

Concept Plan and Development Guide





# TRAVERSE CITY CONCENSION OF CHARLEVOIX TRAIL

**Concept Plan and Development Guide** 

This document is meant to be used for planning purposes only. The costs and mileages cited in this document are only estimates. More detailed design efforts will be required to generate accurate cost estimates.

#### **Prepared by:**

The National Park Service RTCA - Rivers, Trails, and Conservation Assistance Program

#### In Cooperation with:

TART Trails - Traverse Area Recreation and Transportation Trails, Inc.
Top of Michigan Trails Council
Grand Traverse Regional Land Conservancy
Networks Northwest
Northwest Design Group













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# Traverse City to Charlevoix Trail

# Introduction

The Traverse City to Charlevoix Trail (TVC-CHX Trail) has an ambitious goal to connect two regional trail networks that link the communities of Traverse City, Acme, Elk Rapids, Eastport, Norwood and Charlevoix. This requires combining what trail users want with suitable land and road rights of ways that can support a non-motorized recreation and transportation trail. The trail will pass through beautiful scenery and provide access to parks, beaches, natural areas, communities, and other destinations along the US-31 corridor. The project builds on the vision of more than a decade of community groups working to make trail connections.

The Traverse City to Charlevoix Trail Concept Plan and Development Guide:

- 1) Makes the case for completing the gap in the 325 mile regional trail system by demonstrating the value and benefits of trails and documenting the economic impacts that trails have in this region.
- 2) Identifies and assesses route options for a contiguous bicycle and pedestrian trail from Acme Township (Traverse City) to Charlevoix Township (Charlevoix).
- 3) Provides an overall development concept plan for the preferred trail route including; recommendations for pedestrian and bicycle facilities, cost estimates for trail construction, maintenance and management options, and purposed next steps for implementation.
- 4) Offers resources and information to support trail implementation, including: options and recommendations for management and maintenance partnerships; tools to build community support, project phasing and funding strategy.

### Trail Length by Segment

Acme to Elk Rapids	11.0 Miles
Elk Rapids to Eastport	16.3 Miles
Eastport to Charlevoix	18.5 Miles

### Trail Length by County

Grand Traverse	8.4 Miles
Antrim	26.1 Miles
Charlevoix	11.3 Miles

Total Length of Trail 45.8 Miles



# Closing The Gap

Michigan is home to one of the largest, interconnected trail systems in the country. This inviting network – and the associated quality of life, health and economic benefits it offers – is fueling Michigan's drive to be known nationally as "the Trail State."

Michigan's non-motorized trail system allows visitors and residents to hike, bike, ski, run, walk and explore Michigan's great outdoors, its big cities and small towns. Trails provide opportunities for recreation and promote active, healthy lifestyles. Michigan's non-motorized multi-use trails provide people with a variety of alternative transportation options to travel to where people live, work and play. And they do a lot more.

Trails help fuel Michigan's economy. They help create and cultivate tourism destinations by connecting people to Michigan's cities, towns and villages, scenic sites, and natural, cultural and historic resources. They provide settings for festivals and races, attract out-of-state quests, create jobs, attract new residents, and increase property values.

That's why trail enthusiasts have been working to create the Northern Lower Peninsula Trails Network and the top statewide trail system. The Traverse City to Charlevoix Trail aims to link TART's 28 mile trail system between Suttons Bay and Acme with Top of Michigan Trails Council's 26 mile Little Traverse Wheelway Trail starting in Charlevoix. Closing the 46 mile Traverse City to Charlevoix gap will create a 325 mile nonmotorized transportation and recreation trail network in northern Lower Michigan.



Annual festivals and events occuring along the Traverse City to Charlevoix Trail route

# **Making the Case**

### The Economic Benefits of Trails

Trails are an increasingly important economic development asset of communities and regions as they attract new residents, generate recreation related tourism, with related expenditures on food, lodging, equipment, and produce new businesses and jobs. At the 2014 Pure Michigan Governor's Conference on Tourism, bicycle tourism was identified as one of the major tourism marketing thrusts for Michigan in the coming years. The Michigan Department of Transportation (MDOT) 2014 study found that bicycling provides an estimated \$668 million annually in economic benefits to our state's economy, and \$22 million in spending from out-of-state participants in key bicycling events.

The <u>Vasa Economic Impact Study</u>, commissioned by TART Trails in 2014 found that events and day-use generate more than \$2.6 million annually in direct economic impact to the Traverse Area community and supports the idea that trails play an important

role in the health and vitality of our local community.

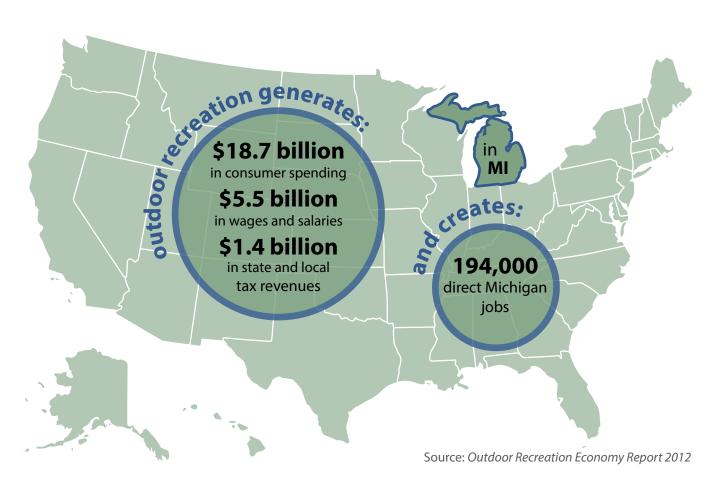
The 2015 Assessing Use and Users on the Little Traverse Wheelway, the Northwest State Trail and the North Central State Trail study conducted by Michigan State University found that about half of trail users spent money during their trail visit, with many enjoying area restaurants and shopping. About a third of those noted that trail use increased their spending. This is a substantial boost to the local economy.

Dr. Charles Nelson, who conducted the 2015 study, said "The more intangible benefits of strengthening the sense of community through a shared trail experience, welcoming visitors to the region and providing enjoyable family activities that keep people in the area longer and spark return visits may be more important than the daily spending related to the trail experience. Trails by their nature reveal many positive aspects of a community and provide important physical and social connections that can have lasting economic benefits and influence decisions related to future travel activities, as well as second home and

# Spending by Trail Users

Category	Little Traverse Wheelway	North Western State Trail	North Central State Trail
Percentage of uses with spending during trail use	51%	46%	54%
Mean spending of those who spent during trail use	\$40.29	\$28.57	\$21.87
Median spending of those who spent during trail use	\$25.00	\$20.00	\$10.00
Estimated local spending for all trail uses during study period using median spending	\$760,219	\$85,624	\$92,259
Percentage of spenders who spent more in the area due to the trail	37%	32%	32%

Source: Assessing Use and Users on the Little Traverse Wheelway, the Northwest State Trail and the North Central State Trail



# **Creating Jobs and Income**

The outdoor recreation industry is essential to Michigan's economy. Every year, Americans spend \$646 billion on outdoor recreation, including gear, vehicles, trips, travel-related expenses and more. This creates jobs, supports

communities, generates tax revenue and helps drive the economy. At least 63% of Michigan residents participate in outdoor recreation each year. This generates \$18.7 billion in consumer spending, \$5.5 billion in wages and salaries, and \$1.4 billion in state and local tax revenues. A total of 194,000 direct jobs are created in Michigan because of outdoor recreation.



