township is a regional shared use path. Numerous local shared use paths exist throughout Grand Haven, Grand Haven Township, Spring Lake, Ferrysburg, and Spring Lake Township. Paved shoulders

as non-motorized facilities are less prevalent in the Northwest Ottawa County sub-area. These are essentially limited to two short street sections in Grand Haven.



Existing local shared use path.



OVERALL SUB-AREA PLAN MAP
EXISTING BIKEWAYS FACILITIES

EXISTING BIKEWAY FACILITIES

REGIONAL SHARED USE PATH

LOCAL SHARED USE PATH

PAVED SHOULDER ≥ 4 FEET

N

0

2

4

Miles

progressive

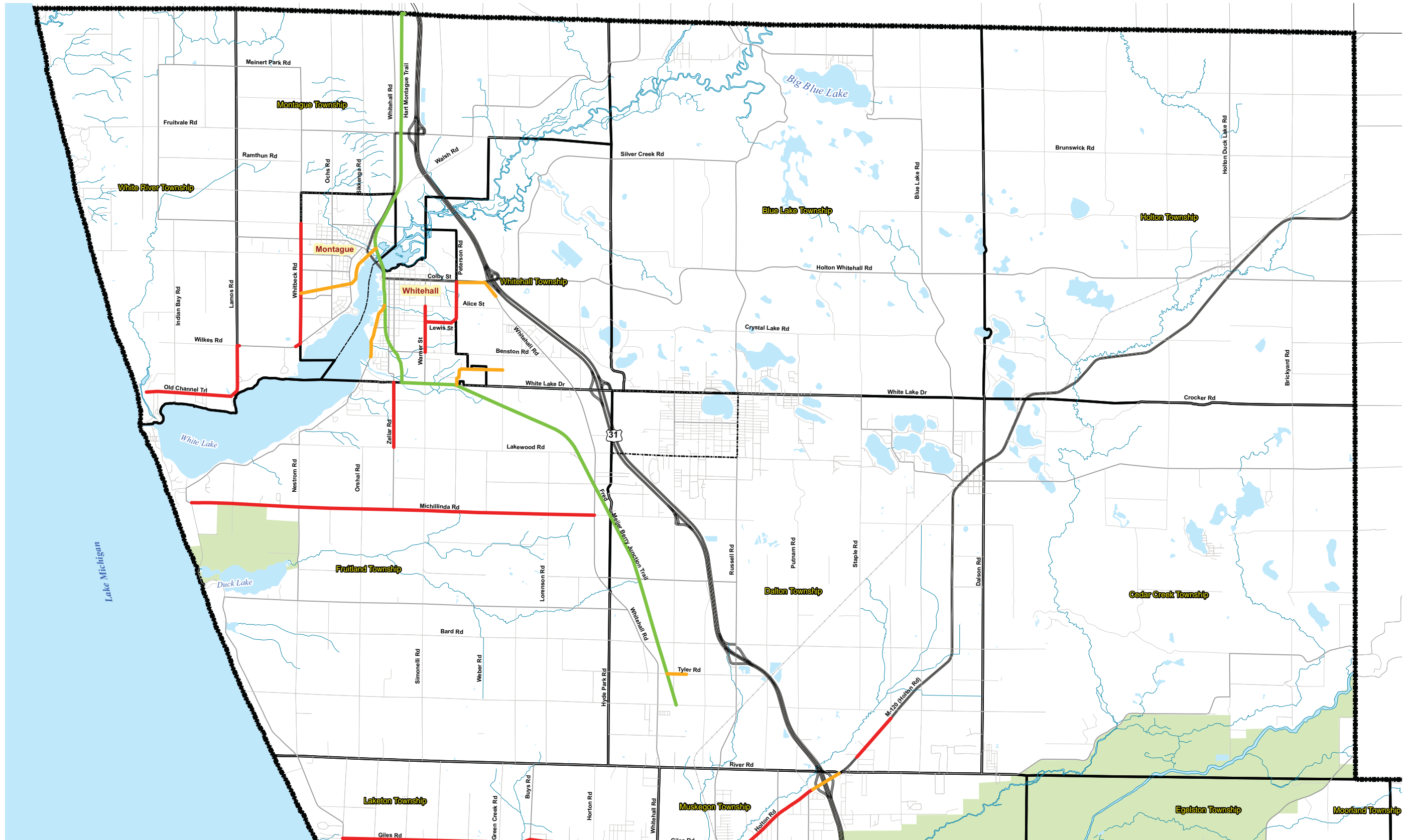
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WSRDC

WEST MICHIGAN SHORELINE
REGIONAL DEVELOPMENT COMMISSION

NORTH MUSKEGON COUNTY SUB-AREA

Muskegon/Northern Ottawa Non-Motorized Plan



EXISTING BIKEWAY FACILITIES

REGIONAL SHARED USE PATH

LOCAL SHARED USE PATH

PAVED SHOULDER ≥ 4 FEET

N

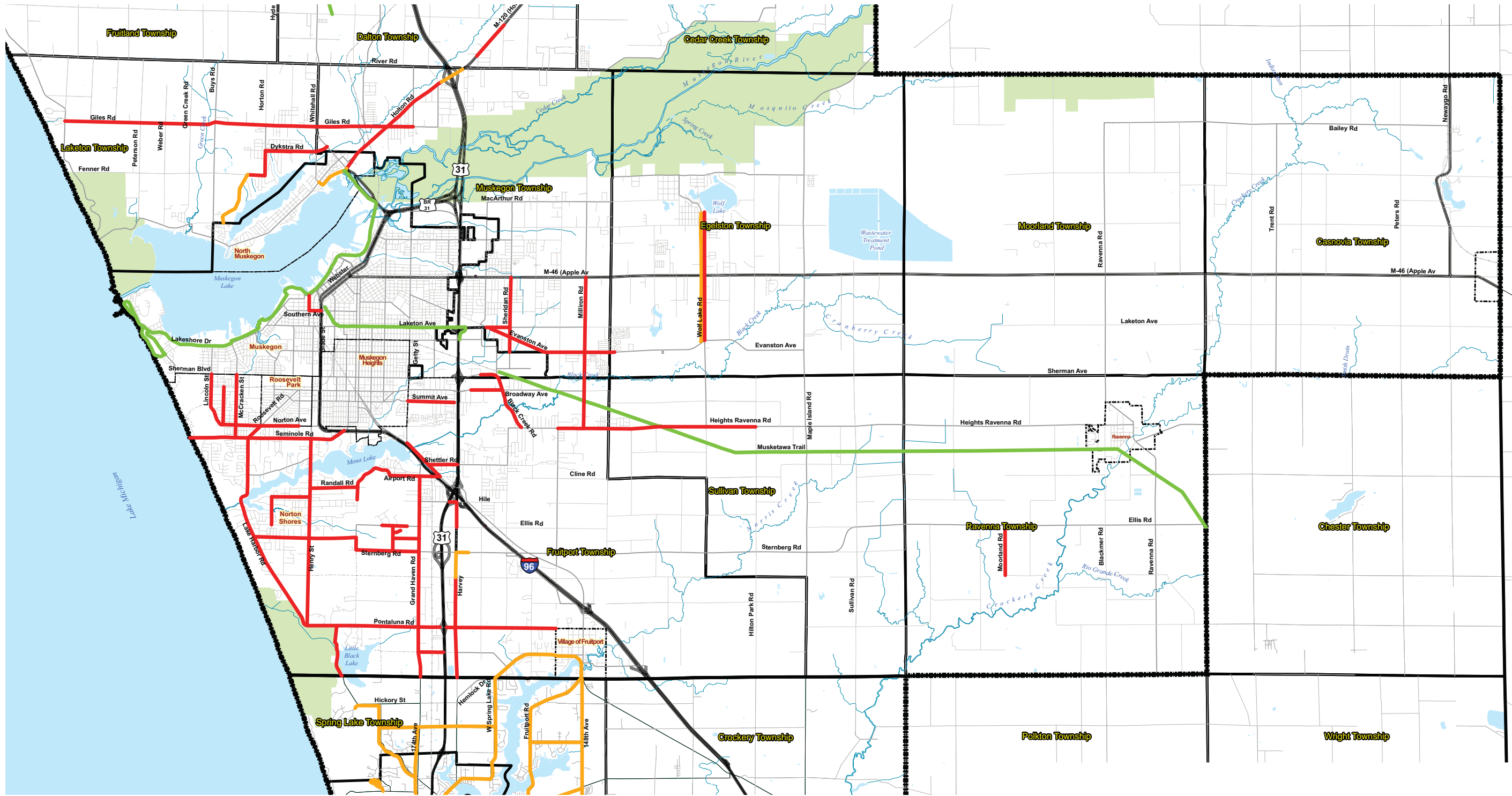
0

1

2 Miles

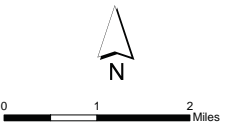
progressive|ae

WEST MICHIGAN SHORELINE REGIONAL DEVELOPMENT COMMISSION



EXISTING BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET

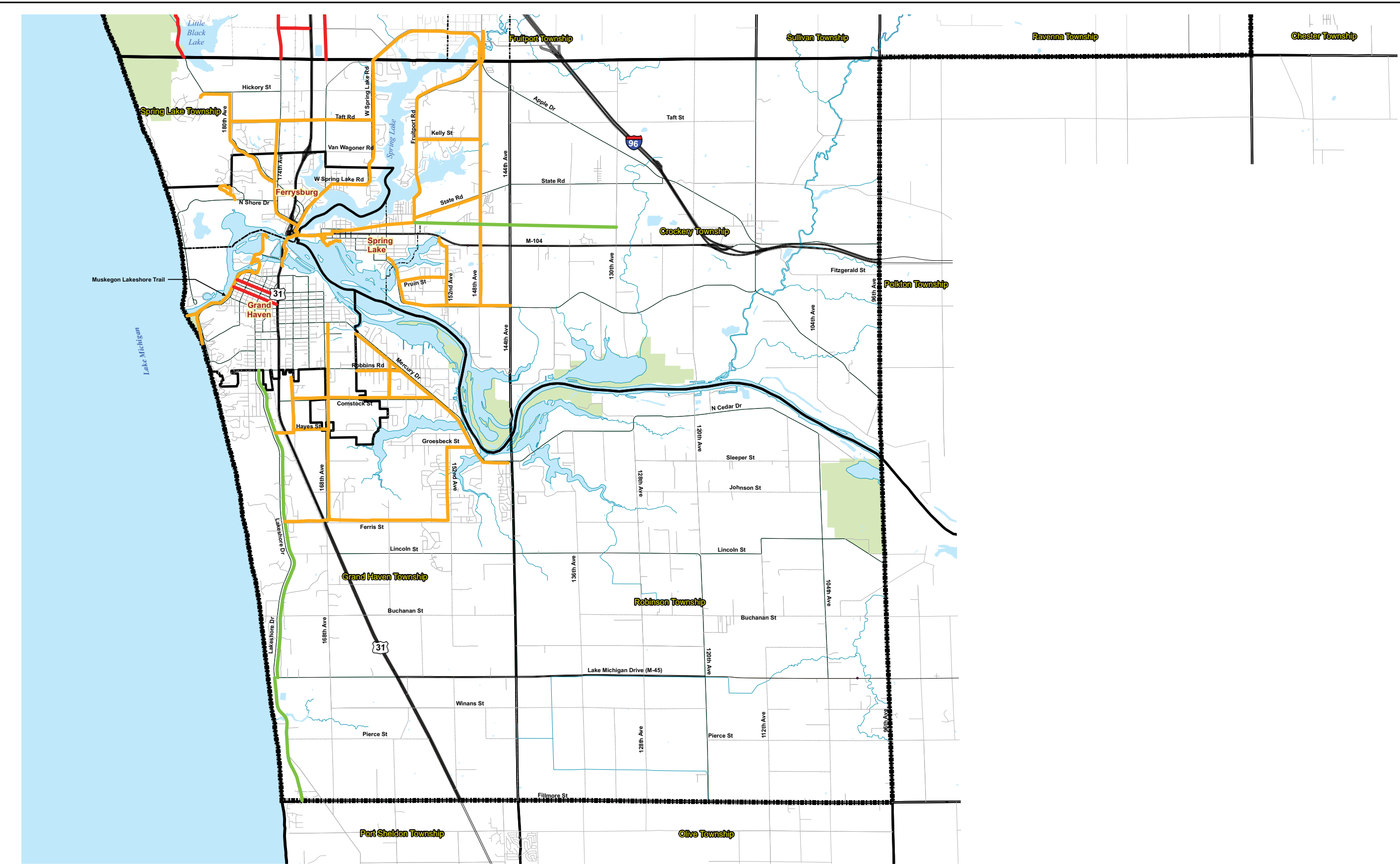


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SOUTH MUSKEGON COUNTY SUB-AREA

Muskegon/Northern Ottawa Non-Motorized Plan

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NORTHWEST OTTAWA COUNTY SUB-AREA

Muskegon/Northern Ottawa Non-Motorized Plan

EXISTING BIKEWAY FACILITIES

REGIONAL SHARED USE PATH

LOCAL SHARED USE PATH

PAVED SHOULDER ≥ 4 FEET

N

012 Miles

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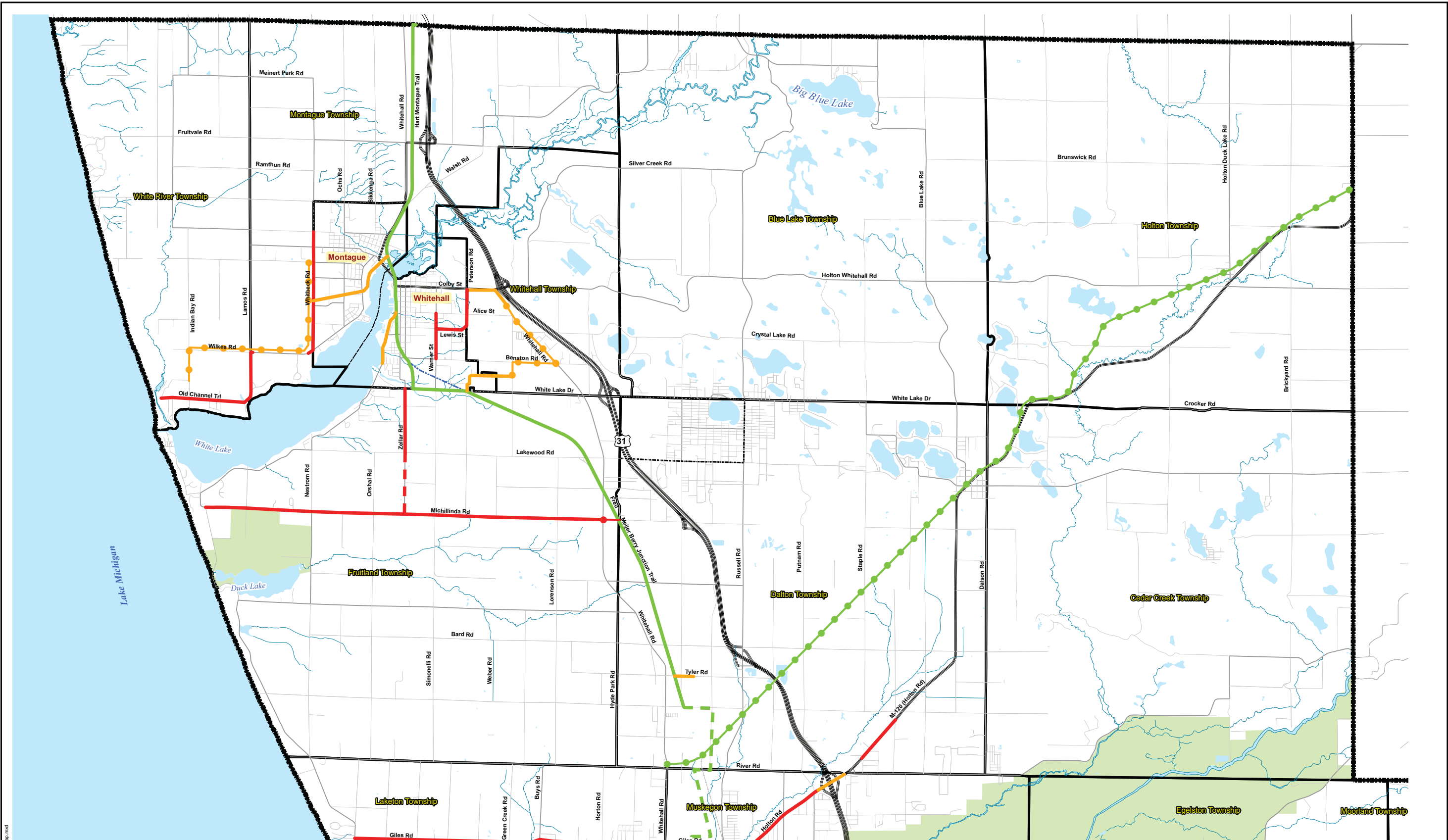
WEST MICHIGAN SHORELINE REGIONAL DEVELOPMENT COMMISSION

Proposed and Conceptual Non-motorized Facilities

Proposed and Conceptual Non-motorized Facilities

To build upon the existing network of non-motorized facilities, there are numerous new regional shared use paths, local shared use paths, paved shoulders, and bike lanes that may be developed in the coming years. Some are “proposed” and have a greater likelihood of coming to fruition, while others are identified as “conceptual” in nature. The “conceptual” designation indicates that these facilities are desirable for the overall non-motorized network, however they may not currently be identified in a local non-motorized plan or have several logistical issues that may need to be resolved in the long-term. An example of this would be a conceptual regional shared use path suggested through Holton, Cedar Creek, and Dalton Townships. The suggested alignment for this is still a functioning rail line, however due to low usage this is conceivably a line that may be abandoned at some point in the future, making it desirable as a regional non-motorized connection.

The following pages identify proposed and conceptual non-motorized facilities within each municipality for the North Muskegon County sub-area, South Muskegon County sub-area, and Northwest Ottawa County sub-area. An overall plan for each sub-area introduces the network of proposed and conceptual level improvements. The pages that follow are for the municipalities within that particular subarea. The information for each municipality includes a more detailed description of existing non-motorized facilities, followed by the description of proposed and conceptual level facilities. Five municipalities are not included herein; Blue Lake Township, the Village of Lakewood Club, Casnovia Township, the Village of Casnovia, and Moorland Township. These municipalities do not currently have existing non-motorized facilities and do not have proposed or conceptual level facilities suggested.



EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE

0 1 2 Miles

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REGIONAL DEVELOPMENT COMMISSION

NORTH MUSKEGON COUNTY SUB-AREA

City of Montague

Existing Facilities

There are two notable non-motorized facilities within the City of Montague. The first is the Hart Montague Trail, which is a regional shared use path. This runs from the north city limits to the White River and Montague's border with Whitehall. The second facility is a local shared use path, which runs from the Hart Montague Trail, near the City's business district, west to Whitbeck Road and the border of Whitehall Township.

Proposed Facilities

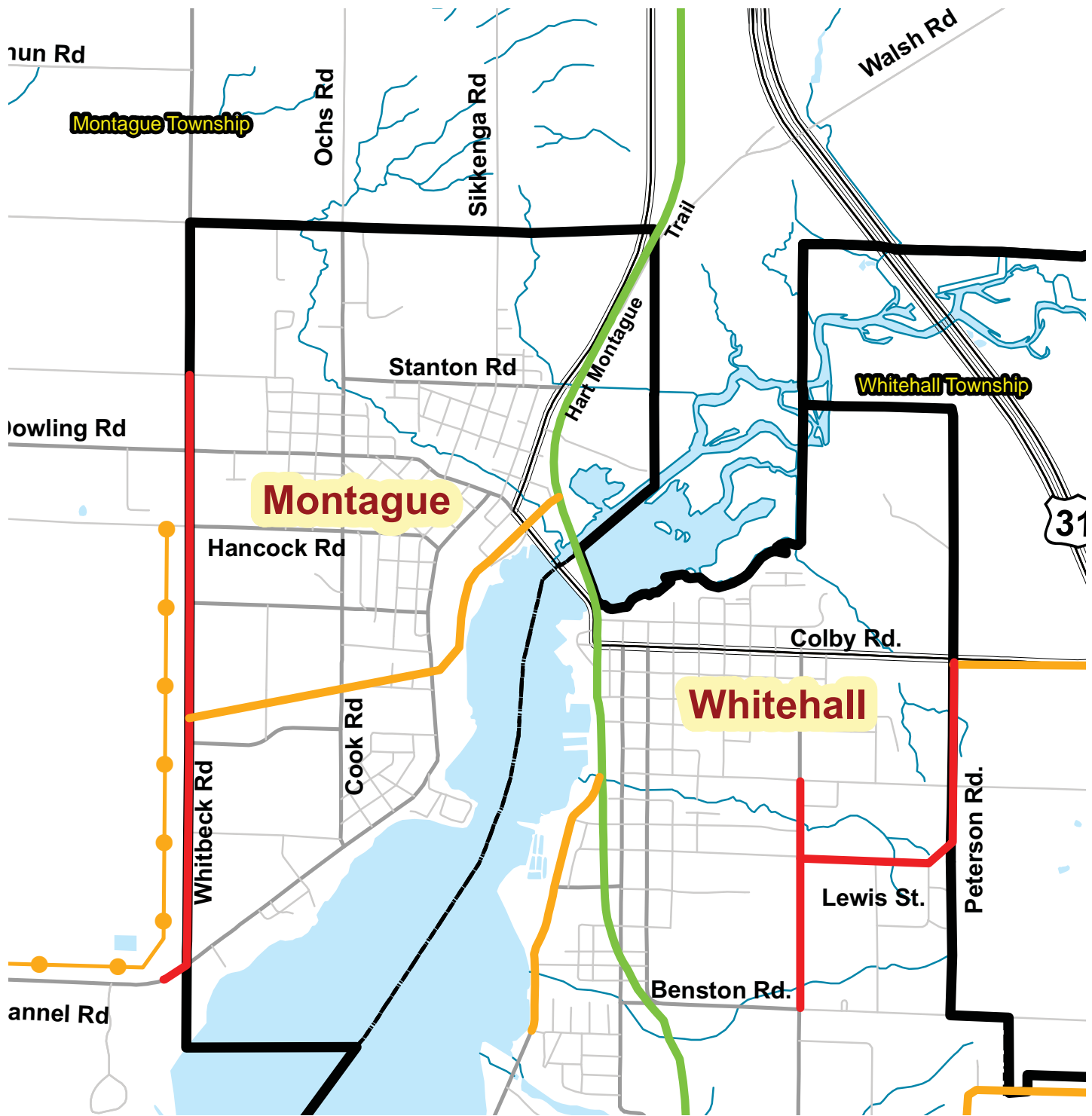
There are currently no proposed non-motorized facilities planned for the City of Montague.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for the City of Montague.



