

Bay Region Non-Motorized Transportation Plan

Connecting..... our communities

Funded by:



Michigan Department of Transportation

Prepared by:



East Michigan Council Of Governments

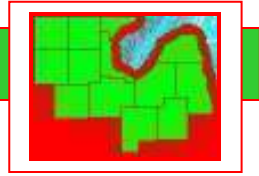
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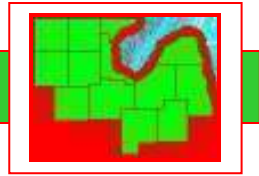
2010



ACKNOWLEDGEMENTS

We would like to thank some of our partners in the development of this trail plan for their participation, insightful ideas and collaborative efforts.

- Michigan Trails and Greenways Alliance
- Michigan Department of Transportation
- Federal Highway Administration
- The League of Michigan Bicyclists
- Friends of Rails & Trails, Tuscola
- Riverwalk Rail Trail, Bay
- Saginaw Transit Authority Regional Services
- Arenac Heritage Route Authority
- Friends of Pere Marquette Rail Trail
- Friends of Flint River Rail Trail
- Tri-City Cyclists
- Michigan Snowmobile Association
- Pere Marquette Snowmobile Club
- Center of Applied Environmental Research-University of Michigan-Flint
- Mid-Michigan Community College
- Central Michigan University
- National Parks Service
- Saginaw News
- Bay City Times
- Saginaw Area GIS Authority
- Saginaw Metropolitan Area Transportation Study
- Bay City Area Transportation Study
- Genesee County Metropolitan Planning Commission
- US-23 Heritage Route Group
- M-15 Heritage Route Committee
- M-25 Heritage Route Committee
- Participating County Road Commissions
- Participating County Economic Development Authorities



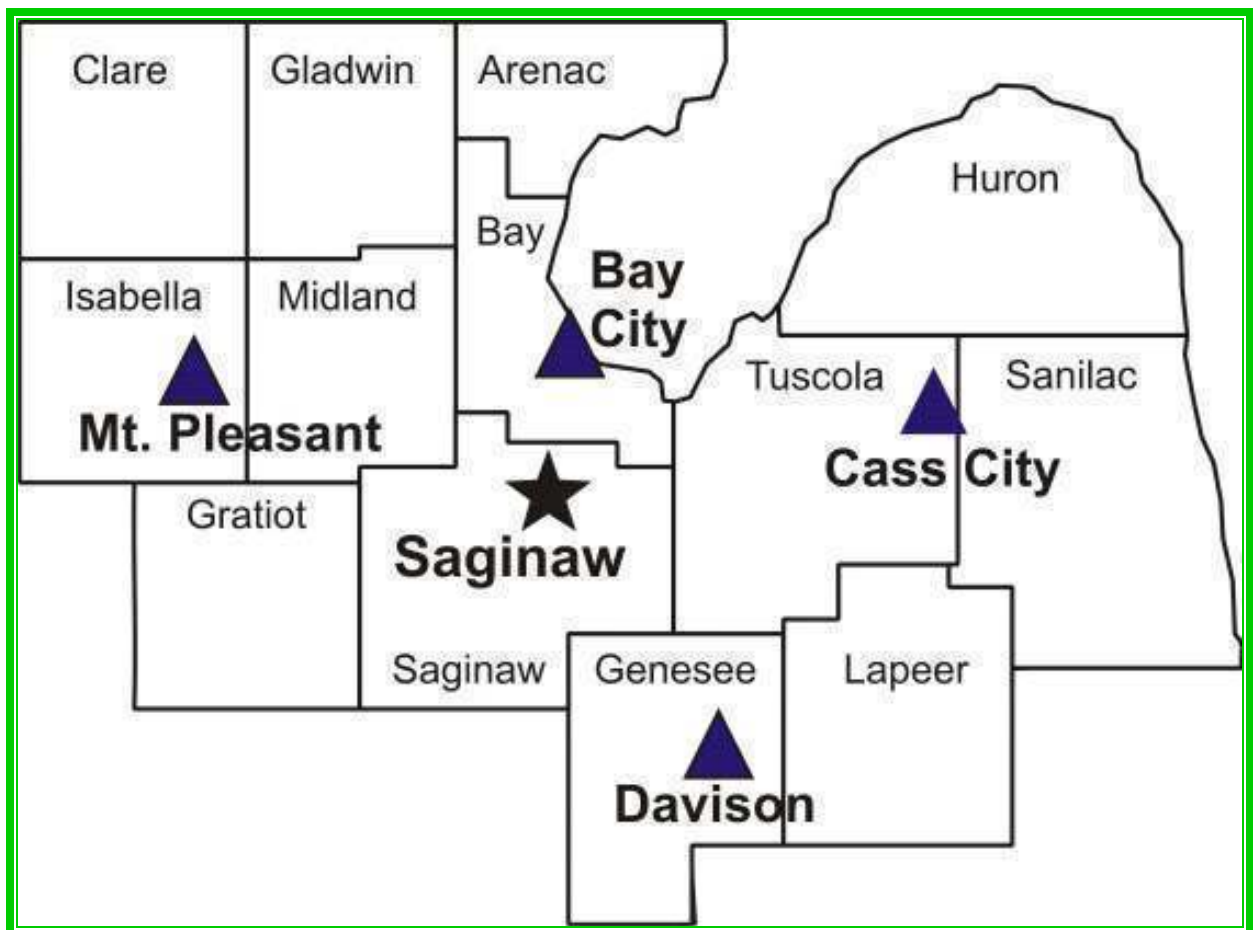
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Chapter 1: Project Overview

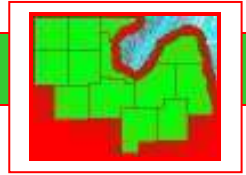
In recent years, the 13 counties comprising the MDOT Bay Region (Fig 1.) has experienced the rapid development of non-motorized facilities. The area already boasts several extensive non-motorized networks including the Pere Marquette Rail Trail which extends through 3 counties (Midland, Isabella, and Clare) and the Southern Links Trailway that traverses the 3 counties of Genesee, Lapeer & Tuscola. The present challenge is how to best connect existing facilities with proposed non-motorized projects to create an interconnected non-motorized network. The development of a Bay Region Non-Motorized Transportation Plan will not only help provide the direction to develop the non-motorized network, but also provide a resource for local units of government and advocacy groups to promote non-motorized projects.

Fig 1. MDOT Bay Region



a. Regional Vision

The Michigan Department of Transportation envisions a region where non-motorized travel is safe, convenient, interesting and inviting. The vision is one of an interconnected system of non-motorized facilities that will exist throughout the Region.



b. Goal

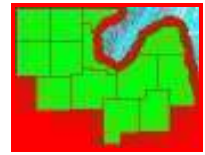
The goal of this plan is *to create a safe, accessible and interconnected non-motorized transportation network.*

c. Planning Process/Methodology

The following are activities associated with the plan development that were or will be performed by East Michigan Council Of Governments as part of the planning process:

1. Hosted a “**Bay Region Non-Motorized Summit**” to bring together the local stakeholders to discuss non-motorized issues such as; funding, liability, state-wide efforts, and design standards. The summit was hosted at The Bavarian Inn Lodge in Frankenmuth on November 1, 2007. It provided an opportunity to identify key stakeholders for the development of the transportation plan. The summit was facilitated in cooperation with the Michigan Trails and Greenways Alliance, Michigan Department of Transportation, Genesee County Metropolitan Planning Commission and Local County Parks and Recreation staff.
2. A series of three multi-county **Charrettes** were facilitated for public input with key stakeholders to verify existing non-motorized facilities. Discussions regarding proposed future non-motorized projects throughout the region were held that would promote intra and inter county/region connectivity. The Charrette locations and dates are as follows:
 - a. Charrette I -MDOT- TSC Mt. Pleasant on Feb 5, 2008.
 - b. Charrette II- Bay County Community Center, Bay City, Feb 20, 2008.
 - c. Charrette III- Tuscola Technology Center, Caro, March 4, 2008.





3. Maps were prepared depicting all the proposed non-motorized facilities as suggested by the stakeholders during the public input session of Charrettes.
4. Additional public input on the proposed network of non-motorized facilities was gathered by making the maps available to the public for comment on the EMCOG website and through e-mails.
5. Draft plan posted online and mail requests for local review. Request review from Bay Region Transportation Service Centers (TSC) and adjoining MDOT Regions.
6. Revise plan based on public input.
7. Finalize the Bay Region Non-Motorized Transportation Plan.
8. Distribute plan to participating agencies.
9. Submit completed plan to MDOT.





d. Charrettes

The Charrettes were attended by many enthusiastic supporters of non-motorized facilities. These key individuals can be instrumental in implementation of these potential projects. Following are the names and contact of the attendees (70):

	Name	Contact	County
1.	Fran Sumenick	Whitney Township Supervisor	Arenac
2.	Patricia Killingbeck	City of Au Gres	Arenac
3.	Earl McLavy	Arenac Township Board	Arenac
4.	Steve Chmura	Arenac Rail Trail	Arenac
5.	Curt Hillman	Arenac Heritage Route Authority	Arenac
6.	Dave Englehardt	BCATS	Bay
7.	Dirk Westbury	BCATS	Bay
8.	Kathy Bremer	Merritt Township	Bay
9.	Terry A. Moulane	City of Bay City	Bay
10.	Sue Cooley	KawKawln Township	Bay
11.	Ryan J Stanton	Bay City Times	Bay
12.	Vaughn Begick	Bay County Commissioner	Bay
13.	Bary A Brandt	Monitor Township	Bay
14.	Daniel Morgan	Resident	Bay
15.	Marcie Post	City of Clare	Clare
16.	Mike Hamilton	Pere Marquette S.C.	Clare
17.	Ken Hibl	City of Clare	Clare
18.	Dan Daggy	Farwell Snowmobile Club	Clare
19.	Larry Martin	Clinton County Commissioner	Clinton
20.	Victor Lukasavitz	Gould Engineering Inc	Genesee
21.	Doug Cook	League of Michigan Bicyclists	Genesee
22.	Mr. Jacky King	Resident	Genesee
23.	Mrs Dora King	Resident	Genesee
24.	Aeric Ripley	City of Alma	Gratiot
25.	David Ringle	City of Alma	Gratiot
26.	Kurt Giles	City of St. Louis	Gratiot
27.	Ronald G. Turner	City of Alma	Gratiot
28.	Sue Ann Kopmeyer	Isabella County Parks & Recreation	Isabella
29.	Chris Bundy	City of Mt Pleasant	Isabella
30.	Greg Baderschneider	City of Mt Pleasant	Isabella
31.	Gladys Austin	Mid MI Community College	Isabella
32.	Steve Davidson	Village of Shepherd	Isabella