The Cyclery, in Glen Arbor, was built in anticipation of the opening of the Sleeping Bear Heritage Trail in 2011

# **Project Description**

# **Project History**

In 2004, the Rotary Club of Elk Rapids hired Northwest Design Group (NDG) to investigate a route for a non-motorized recreation and transportation trail between Acme and Elk Rapids. Several possible routes were identified and evaluated by stakeholders in a series of public meetings. A concept design was developed for the preferred trail route along the US-31 Corridor from Rotary Park to Bates Road. The project stalled, in part due to the downturn in the economy, but also because no management and maintenance entity for the effort was identified.

In 2010, the Rotary Club of Elk Rapids partnered with the Elk Rapids Parks and Recreation Commission, TART Trails, and Grand Traverse Regional Land Conservancy (GTRLC) to host a public forum on trail connections between Traverse City and Elk Rapids. The workshop drew 75 participants and generated a strong, positive community response supporting the concept of a non-motorized trail to and through Elk Rapids. The trail concept was also supported by the Grand Vision for Antrim and Grand Traverse Counties.

In 2013, the Michigan Department of Transportation Commission directed MDOT planning staff to convene a meeting with interested parties to assess the feasibility of creating a trail from Traverse City to Charlevoix. Participants included representatives from county and local governments, nonprofits, local business and community members, MDOT, and the Michigan Department of Natural Resources (MDNR). To help move the effort forward and develop a design concept and action plan, TART Trails and TOMTC sought assistance from the National Park Service - Rivers, Trails, and Conservation Assistance Program (NPS-RTCA) to help facilitate a public planning process and develop a trail plan.

# **Planning Process**

In November 2014, a core planning team and a stakeholder planning committee were established. The core planning team includes: TART Trails, TOMTC, GTRLC, Networks Northwest, NPS-RTCA, and NDG. The stakeholder planning committee includes: representatives from MDOT, Charlevoix, Antrim, and Grand Traverse Counties, Grand Traverse Band of Ottawa and Chippewa Indians, Acme, Milton, Elk Rapids, Torch Lake, Banks, Norwood, and Charlevoix Townships, City of Charlevoix and Traverse City, Village of Elk Rapids, Elk Rapids Chamber of Commerce, Elk Rapids Rotary, Short's Brewing Company, Grand Traverse Resort, and MDNR.

# The Planning Team was responsible for:

- Project planning, facilitation and public engagement process
- Formation of a Concept Plan and Development Guide including resource inventory, design alternatives, and final recommendations
- Development of an Implementation Plan including project cost projections, implementation phasing and strategy.

# The Stakeholder Planning Committee was formed to:

- Contribute to project goals and objectives
- Represent their community, agency or organization
- Host and help arrange public meetings
- Provide resource information
- Help guide planning decisions

Between November 2014 and August 2015, the Planning Team conducted 10 planning committee meetings which contributed to the following:

- Resource inventory of the US-31 corridor and identification of alternative routes
- Development of project vision, goals and objectives to guide trail planning
- Identification of criteria to evaluate the trail routes
- Assessment of alternative routes and selection of a preferred route
- Concept Plan and Development Guide to include: location and type of bicycle/pedestrian facilities, trail design specifications, key trail connections, trail crossings, cost estimates for design, engineering and trail construction.
- Evaluation of trail management and maintenance options
- Recommended action plan

The trail corridor and planning committee were broken down into three manageable segments; Acme to Elk Rapids, Elk Rapids to Eastport, and Eastport to Charlevoix. The "segment work groups" met several times to conduct the resource inventory, evaluate alternative routes, and host public information meetings.



Stakeholder Planning Committee meeting in July, 2015



A project website was set up in 2014 to further outreach and share project information, updates, and resources http://www.traversecitytocharlevoixtrail.org

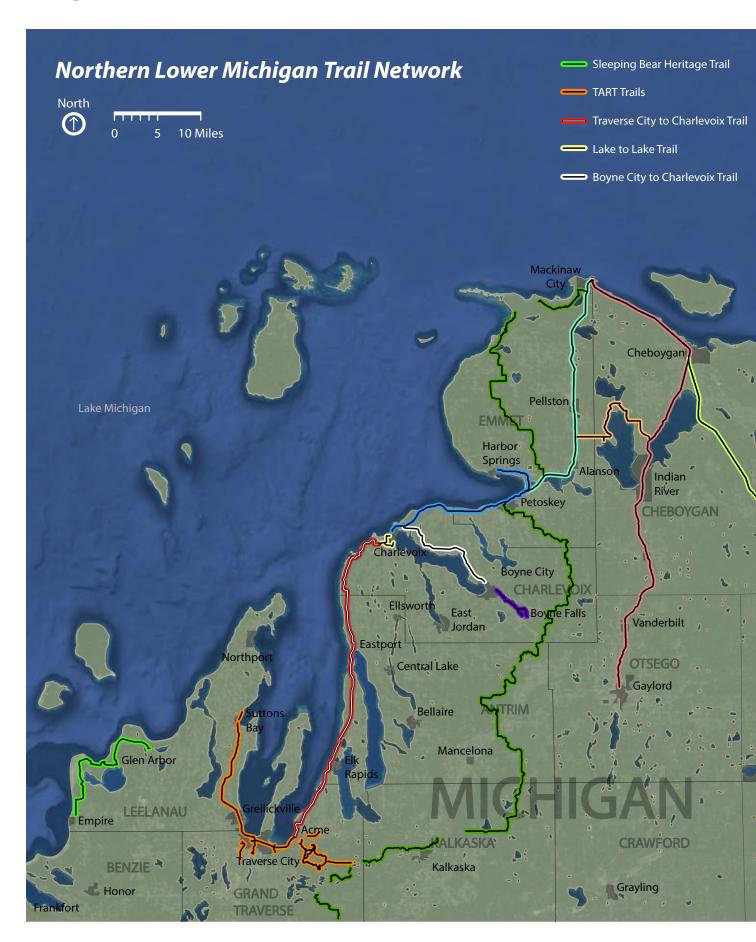
# Traverse City to Charlevoix Trail Vision