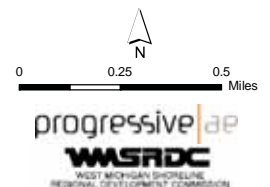
Local shared use path at Old Channel Trail



CITY OF MONTAGUE

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



City of Whitehall

Existing Facilities

There are a number of non-motorized facilities within the City of Whitehall. The most notable is the Fred Meijer Berry Junction Trail, a regional shared use path that runs from White River and Montague, to White Lake Drive on the south boundary of the City, then along White Lake Drive to the southwest corner of the City.

Two local shared use paths also are within the City. One is near White Lake, branching off from the Fred Meijer Berry Junction Trail and proceeds south, paralleling Lake Street. The second local shared use path is in the southeast part of the City. This provides a connection between the Fred Meijer Berry Junction Trail near White Lake Drive and Whitehall High School.

There are also existing paved shoulders in several locations. These are on Warner Street, from Benston Road to Alice Street; on Lewis Street, from Warner Street to Peterson Road; and on Peterson Road, from Lewis Street north to Colby Street.

Proposed Facilities

There are currently no proposed non-motorized facilities planned for the City of Whitehall.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for the City of Whitehall.



Fred Meijer Berry Junction Trail near Benston Road and Division Street

Cedar Creek Township

Existing Facilities

There are currently no existing non-motorized facilities in the Cedar Creek Township area.

Proposed Facilities

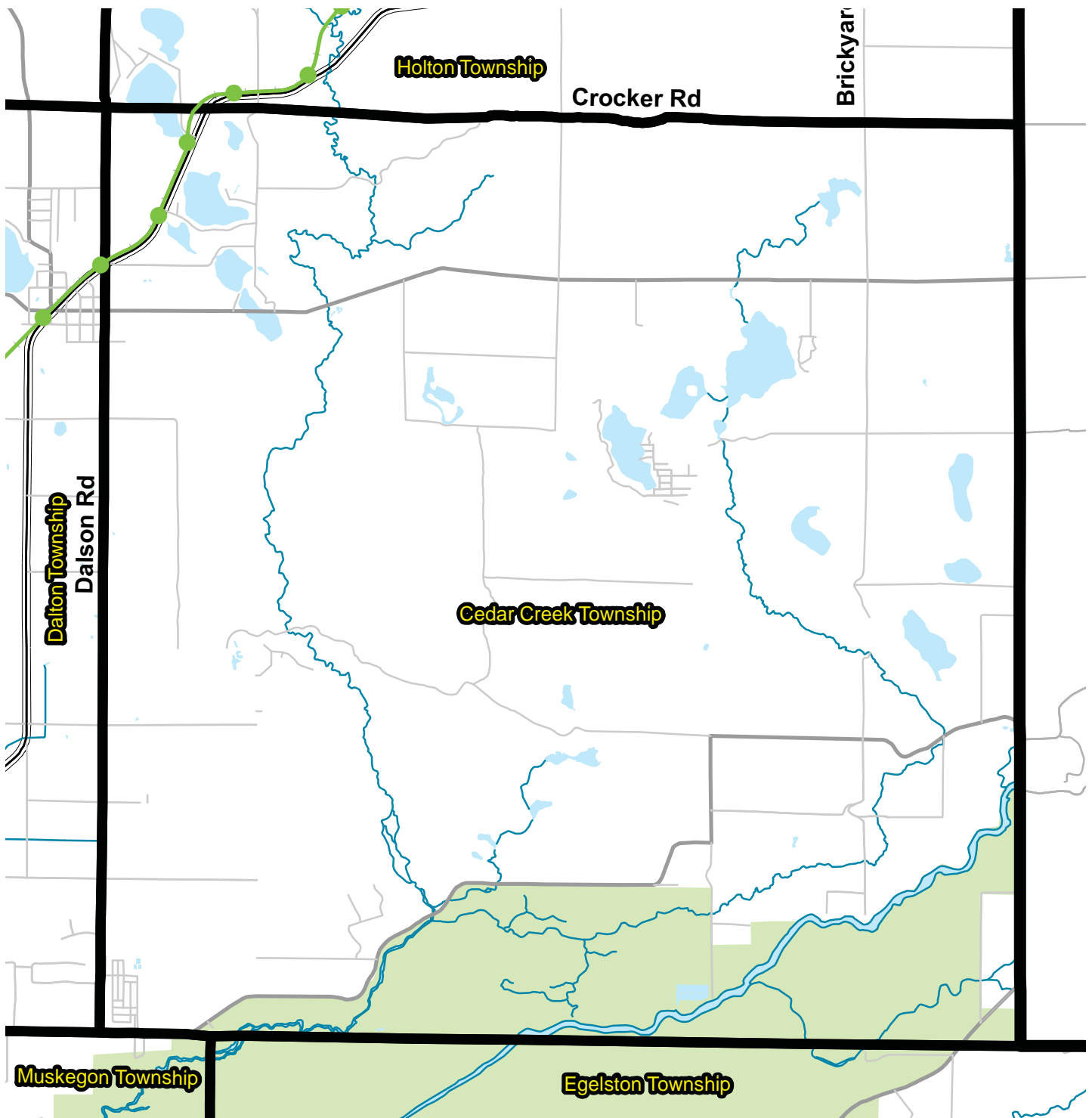
There are currently no proposed non-motorized facilities planned for the Cedar Creek Township area.

Conceptual Facilities

There is one conceptual non-motorized facility to be considered for Cedar Creek Township. This would be a segment of a potential regional shared use path that would run in the existing railroad right-of-way that runs across the northwest corner of the township. This would continue through Dalton Township, ultimately connecting to the Fred Meijer Berry Junction Trail extension. This portion of this regional shared use path within Cedar Creek Township is roughly 1.2 miles long.



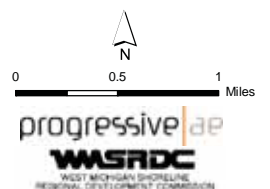
Existing railroad line parallel to Holton Road (M-120). A suggested conceptual regional shared use path alignment should this line ever be abandoned.



CEDAR CREEK TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Dalton Township

Existing Facilities

Dalton Township has a few existing non-motorized facilities, all located in the southern part of the township. First is the Fred Meijer Berry Junction Trail, a regional shared use path, which enters the township from the west near Michillinda Road and continues to McMillan Road. There is also an existing local shared use path parallel to Tyler Road. This is between the Fred Meijer Berry Junction Trail and a township park to the east. Lastly, there is a section of paved shoulder along Holton Road (M-120) from Pillon Road to east of Old Orchard Lane.

Proposed Facilities

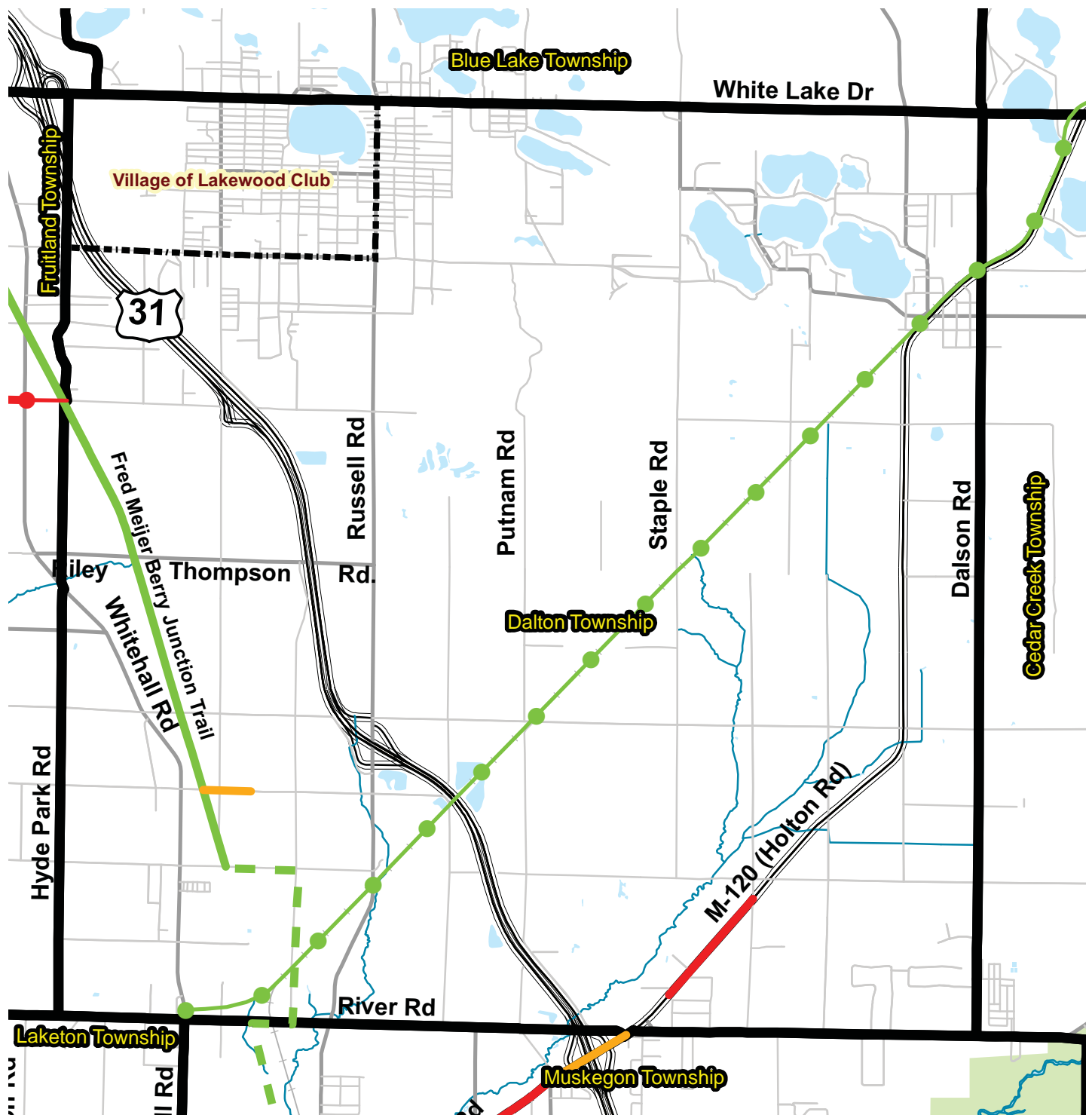
There is one proposed non-motorized facility for Dalton Township. This is the extension of the Fred Meijer Berry Junction Trail from its current terminus at McMillan Road, south to River Road, which is the south limit of the township. Unlike the existing regional shared use path, this trail will not follow abandoned railroad easements. The Muskegon County Road Commission and several private land owners have agreed to allow access to their right-of-way to allow this trail to exist. An approximate alignment will be east along McMillan Road to Central Road, then south on Central Road to River Road. This segment will total approximately 1.45 miles.

Conceptual Facilities

There is one conceptual non-motorized facility to be considered for Dalton Township. This would be a segment of a potential regional shared use path that would run in the existing railroad right-of-way that runs from northeast to southwest across the township. It could connect to the Fred Meijer Berry Junction Trail extension near Whitehall Road and River Road. The portion of this regional shared use path within Dalton Township is roughly 7.2 miles long.



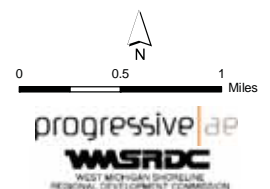
Fred Meijer Berry Junction Trail south of Michillinda Road.



DALTON TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Fruitland Township

Existing Facilities

There is an existing regional shared use path in Fruitland Township, as well as existing paved shoulders. The Fred Meijer Berry Junction Trail runs across the northeast portion of the township, entering from White Lake Drive and the City of Whitehall and exiting the township at the east. Existing paved shoulders occur along Michillinda Road, from Whitehall Road west to Scenic Drive. In addition, there are existing paved shoulders along Zellar Road, from White Lake Drive to Lakewood Road, a distance of roughly 1 mile.

Proposed Facilities

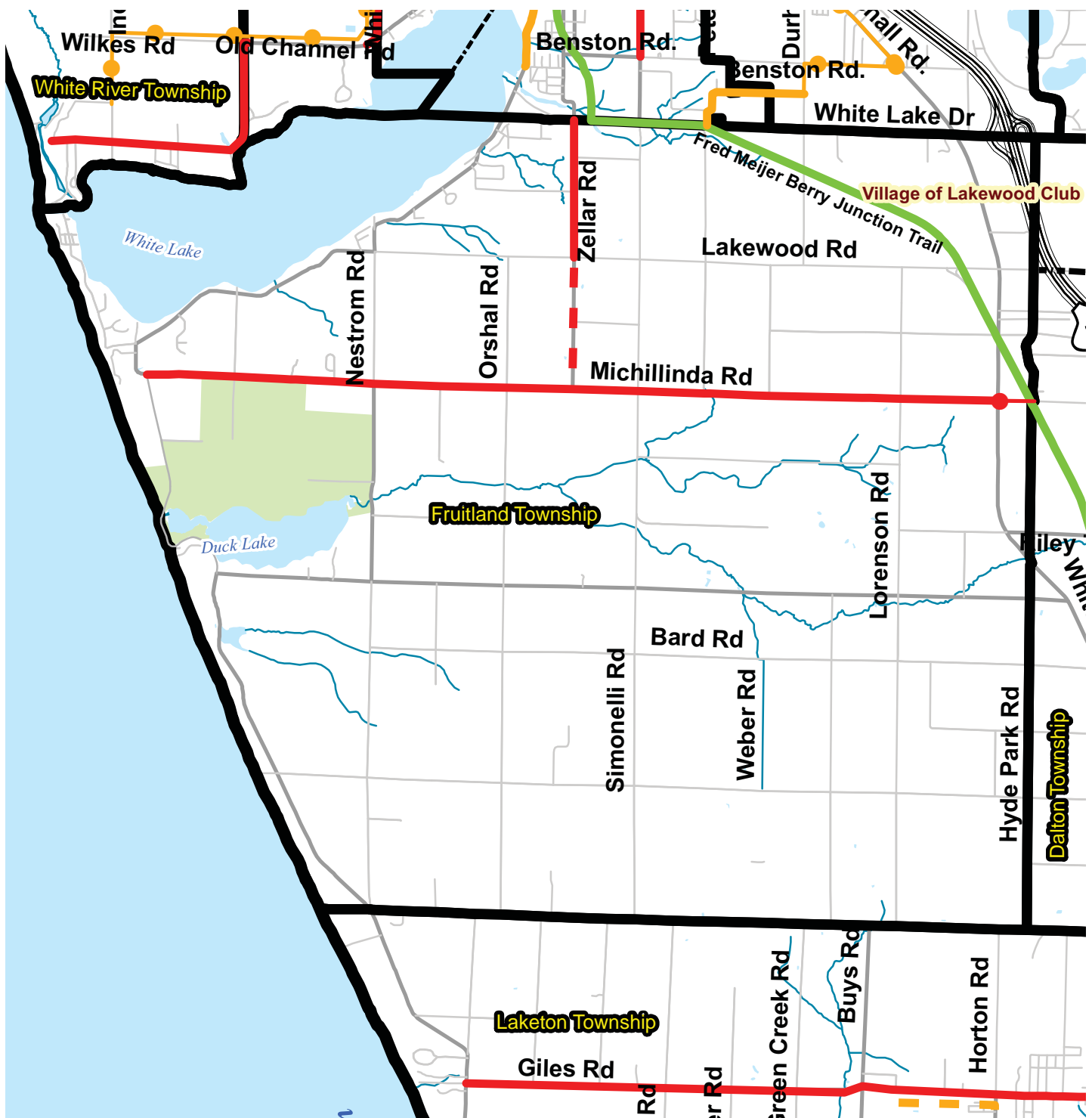
One non-motorized facility improvement is proposed for Fruitland Township. This is for a proposed paved shoulder on Zellar Road, from Lakewood Road to Michillinda Road. This would connect the existing paved shoulder on Zellar Road north of Lakewood Road to the existing paved shoulder that is along Michillinda Road. This segment would be approximately 1 mile long.

Conceptual Facilities

One minor conceptual facility is recommended for Fruitland Township. This is for a short section of paved shoulder on Michillinda Road, from Whitehall Road to the Fred Meijer Berry Junction Trail. There is currently paved shoulder 4' wide or greater on Michillinda Road, from Whitehall Road going west. This short section of paved shoulder would be approximately .25 miles long.



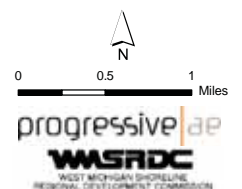
Existing paved shoulders on Michillinda Road



FRUITLAND TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- — ● CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- — ● CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- — ● CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Holton Township

Existing Facilities

There are currently no existing non-motorized facilities within Holton Township.

Proposed Facilities

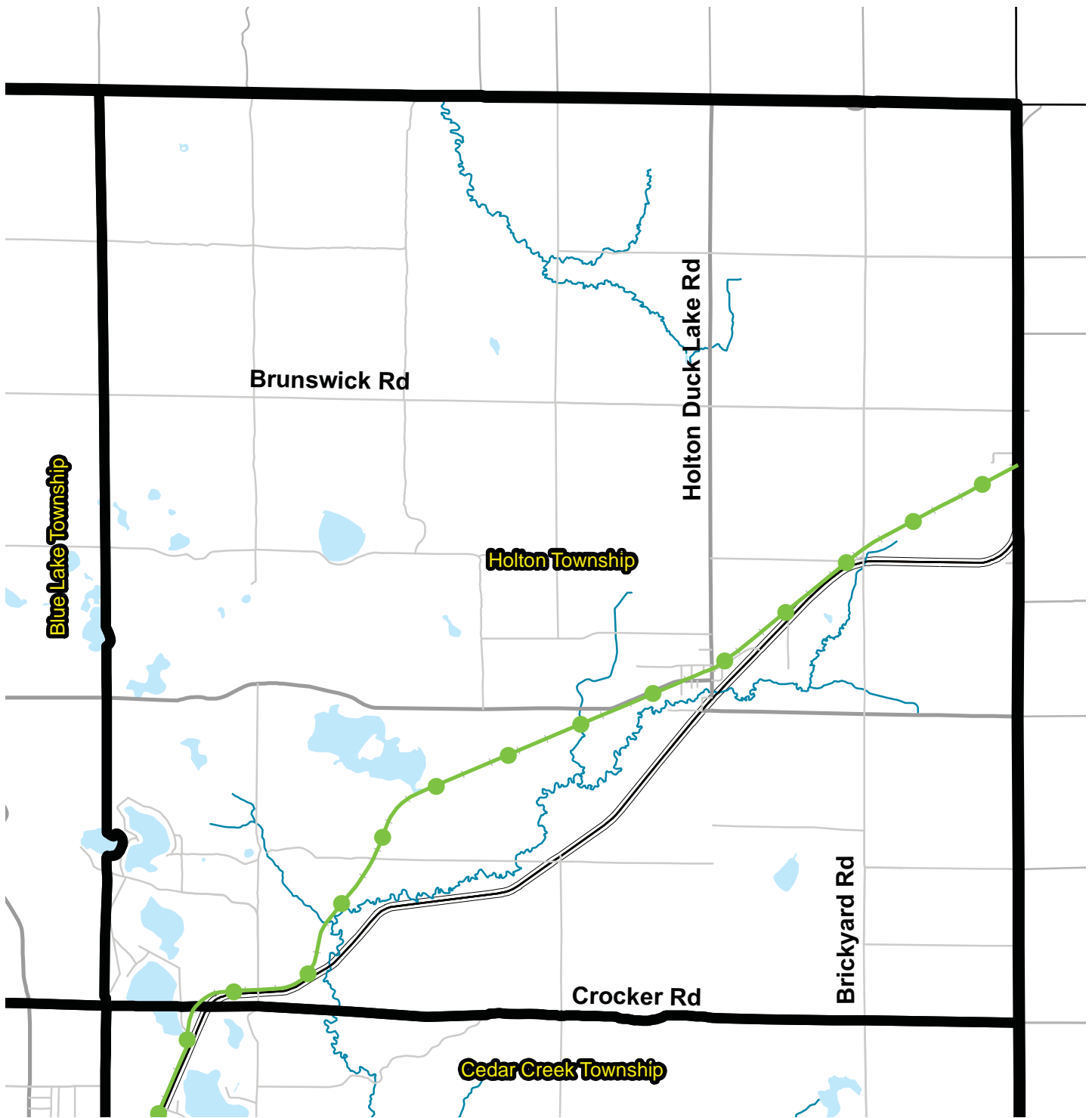
There are currently no proposed non-motorized facilities planned for the Holton Township area.

Conceptual Facilities

As with Cedar Creek and Dalton Townships, there is one conceptual non-motorized facility to be considered in Holton Township. This would be a segment of a potential regional shared use path that would run in the existing railroad right-of-way that runs from northeast to southwest across the township. This would continue through Cedar Creek and Dalton Townships, ultimately connecting to the Fred Meijer Berry Junction Trail extension. The portion of this regional shared use path within Holton Township is roughly 6.4 miles long.



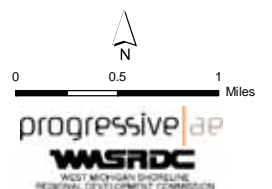
As a long-range possibility, this existing railroad right-of-way could provide a regional shared use path connection within the township



HOLTON TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Montague Township

Existing Facilities

The Hart Montague Trail runs through the township, from its northern border to the City of Montague. Paralleling Whitehall Road, this portion of the regional shared use path is approximately 3 miles long.

There are also existing paved shoulders within Montague Township that promote non-motorized travel. These shoulders are along Whitbeck Road, as the township borders the City of Montague, running from Post Road to Old Channel Trail. In addition, paved shoulders exist on Lamos Road, from Old Channel Trail/Wilkes Road to West Old Channel Road, a distance of slightly under 1 mile. Lamos Road defines the border between Montague Township and White River Township.