33.	John Latoski	CMU	Isabella
34.	Nancy Krupriaz	MTGA	Lansing
35.	Cynthia Krupp	MDOT-Lansing	MDOT
36.	Jack Hofweber	MDOT-TSC	MDOT
37.	Terry Palmer	MDOT-TSC	MDOT
38.	Kimberly Zimmer	MDOT-Bay City TSC	MDOT
39.	Jay Reithel	Bay Region	MDOT
40.	Dave Geiger	Bay Region	MDOT
41.	Linda Burchell	MDOT-Bay	MDOT
42.	Jay Reithel	Bay Region	MDOT
43.	Mohammad E. Huque	Design Engineer, Port Huron TSC	MDOT
44.	Rachel Phillips	MDOT-Cass City TSC	MDOT
45.	James Reigler	Michigan Snowmobiler's Club	Midland
46.	Ron Groskey	Pere Marquette S.C.	Osceola
47.	Craig Schripsema	ROWE	ROWE
48.	Casey Collings	ROWE	ROWE
49.	Justin Sprague	ROWE	ROWE
50.	Mike Carpenter	ROWE	ROWE
51.	Bill Wright	STARS	Saginaw
52.	Chuck Hoover	Pedestrian Committee member	Saginaw
53.	Tim Gnatkowski	Saginaw Charter Township	Saginaw
54.	Doug Bishop	Saginaw Planning Commission	Saginaw
55.	John Schmude	Saginaw County Parks	Saginaw
56.	Ruth Avery	Chairperson Saginaw County Parks Commission	Saginaw
57.	Phil Grimaldi	SMATS	Saginaw
58.	Al Bader	Kochville twp parks	Saginaw
59.	Cathy Washabaugh	Tri-County Regional Pathway Study Group	SPICER
60.	Tanya Moore	SPICER	SPICER
61.	Kim Wasik	Resident	Tuscola
62.	Brad Glassford	Glassford Media	Tuscola
63.	Mark Putnam	Resident	Tuscola
64.	Clare Fryer	Village of Mayville	Tuscola
65.	Gary Anderson	Friends of Rail Trails(FORT)	Tuscola
66.	Jason Davis	Parks and Recreation	Tuscola
67.	Laura Stacer	Village of Caro Parks and Recreation	Tuscola
68.	Mark Graham	Friends of Rail Trails(FORT)	Tuscola
69.	Jesse Parker	TCRC	Tuscola
70.	Michael Hormel	Resident	Tuscola



e. Public Input

After the first compilation of the proposed trails from the series of Charrettes, the maps were posted online. A request was sent to all the attendees and non-motorized advocates from the Region to review and comment on the proposals submitted on the Charrette Public Input Forms (appendix).

f. Relationship to Other Plans and Policies

The Bay Region Non-Motorized Transportation Plan is intended to complement, rather than supplement the adopted regulations and guidelines of local managing agencies. Implementation of this plan relies on the continued cooperation among property owners, the local, regional, state and federal agencies with jurisdiction over the non-motorized alignment, the numerous trusts and foundations which support trails in the region, and the countless environmental and recreational interests whose members care deeply about the non-motorized facilities in the Bay Region.

Regional coordination in the Bay Region is already underway through groups and projects such as:

- **Great Lakes Bay Region Regional Path Study Committee** which continues working to link Saginaw, Bay and Midland counties. <http://www.greatlakesbay.org/regionaltrail/>
- The **Mt. Pleasant Non-motorized Committee** that is working to make connections between the Fred Meijer Trail in Gratiot County and the Pere Marquette Trail in Clare County by way of routes within Isabella County.
- The Genesee County Metropolitan Alliance has been very proactive with the development of a county-wide plan (**Regional Trails Plan**) that not only identifies the community's top project priorities, but also looks toward extending non-motorized connectivity in Saginaw, Lapeer, Tuscola and Oakland Counties. <http://www.co.genesee.mi.us/gcmnpc-plan/>



MDOT has been working very closely with local communities within the Region and started constructing eight foot shoulders on M-25, M-13 and US-23 along Lake Huron Shoreline making it a great connection.

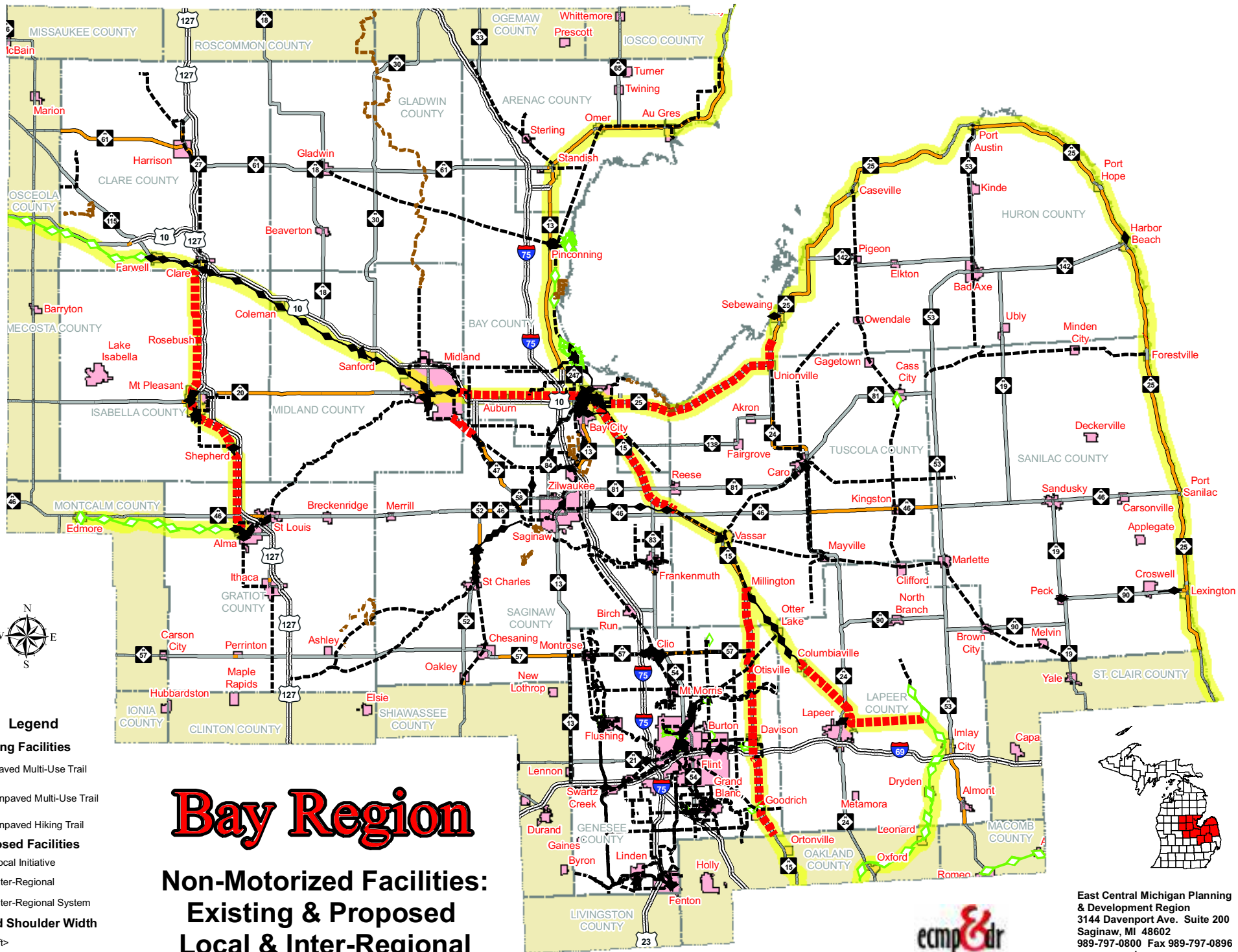


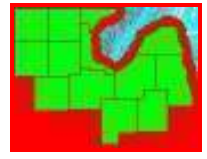
The Adventure Cycling Association also has **The Adventure Cycling Route Network**. Their **Lake Erie Connector** is 482 miles between Luther, MI, to Fort Erie, ON. It passes through the MDOT Bay Region through Sanilac, Tuscola and Bay counties. More details can be found on their website at www.adventurecycling.org.



The U.S. Bicycle Route System also identifies an east-west connector through Bay Region in MI. Route 20 has been identified as a prioritized corridor by American Association of State Highway and Transportation Organizations (AASHTO). This route, looking from east to west, starts in the eastern Lower Peninsula of Michigan, north of Detroit at Marine City. It then traverses the lower peninsula of Michigan, going through the Saginaw-Midland area then west to Ludington, using the ferry to cross Lake Michigan to Manitowoc, WI. It then continues going west-northwest through Wisconsin, ending at the intersection of USBR 10 somewhere in Northwest WI. More information can be found at : <http://www.adventurecycling.org/routes/nbrn/us bikewaysystem.cfm>







Chapter 2: Inter-Regional Non-Motorized Facilities

Rural highways and county roads are considered suitable for non-motorized use if they have at minimum 4 ft paved shoulders or relatively low traffic volumes. State highways and county roads provide good opportunities for long-distance touring and shorter recreational rides. As you approach cities, these roads serve as commuter routes into the urban area from outlying residential areas. As part of the established objectives set forth in the development of the non-motorized plan, the Michigan Department of Transportation Bay Region identified segments of state trunkline with lower volumes that may be more conducive to non-motorized trips. (*Figure 2 identifies trunkline routes within the MDOT Bay Region with Average Annual Daily Traffic volumes less than or equal to 10,000 vehicles, Pg 9*). Generally an AADT of around 2500 is most favorable for non-motorized usage on the same road. Roads with lower volumes can be used without major improvements. Trunk lines with higher volumes are the roads that will need added non-motorized facilities.

Pedestrian and cycling activities in the Bay Region are often limited due to large travel distances, limited facilities, and fewer destinations than urban areas. This plan focuses on the integration of existing non-motorized facilities across the Bay Region network with state trunkline routes to create a seamless non-motorized network.

There have been several efforts to inventory the existing and proposed non-motorized system throughout the counties in the MDOT Bay Region. In 1998 representatives of more than two dozen agencies and organizations met to explore the potential of a non-motorized trail network in Bay, Midland, and Saginaw counties. The result was the Tri-County Trail Guide (www.co.bay.mi.us), which identified 33 existing parks, nature preserves, state and national wildlife refuges, and trails in the Saginaw Bay region. This project was the driving force behind the development of a “green-way vision” that incorporated not only non-motorized trails, but also identified important natural features and promoted preservation of existing land uses that aided in the connectivity of these features.

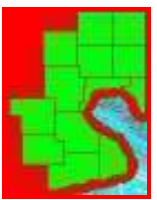
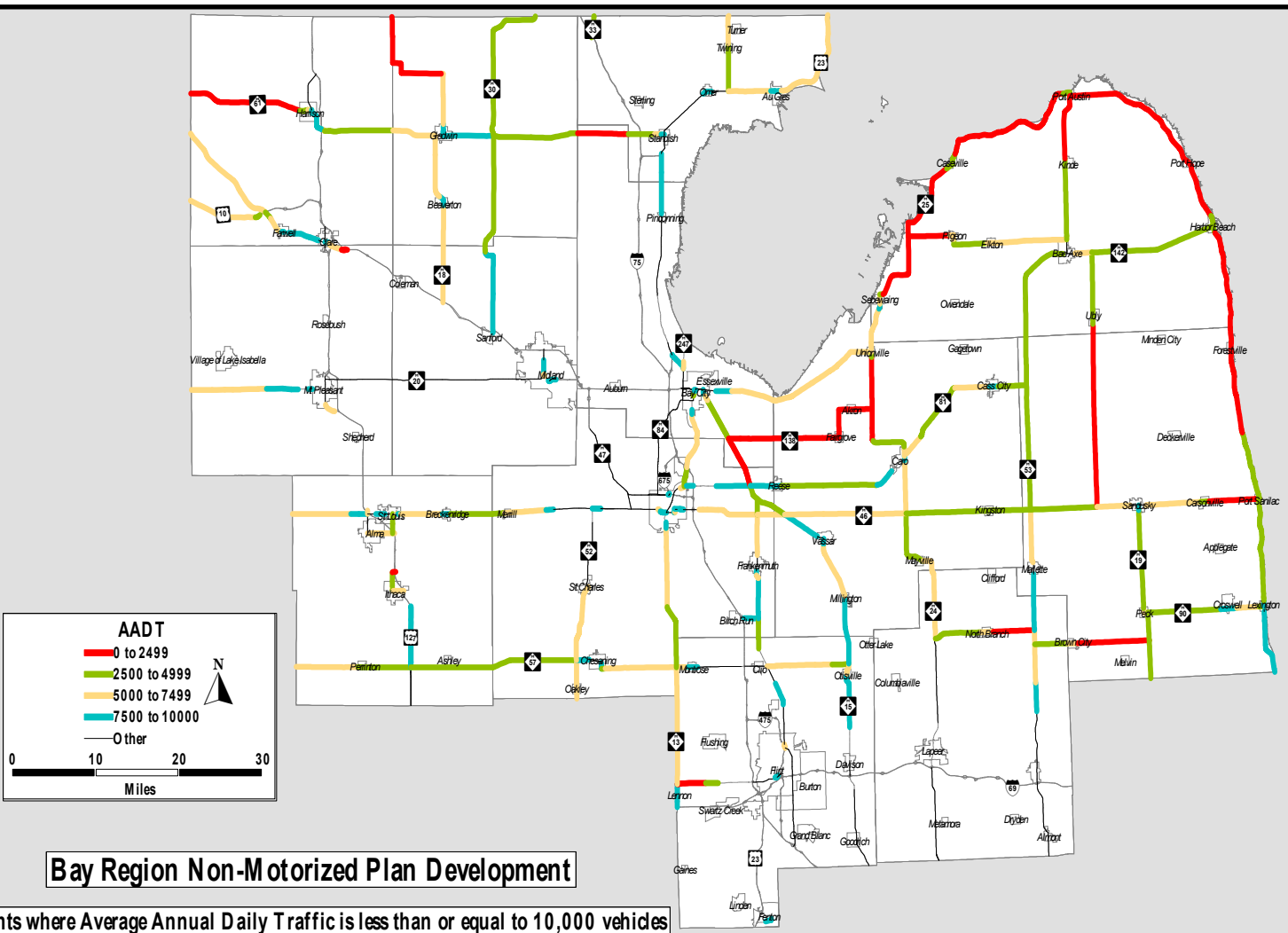
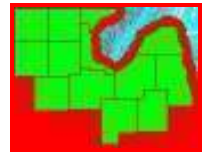