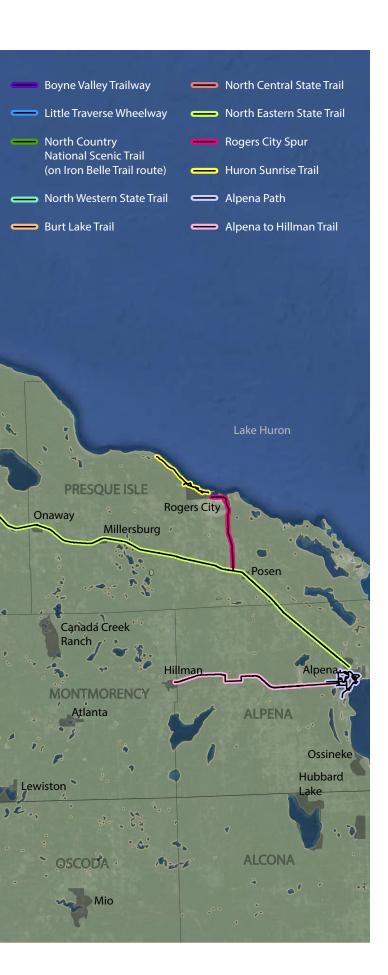
The Traverse City to Charlevoix non-motorized transportation and recreation trail connects Traverse City's TART Trail to Charlevoix's Little Traverse Wheelway and the rest of the Northern Lower Peninsula Trail network. The Traverse City to Charlevoix Trail is well maintained and effectively managed. People are drawn to the trail by the wonderful opportunity to travel through exceptional scenic and agricultural landscapes which showcase the region's tremendous recreational, natural, and community assets.

#### Goals:

- Developanon-motorized trail that connects two major destinations in northwest Lower Michigan that draw people from around the state and the region and provides local communities with economic development opportunities.
- Provide people of all ages and physical abilities access to more transportation choices and opportunities for active living and healthy lifestyles.
- Enhance regional identity and help create vibrant communities that attract and retain visitors, residents, and businesses.

# **Regional Context**





# **Northern Lower Michigan Trails**

Northern Lower Michigan enjoys more than 5,000 miles of trails weaving through the communities, parks, and forests that make up the northern portion of the lower peninsula. Through impressive collaborations between state, local, and federal resources, the area is home to an expansive network of multi-use trails that connect communities from Alpena to Cheboygan, Charlevoix to Allanson, Mackniaw City to Harbor Springs, and Suttons Bay to Acme. The proposed Traverse City to Charlevoix Trail provides the missing link in Northern Lower Michigan's Multi-Use Trail System, connecting two major trail networks described below.

#### The TART Trails Network

The network consists of eight multi-use trails in Grand Traverse and Leelanau counties as well as a cross-town bike route, totaling more than 60 miles of regional trails. Trails include the TART in Town, Leelanau Trail, the Boardman Lake Trail and the VASA Pathway. For more information, please see: http://traversetrails.org/trail/tart-trail/

# *Top of Michigan Trails Council (TOMTC)*

This network currently consists of 288 miles of existing or soon-to-be constructed trails, of which about 180 run along old railroad corridors. The 158 mile "Trunk Line" Trails are non-motorized (except for snowmobiles), multi-purpose trails that can ordinarily be used for running, hiking, bicycling, in-line skating, snowmobiling, and equestrian activities. The Top of Michigan Trails Council is known for the Little Traverse Wheelway and its long distance rail trails: The North Central State Trail, the North Eastern State Trail, and the North Western State Trail. For more information, please see: <a href="http://www.trailscouncil.org/">http://www.trailscouncil.org/</a>

# Regional Context

### **TVC-CHX Trail Connections**

#### **Traverse Area Recreational Trail (TART)**

This 10.5 mile long paved urban transportation and recreation corridor has an eastern end point at M-72/Bates Road in Acme Township and a western end point at Carter Road in Traverse City, where it links with the 18 mile Leelanau Trail. The TART connects local neighborhoods, shopping and retail along the US-31 corridor, and large natural and recreational areas like Traverse City State Park and Reffitt Nature Preserve to Downtown Traverse City, Clinch Park Marina and Beach, and a regional trail network that includes Boardman Lake Trail, Three Mile Trail, and the Leelanau Trail. See more at:

http://traversetrails.org/trail/tart-trail/





#### **Little Traverse Wheelway (LTW)**

The Little Traverse Wheelway is a 26 mile paved and non-motorized trail that extends from Charlevoix to Harbor Springs. Surfaced with 8' to 10' wide asphalt or 6' wide concrete sidewalk, the trail is great for biking, walking, running, and inline skating. The trail follows the Little Traverse Bay shoreline and north side of US-31 to Petoskey, and then follows M-119 into downtown Harbor Springs. There are great views along the entire trail and direct water access at several points along the Lake Michigan Shoreline. See more at: <a href="http://www.trailscouncil.org/little-traverse-wheelway-17/">http://www.trailscouncil.org/little-traverse-wheelway-17/</a>



#### **US Bike Route 35**

The Michigan portion of US Bicycle Route (USBR) 35 extends 501 miles from Sault St. Marie in the north to New Buffalo in the southwest. USBR 35 passes through the region along the Leelanau and TART trails, then heads north along county and state roadways until it gets back onto the Little Traverse Wheelway in Charlevoix. US Bicycle Routes are carefully selected to offer safe and scenic connections for road cycling through urban, suburban and rural communities.

See more at: <a href="http://bicycletouringroutes.com">http://bicycletouringroutes.com</a>

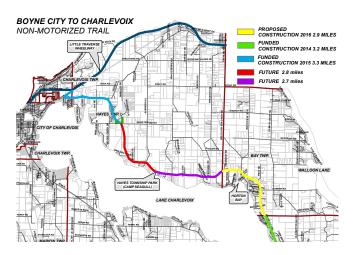


#### The Lake to Lake Trail

The Lake to Lake Trail connects Fisherman's Island State Park and the Little Traverse Wheelway through downtown Charlevoix. The trail is around five miles long and runs west from Ferry Beach, crossing M-66 and along US-31 to Bells Bay Road. The trail connections make downtown Charlevoix and Fisherman's Island State Park more accessible to cyclists. See more at:

http://www.laketolaketrail.com/





#### **Boyne City to Charlevoix Trail (BCCT)**

The 14 mile Boyne City to Charlevoix Trail is an off road multi-use trail will follow the Charlevoix-Boyne City Road right-of-way through Young State Park, Horton Bay, and connect to the Little Traverse Wheelway at Waller Road. Trail construction is scheduled for 2016 and 2017.