Proposed Facilities

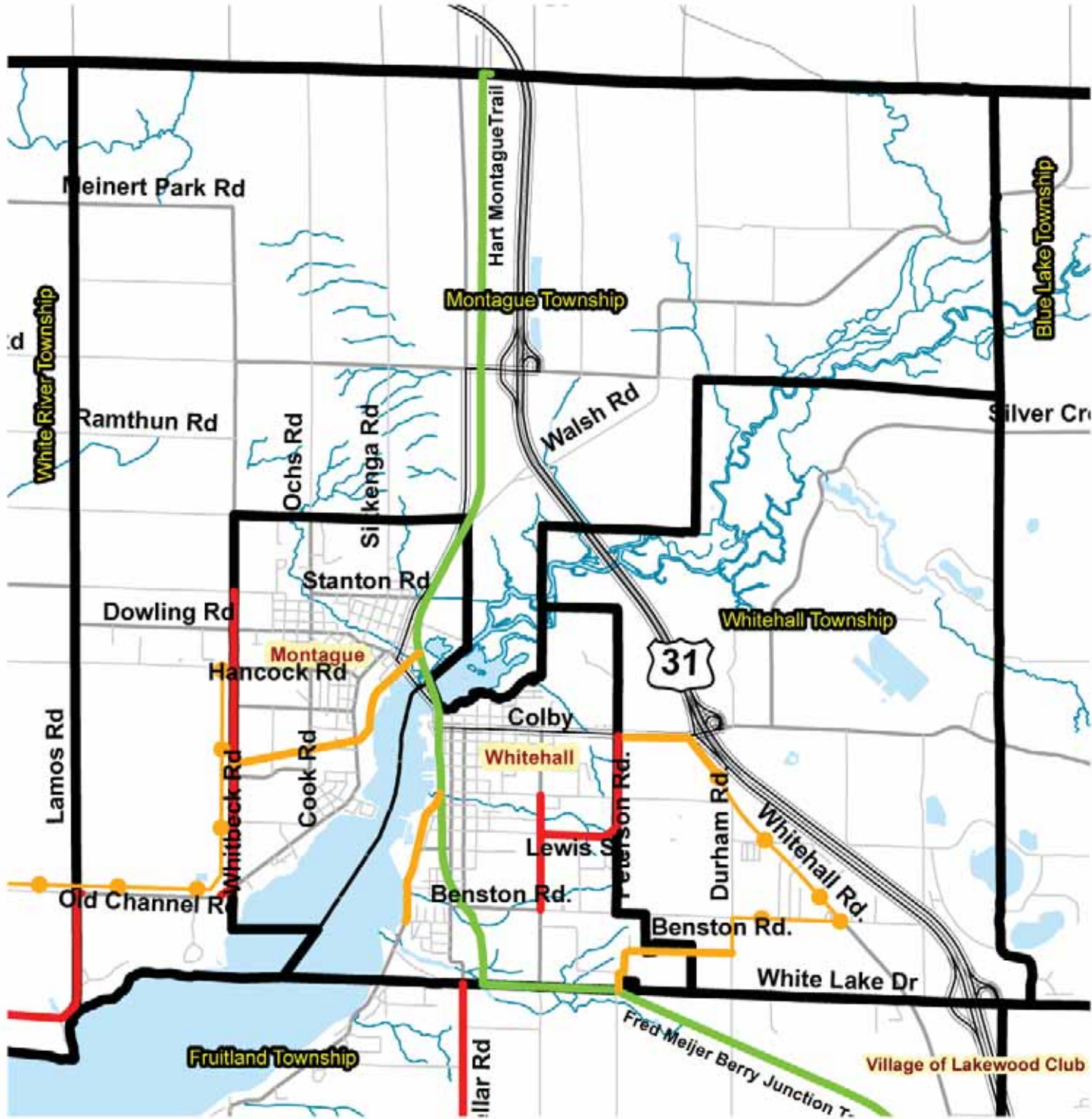
There are currently no proposed non-motorized facilities planned for Montague Township.

Conceptual Facilities

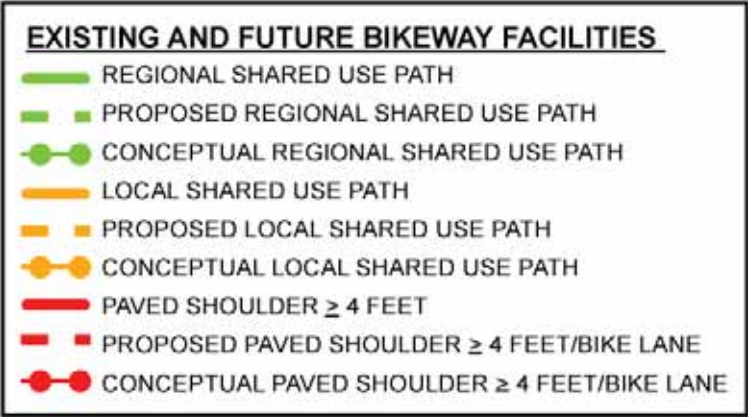
To complement the existing paved shoulders that currently exist in Montague Township, a conceptual facility is recommended that roughly parallels Whitbeck and Wilkes Roads. This would be a local shared use path that would extend from Hancock Road south to Wilkes, then west to the township line, continuing into White River Township. Existing private property would need to be secured for this alignment, which is approximately 1.5 miles parallel to Whitbeck and 1 mile parallel to Wilkes.



Existing paved shoulders along Whitbeck Road



MONTAGUE TOWNSHIP



Whitehall Township

Existing Facilities

There currently are two sections of local shared use paths that provide existing non-motorized facilities within Whitehall Township. The first is along the south side of Holton Whitehall Road, from the Whitehall city limits east to Whitehall Road; then parallel to Whitehall Road, south to Albers Drive. The second existing local shared use path is from Durham Road, west to the city limits. This section provides access to Whitehall High School.

Proposed Facilities

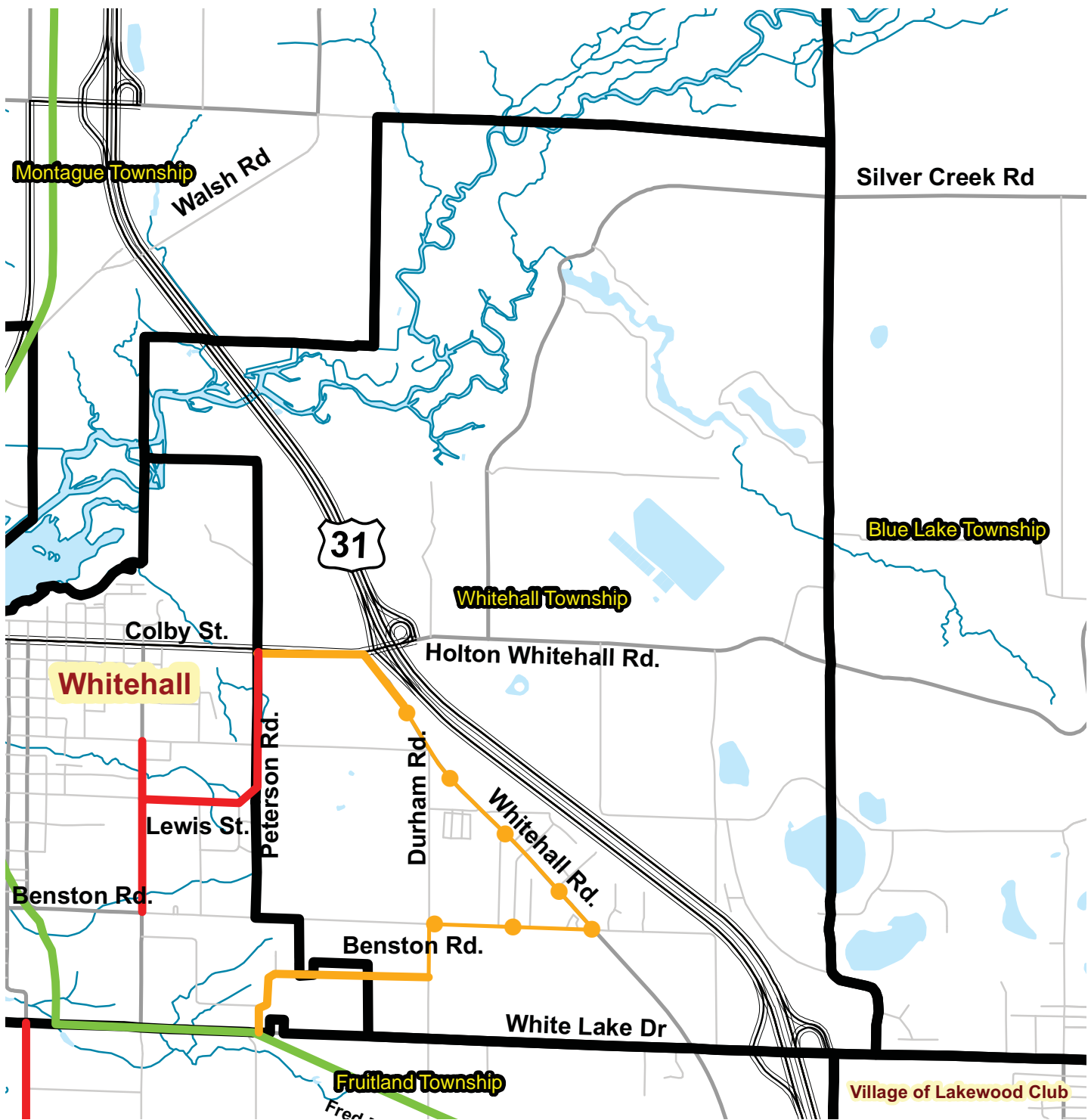
There currently are no proposed non-motorized facilities planned for Whitehall Township.

Conceptual Facilities

Several conceptual local shared use path segments are suggested for Whitehall Township. One segment is along Whitehall Road, from Albers Drive to Benston Road. This segment is about 1.35 miles long. The second segment is along Benston Road from Whitehall Road west to Durham Road, and is roughly .7 miles. The third conceptual local shared use path is along Durham Road, from Benston Road south to the existing local shared use path that goes to Whitehall High School. This short segment is .25 miles.



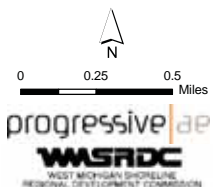
Conceptual paved shoulders are recommended along this portion of Benston Road



WHITEHALL TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



White River Township

Existing Facilities

White River Township has a section of paved shoulder that can be used for non-motorized travel. This is along Old Channel Trail, from Lamos Road to Lau Road, a distance of about 1 mile. As previously mentioned Lamos Road, which defines the border with Montague Township, also has paved shoulders.

Proposed Facilities

There are currently no proposed non-motorized facilities planned for White River Township.

Conceptual Facilities

To complement the existing paved shoulders that currently exist in White River Township, a conceptual facility is recommended that would roughly parallel Wilkes Roads from Lamos Road to Indian Bay Road, then would proceed south, parallel to Lamos, to Sunset Lane. This would be a local shared use path, approximately 1 mile parallel to Wilkes and .5 miles parallel to Indian Bay.



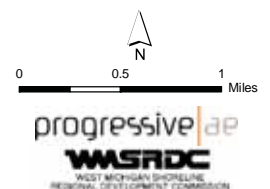
A conceptual local shared use path is suggested along Wilkes Road between Lamos Road and Indian Bay Road

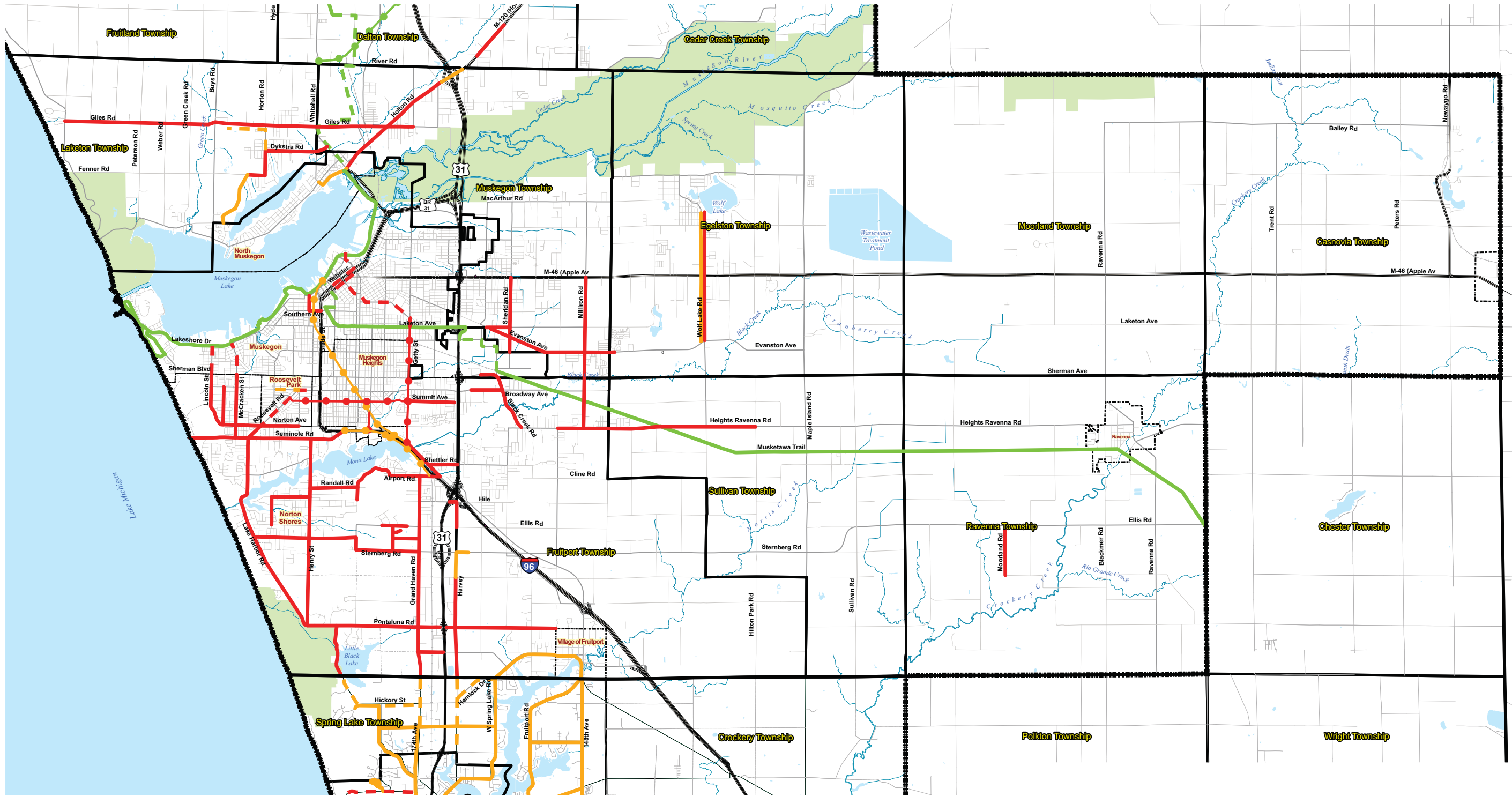


WHITE RIVER TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

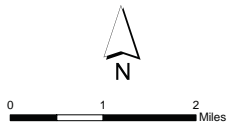
- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE





EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



SOUTH MUSKEGON COUNTY SUB-AREA

City of Muskegon

Existing Facilities

Regional shared use paths provide the majority of the non-motorized facilities within the City of Muskegon. These are the Muskegon Lakeshore Trail and the Laketon Trail. Within the city limits, the Muskegon Lakeshore Trail runs from the causeway and the City of North Muskegon, along the south side of Muskegon Lake all the way to Pere Marquette Park and Lake Michigan. The Laketon Trail begins near downtown Muskegon and runs southeast to Laketon Avenue then east along Laketon to US-31.

There are no local shared use paths, however there are a couple of bike lanes providing non-motorized opportunities within the city as well. These exist along Southern Avenue and Division Street. The Southern Avenue segment provides connection from near the west terminus of the Laketon Trail west to Division Street. The Division Street bike lanes then provide access from Southern Avenue to Western Avenue and the Lakeshore Trail.

Proposed Facilities

Sections of regional shared use path are proposed for the City of Muskegon. The first section would connect the regional shared use path along Lakeshore Drive to the shared use path that ends at West Grand Avenue. Winding through a neighborhood, this segment would be .75 miles. The second segment would be in the southwest city, connecting the shared use path along Laketon Avenue with the Musketawa Trail. This shared use path would be approximately 1.5 miles through the industrial park.

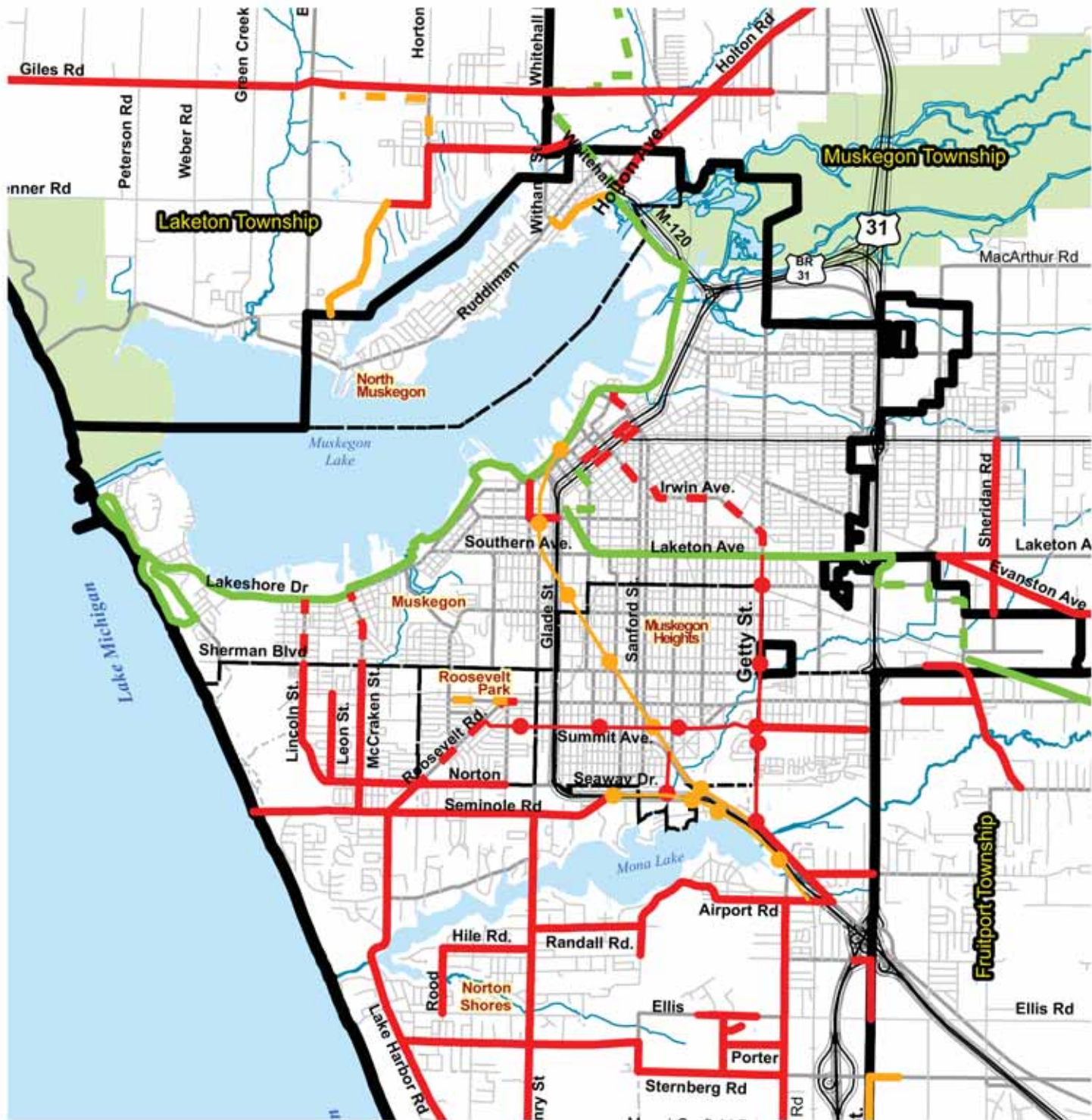
There are also several proposed bike lanes in various parts of the city. Two of the bike lanes are on Lincoln and McCracken Streets, between Sherman Boulevard and Lakeshore Drive. Each of these is approximately .6 miles long. In addition, bike lanes are also proposed on Terrace Avenue, from Muskegon Avenue to Shoreline Drive (roughly .5 miles); on Webster and Muskegon Avenues, between Terrace Avenue and 7th Street (approximately .6 miles); and on 3rd Street, Strong Avenue, Arthur Street, Irwin Avenue, Nims Street and Getty Street, between Muskegon Avenue and Laketon Avenue (roughly 1.7 miles).

Conceptual Facilities

Two non-motorized facilities in the City of Muskegon are conceptual. A conceptual local shared use path is recommended to follow the railroad right-of-way from near the waterfront, then parallel to Henry Street for several blocks, then southeast to the Muskegon/Muskegon Heights border. This conceptual local shared use path is roughly 1.25 miles long. In addition, a conceptual bike lane is recommended along Getty Street between Laketon Avenue and Keating Avenue. This is approximately .25 miles.



The Muskegon Lakeshore Trail along Lakeshore Drive



CITY OF MUSKEGON

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE

City of Muskegon Heights

Existing Facilities

There are currently no existing non-motorized facilities within Muskegon Heights.

Proposed Facilities

There are currently no proposed non-motorized facilities planned for the Muskegon Heights area.