Fig. 3. Trunkline routes within the MDOT Bay Region with Average Annual Daily Traffic volumes less than or equal to 10,000 vehicles.





a. Existing Inter-Regional Non-Motorized Facilities

The following is the list of existing trails county by county, identified within local plans and/or through the Bay Region Charrettes conducted in 2008:

Arenac

1. US- 23 Recreational Heritage Route
2. M-13 On-system Connector

Bay

3. Bay City Riverwalk Trail
4. M-13 On-system Connector

Clare

5. Pere Marquette Rail Trail

Genesee

6. Southern Links Trail
7. M-15 Recreational Heritage Route

Gladwin

8. Midland-Mackinaw Trail

Gratiot

9. Fred Meijer Hartland Trail

Huron

10. M-25 Recreational Heritage Route

Isabella

11. Pere Marquette Rail Trail

Lapeer

12. Polly Ann Trail
13. Southern Links Trail

Midland

14. Pere Marquette Rail Trail
15. Midland-Mackinaw Trail
16. Midland-Bay Connector

Sanilac

17. M-25 Recreational Heritage Route

Saginaw

18. Harger Line Trail

Tuscola

19. M-25 Recreational Heritage Route
20. M-15 Recreational Heritage Route
21. Southern Links Trail

*** On-Road Shoulders of width 4 feet or more in Bay Region (non-motorized) including local and inter-regional connections:**

Please refer to the Table on Page 13 & 16.



b. Proposed Inter-Regional Non-Motorized Facilities

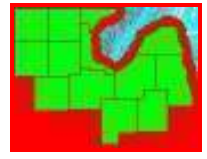
After public input from the series of three (3) Charrettes, the data was compiled into a GIS data layer to be incorporated into the existing Bay Region Bike Map file for the Non-Motorized Transportation Plan. The maps generated depicted all the potential or proposed trail connections in the Bay Region. These connections included both on-road and off-road non-motorized routes as suggested by the stakeholders.

Recreational Cyclists generally choose non-motorized networks based on traffic volumes and surface condition of the route. Professional or experienced groups sometimes prefer to stay on-road (paved shoulders) with proper bike lanes or shoulders for bike use. At the same time leisure and family oriented cyclists prefer off-road routes (separate pathways). The proposed maps generated had a good combination of both types of facilities.



Additional public input on the proposed non-motorized facilities was acquired by making the charrette maps available to the public for comment through the project website as well as e-mail correspondence from stakeholders. This Plan is a vision document and not a project specific plan. Hence, no prioritization was established for the non-motorized connections within the Region. Also, the actual implementation of these suggestions depends on the scenario at the window of opportunity. This Plan supports and backs all the proposed routes understanding that some are important regionally while some locally.





This Plan recommends and discusses the proposed connections into **2-tiers**. Those tiers would be:

1. **Inter-regional projects** that connect multiple regions – For e.g. Polly Ann Trail to Southern Links to the Bay City Riverwalk to the Pere Marquette and heading north, M-25 8' shoulders from Port Huron in the MDOT Metro Region to Bay City, Fred Meijer Trail connecting to the Pere Marquette.
2. **Local projects** that connect multiple communities within the Bay Region- For e.g. Midland-Bay Connector, Clio to Birch Run Trolley Line Trail, etc. And that may connect a community to a larger system- For e.g. Extension of the Saginaw Valley Rail Trail.

Tables below list all the proposed non-motorized connections (both on-road and off-road) in the following manner:

- County Name
- Start at: Starting location, intersecting street.
- On: Name of the street at which the non-motorized facility starts or goes along.
- End at: Ending location or intersecting street.
- On: Name of the street at ending location at which the non-motorized facility is identified.
- Through (cities, villages): Cities and villages through which the non-motorized facility passes that can be crucial in its development.

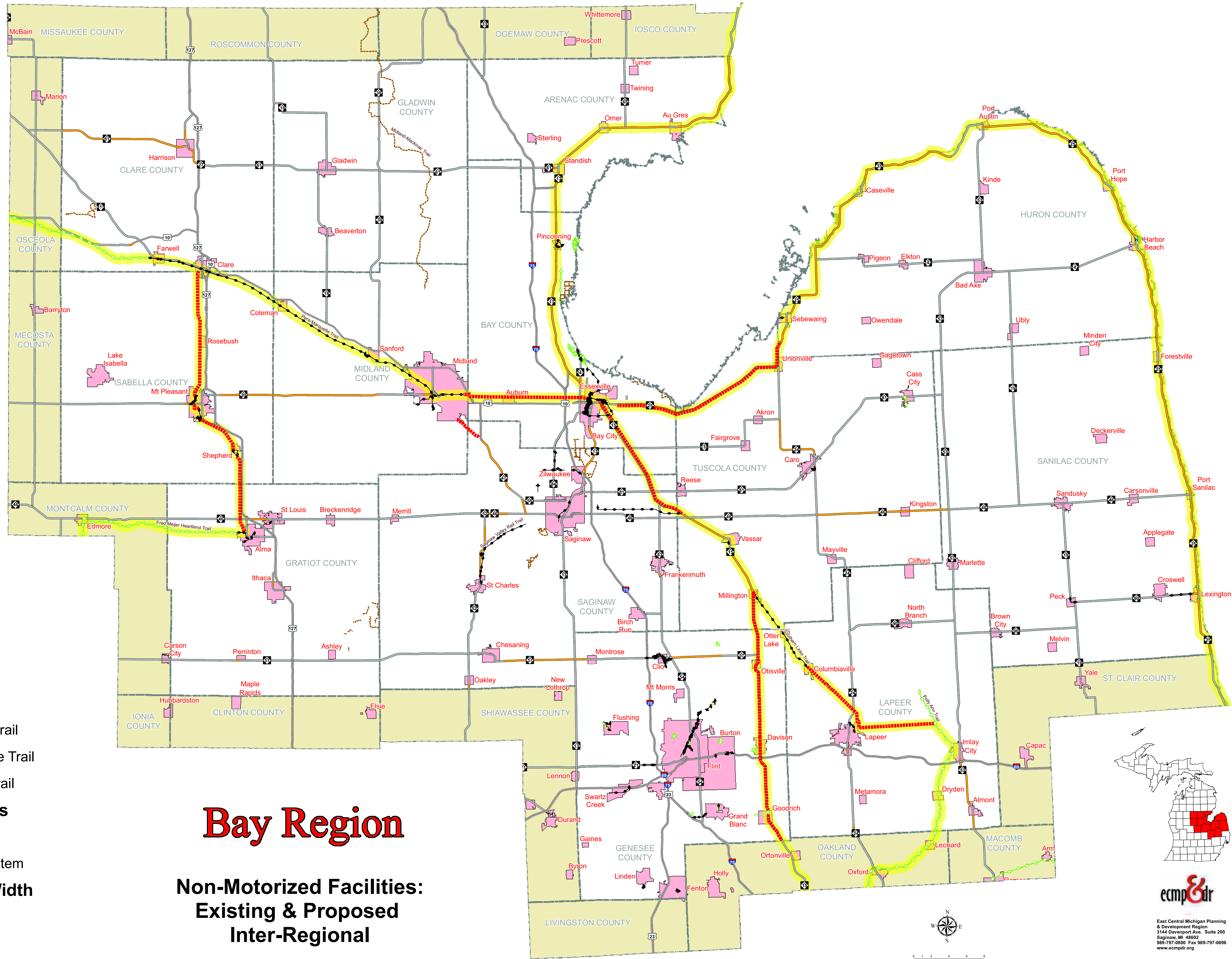


The following 18 Inter-Regional non-motorized facilities were identified by the enthusiastic members involved in the process. The selection of the most desired path was done by the participants through open discussion and dialogue with the members of other counties.

Table 1. Bay Region Proposed Non-Motorized Connections showing Inter-Regional Facilities (Tier-1)

Trails are described from West to East & from South to North

#	County	Start At	On	End At	On	Length	Through (Cities, Villages)
1	Arenac	SCoL	Delano-Nonle Railroad	NCoL	Noble Rd	31.08	Omer, Au Gres
2	Bay	E Alameda Bead Rd	N State Rd	NCoL	Delano-Nonle Railroad	6.51	Pinconning
3	Bay	E River Rd	Along Lake	Sherman Rd	N Elevator Rd	5.09	
4	Bay	WCoL	M-20	Lake State Railway	Huron & Eastern Railway	13.53	Midland, Auburn, Bay City
5	Bay	Cecelia Ct	M-25	ECoL	M-25	6.66	
6	Bay	1st St	M-15	SCoL	M-15	10.02	Bay City
7	Clare	Main Street	Pere Marquette Rail	Main Street	US-127	3.19	Clare
8	Gratiot	Great Lakes Rail Trail	William Rd	Great Lakes Rail Trail	NCoL	5.52	Alma
9	Huron	WCoL	M-25	SCoL	M-25	76.84	Sebewaing, Caseville, Port Austin, Port Hope, Harbor Beach
10	Isabella	SCoL	Great Lakes Rail Trail	NCoL	Great Lakes Central Railroad	23.19	Mt Pleasant, Shepherd, Rosebush, Clare
11	Lapeer	Pine St	Lapeer St	Hummel Dr	Woods		Columbiaville
12	Midland	Saginaw Rd	Grodonville Rd	Saginaw Rd	WCoL	1.50	Midland
13	Saginaw	NCoL	Along N River Rd	M-47	Along N River Rd	1.63	
14	Saginaw	NCoL	W Vassar Rd	ECoL	W Vassar Rd	5.75	
15	Sanilac	SCoL	M-25	NCoL	M-25	38.07	Lexington, Port Sanilac, Forestville
16	Tuscola	WCoL	M-25	NCoL	M-25	15.20	Unionville
17	Tuscola	WCoL	M-25	Vassar	M-15	10.88	Vassar
18	Tuscola	SCoL	M-15	Railroad at Millington	M-15	4.5	Millington