See more at: <a href="http://www.trailscouncil.org/boyne-city-to-charlevoix-12/">http://www.trailscouncil.org/</a>

### Chain of Lakes and East Grand Traverse Bay Water Trail

This proposed water trail runs from northern Antrim County near Ellsworth through the Chain of Lakes entering East Bay in Elk Rapids and continues along both coasts of East Bay through Traverse City and along the Old Mission Peninsula. Along the way, the water trail passes by numerous parks and natural areas, effectively doubling the recreational opportunities at these spectacular venues. See more at:

http://www.michiganwatertrails.org/ trail.asp?ait=cv&cid=148



### The Lake Michigan Water Trail

A four state effort by State and federal officials and local planning agencies to create 1,600 mile water trail that will circumnavigate Lake Michigan. Parts of the trail are now in place but there is a good deal of work still ahead to provide additional access points and amenities. A new organization, the Lake Michigan Water Trail Network promotes the water trail as well as hiking, biking and auto routes around Lake Michigan. See more at:

http://www.michiganwatertrails.org/ trail.asp?ait=cv&cid=145



# Local and Regional Support

# Community Park, Recreation, Open Space & Greenway Plans

There is demonstrated local and regional support for the Traverse City to Charlevoix Trail. Non-motorized trails and connected trail networks are transportation and outdoor recreation priorities of every county, township, and village along the proposed Trail. A connecting trail from Traverse City to Charlevoix is mentioned specifically as a priority and/or goal in seven of the eleven community park and recreation plans.

# Antrim County Parks, Lands & Recreation Plan 2013-2018:

"Trail development throughout Antrim County ranks high in popularity. Trails for biking consistently ranked the highest and continues to increase in popularity. A connecting trail from Traverse City to the Petoskey/ Charlevoix trail would be a great benefit to Antrim County and the region."

### Grand Traverse County Community Park, Recreation, Open Space and Greenway Plan 2013-2018:

Objective 5a - Increase the network of trails both within the parks and connecting to other trails.

# Charlevoix County Recreation Plan 2015-2019:

Goal 3: Collaborate with other public and private entities to develop a network of trails throughout the County that will link the communities with each other and provide improved access to all recreation facilities.

# Acme Township Parks Master Plan 2014-2019:

Goal 3: Connect recreation assets through non-motorized transportation routes Objectives: Designate local non-motorized spurs that connect existing parks, various community points of interest, and residential/commercial areas to the designated regional routes (US Bike Route 35 and the TART Trail).

# Village of Elk Rapids Five Year Community Recreation Plan 2013-2017:

"The Village of Elk Rapids serves as an ideal location to connect the existing trails that have been developed by the Top of Michigan Trails Council, which provides recreational trails through Charlevoix, Emmet and Cheboygan counties as well as Traverse Area Recreation Trail (TART) in the Grand Traverse region." The top recreation goal is to work with TART, Grand Traverse Regional Land Conservancy and Township officials (Elk Rapids, Whitewater and Acme Townships) to assist in the establishment of a non-motorized trail that connects Elk Rapids with the TART system to the south at M-72.

#### **Elk Rapids Township:**

Does not have a park and recreation plan

#### Milton Township 2014-2018 Recreation Plan:

Goal 5: Consider the development of new and linkage of existing motorized and non-motorized trails, especially along but separated from State or County road surfaces. Action: Consider non-motorized trails along....and/or north and south parallel with the US-31 corridor. Action: Develop relationships/partnerships with regional trail organizations, such as TART, to explore additional opportunities for bike trail connections and enhancements.

# Village of Ellsworth & Banks Township Community Recreation Plan 2011-2016:

Banks Township and the Village of Ellsworth will be working cooperatively with the Top of Michigan Trails Council, Antrim County and Charlevoix County to pursue the development of non-motorized trails and bike lanes, in order to effectively develop local routes that connect with the larger trail system in northern Michigan.

# **Torch Lake Township Recreation Plan 2011-2016:**

Section 5 Goal/Objective: Non-motorized paths – Pursue additional non-motorized paths and/or bike routes to connect with the route along US-31 from Barns Road to Lore, to expand a local trail network and link recreation facilities.

#### **Norwood Township**

#### 2009-2014 Recreation and 2015 Master Plans:

GOAL: Provide non-motorized links to other communities. Action: Create bike/walking trail to Charlevoix

Tasks: Start communication and indicate interest in project with regional trails committee, identify best possible route, research easement agreements as needed, secure funding, install trails and signage.

2015 Master Plan: The community should stay actively engaged in the planning for a regional trail connector between Traverse City and Charlevoix. This long-term project aims to link the eastern end of the TART Trail in Acme with the Little Traverse Wheelway trail, which starts in Charlevoix.

# Charlevoix Township Recreation Plan 2012-2016:

Goal: Work closely with the City to consider ways to implement the Township portions of the proposed bike path network common to the City and Township.

# City of Charlevoix Recreation Master Plan 2012-2016:

Goal: Continue the development of a "Complete Street" transportation network that incorporates walking paths, sidewalks, and bike lanes. Objectives: Seek grant and private funding to construct and expand the Lake to Lake Trail System.



# The Regional Non-Motorized Transportation Plan and Strategy, 2008:

Networks Northwest, formerly Northwest Michigan Council of Governments, developed a regional non-motorized transportation plan and investment strategy, with widespread stakeholder input, for 13 counties which included Charlevoix, Antrim and Grand Traverse. The Michigan Department of Transportation commissioned the plan and uses it to prioritize the funding of projects. The priority routes identified in this plan include:

Grand Traverse County: Create a trail from the TART Trail north to Elk Rapids

Antrim County: Create a trail separate from US-31 or paved shoulders from Elk Rapids to Charlevoix.

Charlevoix County: Create a trail from the Norwood area to Charlevoix

# Michigan Department of Natural Resources State Trails Implementation Plan, 2013-2018:

With the most rail-trail miles of any state and more than 12,000 miles of recreational trails serving a variety of users, Michigan's acclaim as a national trails leader is well established. The Michigan DNR is committed to the acquisition and development of trails, especially when they connect to already existing trails and to MDNR managed parks, games areas, and forests. The State Trails Implementation Plan lays out the actions that the MDNR will take to sustain Michigan's title as the Trail State.

### Fisherman's Island State Park General Management Plan 2015:

In late 2014, the Michigan Department of Natural Resources began a year long process to develop a General Management Plan for Fisherman's Island State Park (FISP). The purpose of the plan is twofold: 1. To develop 20 year management zone plan that provides specific guidance for development and stewardship of the park and 2: to develop a 10 year action goals that address the desired future condition within each management zone. The proposed Traverse City to Charlevoix Trail was included in many discussions during the public input elements of the planning process. In the end, the trail was included in the southern part of the park and in the northern part the location was to be determined.