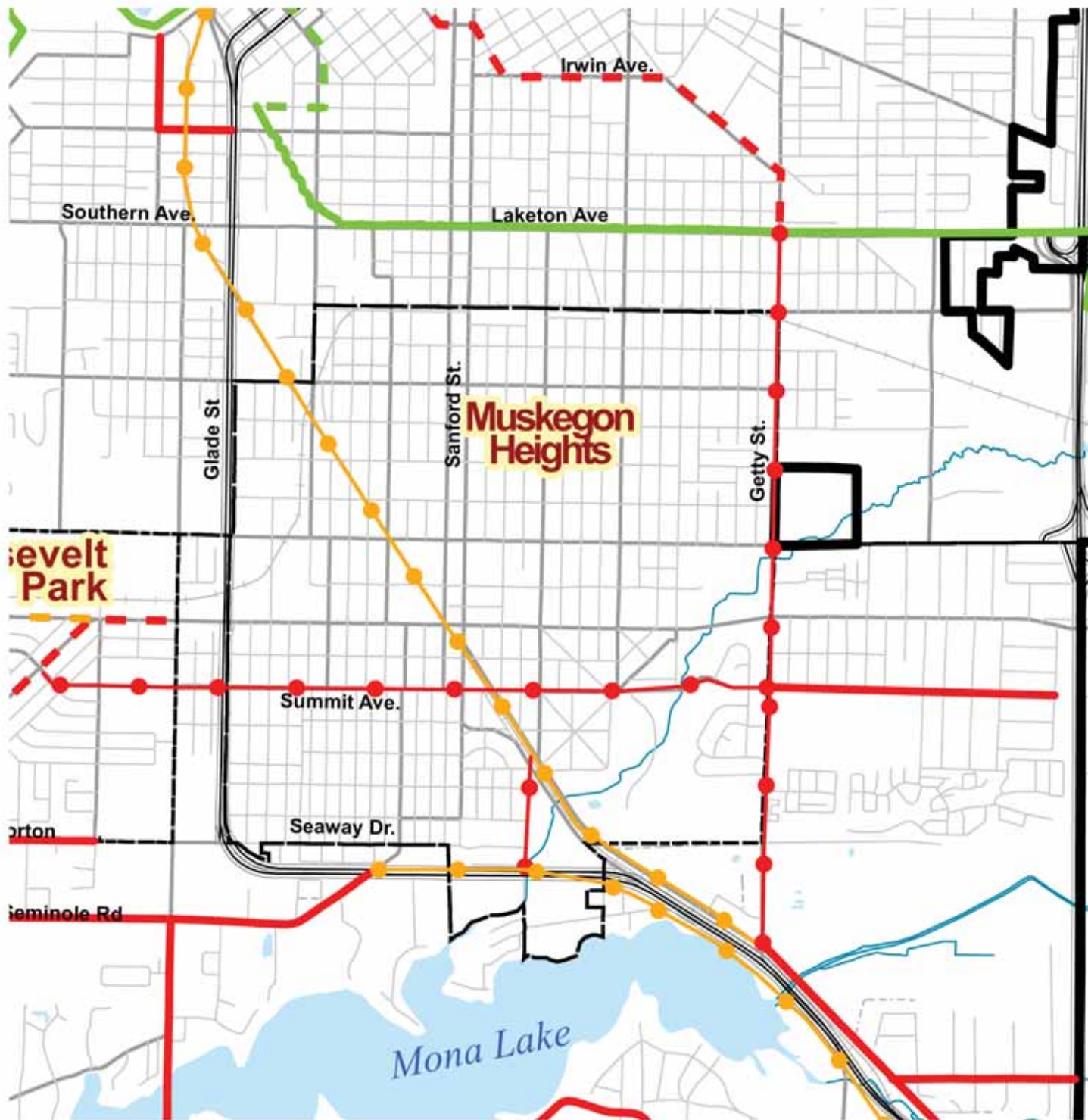
Conceptual Facilities

Several conceptual non-motorized facilities are recommended for Muskegon Heights. A conceptual shared use path is recommended to follow the railroad right-of-way, beginning at the northwest city limits and continuing southeast to the south city limits. This conceptual local shared use path is approximately 1.8 miles long.

Conceptual bike lanes are also recommended on Summit Avenue, from the east city limits to the west city limits (roughly 1.75 miles) and on Getty Street, from the north city limit to the south city limit (approximately 1.7 miles). On Hoyt Street, a conceptual paved shoulder is recommended from Merriam Street to Seaway Drive (roughly .4 miles).



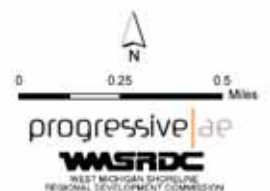
Summit Avenue may provide a future opportunity for bike lanes at some point in the future



CITY OF MUSKEGON HEIGHTS

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



City of North Muskegon

Existing Facilities

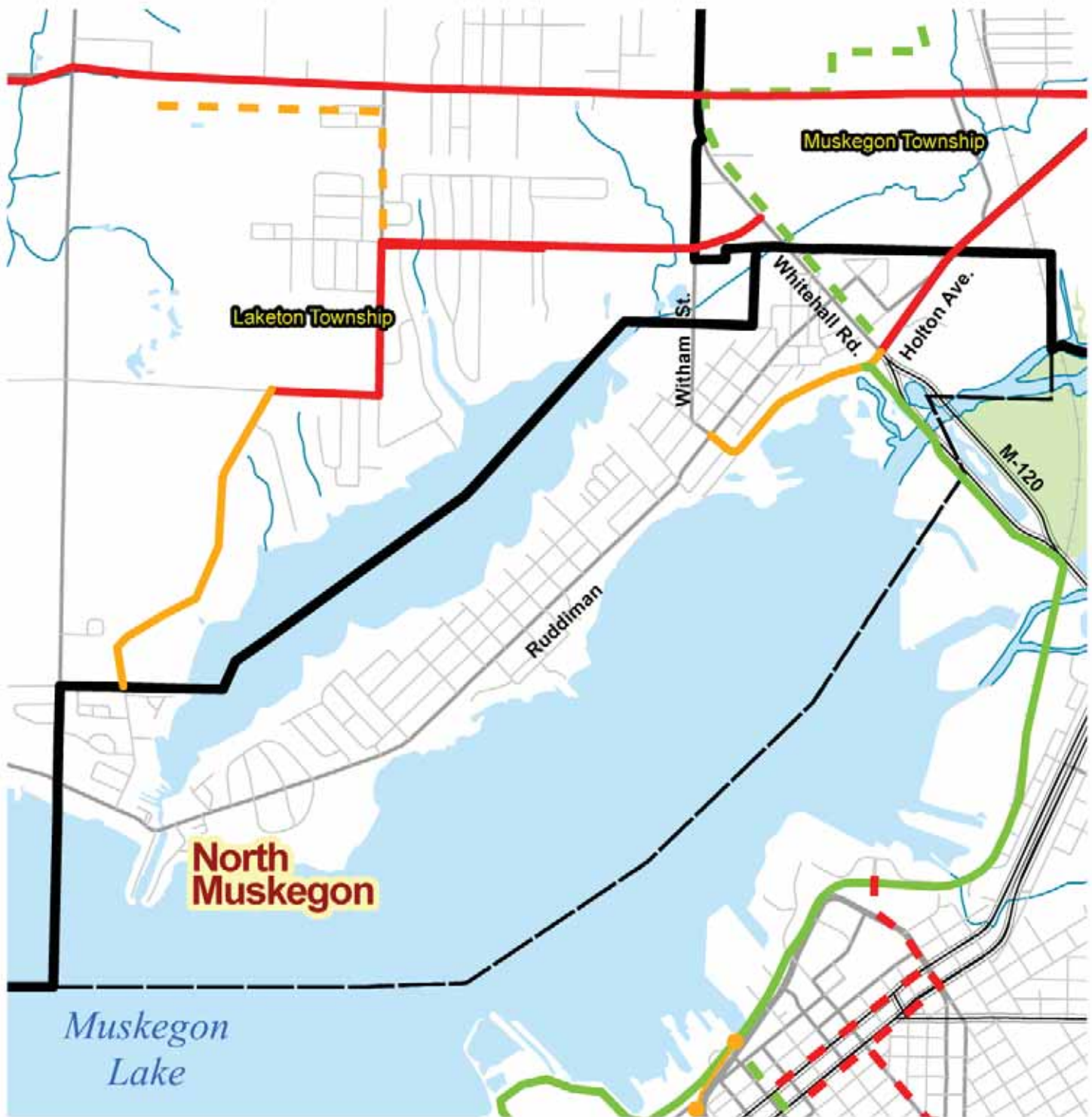
There are several existing non-motorized facilities within the City of North Muskegon. A regional shared use path exists from Holton Road southeast across the causeway, connecting to the Muskegon Lakeshore Trail in the City of Muskegon. A local shared use path connects to the regional path near Holton Road and runs southeast next to Lake Avenue then up Center Street to the commercial area. In addition, paved shoulders exist along Holton Road from Whitehall Road northeast to the north city limits.

Proposed Facilities

One non-motorized facility is proposed for the City of North Muskegon. This is for a portion of regional shared use path which would be a connecting link within the continuation of the Fred Meijer Berry Junction Trail. This would most likely parallel Whitehall Road, running from the border with Muskegon Township on the north to Holton Road, where there is an existing regional shared use path. The length of this segment is approximately .45 miles.

Conceptual Facilities

Currently there are no conceptual non-motorized facilities suggested for the City of North Muskegon.



CITY OF NORTH MUSKEGON

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



City of Norton Shores

Existing Facilities

Numerous non-motorized facilities exist throughout the City of Norton Shores, all of them being paved shoulders. In the northeast part of the city, paved shoulders exist on Lincoln Street, from Norton Avenue to Sherman Boulevard; on Leon Street, from Norton Avenue to Plainfield Avenue; on McCracken Street from Seminole Road to Sherman Boulevard; on Norton Avenue, from Lincoln Street to Maple Grove Road; Seminole Road, from Seaway Drive to Lake Michigan; and Roosevelt/Lake Harbor Road from Norton Avenue south to Pontaluna Drive.

Elsewhere in the city there are additional shorter segments of paved shoulders on Summit Avenue, from Henry Street to just short of US-31; Shettler Road, from Seaway Drive to US-31; on Hile Road from Henry Street to Rood Road; on Rood Road from Hile south to Hendrick Road; on Harvey Street from Ellis Road to Hile Road; on Hile Road from Ellis to US-31; on Airline Road, between Airport Road and Shettler Road; Black Lake Road from Pontaluna Road to the south city limits; and portions of Ellis Road, Robert Hunter Drive, Airport Place and Porter Road south of Muskegon Airport.

Lastly, long segments of paved shoulders exist on Henry Street, from Seminole Road to Pontaluna Road; on Pontaluna Road, from Lake Harbor Road to Harvey Street; Grand Haven Road, from Airport Road to Wilson Road; a combination of Airport Road, Wellesley Drive and Randall Road from I-96 to Henry Street; Harvey Street, from Mt. Garfield Road to Wilson Road; Sternberg Road, from Grand Haven Road west to Martin; then Martin north to Porter, then Porter west to Lake Harbor Drive. Paved shoulders also provide non-motorized travel on Summit Avenue between Getty Street and Stratford Street, just west of US-31.

Proposed Facilities

There are currently no proposed non-motorized facilities planned for the City of Norton Shores.

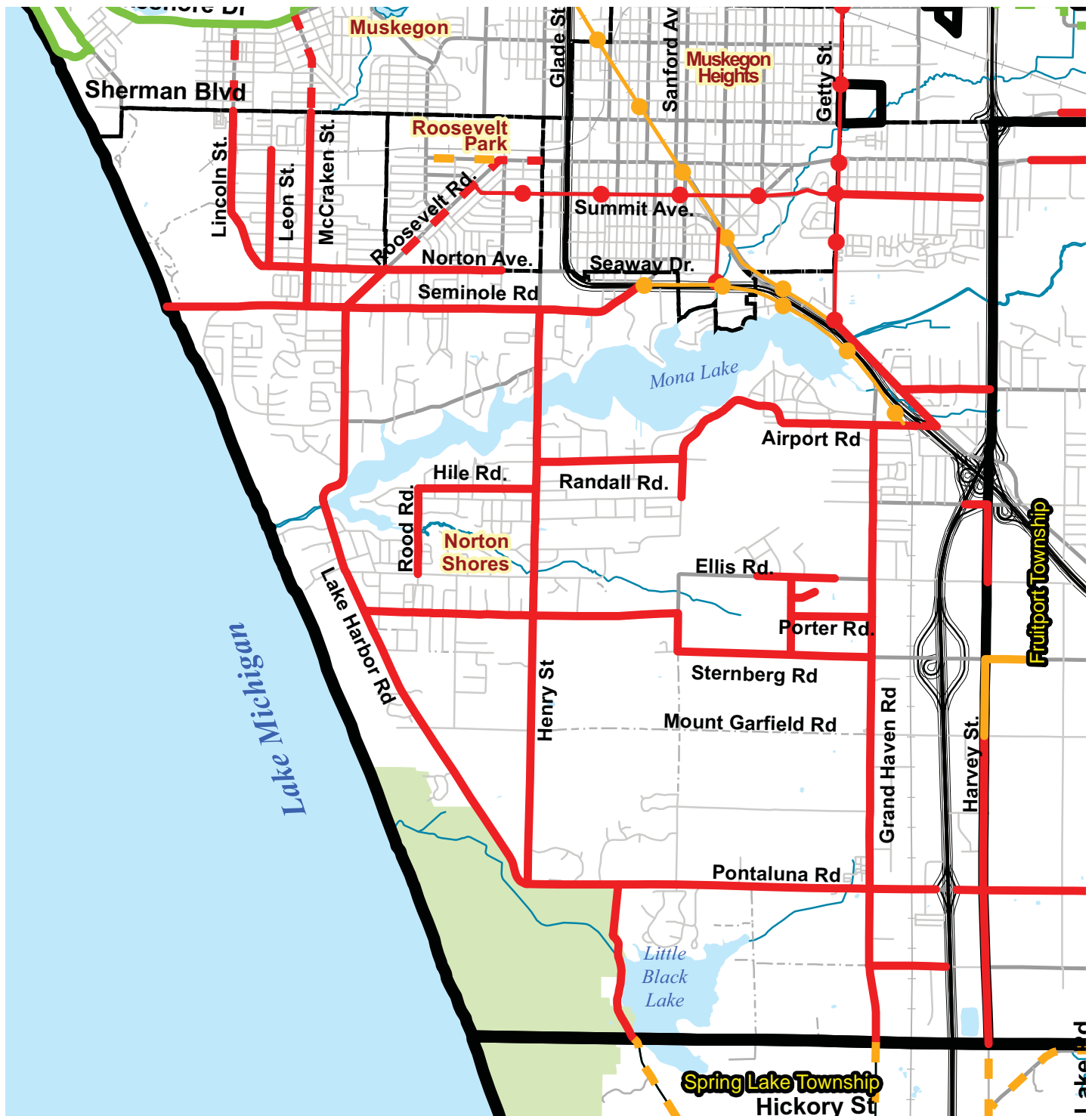
Conceptual Facilities

Conceptual non-motorized facilities recommended for Norton Shores include conceptual local shared use paths and conceptual bike lanes. A conceptual local shared use path is recommended on the south side of Seaway Drive, from Seminole Road to Airport Road. A portion of this will run through Muskegon Heights, in the middle. The portion east of Muskegon Heights is 1.5 miles, while the portion west of Muskegon Heights is .3 miles. A second conceptual local shared use path would follow the railroad right-of-way, beginning at the Muskegon Heights city limits, continuing southeast Airport Road. This segment would be about 1.5 miles.

Conceptual bike lanes are recommended at two locations within Norton Shores. The first location would be an infill gap on Summit Avenue, between the city limits of Roosevelt Park and Muskegon Heights. This short section is roughly .15 miles long. The second location is a short section of Getty Street, from the north city limits to Airline Drive, which is approximately .35 miles.



Existing paved shoulders near Hoffmaster State Park



CITY OF NORTON SHORES

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE

City of Roosevelt Park

Existing Facilities

Existing non-motorized facilities within the City of Roosevelt Park are limited at this time. Currently there are paved shoulders on Norton Avenue along the southern border of the city. There are also extra wide parking lanes on both Summit and Broadway which could be designated as sharrows lanes.

Proposed Facilities

There is one section of proposed paved shoulder in the City of Roosevelt Park. This section would be along Roosevelt Road, between Norton Avenue and Henry Street. This will provide connection to other paved shoulders along Roosevelt Road and Norton Avenue and is roughly 1.3 miles in length. At the intersection of Roosevelt Road and Glenside Boulevard there are existing curbs on Roosevelt Road, therefore this short stretch would require a bike lane, rather than a paved shoulder.

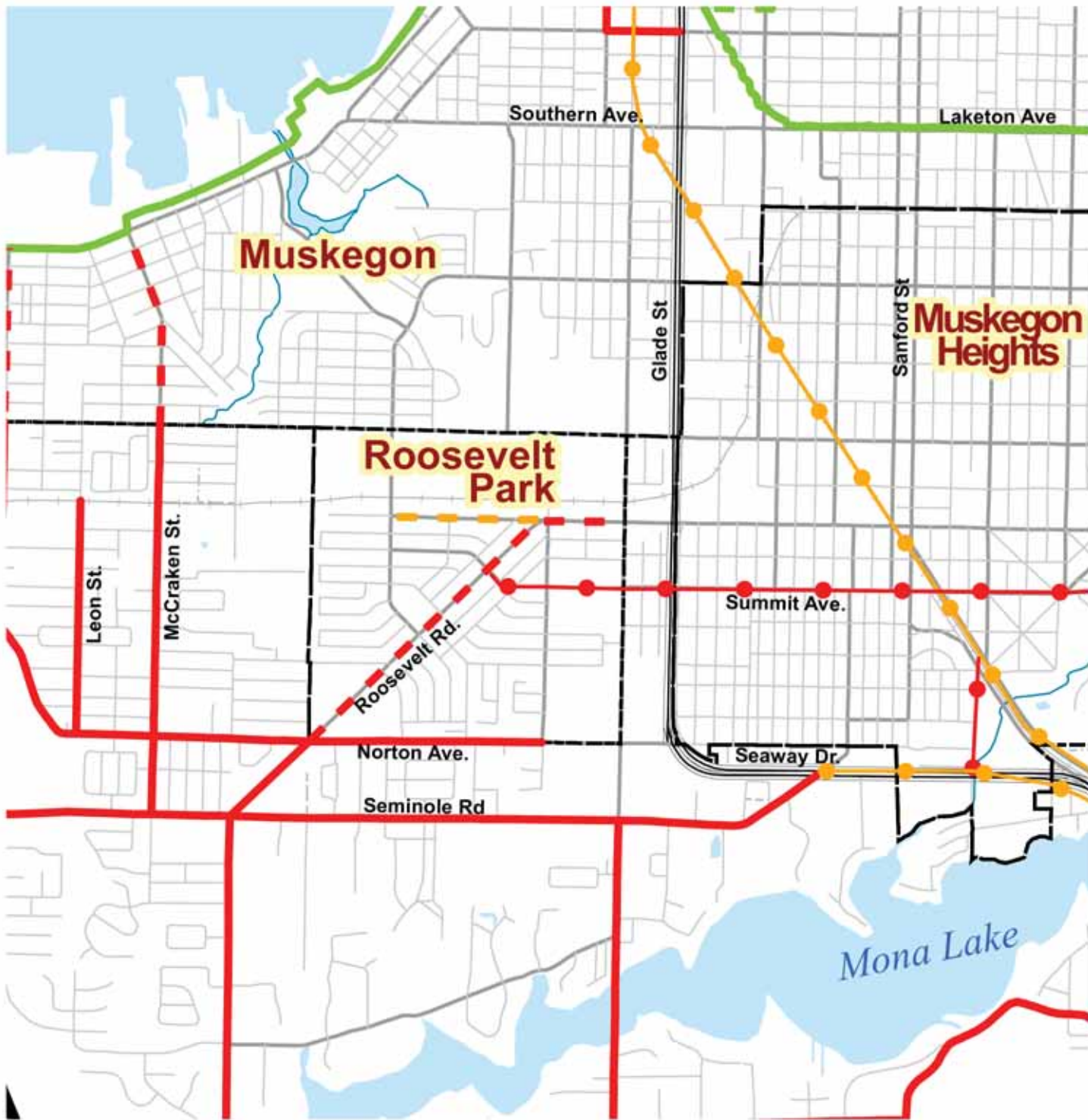
There is also a proposed pathway alongside the rail line which runs east/west through the City. Running from Glenside Boulevard to Henry Street, this path will be approximately 1 mile long.

Conceptual Facilities

A conceptual paved shoulder is recommended on Summit Avenue, from the east city limits to Roosevelt Road. The length of this paved shoulder is approximately .45 miles.



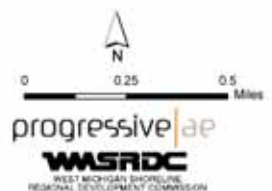
Widened paved shoulders are proposed along Roosevelt Road north of Norton Avenue to promote non-motorized travel



CITY OF ROOSEVELT PARK

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



Egelston Township

Existing Facilities

There are minimal non-motorized facilities located within Egelston Township. There are paved shoulders along Wolf Lake Road, from Wolf Lake south to Evanston Avenue. This section of paved shoulders is approximately 2.5 miles long. In addition, there is a local shared use path along the west side of Wolf Lake Road, which extends from Hall Road south to the commercial cluster at the intersection of Wolf Lake Road and Apple Avenue (M-46). This local shared use path provides non-motorized access to various schools of the Oakridge Public School district.