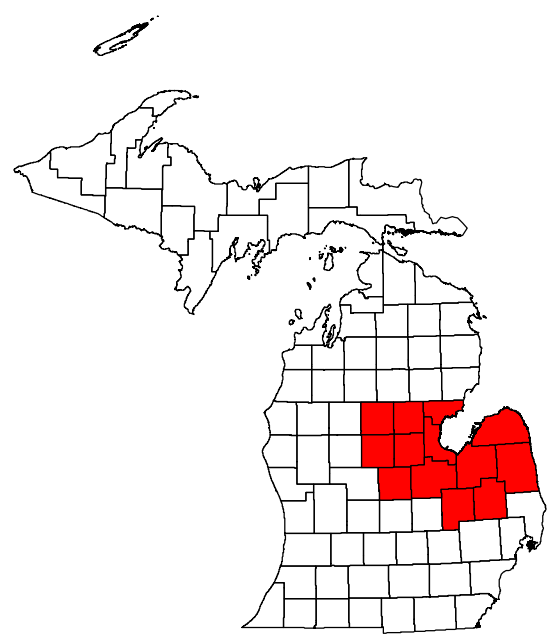


Legend

- Existing Facilities**
- Paved Multi-Use Trail
 - Unpaved Multi-Use Trail
 - Unpaved Hiking Trail
- Proposed Facilities**
- Inter-Regional
 - Inter-Regional System
- Paved Shoulder Width**
- 5ft+
 - <=5ft

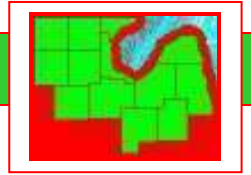
Bay Region

**Non-Motorized Facilities:
Existing & Proposed
Inter-Regional**



East Central Michigan Planning
& Development Region
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Saginaw, MI 48602
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Created 7/2/2009



Chapter 3: Local Non-Motorized Facilities

a. Existing Local Non-Motorized Facilities

The following is the list of existing facilities county by county, identified within local plans and/or through the Bay Region Charrettes conducted in 2008:

Bay

1. Fraser Township Trail
2. Pinconning Park Trail
3. Shoreline Pinconning Trail
4. Bangor Trail
5. Northern Bay Nature Trail
6. Bay-Hampton Rail Trail
7. Quanicassee Wild Life Area Pathway
8. Delta College Pathway
9. Bay-Portsmouth Rail Trail
10. Defoe Park Link
11. Anderson Trail
12. East Side Bay City Riverwalk
13. West Side Bay City River Walk

Clare

14. Leota Trail
15. Green Pine Lake Pathway

Genesee

16. Flint River Trail
17. George Atkin Jr. Recreational Trail
18. Flushing Riverview Trail
19. Grand Blanc Bike Path
20. Swartz Creek Bike Lane
21. Shiawassee River Walk
22. Linden Bike Lane
23. Goodrich Area Bike Path
24. Court Street Bike Lane
25. Flushing Bike Lane
26. Genesee Road Trail
27. Davison Township Trail

Gladwin

28. Gladwin Field Trial Area
29. Lame Duck Foot Trail

Gratiot

30. Gratiot-Saginaw Game Area Pathway
31. Riverdale Meijer Hartland Trail
32. Maple River State Game Area Pathway

Huron

33. Caseville Nature Trails



- 34. Harbor Beach Nature Trails
- 35. Port Austin Nature Trails
- 36. Sebewaing Trail

Isabella

- 35. Mt. Pleasant Trail
- 36. Central Michigan University Park System

Lapeer

- 37. Ortonville State Recreation Area Pathway
- 38. Serene Ponds Nature Center Pathway
- 39. Lapeer Linear Park Trail
- 40. Lapeer State Game Area Pathway
- 41. Zucker Nature Sanctuary Pathway

Midland

- 42. Midland City Forest Pathway
- 43. Salt River Pathway
- 44. Chippewa Trail
- 45. Barstow Woods Pathway

Sanilac

- 46. Lexington to Croswell Trail
- 47. Peck Trail

Saginaw

- 48. Freeland Trail
- 49. Kochville Pathway
- 50. Zilwaukee Pathway
- 51. Saginaw River Walk
- 52. Saginaw Valley Rail Trail
- 53. Trolley Line Trail
- 54. Ringwood Forest Pathway
- 55. Chesaning Park Pathway

Tuscola

- 56. Cass City Walking Trail
- 57. Vassar Rail Trail

On-Road Shoulders of width 4 feet or more in Bay Region (non-motorized) including local and inter-regional connections

County	Miles	County	Miles
Arenac	29.59	Isabella	9.05
Bay	33.19	Lapeer	9.85
Clare	18.95	Midland	13.12
Genesee	16.11	Saginaw	40.78
Gladwin	4.54	Sanilac	36.32
Gratiot	25.48	Tuscola	47.22
Huron	80.19		
Bay Region		364.39	



b. Proposed Local Non-Motorized Facilities

Local projects that connect multiple communities within the MDOT Bay Region- For e.g. Bay/Midland/Saginaw Trail, Clio to Birch Run Trolley Line Trail, etc. And that may connect a community to a larger system- For e.g. Extension of the Saginaw Valley Rail Trail.

Table below lists all the proposed non-motorized connections in the following manner:

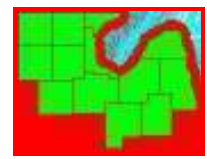
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- On: Name of the street at ending location at which the non-motorized facility is identified.
- Through (cities, villages): Cities and villages through which the non-motorized facility passes that can be crucial in its development.

Individual County maps were prepared for in-depth analysis of the connection and discussion on the importance of the non-motorized facility. The local communities were also sent a Non-Motorized Public Input Form with questions regarding connection within the counties. Some of the trails also have a lot of history attached to them. The maps, forms and the descriptions will be kept as archival records and can be sought by contacting the EMCOG office.

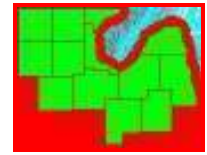
Table 2. Bay Region Proposed Non-Motorized Connections showing Local Facilities (Tier-2)

Trails are described from West to East & from South to North

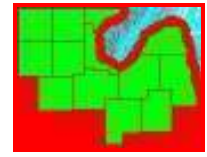
County	Start-Point Intersecting Street	On	End-Point Intersecting Street	On	Through (Cities, Villages)
Arenac		Old M-76	NCoL	Old M-76	Sterling
Arenac	Old M-76	Schoool Rd	City Limits Rd	Melita Rd	Sterling
Arenac	US-23/Huron Rd	Mackinaw Rd	Lake Shore	Main Street	Au Gres
Arenac	M-13	Pine River Rd	Delano-Nonle Railroad	Pine River Rd	Standish
Bay	WCoL	Consumer's Easement	S Mable St	Consumer's Easement	Pinconning
Bay	Delano-Nonle Railroad	E Pinconning Rd	Saginaw Bay	E Pinconning Rd	



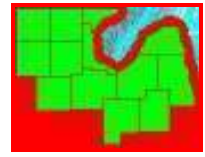
Bay	WCoL	W Townline 14 Rd	E Chip Rd	S Mackinaw Rd	
Bay	W Townline 14 Rd	S 9 Mile Rd	N Euclid Ave	Lauria Rd	
Bay	SCoL	Rogers Rd	W Townline 14 Rd	Rogers Rd	Midand
Bay	WCoL	W North Union Rd	Rogers Rd	W North Union Rd	Midland
Bay	Huron Eastern Railway	Woods	N Euclid Ave	Yorkshire Dr	
Bay	Ohio St	2 mile Rd	E Beaver Rd	N Euclid Ave	
Bay	N Schaumann Rd	W Ridge Rd	N Knight Rd	Tracey Rd	Bay City
Bay	7th St	W Center Rd	Cecelia Ct	W Center Rd	Bay City
Bay	SCoL	GT&W Railway	27th St	GT&W Railway	
Bay	SCoL	M-84	Morton St	M-84	Bay City
Bay	WCoL	Along Delta Rd	M-84	Woods	
Bay	SCoL	GT&W Railway	Local Trail	Evergreen Dr	Bay City
Clare	E Colonville Rd	S Clare Avenue	N Harding Ave	Muskegon Rd	Harrison
Clare	WCoL	Cedar Rd	Thornapple Trail	Twin Lake Ave	
Clare	City Loop				Clare
Genesee	NCoL	Along Flint River	ECoL	Along Flint River	Flushing, Flint (Flint River Trail)
Genesee	Seymour Rd	Hill Rd	Flint River	W Court St	Swartz Creek, Flint (Genesee Valley Trail)
Genesee	E Maple Ave	CSX Railroad	Flint River	CSX Railroad	Flint (CSX Railroad Line-South Flint)
Genesee	Stanley Rd	Saginaw Bay Southern CSX	NCoL	Saginaw Bay Southern CSX	Mt Morris, Clio (Tolley Line Trail-North)
Genesee	WCoL	Silver Lake Rd	Fenton Rd in Fenton		Linden, Fenton (Silver Lake Road Trail)
Genesee	SCoL	Seymour Rd	Flint River	Seymour Rd	Swartz Creek, Flushing (Seymour Rd Pathway)