# **Assessment of Alternative Trail Routes**

# Assessment of Alternatives

Alternative trail routes and types were conceived and geographically grouped into the following three segments: Traverse City to Elk Rapids; Elk Rapids to Eastport and Eastport to Charlevoix. Five primary route selection criteria categories were established for the assessment process and consisted of: overall constructibility, recreational experience, political factors, cost considerations and alternative transportation. (See below)

Meetings were held to assess alternative routes in Traverse City, Elk Rapids, and Charlevoix by Planning Team members and Planning Committee stakeholders familiar with their area and community. NDG facilitated the Choosing by Advantages decision making process to assess approximately 25 route options. In each meeting a group consensus was reached and the best routes within each segment were chosen.

# **Choosing by Advantages**

Choosing by Advantages (CBA) is the decision making process that was selected and utilized for this project. CBA is an accurate, logical and documentable method for comparing alternatives and making sound decisions. It was developed by federal agency personnel with the help of economic, ecologic, urban planning and human behavior experts at the University of Michigan and Utah State University and is now the preferred method for facility decisions in the US National Forest Service, the National Park Service and several other agencies. In a nutshell, the process looks at magnitude of differences between options and the relative importance of those differences. The overall recreational experience and constructibility consistently played a major role in the TVC-CHX trail segments chosen.

# **Route Selection Criteria**



# Overall Constructibility

Advantages of constructing a trail within that particular setting

- Natural Resource Impacts
- Historic/Cultural Resource Impacts
  - Topography
- Adjacent Land Use
  - Corridor Ownership



### Recreational Experience

Advantages of the trail segment for recreation experience

- Length of Trail
- Connectivity to Parks and Natural Areas
- Safety of Route for Pedestrian and Bicycle Use
  - Universal Accessibility
- Potential User Conflicts



# Political Factors

Advantages of a trail segment due to public, governmental and tribal support

- Level of Government/ Tribal Support
- Economic Impact
- Pedestrian/Bike
   Traffic Generator



### Cost Considerations

Advantages of a trail segment based on cost of purchasing easements, engineering and construction costs

- Cost of Easements
- Cost of Engineering
- Cost of Construction



# Alternative Transportation

Advantages of a trail segment as a non-motorized transportation alternative

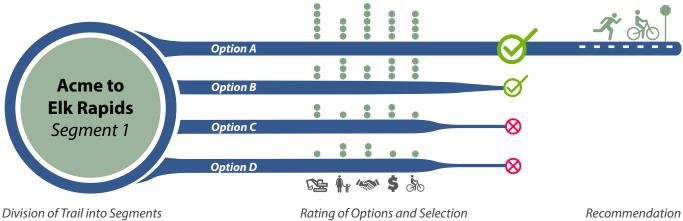
• Service as an alternative means of transportation

# **Route Options Considered**

The following table is an abbreviated version of the alternative routes considered. To view complete listing and assessment, please visit: http://www.traversecitytocharlevoixtrail.org/project/route-assessments.html

Acme to Elk	Rapids				
Segment 1 Tart to M-72	Bunker Hill to Lautner, USBR-35 (Bike Lane)	TART Gap through VGT to M-72 Underpass (Shared-Use Path)	Mount Hope to M-72 Underpass (Shared-Use Path)	US-31 West through Bayside Park to M-72 (Shared-Use Path)	US-31 East behind businesses to M-72 Underpass (Shared-Use Path)
Segment 2 M-72 to Yuba	US-31 West to Yuba (MDOT ROW, Shared-Use Path)	Bayside Park to Deepwater Pt to US-31 West (Shared Roadway)	Bates to Yuba South via USBR-35 (Shared Roadway, Shared-Use Path)	M-72 to Yuba via GTR, Yuba Creek Natural Area (Shared-Use Path)	
Segment 3 Yuba to Elk Rapids	US-31 West to Elk Rapids (MDOT ROW, Shared-Use Path)	US-31 East to Elk Rapids (MDOT ROW, Shared-Use Path)			
Elk Rapids to	o Eastport				
Segment 1 Elk Rapids to Williams Road	North Bayshore to Williams (Shared Roadway)	US-31 West (MDOT ROW, Shared-Use Path)	US-31 East (MDOT ROW, Shared-Use Path)		
Segment 2 Williams Road to M-88	US-31 West to M-88 (MDOT ROW, Shared-Use Path)	US-31 East to M-88 (MDOT ROW, Shared-Use Path)			
Eastport to (	Charlevoix				
Segment 1 M-88 to Norwood	US-31 West to Old Dixie Hwy (Shared Roadway)	US-31 West to Old Dixie Hwy (Bike Lane)	US-31 West (MDOT ROW, Shared-Use Path)	US-31 (MDOT ROW, Shared-Use Path) USBR-35 (Shared Roadway)	
Segment 2 Norwood to Bells Bay Road	USBR-35 via Barnard Road to US-31 (Shared Roadway)	US-31 West (MDOT ROW, Shared-Use Path)	Fisherman's Island State Park via 2-track and shared Park road (Shared-Use Path)	Fisherman's Island State Park, St. Marys Cement Easement (Shared-Use Path)	