Proposed Facilities

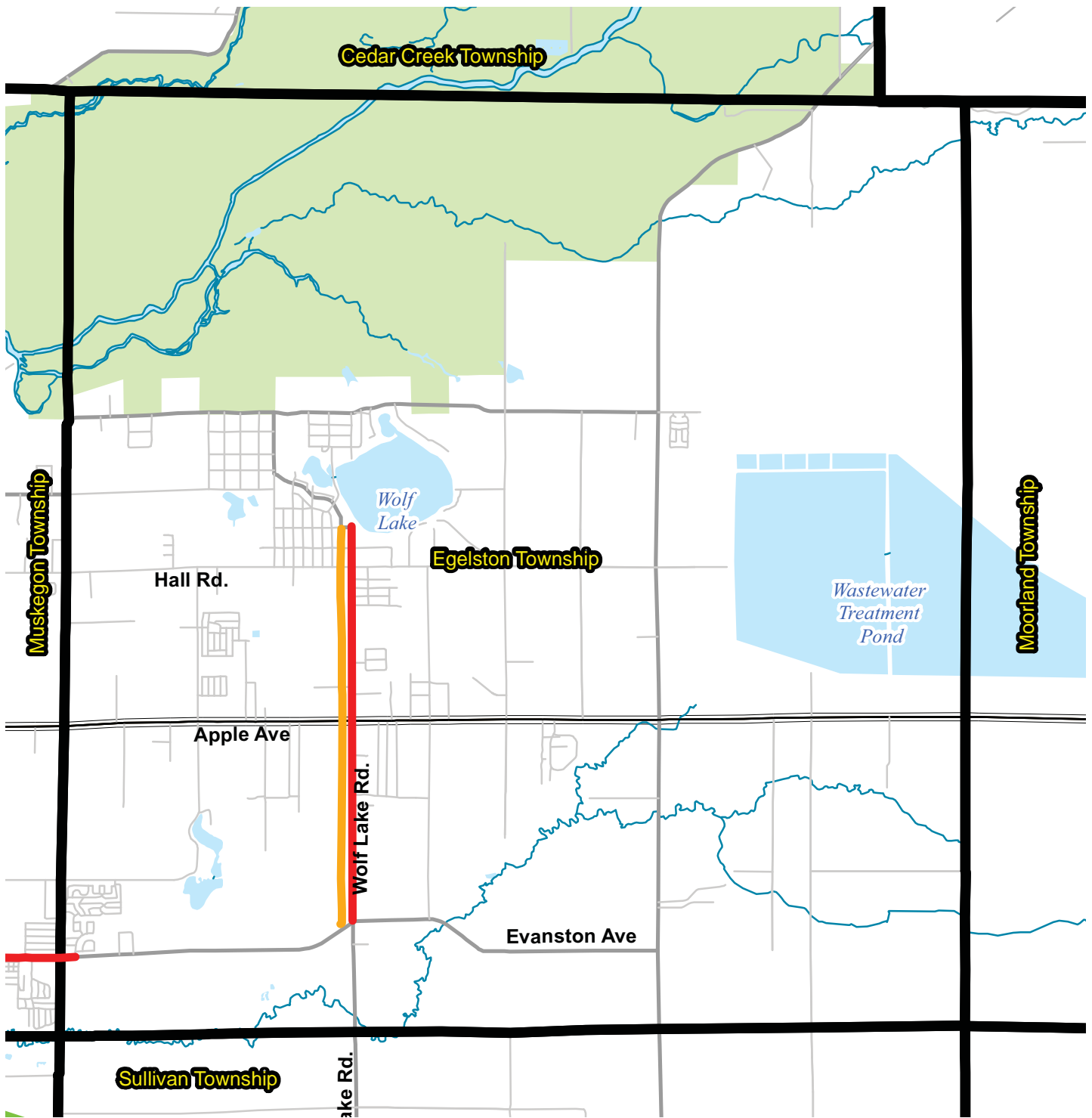
There are currently no proposed non-motorized facilities planned for Egelston Township.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Egelston Township.



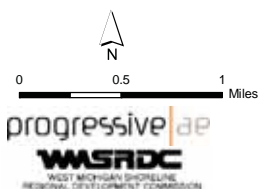
Existing paved shoulders and local shared use path on Wolf Lake Road promote non-motorized travel



EGELSTON TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Fruitport Township

Existing Facilities

There are several existing non-motorized facilities within Fruitport Township. In particular, the Musketawa Trail, a regional shared use path, cuts across the northern part of the township, providing linkage to the City of Muskegon to the north and Sullivan Township to the east. Local shared use paths exist primarily in the southwest portion of the township. One local shared use path is at The Lakes Mall, running along the east side of Harvey Street, from Mt. Garfield Road to Sternberg Road, then east along Sternberg. Another local shared use path is along Fruitport Road, from the south township border, northeast and east to the Fruitport village limits.

In addition, there are a few sections of paved shoulders that can be used for non-motorized travel. In the north part of the township, these exist along Mill Iron Road, from the north township boundary to Heights Ravenna Road; on Heights Ravenna Road from Dangle Road to Brooks Road; Black Creek Road from the north township border to Heights Ravenna Road; and on Broadway Avenue from east of US-31 to Black Creek Road. In the south part of the township, paved shoulders run along Pontaluna Road from Henry Street to the Village of Fruitport limits.

Proposed Facilities

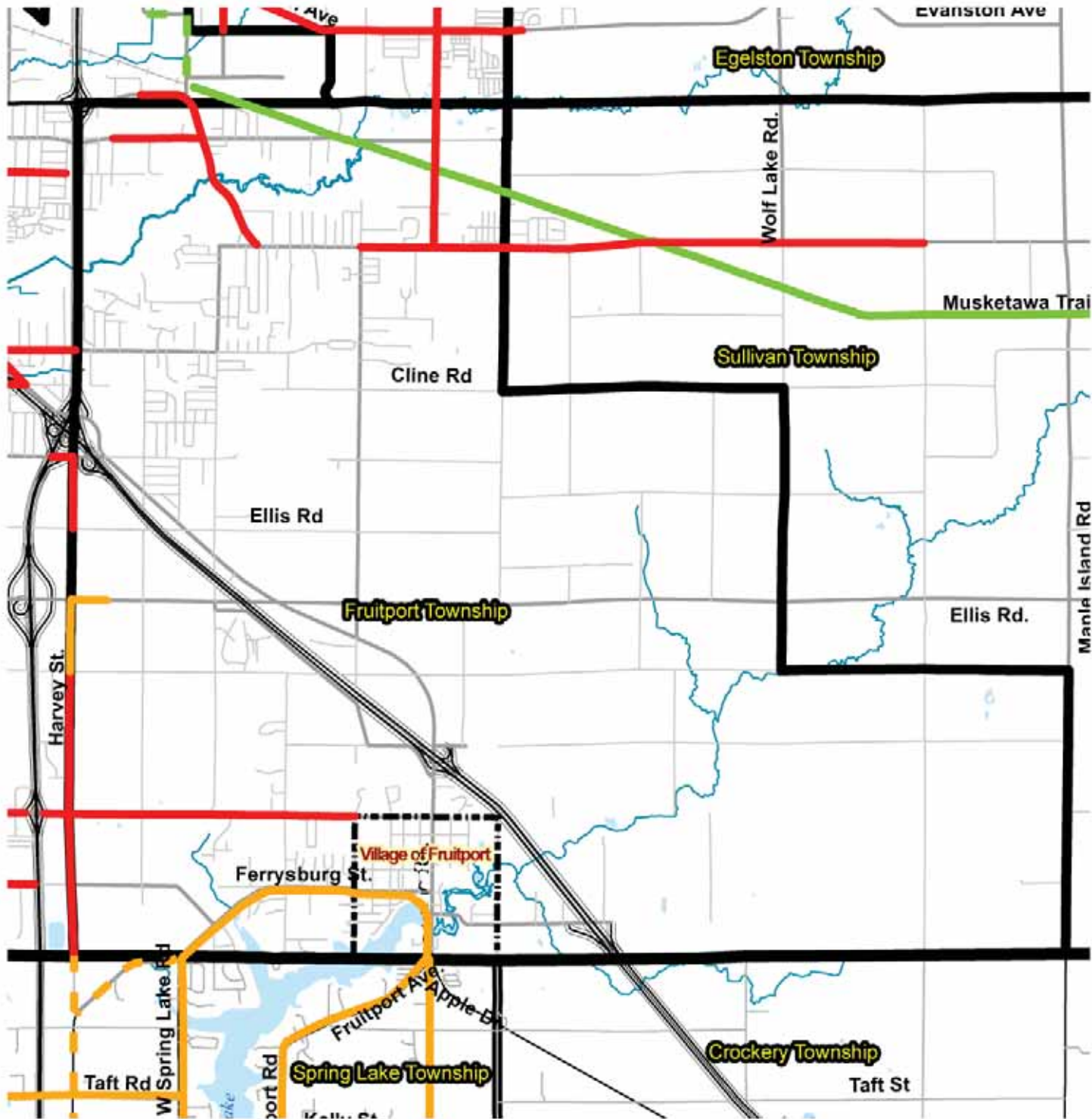
There are currently no proposed non-motorized facilities planned for Fruitport Township.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Fruitport Township.



Existing shared use path along Fruitport Road



FRUITPORT TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Laketon Township

Existing Facilities

A local shared use path and a few sections of paved shoulders provide the existing non-motorized facilities in Laketon Township. The local shared use path is along Bear Lake Road, from the City of North Muskegon limits to Fenner Road. Existing paved shoulders then run along Fenner Road to Horton Road, north on Horton to Dykstra Road, then east along Dykstra to the township limits at Whitehall Road. In addition, most of Giles Road has paved shoulders supporting non-motorized travel, from Whitehall Road west to Scenic Drive.

Proposed Facilities

Laketon Township has one small section of proposed local shared use path. This is a Safe Route to School (SR2S) path and would parallel Giles Road and Horton Road, connecting Central Elementary School to paved shoulders and local shared use paths to the south. The sections along Giles Road and Horton Road are each approximately .5 miles long.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Laketon Township.



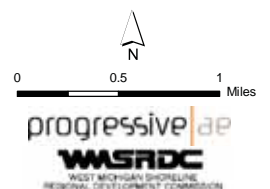
There are existing paved shoulders on Giles Road, however a local shared use path is planned for non-motorized access to Central Elementary School.



LAKETON TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Muskegon Township

Existing Facilities

Existing non-motorized facilities within Muskegon Township are primarily paved shoulders, with one short section of local shared use path. This section of local shared use path is along Holton Road, extending through the interchange area at US-31. In the north part of the township, paved shoulders then exist on Holton Road, from US-31 southwest to the City of North Muskegon border and along Giles Road from Whitehall Road to Getty Street.

In the south part of the township, paved shoulders can provide non-motorized access on Sheridan Road from M-46 (Apple Avenue) to the south township border; on Mill Iron Road from M-46 to the south township border; on Evanston Avenue from Laketon Avenue to the east township border; and on Laketon Avenue from the west township limits to Sheridan Road.

Proposed Facilities

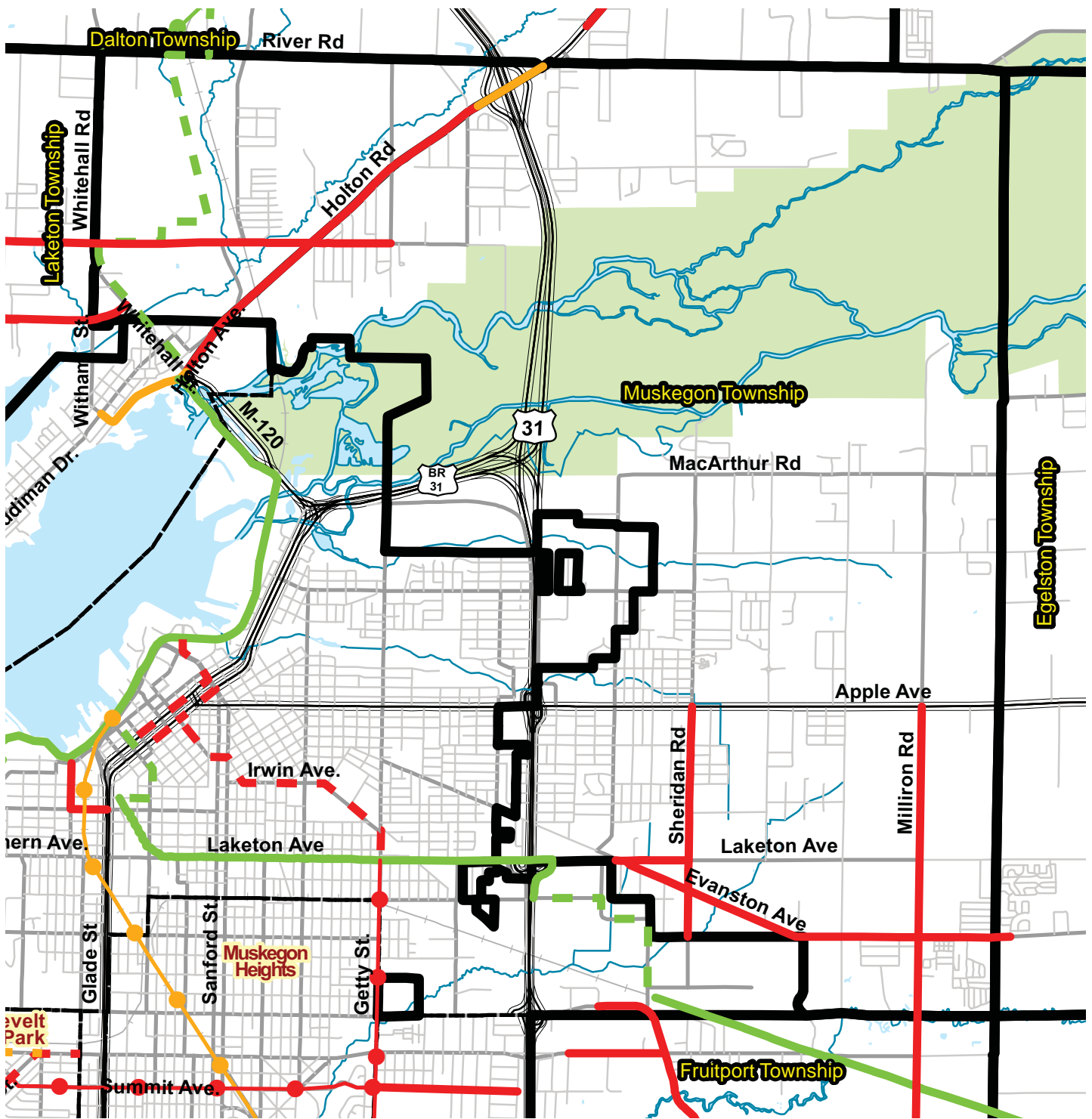
Muskegon Township has one section of proposed regional shared use path, which will be an extension of the Fred Meijer Berry Junction Trail. This will run through green space and easements west of Little Bear Creek from River Road to Giles Road, then west along Giles Road to Whitehall Road, then south along Whitehall Road to the border of North Muskegon. This section of regional shared use trail is about 2.75 miles long.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Muskegon Township.



Existing paved shoulders along Mill Iron Road



MUSKEGON TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Ravenna Township

Existing Facilities

There are limited non-motorized facilities within Ravenna Township. The primary one is the Musketawa Trail, a regional shared use path, runs from east to west across the total extent of the township and also goes through the Village of Ravenna. The other facility is paved shoulders along a short section of Moorland Road, from Ellis Road south to Mt. Garfield Road.

Proposed Facilities

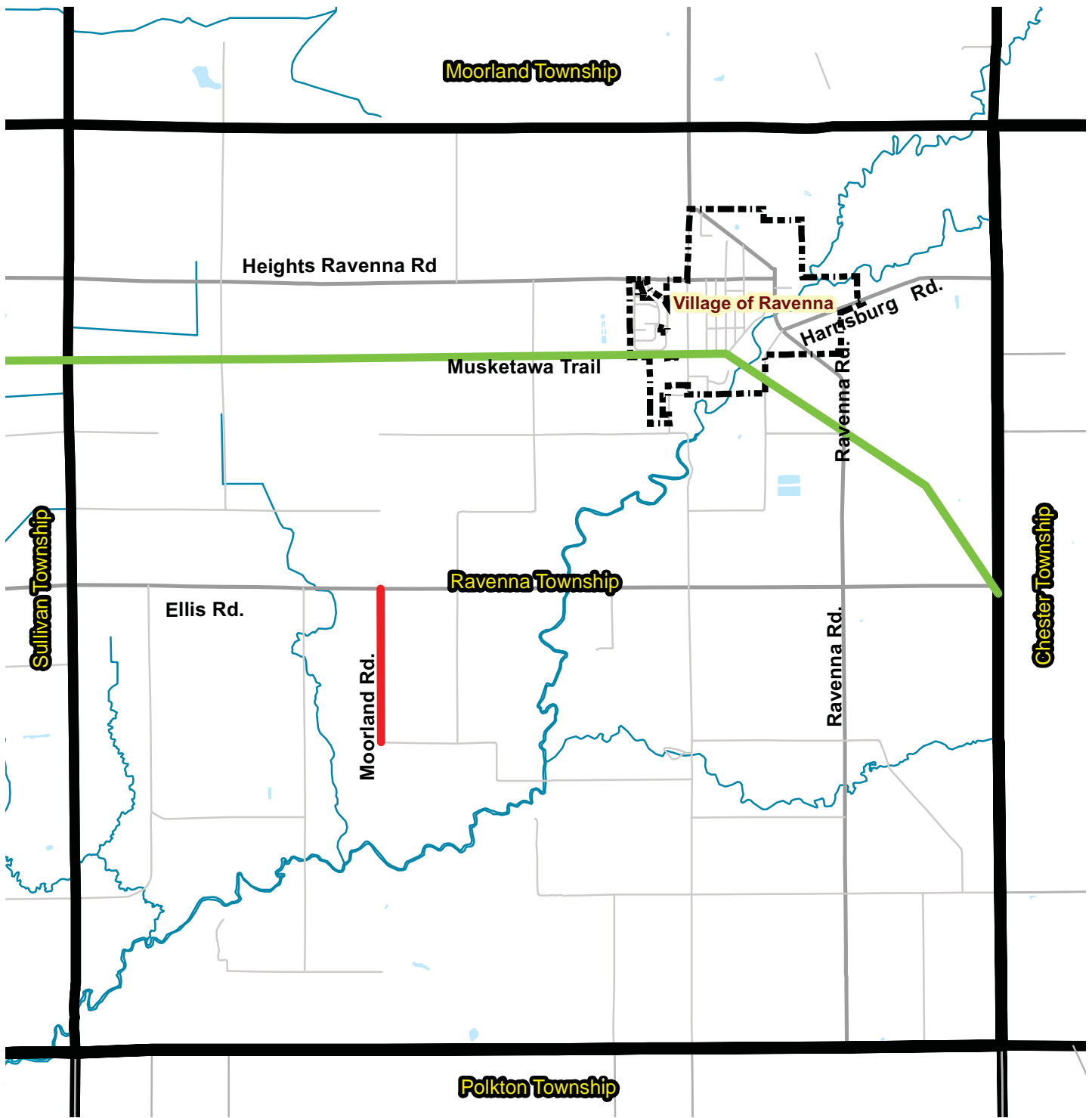
There are currently no proposed non-motorized facilities planned for Ravenna Township.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Ravenna Township.



The Musketawa Trail traverses from east to west across Ravenna Township



RAVENNA TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Sullivan Township

Existing Facilities

There are limited non-motorized facilities within Sullivan Township. The primary one is the Musketawa Trail, a regional shared use path, which runs east-west across the township. Aligned on an old railroad bed, it enters from Fruitport Township, in the northwest and exits at the east township border with Ravenna Township. In addition, paved shoulders run approximately halfway across the township along Heights Ravenna Road. Beginning at the township's west border at Brooks Road, this paved shoulder section continues east to Hilton Park Road.

Proposed Facilities

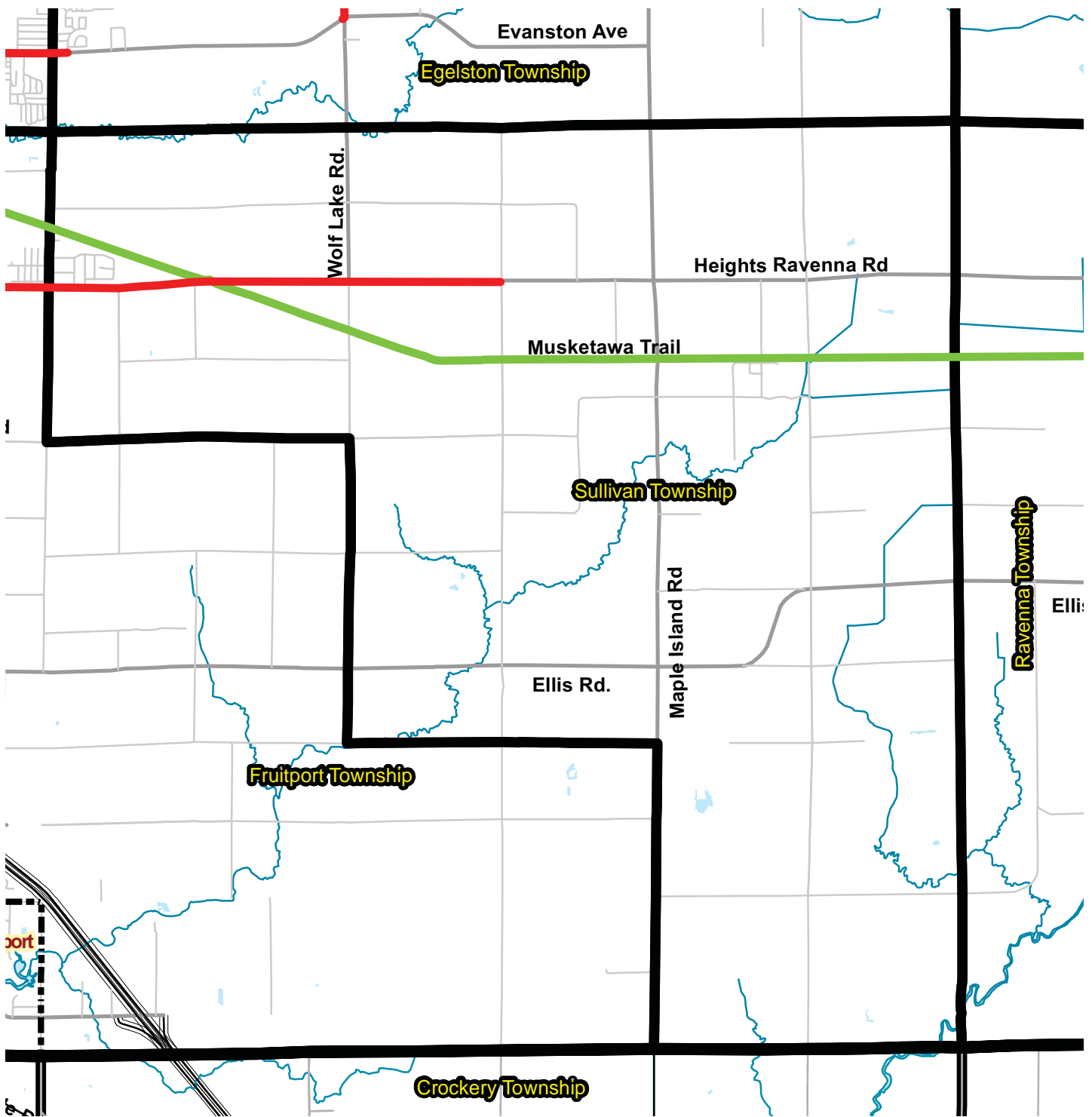
There are currently no proposed non-motorized facilities planned for Sullivan Township.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Sullivan Township.