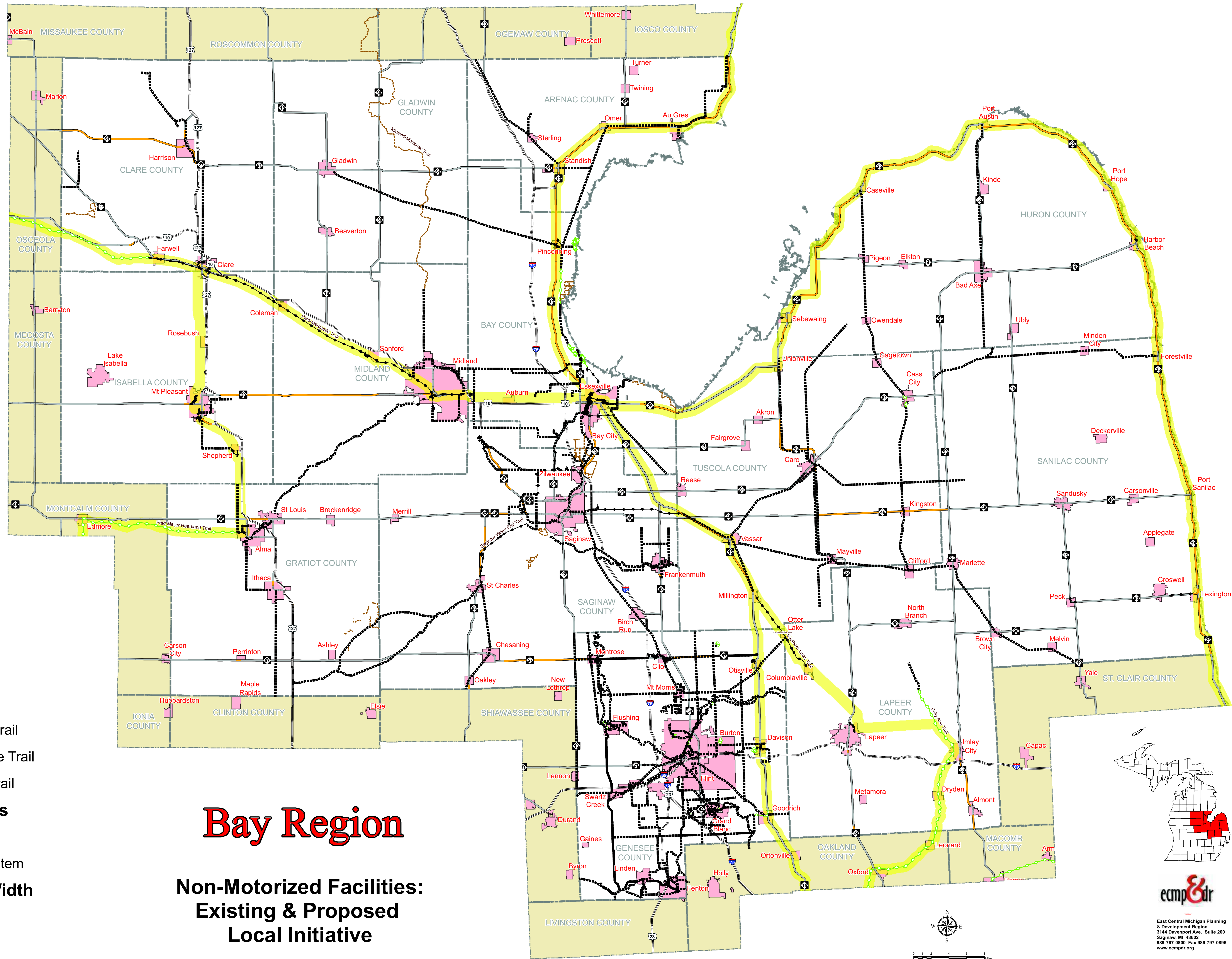
Genesee	W Shiawassee Av	Fenton Rd	W Hemphill Rd	Fenton Rd	Fenton (Fenton Rd Trail)
Genesee	SCoL	Consumer's Easement	Grand Blanc Rd	Consumer's Easement	Consumer's Corridor TrailGrand Blanc Twp (Sounty) & Embury Rd
Genesee	Hegel Rd	Consumer's Easement	Genesee Rd	Consumer's Easement	Goodrich, Flint (Trolley Line Trail-South)
Gladwin	M-61/Cedar St	Consumer's Easement	ECoL	Consumer's Easement	Gladwin
Gratiot	Cheasapeake and Ohio Railroad	N Luce Rd	NCoL	N Luce Rd	Alma
Gratiot	NCL	Charles Ave	Pine ave	Woods	Alma
Gratiot	SCoL	S State Rd	E Washington Rd	S State Rd	Ithaca
Gratiot	S Maple Street	E Washington Rd	Hill St	Alger Rd	Ithaca, Alma
Gratiot	W Madison Rd	Riverside Dr	NCoL	Riverside Dr	St Louis
Gratiot	US-127	Along Maple River	ECoL	Woods	
Gratiot	S McClelland Rd	Woods	ECoL	Woods	
Huron	SCoL	Bad Axe Rd	M-25	Lake St	Bad Axe, Kinde, Port Austin
Huron	SCoL	Huron & Eastern Railway	Shebeon Rd	Huron & Eastern Railway	
Huron	SCoL	Grand Trunk Western Railway	M-25	Grand Trunk Western Railway	Owendale, Pigeon, Caseville
Isabella	E Blanchard Rd	Great Lakes Rail Trail	E Deerfiled Rd	Campus Dr	Mt Pleasant, Shepherd
Isabella	E Broomfield Rd	Campus Dr	Summerton Rd	M-20	Mt Pleasant
Isabella	E Broadway Rd	Summerton Rd	E Broadway Rd	Ojibway Dr	



Lapeer	Southern Links Trail	Woods	N Lapper Rd	Woods	
Lapeer	Hummel Dr	Woods	past Snoblin Rd	Woods	Ext of Polly Ann Trail
Lapeer	NCoL	Huron & Eastern Railway	ECoL	Huron & Eastern Railway	Clifford
Lapeer	Main Rd, Clifford	Woods	NCoL	Woods	Clifford
Midland	Pine River Rd	SCoL	Pine River Rd	Dublin Rd	
Midland	Wheeler Rd	Dublin Rd	E Shearer Rd	Saginaw Bay Southern Railway	Midland
Midland	Sturgeon Rd	Huron Eastern Railway	M-20	Illinois Dr	Midland
Midland	Huron Eastern Railway	N Waldo Rd	ECoL	Wackerly Rd	Midland
Midland	E Progress St	Poseyville Rd	M-20	Waldo Rd	Midland
Saginaw	NCoL	Along Rogers Rd	ECoL	Along Buck Rd	
Saginaw	Mackinaw Rd	Consumer's ROW	Loop to Consumer's ROW	Huron Eastern Railway	
Saginaw	Harger Line Trail	M-15	Harger Line Trail	N Towerline Rd	
Saginaw	State St	Dixie Hwy	ECoL	E Tuscola Rd	Frankenmuth
Saginaw	W Tuscola Rd	S Beyer Rd	Bradley Rd	S Beyer Rd	Frankenmuth
Saginaw	E Tuscola Rd	S Block Rd	Bradley Rd	S Block Rd	Frankenmuth
Saginaw	S Beyer Rd	Baker Rd	S Block Rd	Baker Rd	Frankenmuth
Saginaw	S Gera Rd	Junction Rd	S Block Rd	Junction Rd	Frankenmuth
Saginaw	E Townline Rd	S Gera Rd	Weiss St	S Gera Rd	Frankenmuth
Saginaw	Davis Rd	Crane Rd	Melbourne Rd	Woods	
Saginaw	Huron Eastern Railway	Along Saginaw River	NCoL	Along Saginaw River	Saginaw, Zilwaukee
Saginaw	NCL Zilwaukee	Woods	NCoL	Woods	
Saginaw	Teft Rd	Stroebe Rd	Ederer Rd	Loops Around	
Saginaw	State Rd	M-47	Saginaw River	Gallagher St	Saginaw
Saginaw	Saginaw River	Along CassRiver	ECoL	Along CassRiver	Frankenmuth
Saginaw	SCoL	Saginaw Bay Southern Railway	Harger Line Trail	Saginaw Bay Southern Railway	
Saginaw	SCoL	M-13	Gary Rd	M-13	



Saginaw	SCoL	Great Lakes Central Railway	Pine St	Great Lakes Central Railway	St Charles
Saginaw	WCoL	Along Maple River	Great Lakes Central Railway	Pine St	St Charles
Sanilac	Bad Axe Rd	Bay City Forestville Rd	M-25	Bay City Forestville Rd	Minden City , Forestville
Sanilac	WCoL	Potts Rd	NCoL	Potts Rd	
Sanilac	WCoL	ITC Easement	Decker Rd	ITC Easement	ITC Trail
Sanilac	WCoL	Albertson Rd	SCoL	Huron & Eastern Railway	Marlette, Brown City, Melvin
Tuscola	NCL Caro	Colling Rd	NCoL	M-24	Caro, Unionville
Tuscola	SCoL	Huron & Eastern Railway	NCoL	Woods	Mayville, Caro
Tuscola	W Barnes Rd	Old Rail Trail E of M-24	Fox St	Old Rail Trail E of M-24	Mayville
Tuscola	ECL Vassar	W Saginaw Rd	Fox St, Mayville	W Saginaw Rd	
Tuscola	Ellis Rd, Millington	Huron & Eastern Railway	ECoL	ITC Trail	Millington, Vassar, Caro
Tuscola	Huron & Eastern Railway	Mertz Rd	Huron & Eastern Railway	Caro City	Caro
Tuscola	SCoL	Grand Trunk Western Railway	NCoL	Grand Trunk Western Railway	Kingston, Cass City, Gagetown



Legend

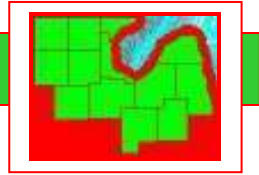
- Existing Facilities**
- Paved Multi-Use Trail
 - Unpaved Multi-Use Trail
 - Unpaved Hiking Trail
- Proposed Facilities**
- Local Initiative
 - Inter-Regional System
- Paved Shoulder Width**
- 5ft>
 - <=5ft

Bay Region

**Non-Motorized Facilities:
Existing & Proposed
Local Initiative**

East Central Michigan Planning
& Development Region
3144 Davenport Ave., Suite 200
Saginaw, MI 48602
989-797-0800 Fax 989-797-0896
www.ecmpdr.org

Created 7/3/2009



Chapter 4: Conclusion

a. How to use this Plan

The Bay Region Non-Motorized Transportation Plan is a guide for planning and developing non-motorized facilities in the thirteen county MDOT Bay Region. It clarifies the regional linkages needed to connect individual non-motorized plans between counties, cities, townships and villages. The plan lends support and justification for funding requests by local units of government, collaborative partnerships and state-local transportation agencies. Non-Motorized projects that are part of or connect with regional non-motorized network in an adopted regional plan are looked upon in a favorable light by funding agencies from state and federal programs to foundations and philanthropic organizations. Municipalities and non-motorized transportation advocates should utilize this plan to seek funding support and other assistance in their non-motorized facility development and improvement efforts.

The plan is a living document that represents the current non-motorized transportation needs in the Bay Region. It will need to be updated periodically as sections of non-motorized facilities are built, other potential non-motorized connections are found or the needs within a community changes. The plan can be used as a basis for developing local non-motorized facilities plan by the counties, townships, cities and villages. It can also serve as a guiding document for the local enthusiastic groups to forward the efforts of regional connectivity.

As local plans are revised and updates, especially any elements that would integrate with this plan, it is important and appreciated if those revisions are shared with the MDOT Bay Region office, the MDOT Transportation Service Center that serves the community and the East Michigan Council Of Governments. This will enable for this plan to be kept current as a living document. These agencies are located as follows:

**MDOT Bay Region, 55 E Morley Drive,
Saginaw, MI 48601**

MDOT-Bay City TSC, 2590 E. Wilder Rd, Bay City, MI 48706

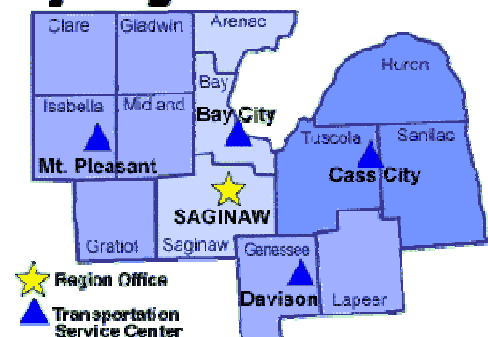
MDOT-Cass City TSC, 6867 E. Cass City Rd, Cass City, MI 48726

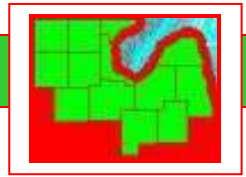
MDOT- Davison TSC, 9495 E. Potter Road, Davison, MI 48423

MDOT-Mt. Pleasant TSC, 1212 Corporate Drive, Mt. Pleasant, MI 48858

East Michigan Council of Governments- EMCOG, 3144, Davenport Avenue, Suite 200, Saginaw, MI 48602

Bay Region





Appendix

a. Non-Motorized Facility Public Input Form

This form was circulated along with the proposed routes maps for additional public input on the proposed networks.