# **Route Selection Process**

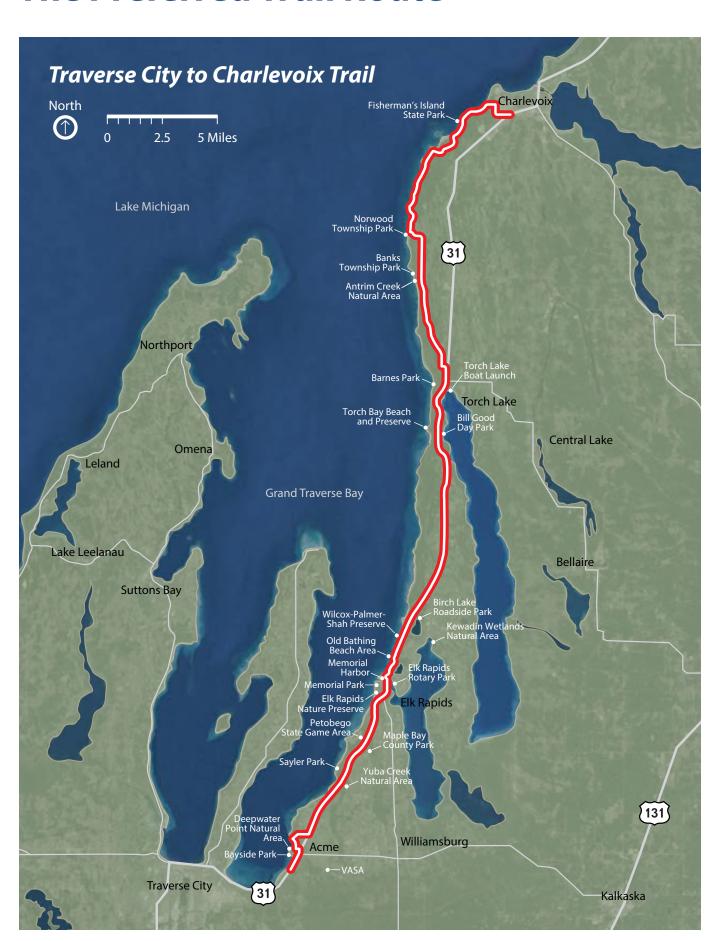


and Identification of Route Options

of Preferred Routes

of Trail Facilities

# The Preferred Trail Route



### **TVC-CHX Trail Route Overview**

As you travel along Grand Traverse Bay, US-31, and the proposed route of the Traverse City to Charlevoix Trail you encounter the beautiful rolling landscape and sweeping vistas of the Bay. Pink and white blossoming cherry and apple orchards in the spring give way to busy farming activities throughout the summer and harvest in fall. You can sample the harvest at the many farm stands along the way. You can enjoy one of the twenty parks or natural areas listed below, which provide a wealth of recreation opportunities to hike, camp, ski, hunt, fish, boat, paddle, swim, with access to Lake Michigan, Birch, Elk and Torch Lakes. The Trail takes you to the charming and bustling harbor towns of Traverse City, Elk Rapids, and Charlevoix, where there are many places to enjoy dining, shopping entertainment and lodging. The 46 mile Traverse City to Charlevoix Trail closes the gap between the TART and TOMTC trail systems and provides an unparalleled opportunity to bike and hike 325 miles of non-motorized transportation and recreation trails in northern Lower Michigan.

	Parking	Restrooms	Picnic Area	Playground	Hiking Trails	Camping	Swimming	Paddling Access	Boat Launch
Assets & Amenities	P			<b>₹</b>	τ <u>Ε</u>	Δ	Ś	2 ×	
Fisherman's Island State Park				0					0
Norwood Township Park				0	0	0			0
Banks Township Park				0	0	0			0
Antrim Creek Natural Area			0	0		0		0	0
Barnes Park and Campground									0
Torch Lake Boat Launch			0	0	0	0			
Torch Bay Beach and Preserve		0	0	0		0	0		
Bill Good Day Park					0	0			
Birch Lake Roadside Park				0	0	0	0	0	0
Wilcox-Palmer-Shah Preserve		0	0	0	0	0		0	0
Kewadin Wetlands Natural Area	0	0	0	0	0	0	0		0
Old Bathing Beach	0	0	0	0	0	0		0	0
Edward C Grace Memorial Harbor				0	0	0	0		
Elk Rapids Rotary Park		0		0	0	0	0		0
Veterans Memorial Park					0	0			0
Elk Rapids Park						0		0	0
Petobego State Game Area		0	0	0	0	0	0	0	0
Maple Bay County Park		0	0	0		0		0	0
Sayler Park					0	0			
Yuba Creek Natural Area		0	0	0		0	0	0	0
Deepwater Point Natural Area		0	0	0		0			0
North Bayside Park					0	0			0
VASA				0		0	0	0	0
South Bayside Park		0		0	0	0			

# The Preferred Trail Route

### Section 1 - Acme to Elk Rapids

#### **Preferred Route Description**

This project begins where the TART meets Bunker Hill Road in Acme Township. A shared-use path is envisioned along Bunker Hill Road, crossing US-31 at the traffic signal and running along the west side of US-31 through Acme shoreline parks and within MDOT ROW and/or easements. As the trail enters into Acme's residential area north and west of M-72, the trail will share public roadways as it heads north toward the Lochenheath development. North of Dock Road, the trail switches back to a shared-use path along the west side of US-31. The trail will cross to the east side of US-31, possibly near Kesner Road (MDOT will work with trail partners to determine final crossing location), and will utilize the US-31 right-ofway and/or easement(s) until it reaches the Village of Elk Rapids. Once it enters Elk Rapids, a crossing will be added south of the highway bridge at an exact location to be determined by the Village of Elk Rapids and MDOT. Bicycle lanes and shared roadways will be used to navigate through town and to cross over Elk River to North Bayshore Drive.

#### **Overall Constructibility**

Construction of the trail on the west side of US-31 in the ROW through Acme is much less complicated and provides better access to the shoreline and public parks like North and South Bayside park and Deep Water Natural Area. The large stretches of public lands also avoid the multiple curb cut crossings and potential easements and acquisitions that would be needed on the east side of US-31. The MDOT ROW is significantly wider (100-150 feet) heading north out of Acme. A crossing from the west side of US-31 to the east side will be needed south of Yuba Road due to the significant topography issues and limited ROW. There are two stream crossings at Yuba and Petobego Creeks.

#### **Recreational Experience**

The route on the west side of US-31 through Acme will enhance Acme's future plans to improve and expand the shoreline and provide greater access to Grand Traverse Bay. The west side also links into existing public spaces and provides direct connections to Acme's residential neighborhoods along the west side of US-31.

#### **Political Factors**

A crossing location for US-31 and a route through the Village of Elk Rapids will need to be finalized by the Village with input from MDOT and others. Utilizing the MDOT ROW will help limit the amount of private land needed for the trail and provides access to farmlands while minimizing disturbances to the agricultural landscape.

#### **Cost Considerations**

There will be two significant stream crossings for this project. In general, the route avoids the significant topography immediately east of the US-31 ROW. By utilizing public lands and US-31 ROW, costs can be further reduced.

#### **Transportation Alternative**

The trail will serve some of Acme Townships' most dense residential areas along the west side of US-31. It will link residents directly to existing parklands, schools, and churches. By improving critical connections at intersections and filling in sidewalk gaps the trail can also connect to the commercial area along the M72 corridor.

#### **Alternatives Considered**

Several alternatives were considered in this section, particularly within a few mile radius of the M-72 and US-31 intersection. One route looked at staying on the east side of US-31 and traveling along the old rail bed out to Meijer's then crossing under M-72 via pedestrian tunnel and through the Grand Traverse Resort property. Also, routes that ran behind buildings on the east side of US-31, then crossing under M-72 via pedestrian tunnel were reviewed. However, potential easement acquisition, the disadvantage of taking users away from the lake, and congestion on the east side of US-31 led to the preferred route location.

# Section 2 - Elk Rapids to Eastport

#### **Preferred Route Description**

North of Elk Rapids, the character of the surroundings shifts from the somewhat urban Acme and orchard / agricultural areas to a more rural forested character. This unique narrow section of land, ranging ½ mile to 3-½ miles in width is bordered on the west side by Lake Michigan and Elk and Torch Lakes to the east. This section offers many natural areas and parks to

enjoy along the way, including the Old Bathing Beach Area, Wilcox-Palmer Shah Preserve, Kewadin Wetlands Natural Area, the Birch Lake Roadside Park, Torch Bay Beach and Preserve, Bill Good Day Park, Barnes Park Campground and Torch Lake Boat Launch. From Elk Rapids to the south end of Birch Lake, a shared roadway is planned along North Bayshore Drive. The trail type then changes back to a shared-use path along the west side of US-31 until it reaches Old Dixie Highway, north of M-88 in Eastport.