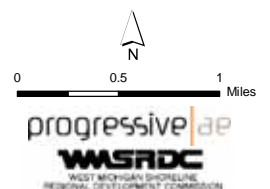
The Musketawa Trail where it crosses Heights Ravenna Road within the township



SULLIVAN TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



Village of Fruitport

Existing Facilities

Local shared use paths provide the existing non-motorized facilities within the Village of Fruitport. The path is on the north side of Spring Lake, continuing the local shared use path entering from Fruitport Township. This path continues around the east side of Spring Lake, on the west side of Third Street.

Proposed Facilities

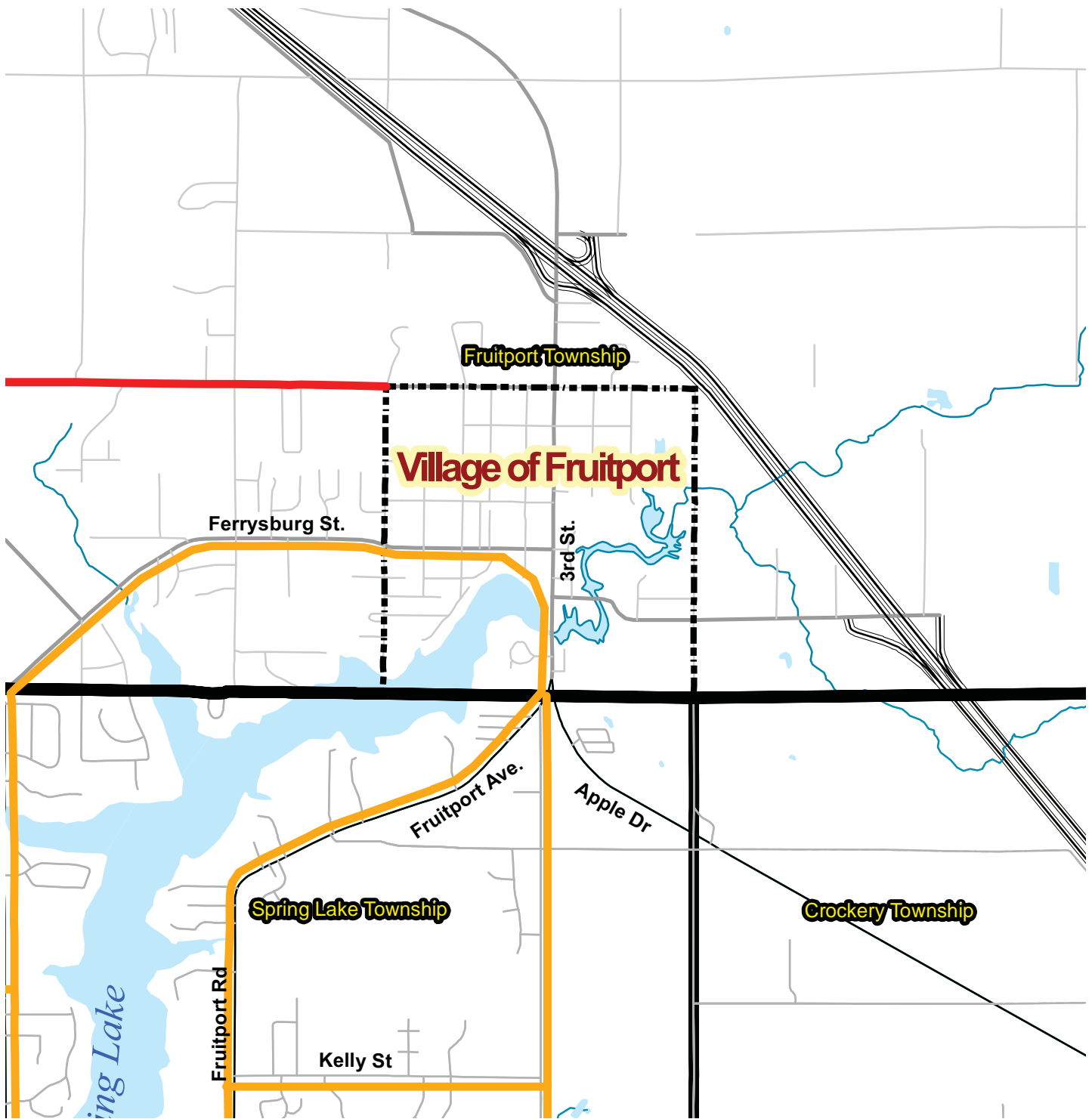
There are currently no proposed non-motorized facilities planned for the Village of Fruitport.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for the Village of Fruitport.



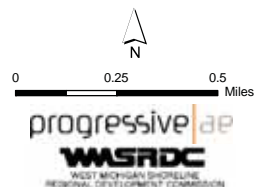
The local shared use path along Fruitport Road within the village



VILLAGE OF FRUITPORT

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



Village of Ravenna

Existing Facilities

Existing non-motorized facilities with the Village of Ravenna are very limited, with one short section of regional shared use path. This is a segment of the Musketawa Trail, which enters the village from Ravenna Township to the west, briefly runs through the south part of the village, then reenters the township at the southeast village limits. This alignment utilizes an old railroad bed.

Proposed Facilities

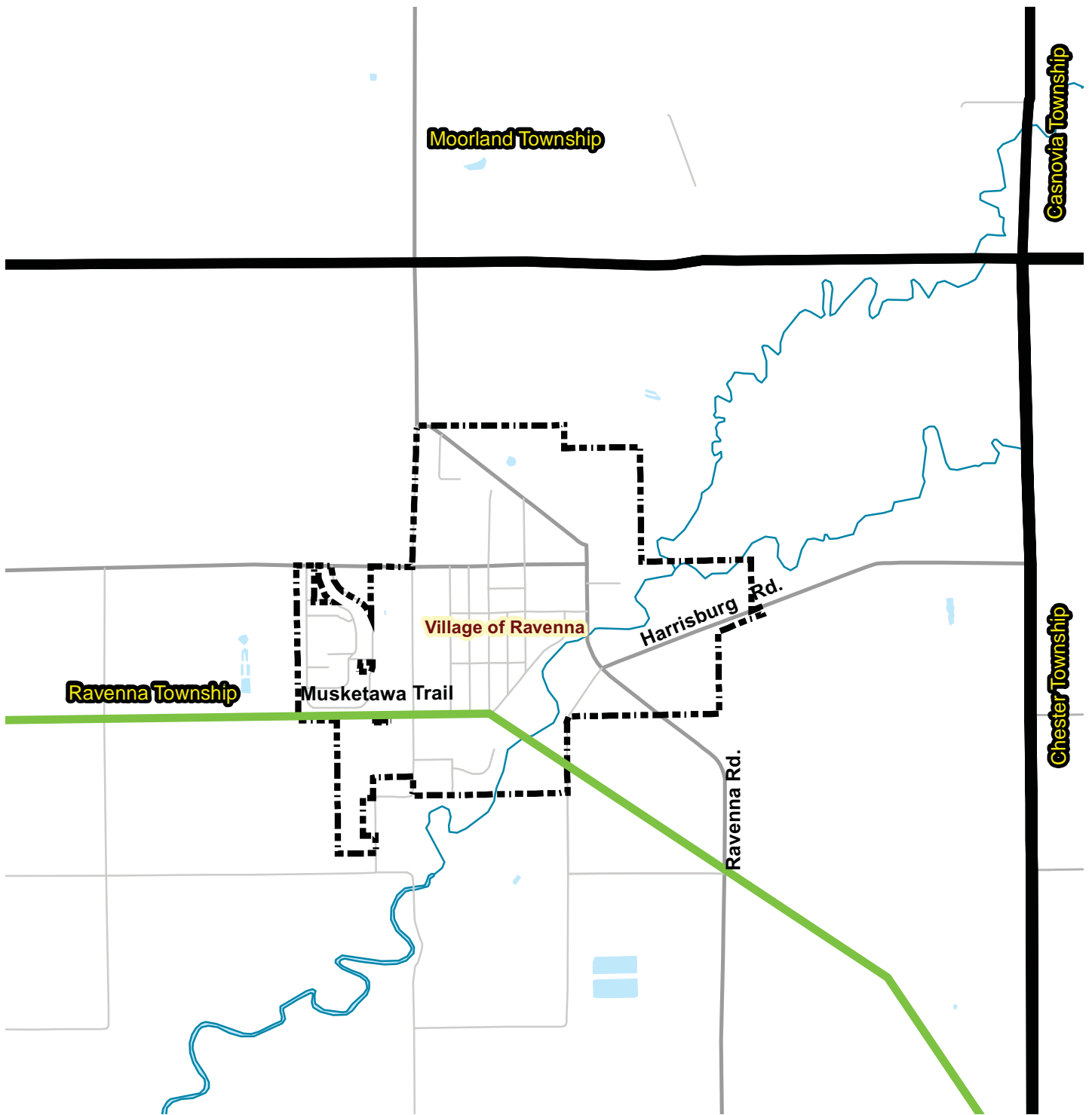
There are currently no proposed non-motorized facilities planned for the Village of Ravenna.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for the Village of Ravenna.



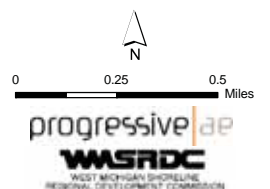
The Musketawa Trail runs through the Village of Ravenna



VILLAGE OF RAVENNA

EXISTING AND FUTURE BIKEWAY FACILITIES

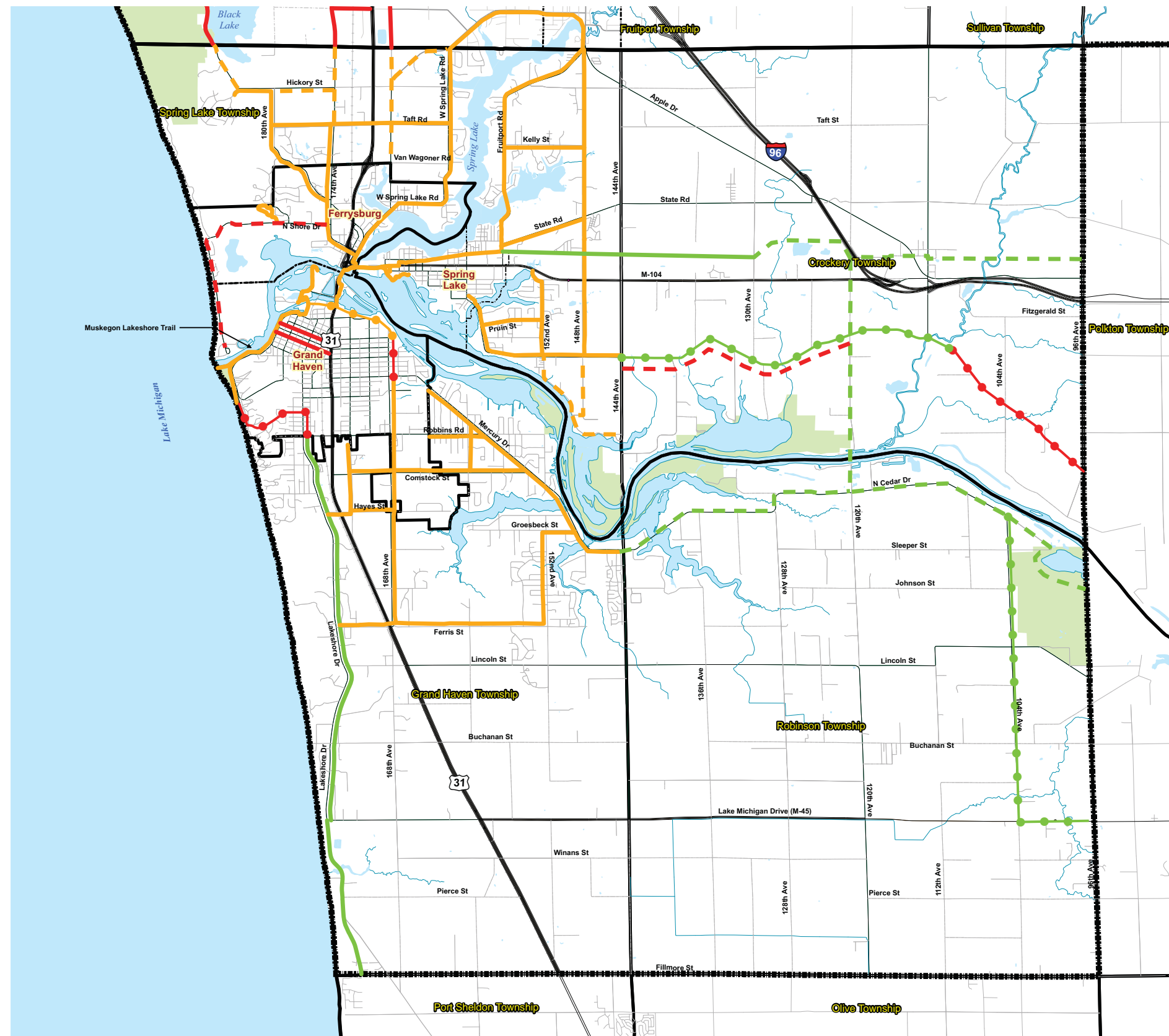
- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



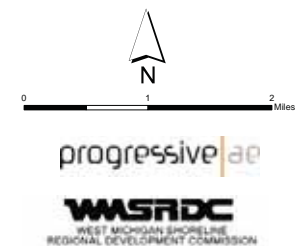
Document Path: P:\00000025\SubAreaMap\DC\Northwest Ottawa County Sub Area Map.mxd

NORTHWEST OTTAWA COUNTY SUB-AREA

Muskegon/Northern Ottawa Non-Motorized Plan



- EXISTING AND FUTURE BIKEWAY FACILITIES**
- REGIONAL SHARED USE PATH
 - PROPOSED REGIONAL SHARED USE PATH
 - CONCEPTUAL REGIONAL SHARED USE PATH
 - LOCAL SHARED USE PATH
 - PROPOSED LOCAL SHARED USE PATH
 - CONCEPTUAL LOCAL SHARED USE PATH
 - PAVED SHOULDER ≥ 4 FEET
 - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
 - CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



City of Ferrysburg

Existing Facilities

Several local shared use paths provide the existing non-motorized facilities within the City of Ferrysburg. The most notable local shared use paths exist along Dogwood Street from the city's border with Spring Lake Township southeast to 174th Avenue; along 174th Avenue/3rd Street from Van Wagoner Road, the north city limits, to Pine Street/West Spring Lake Road; and West Spring Lake Road from the south city limits northeast to city limits. A local shared use path also loops through the residential area in the northwest part of the city, connecting to North Shore Drive.

Proposed Facilities

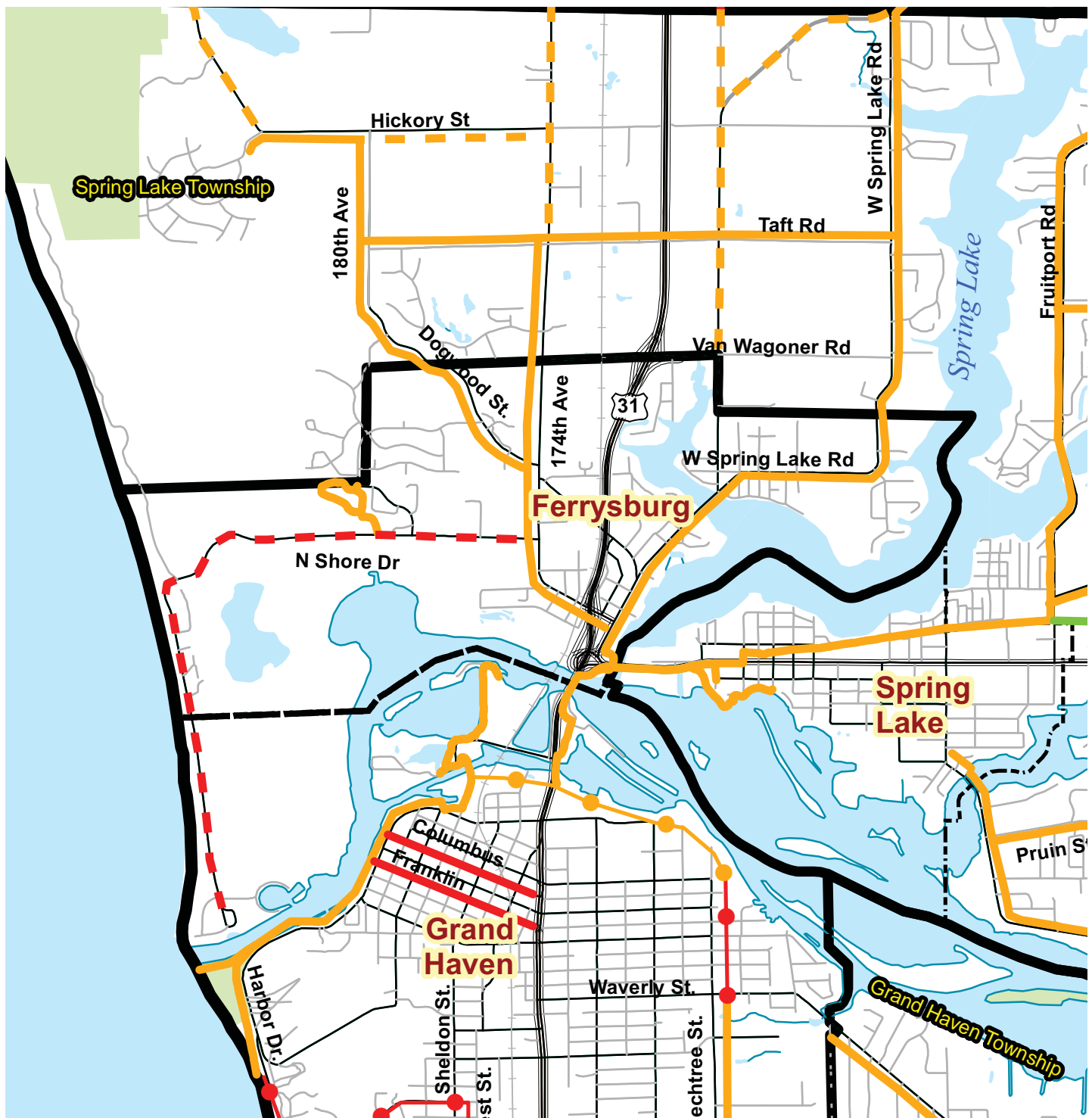
The City of Ferrysburg has one non-motorized facility that is proposed. A paved shoulder is proposed along North Shore Drive. This would provide a link from the city out to the north side of the Grand River channel into Lake Michigan. This connection would be about 3.1 miles.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for the City of Ferrysburg.



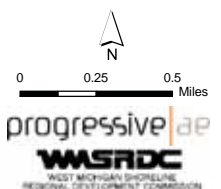
Existing path along Dogwood Street



CITY OF FERRYSBURG

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



City of Grand Haven

Existing Facilities

There are several existing non-motorized facilities with the City of Grand Haven. Several local shared use paths provide access to the waterfront and elsewhere. One such path provides linkage to the Village of Spring Lake, to the north across the Grand River. Another local shared use path traverses the waterfront, beginning at Harbor Island and following the waterfront down to Grand Haven State Park and Grand Haven City Beach on Lake Michigan. Additional paths are parallel to Beechtree Street, from Waverly Street to the south city limits and along Comstock Street, in the southeast part of the city, from Beechtree Street to the east city limits. In addition, there are paved shoulders along Columbus and Franklin Streets, one-way streets located in the northwest part of the city. The paved shoulders on these two streets are from US-31 to Harbor Drive.

Proposed Facilities

There are currently no proposed non-motorized facilities for the City of Grand Haven.

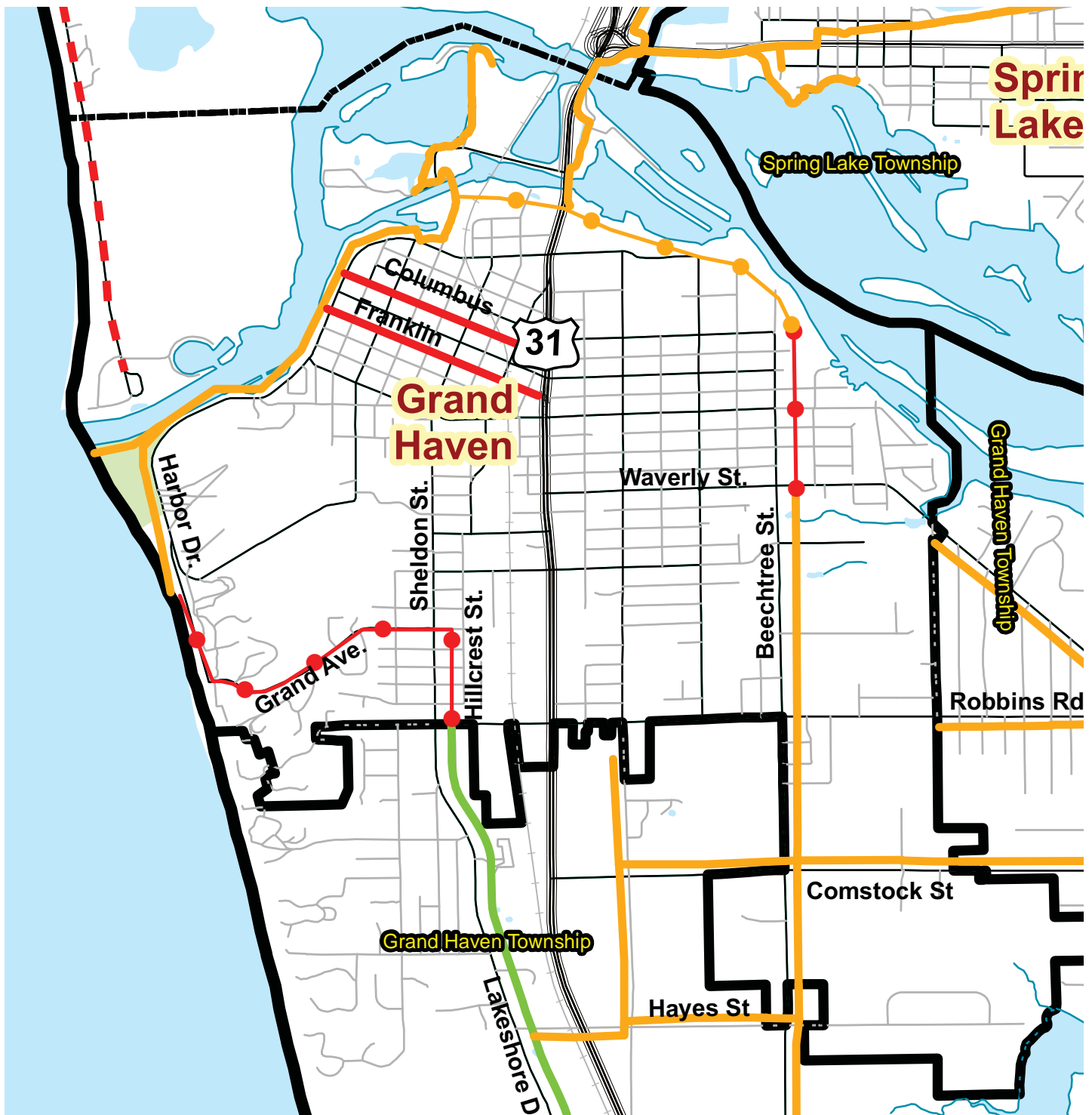
Conceptual Facilities

A conceptual local shared use path is suggested in the north part of the city, connecting the existing local shared use path along the waterfront to a conceptual bike lane on Beechtree Street (168th Avenue). This recommended path is approximately 1.25 miles long.