1. Your Name, Phone number and affiliation: _____

2. County: _____
3. Proposed Trail # as on the map: _____
4. Suggested Name(s) of the Proposed Trail: _____
5. Trail History: (Please share your knowledge of the area) _____

6. Local Importance of the Proposed Trail: _____

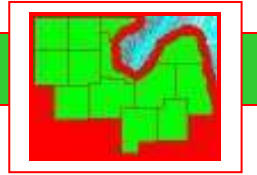
7. Regional Importance of the Proposed Trail: _____

8. Order of Priority amongst other proposed trails within the county: (Please list all in your order of **decreasing** preference from the map). If possible please give reason for your preference. (Optional)

9. Issue related to trail development that should be considered: _____

10. Other points of information, groups involved in trails, funding options in mind: _____

11. Prefer which of these:
On-System/Highway Shoulder Trail or Separately designated Trail



b. Existing Parks in the Bay Region

The following is the list of state, county and local parks that are considered potential destinations for non-motorized users which should be considered as the Bay Region network is developed. Not all of them can be served by the inter-regional networks, but should be accessible through local trails, paths, paved shoulders or low volume roadways: *(Note: Apart from this list there are many public and quasi-public facilities like Schools, Colleges, Libraries, Township, Village and City halls, Cemeteries that can be used as public areas.)*

Arenac

1. County Fairgrounds
2. Oasis Lake Park
3. Youngman Park
4. Au Gres City Park
5. Standish City Park
6. Sterling Village Playground
7. Turner Village Playground
8. Au Gres City Play lot
9. Deep River Township Ballpark
10. Maple Ridge Ballpark
11. Melita Ballpark
12. Moffatt Township Ballpark

Bay

13. Auburn City Park
14. Bay City state Recreation Area
15. Keit Wetland Reserve
16. Nayanquing Point State Wildlife Area
17. Williams Township Park

Genesee

18. Linden County Park
19. For-Mar Nature Preserve and Arboretum
20. Genesee Recreation Area
21. Flushing County Park
22. Jack N. Abernathy Regional Park
23. Ligon Outdoor Center
24. Kearsley Park
25. Flushing Township Nature Park
26. Kelly Lake Park
27. Dauner-Martin Nature Sanctuary

Gladwin

28. Gladwin North Park
29. Ross Lake Park
30. Leo Ross Memorial Park
31. Sugar Springs Campground
32. Calhoun Campground



Gratiot

- 33. WestPark
- 34. Paul Hubscher Park
- 35. Reed County Park

Huron

- 36. Sleeper State Park
- 37. Wagener County Park
- 38. Huron County Nature Center
- 39. Port Crescent State Park

Isabella

- 40. Gilmore Memorial Park
- 41. Majeske Lansing
- 42. Coldwater Lake Family Park
- 43. Deerfield Nature Park
- 44. Maynard S. Gilmore Park
- 45. Herrick Recreation Area
- 46. Meridian County Park

Lapeer

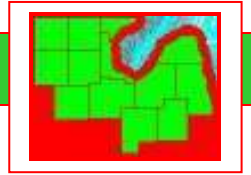
- 47. General Squier County Park
- 48. Mill Race Water park
- 49. Torzewski County Park
- 50. Wetlands Water park

Midland

- 51. Laur Big Salt River Park
- 52. Manitou Park
- 53. Pine Haven Recreation Area
- 54. River Trails Heritage Park
- 55. Sanford Lake Park
- 56. Veterans Memorial Park

Sanilac

- 57. Delaware Park
- 58. Evergreen Park
- 59. Forester Park
- 60. Lexington Park
- 61. Lexington Tierney Park
- 62. Lakeport State Park
- 63. Sanilac Petroglyphs Historic State Park
- 64. River Bend (Swinging Bridge)
- 65. Gingersnap Park
- 66. Harrington St. Park
- 67. P.L. Graham Memorial Park
- 68. Truman Park
- 69. Sandusky City Park
- 70. Marlette Community Park & Pool

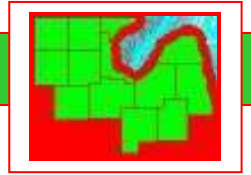


Saginaw

71. Crow Island State Game Area
72. Green Point Environmental Learning Center
73. Riverwalk and Central Parks
74. Shiawassee National Wildlife Refuge
75. Swan Creek Township Park
76. Tittabawassee Township Park
77. Shiawassee River Game State Area
78. Imerman Memorial Park
79. William H. Haithco Park
80. Price Nature Center
81. Veterans Memorial Park

Tuscola

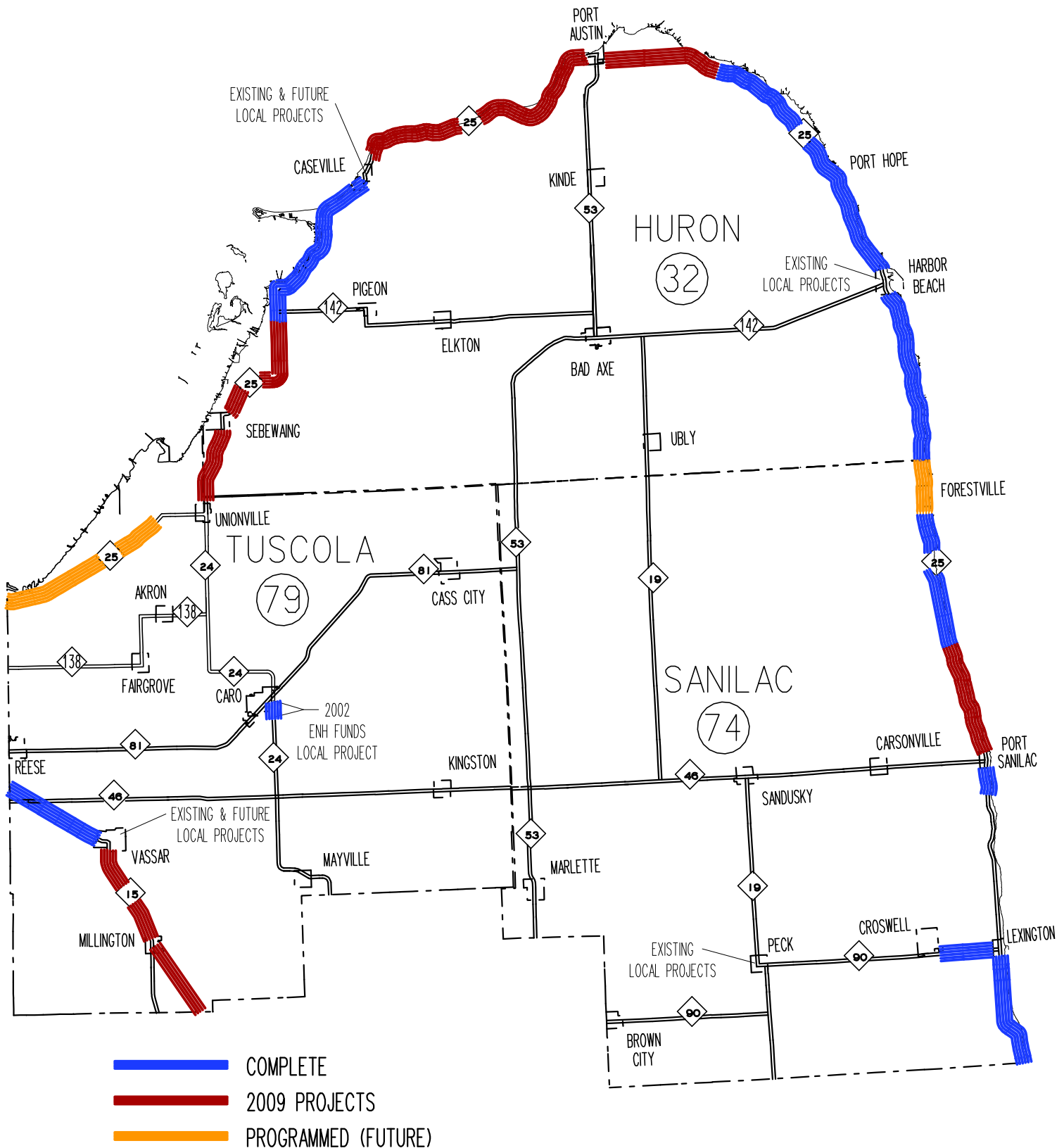
82. Vanderbilt County Park & Campground
83. Akron Village Park
84. Darbee Farm Park
85. AYSO Soccer Park
86. Almer Twp. Community Park
87. Arthur Latham Park
88. Atwood Park
89. Bieth Park
90. Tuscola County Fairgrounds
91. Chippewa Landing Park
92. Colonial Park
93. Williamsburg Subdivision Park
94. Northwood Heights Park
95. Cass City Recreation Park
96. Cedarwood Park
97. Fairgrove Community Park
98. Mulberry Park
99. Gagetown Village Park
100. Indianfields Township Park
101. Kingston Memorial Park
102. Ohmer Park
103. Bodeis Park
104. Reese Community Park
105. Reese Memorial Park
106. Tuscola Twp. Community Park
107. Unionville Community Park
108. Kemp Memorial Park
109. Harper Park
110. Hillside Park
111. White Birch Park
112. McKinley School Park
113. Vassar Lion's Park
114. Vassar Riverside Park



- 115. Vassar Riverside RV Park
- 116. Vassar Memorial Park
- 117. Vassar Fairgrounds
- 118. Fostoria Park
- 119. North Lake Murphy Park



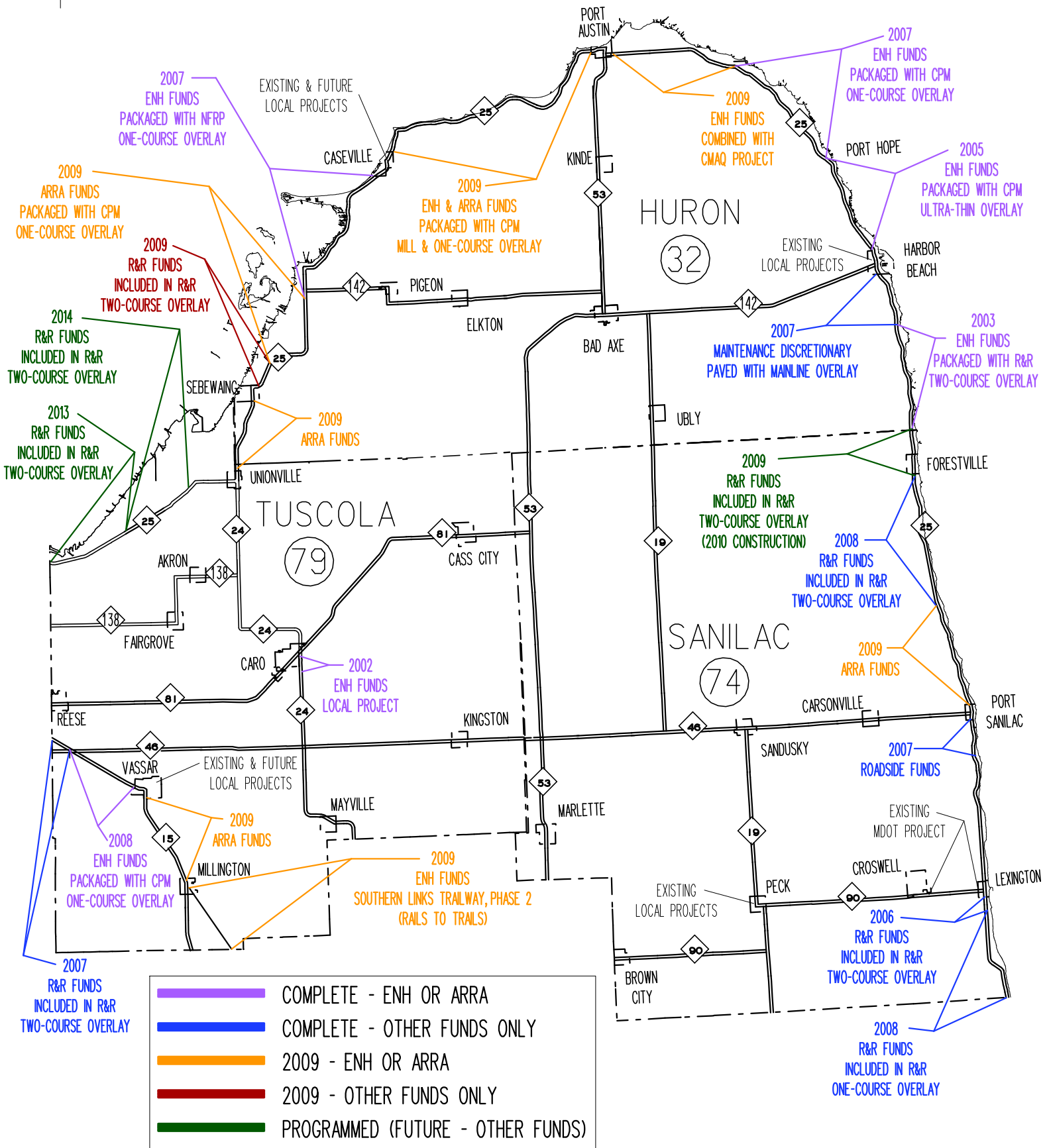
CASS CITY TSC 2009 NON-MOTORIZED PLAN



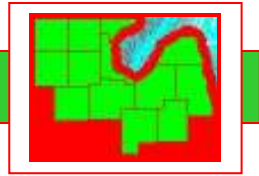
CASS CITY TSC AREA
HURON, SANILAC, TUSCOLA COUNTIES

CASS CITY TSC

2009 NON-MOTORIZED PLAN



CASS CITY TSC AREA
HURON, SANILAC, TUSCOLA COUNTIES



Funding and Maintenance

a. Funding Sources

Historically, only a small percentage of the total public transportation funds have been committed to bicycle and pedestrian projects and programs. If biking and walking are to receive a greater mode share in the future, investments in such projects and programs needs to increase.