#### **Overall Constructibility**

Constructibility of a shared-use path along the west side of US-31 is preferred for much of this section because of available right-of-way and relatively easy terrain.

#### **Recreational Experience**

The west side of US-31 connects four parks/preserves with public access to Grand Traverse Bay offering an outstanding recreational experience.

#### **Political Factors**

This area is made up of working agricultural lands, it will be improtant to closely connect with the farming community to understand their concerns and questions and provide a trail design that enhances the experience for both neighboring farmers and trail users.

#### **Cost Considerations**

The trail costs are relatively low for this section.

#### **Transportation Alternative**

The project will provide good access to businesses and farm stands.

#### **Alternatives Considered**

Within this section of the trail, alternatives considered were the west side and east side of the US-31 Corridor from Ames St. north to Williams Drive. The US-31 corridor has a 200 ft. ROW and is designated a "Limited Access Highway". MDOT would need Federal Highway Administration approval to build a shared-use path within the ROW. Other issues include extensive wetlands which would require significant boardwalk and therefore increase costs.

### **Section 3 - Eastport to Charlevoix**

#### **Preferred Route Description**

Continuing north from Eastport along the West side of US-31, the trail leaves US-31 and turns west onto Old Dixie Highway as shared roadway. Old Dixie is a low volume road, and connects to Antrim Creek Natural Area and Banks Township Park. A shared roadway route through Norwood will be determined by the Township to connect to FISP. A shared-use path largely along an old road grade and shared roadway through FISP to Bells Bay Road is under review by the MDNR. The final segment connects FISP on shared-use path along Bell's Bay Road to the recently completed Lake to Lake Trail.

#### **Overall Constructibility**

Boardwalk sections and two bridges may be needed in FISP to navigate dunes, wetlands and streams. Archaeological sites may impact trail location and construction.

#### **Recreational Experience**

The trail connection between Barnes Park and Campground, Antrim Creek Natural Area, and Fisherman's Island State Park provides a premier recreation opportunity for hiking, biking, camping and access to Grand Traverse Bay and will enhance the recreation opportunities at these existing facilities.

#### **Political Factors**

The route through the State Park will need review and approval by the MDNR. Shared Roadway through Norwood to be determined by Township.

#### **Cost Considerations**

Costs would be minimal along the shared roadway and would include signage and minor shoulder work. Costs through the State Park will be determined by the trail location and could be high because of necessary boardwalks and bridges.

#### **Transportation Alternative**

There will be good access to businesses in Charlevoix from the south along the trail.

#### **Alternatives Considered**

Alternatives considered for this section of trail included utilizing US-31 ROW and portions of St. Mary's Cement property. The recreational experience provided through the State Park is preferred.

# Trail Facility Types

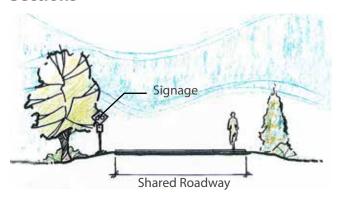
# **Shared Roadway**

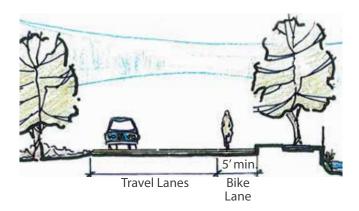
A Shared Roadway is "a roadway that is open to both bicycle and motor vehicle travel" (2012 AASHTO). Most roads are legally open to bicyclists and therefore are technically Shared Roadways. Wayfinding signage identifying the trail serves to help cyclists navigate shared roadways connecting to off-road trails.

# **Bicycle Lane**

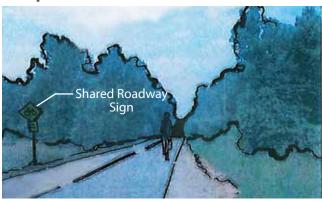
Bicycle Lanes are "a portion of a roadway which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists" (2012 AASHTO). Bicycle Lanes are one-way in the same direction as vehicular traffic, so are normally on both sides of a roadway.

#### **Sections**





# **Perspectives**





# **Built Examples**



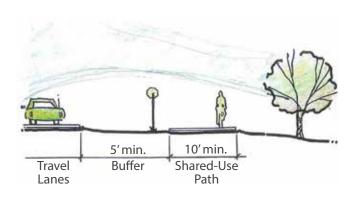


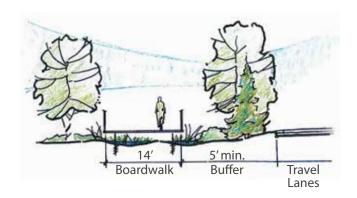
### **Shared-Use Path**

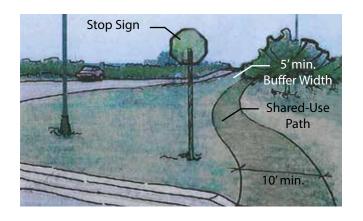
The term "shared-use path" means a multi-use trail or other path, physically separated from motorized vehicular traffic by an open space or barrier, either within a highway right-of-way or within an independent right-of-way, and usable for transportation purposes. Shared-use paths may be used by pedestrians, bicyclists, skaters, equestrians, and other non-motorized users. (Federal Highway Administration)

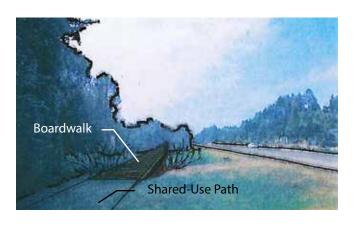
### **Boardwalk**

Boardwalks provide continuity for shareduse paths by spanning unavoidable wet areas or depressions and providing access across steep slopes or small stream crossings. They are normally 14-feet wide and commonly constructed with treated timber or a composite material.













# **Acme Township Segment**



# **Acme Township Segment**

#### **Overview**

The Acme Segment connects to the TART Trail at Bunker Hill Road and is a shared-use path on the NE side of Bunker Hill Road to US-31. The trail crosses US-31 at the stoplight and runs along the west side of US-31. Right-of-way widths are narrow, so use of public park spaces and easements are desired. As it enters into Acme's residential area north and west of M-72, shared roadway continues toward the Lochenheath development where the trail switches back to a shareduse path along the west side of US-31. The trail will cross to the east side of US-31, possibly near Kesner Road, and will utilize the US-31 right-of-way and/or easement(s). The right-of-way is generally 150' wide with narrower sections across from Valley Estates and near Yuba and Petobego Creeks. The trail includes stream crossings at Yuba and Petobego Creeks, which are envisioned to be structures built into the existing foreslopes.