Conceptual bike lanes are recommended at two locations within Grand Haven. The first location is along Beechtree Street (168th Avenue), from Waverly Avenue north to the conceptual local shared use path described above. This is roughly .5 miles. The second conceptual bike lane would be part of a connection between the existing regional shared use path south of Robbins Road at the city limits to the local shared use path by the city beach and state park. The most likely route is for this bike lane to go up Sheldon Road from Robbins Road to Grand Avenue. A conceptual paved shoulder would then go west on Grand Avenue to South Harbor Drive, then north on South Harbor Drive to the existing path. This connection is approximately 1.25 miles.



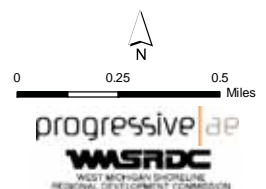
Existing local shared use path along the east side of Beechtree Street



CITY OF GRAND HAVEN

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



Crockery Township

Existing Facilities

There is only one existing non-motorized facility in Crockery Township. This is the North Bank Trail, which enters from Spring Lake Township at 144th Street and continues east to 130th Street. This is a regional shared use path, which is located within an old railroad right-of-way.

Proposed Facilities

Crockery Township has two sections of proposed regional shared use paths. The more significant section extends from 130th Avenue east to the township border with Polkton Township. This would be an extension of the existing regional shared use path that comes from Spring Lake out to 130th Avenue. Part of the North Bank Trail system, this proposed section is roughly 4.3 miles long. The second section would parallel 120th Avenue, extending from the North Bank Trail south to the Grand River and Robinson Township. This section of regional shared use path is roughly 2.6 miles in length. This segment would cross the Grand River on the new bridge being construction for M-231.

There is also a section of proposed paved shoulders along Leonard Street. The proposed paved shoulders would be from 144th Avenue, at the west township border, to 120th Avenue. This is a distance of approximately 3.1 miles.

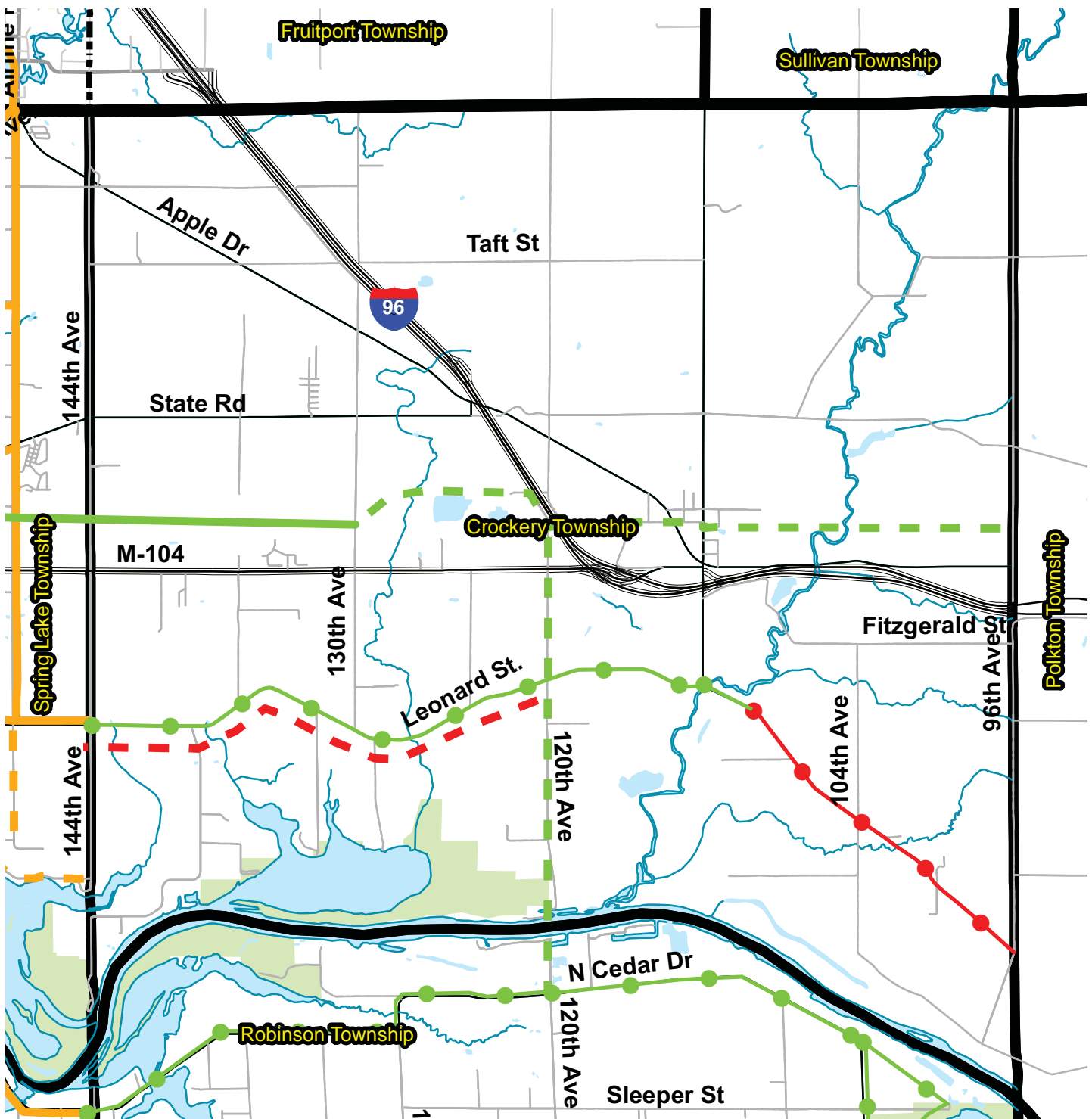
Conceptual Facilities

Two conceptual non-motorized facilities are recommended for Crockery Township. The first is for a conceptual regional shared use path that would parallel Leonard Street from 144th Avenue east to about 112th Avenue. The length of this regional shared use path would be about 4.5 miles.

A conceptual paved shoulder is also recommended. This would also relate to Leonard Street. It would start at about 112th Avenue, where the conceptual non-motorized path would end. It would then continue on to the township border with Polkton Township. This paved shoulder segment would be roughly 2.3 miles long.



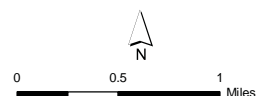
Existing North Bank Trail.



CROCKERY TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE



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 WEST MICHIGAN SHORELINE
 REGIONAL DEVELOPMENT COMMISSION

Grand Haven Township

Existing Facilities

Grand Haven Township's non-motorized network currently consists of regional and local shared use paths. The regional shared use path is several miles long; beginning at the City of Grand Haven city limits on the north and parallels Lakeshore Drive to Fillmore Street, which is the township's border with Port Sheldon Township. Several local shared use paths are along various roads. These include 168th Avenue from Ferris Street north to the township border with the city; Ferris Road, from Lakeshore Drive to 152nd Avenue; 152nd Avenue from Ferris Road north to Groesbeck Street; Groesbeck Street from 152nd Avenue to Mercury Drive; and Mercury Drive running northwest through the township from the east township limits to the City of Grand Haven.

Several shorter segments of local shared use path are located in the north part of the township. These are Robbins Road from Mercury Drive west to the township/city border; 160th Avenue from Comstock Street to Mercury Drive; Hayes Street from Lakeshore Drive to 168th Street; 172nd Avenue from Hayes Street to the township/city border; and Comstock Street from 172nd Avenue to Mercury Drive (runs through City of Grand Haven in the middle).

Proposed Facilities

There are currently no proposed non-motorized facilities planned for Grand Haven Township.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Grand Haven Township.



The existing shared use path along Lakeshore Drive near Lincoln Street



GRAND HAVEN TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE

Robinson Township

Existing Facilities

There are no non-motorized facilities currently existing within Robinson Township.

Proposed Facilities

A couple sections of regional shared use path are proposed for Robinson Township. One path is proposed to parallel 120th Avenue, as a continuation of the proposed regional shared use path in Crockery Township which would connect to the North Bank Trail. The section in Robinson Township would extend from the Grand River south to Cedar Drive. At this point it would intersect with a conceptual regional shared use path. This section would be roughly .45 miles. This segment would cross the Grand River on the new bridge being construction for M-231.

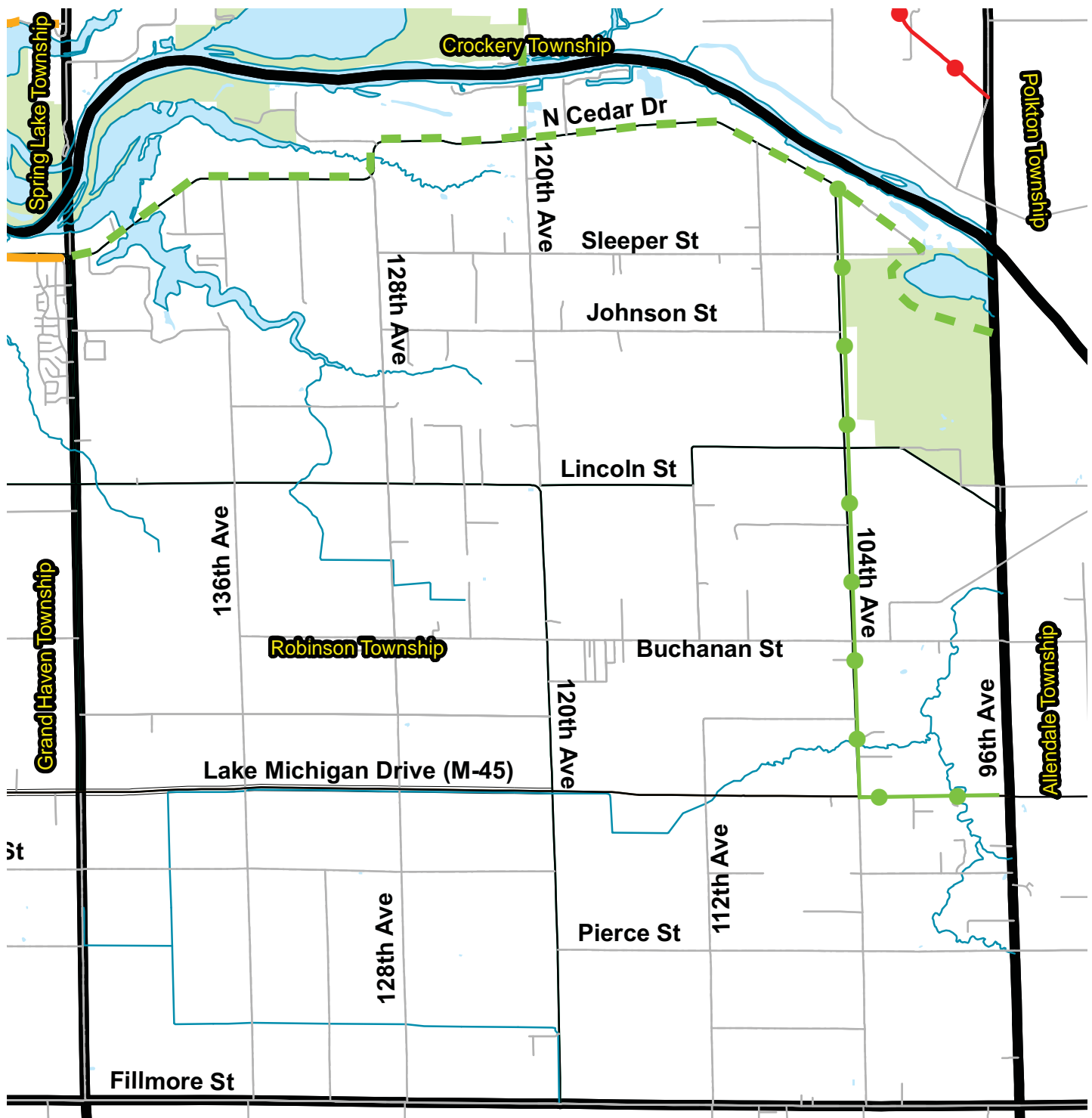
A second proposed path would parallel Green Street and North Cedar Drive along the Grand River, starting at 144th Street and proceeding east until North Cedar Drive ends at Sleeper Street. It would continue on in a greenway along the Grand River to the east limits of the township. This segment would be approximately 7.2 miles.

Conceptual Facilities

Two conceptual regional shared use path segments are suggested for Robinson Township. The first segment would parallel 104th Street from North Cedar Drive south to Lake Michigan Drive. This segment would be roughly 4 miles. The second segment would be along Lake Michigan Drive, from 104th Avenue east to the township limits. This segment would be about 1 mile.



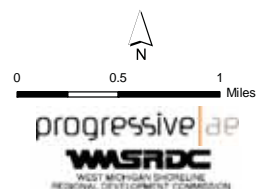
Conceptual paved shoulders are suggested along 140th Avenue



ROBINSON TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE



Spring Lake Township

Existing Facilities

A regional shared use path and several local shared use paths constitute the existing non-motorized facilities within Spring Lake Township. The regional shared use path is the North Bank Trail, running from the Spring Lake village limits east to the township's border with Crockery Township. In the northwest part of the township, local shared use paths exist on Hickory Street from 180th Avenue to Palm Drive; 180th Avenue/Dogwood Drive from Hickory Street south to the Ferrysburg village limits; 174th Avenue from Taft Road to the Ferrysburg/township border; and Taft Road from 180th Avenue to West Spring Lake Road.

In the east part of the township, local shared use paths exist on West Spring Lake Road from the north township limits south to Ferrysburg; Fruitport Road from the north township border south to the Village of Spring Lake; 148th Avenue from the north township limits south to Leonard Street; Kelly Street from Fruitport Road to 148th Avenue; State Road from Fruitport Road to 148th Avenue; Leonard Street from the Spring Lake village limits east to the township's border with Crockery Township; Pruin Street from Leonard Street to 152nd Street; and Kreuger Street/152nd Avenue from M-104 south to Leonard Street.

Proposed Facilities

Several short sections of proposed local shared use paths are planned for Spring Lake Township. These will complement several sections of local shared use paths that already exist. Proposed local shared use paths along 152nd and 148th Avenues will extend existing paths coming from the north, from Cleveland Street down to Boom Road. The 152nd Avenue section is .25 miles, while the 148th Avenue section is .9 miles. Another section of local shared use path would parallel Boom Road and the north bank of the Grand River, from 152nd Avenue to 144th Avenue. This section of path is approximately 1.4 miles.

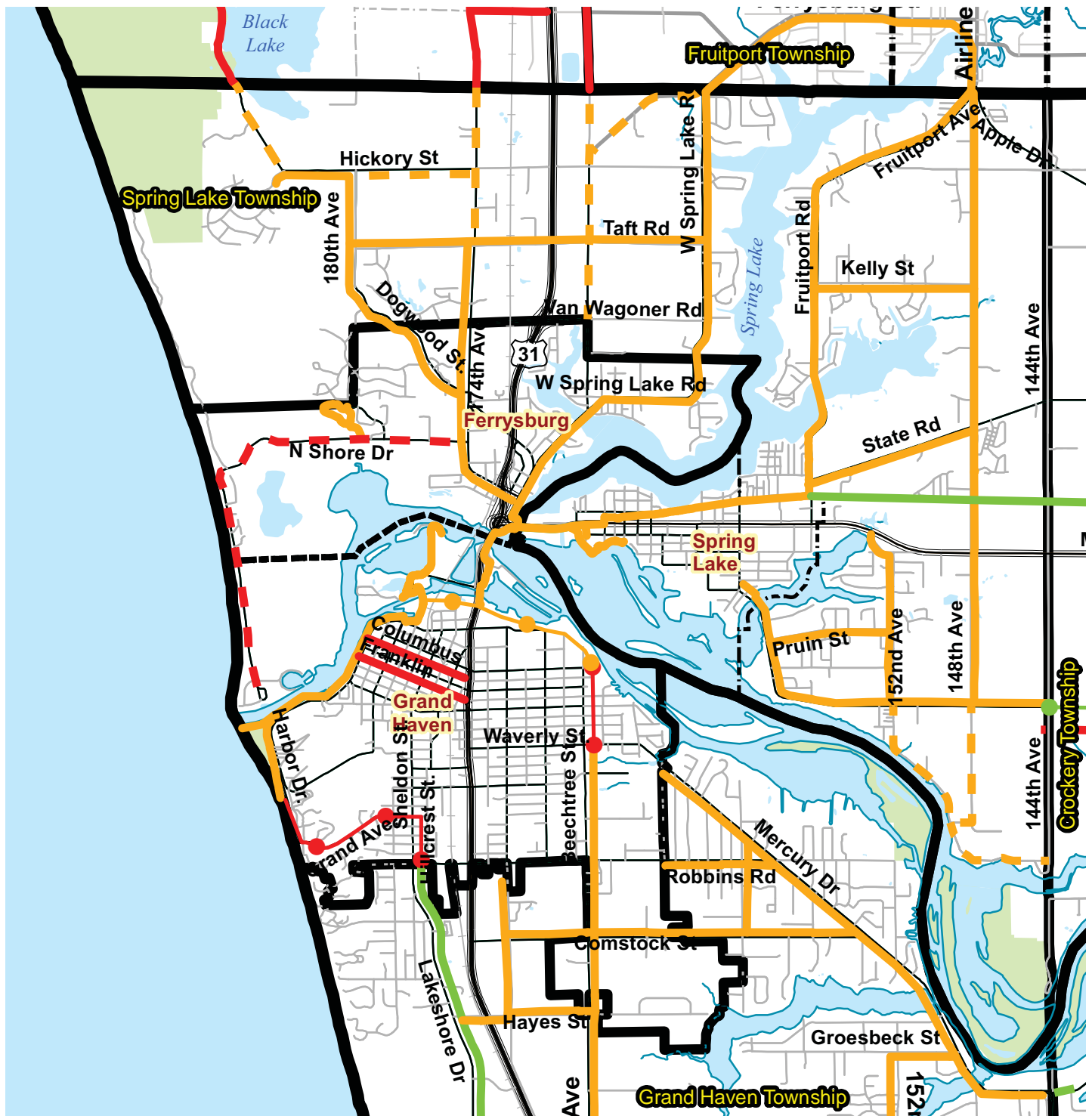
In the northwest corner of the township, three sections of proposed local shared use path will complement the network of paths that already exist in this area. These are on Hickory Street, from 180th Avenue to 174th Avenue; on 174th Avenue from Wilson Road to Taft Road; and on Palm Drive from Hickory Street to the north township limits. These sections are .8 miles, 1 mile and .65 miles respectively. Also in this area, east of US-31, are proposed local shared use paths on 168th Avenue, from VanWagoner Road to Wilson Road; and on Hemlock Drive, from 168th Avenue east to W. Spring Lake Road. The lengths of these two sections are 1.5 miles and .9 miles respectively.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for Spring Lake Township.



Shared use path along Leonard Street



SPRING LAKE TOWNSHIP

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER \geq 4 FEET
- - - PROPOSED PAVED SHOULDER \geq 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER \geq 4 FEET/BIKE LANE

Village of Spring Lake

Existing Facilities

As with the City of Ferrysburg, the existing non-motorized facilities within the Village of Spring Lake consist of local shared use paths. The most notable one runs from the west village border and bridge over the Grand River east to the village's border with Spring Lake Township. This provides access not only to the City of Grand Haven and the City of Ferrysburg, but to the regional North Bank Trail in Spring Lake Township. Another local shared use path runs from West Savage Street (M-104) south through wetlands then along the waterfront. Lastly, a local shared use path runs along Leonard Street from the Grandview/Lake intersection to the southeast village border with Spring Lake Township.