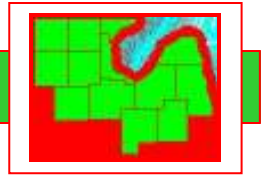
While this document is not the final word on trail development in the Bay Region, it is meant to provide local units and the region as a whole, with the guidance and know how to move in the right direction. This strategy is preliminary, and is meant to be reviewed and updated as conditions and opportunities change.

Funding for non-motorized projects and programs is available through a number of sources and organizations that offer funding for the development of non-motorized trail systems. The Federal Government, Michigan State Government, nonprofit organizations and corporations are all great places to look for trail funding. The following are a few common funding resources, but it is important to note that this list is not complete and trail advocates should try to keep up on new possible sources of funding.

1. **Federal Programs:** Federal programs currently provide the majority of funds going to bicycle and pedestrian projects and programs. Federal funds are distributed to local governments via state and regional processes. Local governments schedule construction of planned projects only after funds have been secured through regional or state competitive review processes. The Intermodal Surface Transportation Efficiency Act (ISTEA) and the Transportation Equity Act for the 21st Century (TEA 21), along with current reauthorization legislation Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA – LU) have historically led the way in federal funding sources for bicycle and pedestrian transportation. The programs within these federal bills that are frequently used to fund bicycle and pedestrian projects and programs include the Surface Transportation Program (STP), Congestion Management and Air Quality (CMAQ), Enhancement Program, Recreational Trails Program, Federal Lands Highway Program and the National Scenic Byways Program. Transit funding programs such as the Federal Transit formula programs and Job Access and Reverse Commute Program also may fund bicycle and pedestrian projects if they increase access to and efficiency of transit facilities.

Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP), prepared by the County Metropolitan Planning Commission or Road Commission in accordance with state law and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), is a four-year schedule and budget of proposed transportation improvements within the MPO. The TIP addresses transportation projects and programs to



include; federal, state and local highways, transit, ride sharing, bikeways, and pedestrian facilities.

Transportation Enhancement Funds (MDOT)

Under Federal law, 10% of federal surface transportation funding is set aside for Transportation Enhancement projects. The Enhancement Grants are administered by MDOT and are used to enrich local communities through landscape, streetscape, bike lanes and bike path development. Like most federal funding, a local funding match is required to supplement federal dollars. This particular program will provide up to 80% of the total project cost with the remaining 20% coming from state and local entities. For more information, please contact the Michigan Department of Transportation at (517) 373-2090, or visit their website at www.michigan.gov/tea.

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

The primary goal of this program is to reduce traffic congestion and enhance air quality. These funds can be used for either the construction of bicycle transportation facilities and pedestrian walkways, or non-construction projects such as maps, brochures, and public service announcements related to safe bicycle use. Funds are available to counties designated as non-attainment areas for air quality, based on federal standards – Benzene and Mason.

Highway Safety Programs

For the State and Community Highway Safety Grants, pedestrian and bicycle safety remain priority areas.

Safe Routes to School (SR2S) www.saferoutesmichigan.org

Under SAFETEA-LU, funding was allocated for a new national Safe Routes to School program to construct new bike lanes, pathways, and sidewalks, and education and promotion campaigns in elementary and secondary schools.

National Scenic Byways Program

These funds may be used for “construction of a facility for pedestrians and bicyclists along a scenic byway”.

Recreational Trails Program

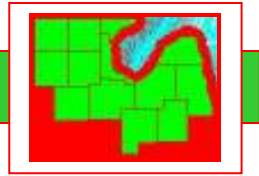
Of the funds apportioned to the state, 30% must be used for motorized trail use, 30% for non-motorized trail uses, and 40% for diverse trail uses (any combination).

Federally-funded transportation facilities for pedestrians must meet the requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG) standards.

2. State Programs:

Michigan Natural Resources Trust Fund

Since 1976, the MNRTF has been providing financial assistance to local governments and the Department of Natural Resources (DNR) to purchase land or rights in land for public



recreation or protection because of its environmental importance or its scenic beauty. Amounts ranging from \$15,000 to \$500,000 are available. Any person, organization, or unit of government can submit a land acquisition proposal; however, development proposals are only accepted from state and local governments. State and local units applying for these grants must include a minimum local match of 25% of the total project cost. For more information please contact the Michigan Department of Natural Resources, Grants Program at 517-373-9125 or visit http://www.michigan.gov/dnr/0,1607,7-153-10366_37984---,00.html

Land and Water Conservation Fund

The National Park Service operates the Land and Water Conservation Funds which administers federal funding to state and local governments for the acquisition and development of public outdoor recreation areas and facilities. Grant applications are available through The Michigan Department of Natural Resources until July 1st of the application year and require a 50% local funding match. For more information please contact the Michigan Department of Natural Resources, Grants Program at (517)373-9125 or visit www.michigan.gov/dnr.

Community Development Block Grants

The primary objective of the Community Development Block Grant Program is to develop viable urban communities by providing decent housing, a suitable living environment and expanded economic opportunities for people of low and moderate income. CDBG funds can also be used as local match funds for federal and state grants such as Enhancement Grants. All activities carried out under the Community Development Block Grant program must meet one of the three national objectives:

- Benefiting low to moderate income persons
- Aids in the elimination or prevention of slum or blight
- Addressing an urgent community need

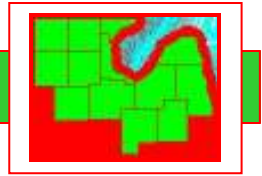
Communities are encouraged to apply for CDBG for trail development as long as the trail will meet one of the objectives.

Special Initiative Campaign – Develop a Michigan Trailways Fund

The bicycling community could develop and campaign. Similar work is being done in southeast Michigan through their Trust that they created.

3. **Local Programs:** Funding for bicycle and pedestrian projects is also raised through property taxes, special bond levies and other local initiatives. Several local initiatives have been created through local parks programs to purchase and develop abandoned rail road right-of-way into non-motorized trails. Implementation of portions of the network can be accomplished through coordination with current or planned Capital Improvement Projects (CIP). However, to be effective, such coordination must begin as early as possible in the design phase.

Millages



Local communities may have dedicated millages for sidewalks or other non-motorized facilities. These dedicated funding sources ensure the development and continued expansion of a non-motorized network within a community and also ensure that it will be properly maintained over time.

Pay Boxes on Trails

Each trail gets its own dollars but there is the maintenance of the boxes, and lightly used trails might not collect enough funds. There is potential vandalism of the boxes.

Licensing Fee for Bicycles

Credibility from users paying their own way. It would increase the cost of bicycles in Michigan but would be a steady stream of funds. There are a number of unanswered questions with this approach such as: Who would collect the fees? Who would receive the fees? Who would enforce?

Establish Recreational Authorities

Steady stream of funds but it would take time to push local legislation through and then the time it would take to advocate for increases in future years. Please see Appendix B.

Local Option Resort Tax/Statewide Tax

Towns with many tourists can charge sales tax on meals, lodging, entertainment, and recreation. Steady stream of funds but it would take time to push local legislation through and then the time it would take to advocate for increases in future years. Hotel room tax would require a change in state law.

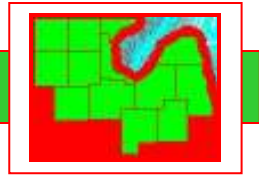
Distance Surcharge Fee

Sliding scale system creates economic incentives for developers to locate projects closer to town centers, and facilities fee for new users who come because of new development. Steady stream of funds in areas of high use but it would take time to push local legislation through and then the time it would take to advocate for increases in future years.

Endowment Fund

Create an endowment fund for the trail at a local community foundation. Local funding keeps control local. Richer communities could use this but it might leave out poorer and/or less populated communities. Example: Midland County Parks Commission's Pere Marquette Rail-Trail Maintenance Endowment Funds; Department of Parks and Recreation; 220 W. Ellsworth Street; Midland MI 48640-5194; 989-832-6874.

4. **Private Agencies:** Private agencies fund many bicycle and pedestrian improvements, especially sidewalks and pedestrian circulation projects in new developments. Local governments regulate the level of bicycle and pedestrian accommodation that must be provided in private development projects. The degree and manner in which this is done varies greatly among jurisdictions. Even within a jurisdiction, the presence and quality of bicycle and pedestrian facilities may



fluctuate from one block to the next if different standards were in place during various phases of development.

Ruth Mott Foundation

Ruth Mott Foundation's mission is to advocate, stimulate, and support community vitality. The Foundation supports the beautification of the community in order to enhance neighborhoods and quality of life in the greater Flint area for its residents and visitors. Through a broad array of approaches, Ruth Mott Foundation seeks to engage the community in beautifying the environment, ranging from the creation of public art and architectural excellence to watershed enhancement, tree planting, community gardening, and removal of weeds, trash and blight. In the past the Ruth Mott Foundation has supported trail development in Genesee County and plans to extend that support on into the future. For more information, please call (810) 233-0170.

DALMAC Fund

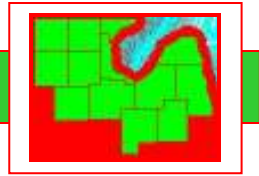
Since 1975, the DALMAC fund has been supporting bicyclists and bicycle trail development throughout the State of Michigan. Administered through the Tri-County Bicycle Association (TCBA), this grant program is open to any entities performing bike safety and educational efforts, involved in the development of bike trails, or engaged in route mapping. For more information please call the TCBA at (517) 882-3700 or visit www.biketcba.org.

Kodak American Greenways Program

Eastman Kodak, The Conservation Fund, and the National Geographic Society provide small grants to stimulate the planning and design of greenways in communities throughout the nation. Grants may be used for activities such as: mapping, ecological assessments, surveying, conferences and design activities; developing brochures, interpretative displays, audio-visual productions or public opinion surveys; hiring consultants, incorporating land trusts, building a foot bridge, planning a bike path or other creative projects. While community groups and non-profits are given preference, public agencies are allowed to apply. The maximum grant is \$2,500; however, most grants range from \$500 to \$1,500. For more information please contact The Conservation Fund at (703) 525-6300 or visit www.conservationfund.org.