Proposed Facilities

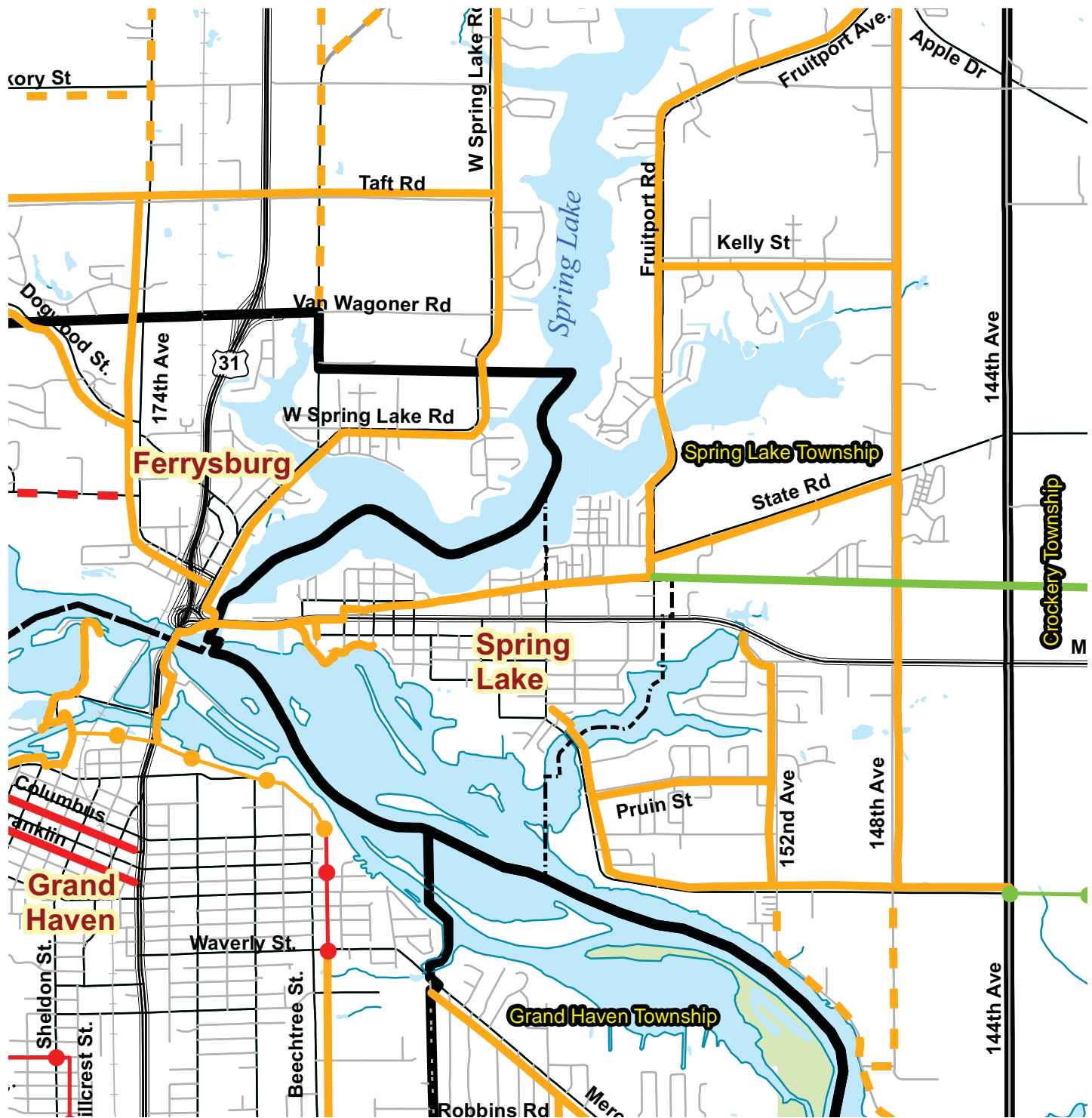
There are currently no proposed non-motorized facilities planned for the Village of Spring Lake.

Conceptual Facilities

There are currently no conceptual non-motorized facilities suggested for the Village of Spring Lake.



Existing local shared use path within the village



VILLAGE OF SPRING LAKE

EXISTING AND FUTURE BIKEWAY FACILITIES

- REGIONAL SHARED USE PATH
- - - PROPOSED REGIONAL SHARED USE PATH
- CONCEPTUAL REGIONAL SHARED USE PATH
- LOCAL SHARED USE PATH
- - - PROPOSED LOCAL SHARED USE PATH
- CONCEPTUAL LOCAL SHARED USE PATH
- PAVED SHOULDER ≥ 4 FEET
- - - PROPOSED PAVED SHOULDER ≥ 4 FEET/BIKE LANE
- CONCEPTUAL PAVED SHOULDER ≥ 4 FEET/BIKE LANE

Non-motorized Facility Cost and Prioritization by Municipality

Non-motorized Facility Cost and Prioritization by Municipality

The following pages provide additional information for each project, based on the municipality in which it resides. Preliminary priorities have been assigned to each project. By their very nature, projects identified as conceptual regional shared use path, conceptual local shared use path, conceptual paved shoulder or conceptual bike lane have been given a long-term priority. Proposed projects have been given either a short-term or mid-term priority. Short-term priorities have been assigned to projects that appear shorter and easily implementable or where the proposed non-motorized facility would complement an area where there are numerous existing non-motorized facilities. These often represent the “low hanging fruit.” Mid-range designation has been assigned to those projects that fall between these short and long-term ranges.

In addition, generalized costs have been identified for each of the proposed and conceptual non-motorized facilities. These are order of magnitude costs to serve as a beginning point for preliminary planning and budgeting. More detailed investigation and analysis of site specific conditions, alignments, and engineering will determine more refined costs as individual non-motorized facilities are developed in the future. Costs for shared use paths are based on a 10 foot wide path with 2 foot gravel shoulders on each side. Costs for paved shoulders are based on a 4 foot wide shoulder on each side of the road. Bike lane costs are based on a 5 foot wide bike lane on each side of the street. Bituminous asphalt construction is anticipated in all cases.

North Muskegon County Sub-area Costs and Priorities

	Location	Miles	Cost	Priority	Status
Cedar Creek Township					
Conceptual regional shared use path	Railroad r.o.w. in northwest township	1.2	\$264,000	Long-term	Conceptual
Dalton Township					
Proposed regional shared use path	McMillan Road to River Road	1.45	\$319,000	Mid-term	Proposed
Conceptual regional shared use path	Railroad r.o.w. NE to SW across township	7.2	\$1,584,000	Long-term	Conceptual
Fruitland Township					
Proposed paved shoulder	Zeller Road (Lakewood to Michillinda)	1	\$131,000	Short-term	Proposed
Conceptual paved shoulder	Michillinda Road (Whitehall to Hart/Montague Trail)	0.25	\$33,000	Long-term	Conceptual
Holton Township					
Conceptual regional shared use path	Railroad r.o.w. NE to SW across township	6.4	\$1,408,000	Long-term	Conceptual
Montague Township					
Conceptual local shared use path	Whitbeck Road (Hancock to Wilkes)	1.5	\$330,000	Long-term	Conceptual
Conceptual local shared use path	Wilkes Road (Whitbeck to Lamos)	1	\$220,000	Long-term	Conceptual
Whitehall Township					
Conceptual local shared use path	Whitehall Road (Colby to Benston)	1.35	\$297,000	Long-term	Conceptual
Conceptual local shared use path	Benston Road (Whitehall to Durham)	0.7	\$154,000	Long-term	Conceptual
Conceptual local shared use path	Durham Road (Benston to existing local path)	0.25	\$55,000	Long-term	Conceptual
White River Township					
Conceptual local shared use path	Wilkes Road (Lamos to Indian Bay)	1	\$220,000	Long-term	Conceptual
Conceptual local shared use path	Indian Bay Road (Wilkes to Sunset Lane)	0.5	\$110,000	Long-term	Conceptual

South Muskegon County Sub-area Costs and Priorities

	Location	Miles	Cost	Priority	Status
City of Muskegon					
Proposed regional shared use path	Lakeshore Drive to W Grand Avenue	0.75	\$165,000	Mid-range	Proposed
Proposed regional shared use path	Laketon Avenue to Musketawa Trail	1.5	\$330,000	Mid-range	Proposed
Proposed bike lane	Lincoln Street from Sherman to Lakeshore	0.6	\$19,000	Short-range	Proposed
Proposed bike lane	McCracken Street from Sherman to Lakeshore	0.6	\$19,000	Short-range	Proposed
Proposed bike lane	Terrace Avenue from Muskegon to Shoreline	0.5	\$16,000	Mid-range	Proposed
Proposed bike lane	Webster Avenue from Terrace to 7th	0.6	\$19,000	Mid-range	Proposed
Proposed bike lane	Muskegon Avenue from Terrace to 7th	0.6	\$19,000	Mid-range	Proposed
Proposed bike lane	3rd, Strong Arthur, Irwin Nims and Getty from Muskegon to Laketon	1.7	\$54,000	Mid-range	Proposed
Conceptual local shared use path	Railroad r.o.w. from waterfront to Muskegon Heights	1.25	\$275,000	Long-range	Conceptual
Conceptual bike lane	Getty Street from Laketon to Keating	0.25	\$8,000	Long-range	Conceptual
City of Muskegon Heights					
Conceptual local shared use path	Railroad r.o.w. from north city limits to south city limits	1.8	\$396,000	Long-range	Conceptual
Conceptual bike lane	Summit Avenue from east city limits to west city limits	1.75	\$56,000	Long-range	Conceptual
Conceptual bike lane	Getty Street from Keating to south city limits	1.7	\$54,000	Long-range	Conceptual
Conceptual paved shoulder	Hoyt Street from Merriam to Seaway	0.4	\$53,000	Long-range	Conceptual
City of North Muskegon					
Proposed regional shared use path	North city limits to Holton Road	0.45	\$99,000	Mid-range	Proposed
City of Norton Shores					
Conceptual local shared use path	Seaway Drive from Muskegon Heights limits to Airport	1.5	\$330,000	Long-range	Conceptual
Conceptual local shared use path	Seaway Drive from Seminole to Muskegon Heights limits	0.3	\$66,000	Long-range	Conceptual
Conceptual local shared use path	Railroad r.o.w. from Muskegon Heights limits to Airport	1.5	\$330,000	Long-range	Conceptual
Conceptual bike lane	Summit Avenue between Roosevelt Park and Muskegon Heights	0.15	\$5,000	Long-range	Conceptual
Conceptual bike lane	Getty Street from north city limits to Airline	0.35	\$11,000	Long-range	Conceptual
City of Roosevelt Park					

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South Muskegon County Sub-area Costs and Priorities

	Location	Miles	Cost	Priority	Status
Proposed paved shoulder/bike lane	Roosevelt Road from Norton to Henry	1.3	\$128,000	Short-range	Proposed
Proposed local shared use path	Along railway from Glenside to Henry	1	\$220,000	Mid-range	Proposed
Conceptual bike lane	Summit Avenue from east city limits to Roosevelt Road	0.45	\$59,000	Long-range	Conceptual
Laketon Township					
Proposed local shared use path	Giles Road from Central Elementary to Horton	0.5	\$110,000	Short-range	Proposed
Proposed local shared use path	Horton Road from Giles to Dykstra	0.5	\$110,000	Short-range	Proposed
Muskegon Township					
Proposed regional shared use path	Whitehall Road from River Road to N. Muskegon border	2.75	\$605,000	Mid-range	Proposed

Northwest Ottawa County Sub-area Costs and Priorities

	Location	Miles	Cost	Priority	Status
City of Grand Haven					
Conceptual local shared use path	Waterfront to Beechtree Street (168th)	1.25	\$275,000	Long-term	Conceptual
Conceptual bike lane	Beechtree Street (168th) from Waverly to waterfront	0.5	\$65,000	Long-term	Conceptual
Conceptual bike lane	Sheldon Road from Robbins to Grand	0.3	\$10,000	Long-term	Conceptual
Conceptual paved shoulder	Grand Avenue & South Harbor Drive from Sheldon	0.95	\$124,000	Long-term	Conceptual
Crockery Township					
Proposed regional shared use path	North Bank Trail from 130th to Polkton Township	4.3	\$946,000	Mid-term	Proposed
Proposed regional shared use path	120th Avenue from North Bank Trail to Grand River	2.6	\$572,000	Mid-term	Proposed
Proposed paved shoulder	Leonard Street from 144th to 120th	3.1	\$403,000	Mid-term	Proposed
Conceptual regional shared use path	Leonard Street from 144th to 112th	4.5	\$990,000	Long-term	Conceptual
Conceptual paved shoulder	Leonard Street from 11th to Polkton Township	2.3	\$299,000	Long-term	Conceptual
Robinson Township					
Proposed regional shared use path	120th Avenue from Grand River to Cedar Drive	0.45	\$99,000	Mid-term	Proposed
Proposed regional shared use path	N. Cedar Drive from 144th east to township limits	7.2	\$1,584,000	Mid-term	Conceptual
Conceptual regional shared use path	104th Street from N. Cedar to Lake Michigan Drive	4	\$880,000	Long-term	Conceptual
Conceptual regional shared use path	Lake Michigan Drive from 104th to township limits	1	\$220,000	Long-term	Conceptual
Spring Lake Township					
Proposed local shared use path	152nd Avenue from Cleveland to Boom	0.25	\$55,000	Short-term	Proposed
Proposed local shared use path	148th Avenue from Cleveland to Boom	0.9	\$198,000	Short-term	Proposed
Proposed local shared use path	Boom Road/Grand River from 152nd to 144th	1.4	\$308,000	Short-term	Proposed
Proposed local shared use path	Hickory Street from 180th to 174th	0.8	\$176,000	Short-term	Proposed
Proposed local shared use path	174th Avenue from Wilson to Taft	1	\$220,000	Short-term	Proposed
Proposed local shared use path	Palm Drive from Hickory to north township limits	0.65	\$143,000	Short-term	Proposed
Proposed local shared use path	168 th Avenue from VanWagoner to Wilson	1.5	\$330,000	Short-term	Proposed
Proposed local shared use path	Hemlock Drive from 168 th to W. Spring Lake	0.9	\$198,000	Short-term	Proposed
Village of Ferrysburg					
Proposed paved shoulder	North Shore Drive from village center to channel	3.1	\$200,000	Short-term	Proposed

Funding Sources

Funding Sources

There are numerous funding sources that have been used to develop the existing non-motorized facilities in the project area. These include a combination of local, state, and federal funds and will continue to be the means to realizing future development of the non-motorized network in the Muskegon/Northern Ottawa Non-motorized Plan project area in the future. On the local level, municipalities have general funds or in some cases special recreation millages. To complement this, the following state and federal programs also offer the potential for funding of projects.

Transportation Alternatives (TA)

A frequently used federal program for non-motorized facility funding is the Transportation Alternates program. All government entities that receive fuel tax revenues are eligible for these funds.

Safe Routes to School (SR2S)

This is a federal program that allocates money to each state to be used to fund construction of new bike lanes, paths, and sidewalks as a safe means of getting students to and from local schools. Safe Routes educational and promotional campaigns in elementary and middle schools can also be funded through this program.

Michigan Natural Resources Trust Fund (MNRTF)

The Michigan Natural Resources Trust Fund (MNRTF) provides grants to local units of the government and the state for acquisition and development of lands and facilities for outdoor recreation or the protection of Michigan's significant natural resources. Trails are currently priority projects for MNRTF, however, only for off-road trails or trails separated from a community's road network. The MNRTF is administered by the Michigan Department of Natural Resources (MDNR) and requires applicant communities to have a 5-year recreation plan on file with the MDNR identifying projects they wish to receive funding for and justified as being a high priority within their community. The community must provide a minimum 25% match of the total project cost.

Recreation Passport Grant Program (RPGP)

MDNR also administers the Recreation Passport Grant Program. Eligible entities for this program include local units of government including cities, villages, townships, and counties, or any combination thereof in which an authority is legally established to provide public recreation, or the Huron-Clinton Metropolitan Authority or regional recreation authorities formed under the Recreational Authorities Act, 2000 PA 321, or trailway commissions formed under Part 721, Michigan Trailways Act, 1994 PA 451, as amended. As with MNRTF, the community must provide a minimum 25% match of the total project cost.

Land and Water Conservation Fund (LWCF)

Administered through MDNR, eligibility for this fund includes any local unit of government, including Native American tribes, school districts, or any combination of units in which authority is legally constituted to provide recreation. Local units of government, school districts, and local authorities must have a DNR-approved community recreation plan to be eligible. The community must provide a minimum 50% match of the total project cost.

Recreational Trails Program Grants (RTP)

Overseen by MDNR, the objective of this program is to fund the maintenance and development of recreational trails and trail related facilities. To be eligible for this program, it must be a State project or state/local government partnership projects. A division within the Department of Natural Resources (Department) must always be the applicant. Funding comes from the Federal Department of Transportation-Highway Administration (a portion of the federal gas tax).

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

CMAQ is jointly administered by FHWA and the Federal Transit Administration (FTA). Funding is available for both "nonattainment areas" that do not meet federal air quality standards as well as "maintenance areas," former nonattainment areas that are now in compliance with air quality standards. CMAQ provides more than \$2 billion a year to state Departments of Transportation, metropolitan planning organizations (MPOs), and transit agencies for projects that improve air quality. This includes improvements to pedestrian and non-recreational bicycle transportation infrastructure that contribute to a reduction in travel by single-occupant vehicles. Relatively few non-motorized projects are funded by CMAQ, however.

Community Development Block Grants (CDBG)

Providing annual grants on a formula basis to local governments and states for a wide range of community planning initiatives, CDBG funds are intended for activities that benefit low and moderate income persons, prevent or eliminate slums or blight, and address urgent community development needs. In the past, CDBG funds have occasionally been used for trail construction.

Alternative Funding Sources

Beyond local, state, and federal funding, there are conceivably other resources available to assist with the planning and development of non-motorized facilities. Local, statewide, and national foundations or other non-profit organizations may provide funding specifically for non-motorized related activities. Each foundation and non-profit organization has particular requirements and procedures that must be followed to acquire their funding or services.

The following tables address the potential funding sources for the various proposed and conceptual projects that have been identified. Only, the most likely funding sources have been included.

North Muskegon County Sub-area Potential Funding Sources

	Location	TA	SR2S	MNRTF	RPGP	LWCF	RTP	CDBG
Cedar Creek Township								
Conceptual regional shared use path	Railroad r.o.w. in northwest township			X	X	X	X	
Dalton Township								
Proposed regional shared use path	McMillan Road to River Road			X	X	X	X	
Conceptual regional shared use path	Railroad r.o.w. NE to SW across township			X	X	X	X	
Fruitland Township								
Proposed paved shoulder	Zeller Road (Lakewood to Michillinda)	X						
Conceptual paved shoulder	Michillinda Road (Whitehall to Hart/Montague Trail)	X						
Holton Township								
Conceptual regional shared use path	Railroad r.o.w. NE to SW across township			X	X	X	X	
Montague Township								
Conceptual local shared use path	Whitbeck Road (Hancock to Wilkes)			X	X	X		
Conceptual local shared use path	Wilkes Road (Whitbeck to Lamos)			X	X	X		
Whitehall Township								
Conceptual local shared use path	Whitehall Road (Colby to Benston)			X	X	X		
Conceptual local shared use path	Benston Road (Whitehall to Durham)			X	X	X		
Conceptual local shared use path	Durham Road (Benston to existing local path)			X	X	X		
White River Township								
Conceptual local shared use path	Wilkes Road (Lamos to Indian Bay)			X	X	X		
Conceptual local shared use path	Indian Bay Road (Wilkes to Sunset Lane)			X	X	X		

South Muskegon County Sub-area Potential Funding Sources

	Location	TA	SR2S	MNRTF	RPGP	LWCF	RTP	CDBG
City of Muskegon								
Proposed regional shared use path	Lakeshore Drive to W Grand Avenue			X	X	X	X	
Proposed regional shared use path	Laketon Avenue to Musketawa Trail			X	X	X	X	
Proposed bike lane	Lincoln Street from Sherman to Lakeshore	X						
Proposed bike lane	McCracken Street from Sherman to Lakeshore	X						
Proposed bike lane	Terrace Avenue from Muskegon to Shoreline	X						
Proposed bike lane	Webster Avenue from Terrace to 7th	X						
Proposed bike lane	Muskegon Avenue from Terrace to 7th	X						
Proposed bike lane	3rd, Strong Arthur, Irwin Nims and Getty from Muskegon to Laketon	X						
Conceptual local shared use path	Railroad r.o.w. from waterfront to Muskegon Heights			X	X	X		
Conceptual bike lane	Getty Street from Laketon to Keating	X						
City of Muskegon Heights								
Conceptual shared use path	Railroad r.o.w. from north city limits to south city limits			X	X	X		
Conceptual bike lane	Summit Avenue from east city limits to west city limits	X						
Conceptual bike lane	Getty Street from Keating to south city limits	X						
Conceptual paved shoulder	Hoyt Street from Merriam to Seaway	X						
City of North Muskegon								
Proposed regional shared use path	North city limits to Holton Road			X	X	X	X	
City of Norton Shores								
Conceptual local shared use path	Seaway Drive from Muskegon Heights limits to Airport			X	X	X		
Conceptual local shared use path	Seaway Drive from Seminole to Muskegon Heights limits			X	X	X		
Conceptual local shared use path	Railroad r.o.w. from Muskegon Heights limits to Airport			X	X	X		
Conceptual bike lane	Summit Avenue between Roosevelt Park and Muskegon Heights	X						
Conceptual bike lane	Getty Street from north city limits to Airline	X						

South Muskegon County Sub-area Potential Funding Sources

	Location	TA	SR2S	MNRTF	RPGP	LWCF	RTP	CDBG
City of Roosevelt Park								
Proposed paved shoulder/bike lane	Roosevelt Road from Norton to Henry	X						
Proposed local shared use path	Along railway from Glenside to Henry			X	X	X		
Conceptual bike lane	Summit Avenue from east city limits to Roosevelt Road	X						
Laketon Township								
Proposed local shared use path	Giles Road from Central Elementary to Horton		X	X	X	X		
Proposed local shared use path	Horton Road from Giles to Dykstra		X	X	X	X		
Muskegon Township								
Proposed regional shared use path	Whitehall Road from River Road to N. Muskegon border			X	X	X	X	

Northwest Ottawa County Sub-area Potential Funding Sources

	Location	TA	SR2S	MNRTF	RPGP	LWCF	RTP	CDBG
City of Grand Haven								
Conceptual local shared use path	Waterfront to Beechtree Street (168th)			X	X	X		
Conceptual bike lane	Beechtree Street (168th) from Waverly to waterfront	X						
Conceptual bike lane	Sheldon Road from Robbins to Grand	X						
Conceptual paved shoulder	Grand Avenue & South Harbor Drive from Sheldon	X						
Crockery Township								
Proposed regional shared use path	North Bank Trail from 130th to Polkton Township			X	X	X	X	
Proposed regional shared use path	120th Avenue from North Bank Trail to Grand River			X	X	X	X	
Proposed paved shoulder	Leonard Street from 144th to 120th	X						
Conceptual regional shared use path	Leonard Street from 144th to 112th			X	X	X	X	
Conceptual paved shoulder	Leonard Street from 11th to Polkton Township	X						
Robinson Township								
Proposed regional shared use path	120th Avenue from Grand River to Cedar Drive			X	X	X	X	
Proposed regional shared use path	N. Cedar Drive from 144th east to township limits			X	X	X	X	
Conceptual regional shared use path	104th Street from N. Cedar to Lake Michigan Drive			X	X	X	X	
Conceptual regional shared use path	Lake Michigan Drive from 104th to township limits			X	X	X	X	
Spring Lake Township								
Proposed local shared use path	152nd Avenue from Cleveland to Boom			X	X	X		
Proposed local shared use path	148th Avenue from Cleveland to Boom			X	X	X		
Proposed local shared use path	Boom Road/Grand River from 152nd to 144th			X	X	X		
Village of Ferrysburg								
Proposed paved shoulder	North Shore Drive from village center to channel	X						