ADD BIKES BELONG

<http://www.bikesbelong.org/grants>



b. Facility Maintenance

It is not enough to simply build facilities for non-motorized travel. A non-motorized facility plan should include maintenance policies. It should identify the agencies responsible for maintaining facilities, the maintenance standards that are to be applied, how users should report maintenance needs, and special activities such as snow clearing and litter cleanup.

1. Trail and Path Maintenance

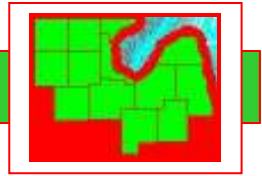
Trail maintenance is an indispensable aspect of trail planning. A clean, safe trail will promote further use by residents. The implementation of a good maintenance strategy not only helps to sustain a safer trail environment, but can also instill a sense of community pride in local citizens. There are a number of different activities associated with trail maintenance:

- Sign replacement
- Repaint pavement markings
- Trim vegetation to maintain sight distance
- Remove fallen trees
- Patch pavement holes and cracks
- Clean drainage systems
- Sweep to remove debris
- Mow shoulders and other areas
- Pick up trash, empty trash cans
- Maintain trail furniture and other support facilities
- Clean & repair restroom facilities as needed
- Remove any graffiti



The removal of snow and ice is an important concern when dealing with trail maintenance. Trail owners must decide whether or not their trail will be open during the winter months. If it is decided to keep it open, snow and ice must be cleared from the trail way.

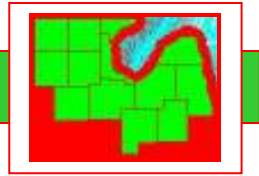
- *Establish a maintenance policy and plan* – Establish written procedures that specify maintenance standards, schedule, quality control, and follow-up that will be used for pedestrian facilities, based on “current best practices.”
- *Repairs* – Inspect trails and paths regularly for surface irregularities, such as potholes and cracks, and damage to signage and lighting. Repair potentially hazardous conditions quickly.



- *Cleaning* – Maintain a high standard of cleanliness. Provide adequate garbage cans and regular garbage pickup.
- *Establish a citizen reporting system* – Encourage citizens to report pedestrian and bicycle facility maintenance needs, garbage and graffiti, and other problems. Publicize a particular telephone number and email address for submitting information.
- *Sweeping* - Establish a seasonal sweeping schedule. In curbed areas sweepings should be picked up, on open shoulders, debris can be swept onto gravel shoulders. In the fall, provide extra sweepings to pick up fallen leaves.
- *Vegetation* – Vegetation may impede sight lines, or roots may break up the travel surface. Vegetation should be cut back to ensure adequate sight lines, and intrusive tree roots may be cut back to keep the walkway surface smooth and level.
- *Drainage* – Malfunctioning drainage systems may cause accumulations of water at pedestrian crossings.
- *Snow Removal* – Snow and ice can make pedestrian travel slow and hazardous. Snow should be removed from sidewalks to ensure safe passage of pedestrian facilities.
- *Animal control* – Establish guidelines for pet behavior. Indicate where dogs must be leashed and where they may run free. Require dog owners to remove droppings, and provide adequate garbage cans. Some communities even maintain a supply of plastic bags along trails, to help dog owners perform this service.
- *Street Markings* – bike lane and crosswalk markings may become difficult to see over time. These should be inspected regularly and retraced when necessary.
- *Utility Cuts* – Poorly performed sidewalk cuts for utilities may leave an interrupted surface for pedestrians. Cuts in sidewalk should be back filled with concrete to the sidewalk grade – so the result is as smooth as a new sidewalk.
- *Volunteers and Sponsorships* – where funding is limited, volunteers and sponsors can help patrol, clean and maintain public trails and related facilities.

The **Michigan Trails and Greenways Alliance (MTGA)** did a survey in Summer 2006 of 69 trails within the State asking 64 questions about Trail Administration, Maintenance, Surface, Personnel, Equipment, Features, Signs, Access Control and Public Safety. It included several of Bay Region trails also. Some of the results from the survey are as follows:

- Paved asphalt trail maintenance activities included 63% Pothole Repairs, 57% Surface Cleaning, 43% Coating or Sealing, 40% Pavement Marking Replacement, 33% Snow Removal and 23% Repaving of Surface.

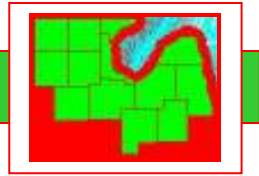


- Non-Asphalt surface maintenance activities included 47% Clearing Trash/Debris, 37% Grading of Surface, 33% Fill-in Patching, 13% Resurfacing and 3% Surface Cleaning.
- Maintenance of the adjacent lands included Mowing, tree Pruning, Litter Clean up to a larger extent followed by Invasive Species Removal, tree & Shrub Planting, Flower and Ground Cover Planting, etc.
- Equipment owned usually included Pick-up Truck, Dump Truck, Light Tractor, Backhoe and Paver.
- Parking - Almost two-thirds utilized shared parking at some private or public lots.
- Facilities - Nearly 54% had restroom facilities, picnic tables and/or benches.

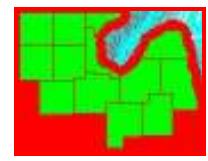
2. Roadway Maintenance

What may be an adequate pavement surface for automobiles (with four wide, low-pressure tires) can be hazardous for cyclists (two, high-pressure tires). Small rocks, branches, and other debris can deflect a wheel, minor ridges in the pavement can cause spills, and potholes can cause wheel rims to bend. Wet leaves are slippery and cause cyclists to fall. Gravel blown off the travel lane by traffic accumulates in the area where bicyclists ride. Broken glass can easily puncture tires. Below are some types of targeted maintenance (ITE, 1998).

- *Surface Repairs* – Inspect bikeways and road shoulders regularly for surface irregularities, such as potholes, pavement gaps or ridges. Such hazards should be repaired quickly.
- *Sweeping* - Establish a sweeping schedule. Sweeping road shoulders of accumulated sand and gravel in the springtime, and fallen leaves in the autumn where they accumulate. Sweepings should be picked up rather than just pushed aside in areas with curbs. Driveway approaches may be paved to reduce loose gravel on paved roadway shoulders.
- *Pavement Overlays* – Where new pavement is installed, extend the overlay to the edge of the roadway. If this is not possible, ensure that no ridge remains at the edge of the road shoulder or bike lane. Do not leave a ridge within the bike travel area. Drain grates should be within 6 millimeters of the pavement height to create a smooth travel surface. Special attention should be given to ensure that utility covers and other road hardware are flush with new pavement.
- *Rail Crossings* – Rail crossings can be hazardous to cyclists, particularly if they are at an oblique angle. Warning signs and extra space at the road shoulder can allow



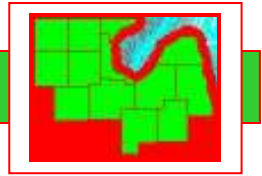
- cyclists to cross at a 90° angle. A special smooth concrete apron or rubber flange may be justified at some crossings.
- *Vegetation* – Vegetation may impede sight lines, or roots may break up the travel surface. Vegetation should be cut back to ensure adequate sight lines, and invasive tree roots may be cut back to preserve the travel surface
 - *Street Markings* – bike lane markings signal loop indicators may become hard to see over time. These should be inspected regularly and retraced when necessary.
 - *Snow removal* – Road plowing should extend into the lane space used by cyclists. Spot salting intersections often creates a hazardous icy patch just past the melted intersection. Trails that get significant winter cycling should be plowed unless they are relegated to ski/snowshoe users.
 - *Roadway Markings* – Whenever roadway markings are used, traction or non-skid paint should be used to avoid the markings becoming slippery in wet weather.



c. Cost Estimates

Source: www.parks.ca.gov

TRAILS: USEFUL LIFE & ESTIMATED COSTS			
Handscaping (Trail Surfaces)			
Items	Materials/Description	Useful Life	Unit Price
Bike Trails (class II)	(Generally 10 Feet Wide)		
Asphalt Resurfacing/Chip Seal	Resurface asphalt surface w/ Chip Seal & center line striping	10 years	\$0.50 SF
Asphalt Overlay	1" overlay of asphalt w/ centerline striping	20 years	\$1 SF
Concrete	Removal and replacement	50 years	\$7 SF
Decomposed Granite (DG)	Replacement of D.G.	5 years	\$1 SF
Aggregate Sub-base (AB)		6 years	\$3 SF
Concrete Containment Curb		50 years	\$15 LF
Parking Lot			
Items	Materials/Description	Useful Life	Unit Price
Asphalt Overlay	1" Overlay of asphalt, repair, restripe & paint handicap logo	20 years	\$1.50 SF
Lighting	Poles and lighting fixtures	30 years	\$1,500 EA
Structures			
Items	Materials/Description	Useful Life	Unit Price
Concrete Undercrossings	Complete Replacement	50 years	\$150 LF
Concrete Bridges	Complete Replacement	50 years	\$400 LF
Wood Bridges	Complete Replacement	20 years	\$500 LF
Steel Bridges/overcrossings	Complete Replacement	30 years	\$750 LF
Boardwalk	Complete Replacement	20 years	\$400 LF
Replace wood Deck	Steel frame bridge with wooden deck	20 years	\$100 LF
Site Equipment / Furniture (Support Facilities)			
Items	Materials/Description	Useful Life	Unit Price
Doggie Stations	Complete Replacement	15 years	\$1,200 EA
Benches	Custom: Recycled Plastic with cobble siding	15 years	\$1,200 EA
Barrier Posts	6" x 6" pressure treated posts	15 years	\$12 LF
Bike Lockers	Metal lockers - 2 bikes per locker	10 years	\$350 EA
Kiosks	Redwood structure, cobble base, with composite shingle roof	15 years	\$200 EA
Trash Cans	Metal container w/ concrete base	15 years	\$500 EA
Fencing			
Items	Materials/Description	Useful Life	Unit Price
Tubular Steel	Painted black - similar to wrought iron	20	\$40 LF
Post & Cable	4 x 4 x 6 wooden posts & metal cable	15	\$10 LF



d. Funding Application Process

The Rails-To-Trails Conservancy is an excellent resource for any agency thinking about trail development. Here are some quick tips they offer for fund raising and grant writing:

- **Develop a fund raising plan for your projects:** Begin with your estimated project cost and set funding goals from key sources. This is a valuable resource because foundations often require you to show percentages of funding anticipated from each source.
- **Identify key components of your project that can be tailored to specific funding sources:** Without compromising your project, try to develop a list of mini projects tailored to the interests of a number of different funding sources.
- **Complete all planning elements prior to submitting funding requests:** Seeking funding prematurely is not advisable as you often only get one chance to make a positive impression on a potential funding agency.
- **Start by writing a two-page summary letter:** This helps to succinctly define your project and your request for support. Many funding sources provide guidelines for the initial “inquiry” letter. Make sure you follow their guidelines.
- **Create a credible team prior to seeking funding:** Funding agencies are interested in not only the quality of your project, but the quality of your organization or team as well.
- **Establish strong partnerships and demonstrate coordination:** Funding agencies are interested in strong partnerships and coordination among agencies. They especially like to see public and private sectors working together to leverage funds.
- **Establish broad community support prior to seeking funding:** At a minimum, all project partners should provide “lead” funding, both cash and in-kind services, where feasible. If you do not have “lead” funding, attach support letters from individuals, local businesses, civic groups and others to your request.
- **Submit proposals:** Once the research is completed, partners are in place, backed by a solid plan, submit proposals to your target list of funding agencies. Make sure to follow any and all guidelines set forth by potential funding agencies.
- **Complete all follow-up documentation; thank and recognize donors:** Make sure you send thank-you letters recognizing receipt of donations and complete any required follow-up documentation.