# **Red Flags**

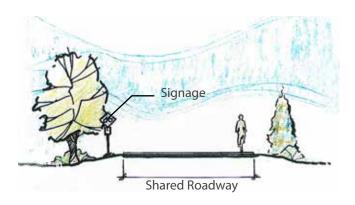
- Best location of US-31 crossing North of Acme to be determined
- Access to Maple Bay County Park to be determined
- Limited right-of-way (ROW) in the following areas:
  - 33-38' ROW along Bunker Hill Road and US-31
- 33' ROW for 350' located just north of Bethesda Court
- 50' ROW for 100' located just north of Yuba Road
- 33' ROW from Petobego Creek to Townline Road



# **Recommended Facilities**

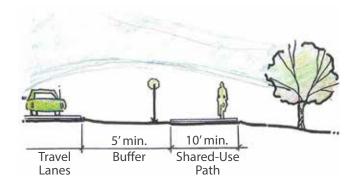
### **Shared Roadway**

1.6 miles



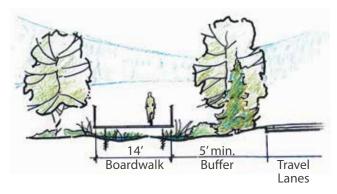
#### Shared-Use Path

6.9 miles



#### **Boardwalk**

0.1 miles



# Elk Rapids Township Segment



# Elk Rapids Township Segment

#### Overview

This segment starts at the Antrim County line and continues north, utilizing the east US-31 right-of-way and/or easements. The US-31 right-of-way width varies from 66' to 200', making easement acquisition efforts important in narrow areas. Once the trail is in the Village of Elk Rapids, it will cross US-31 and use Village streets via bicycle lanes to provide access to the downtown area and across Elk River. The crossing and route through the Village will need to be determined by MDOT and the Village. North of Elk Rapids, North Bayshore Drive will be utilized as a shared roadway. This road is a well used route by cyclists, has low traffic volume and provides access to parks and preserves. At Williams Drive, the trail goes back to a shared-use path along the west side of the US-31 right-of-way (90' wide from centerline).

### **Red Flags**

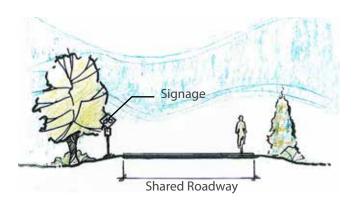
- The Michigan Department of Transportation, with input from the Village of Elk Rapids, need to determine the best location to cross US-31
- The shared roadway route alternatives through the Village of Elk Rapids require further review by the Village
- Limited right-of-way (ROW) in the following areas:
- 33' ROW for 660' located just north of Townline Road
- 33' ROW for 2,000' located on bend in US-31 between Cabana Shores Drive and Sunset Shores Drive



# **Recommended Facilities**

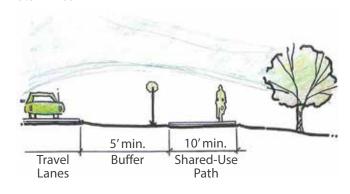
### **Shared Roadway**

2.4 miles



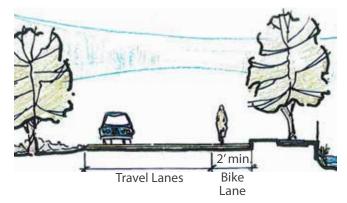
#### Shared-Use Path

3.5 miles



# **Bicycle Lanes**

1.0 miles



# Milton Township Segment



# Milton Township Segment

#### Overview

In the Milton Township segment, the shared-use path continues along the west side of US-31, where both panoramic views and farm stands are abundant. The right-of-way is 75' to 90' wide from centerline, except for a short section that is 33' wide along King Orchards and another in front of a cemetery where easement acquisition may be necessary.

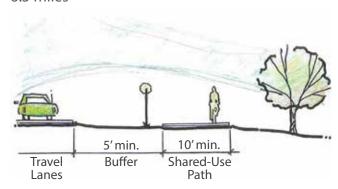
### **Red Flags**

- Agriculture along this and other segments represents historic and present-day agriculture practices that are major economic drivers in the region. The path will be designed in a way that complies with and respects the importance of the agricultural community, while limiting user conflicts.
- Limited right-of-way (ROW) in the following areas:
- 33' ROW for 1,100' located just north of Creswell Rd
- 33' ROW for 50' located 0.5 mile north of Creswell Rd

# **Recommended Facilities**

#### **Shared-Use Path**

6.5 miles





# **Torch Lake Township Segment**



# **Torch Lake Township Segment**

#### Overview

The Torch Lake segment is envisioned as a shared-use path along the west side of US-31 until north of M-88. The trail leaves the US-31 corridor and turns west onto Old Dixie Highway as shared roadway. Between M-88 and Old Dixie Highway, there is potential to route the shared-use path through Barnes Bark property (if approved by Antrim County). The US-31 right-of-way is mostly 75' wide from centerline, except in the Village of Torch Lake where it is 50' and a couple short 33' sections north of the Village.

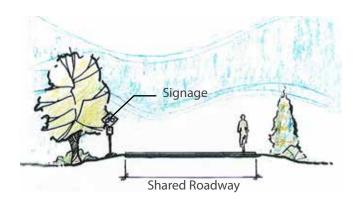
### **Red Flags**

- Limited right-of-way (ROW) in the following areas:
- 50' ROW through the Village of Torch Lake
- 33' ROW two 300' sections located just north of the Village of Torch Lake
- 33' ROW for 200' located just north of Manitou Trail

# **Recommended Facilities**

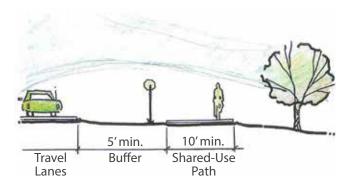
### **Shared Roadway**

0.2 miles



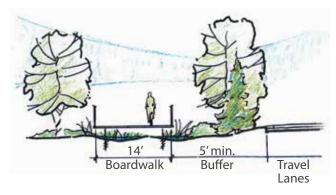
### Shared-Use Path

6.1 miles



### Boardwalk

0.2 miles





# **Banks Township Segment**



# **Banks Township Segment**

#### **Overview**

The Banks Township segment is entirely shared roadway, utilizing Old Dixie Highway. Old Dixie Highway is well-suited as a shared roadway because of its low-volume, rural character. Signage and other minor improvements will be considered for this section. As future road projects are planned along this stretch, multi-modal considerations should be made, and could include widened paved shoulders or bicycle lanes.

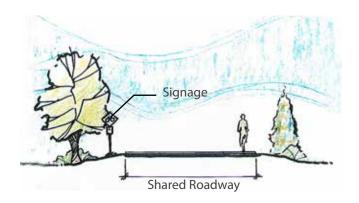
### **Red Flags**

• The local road agencies will be encouraged to consider multiples modes of transportation for future improvements and maintenance.

# **Recommended Facilities**

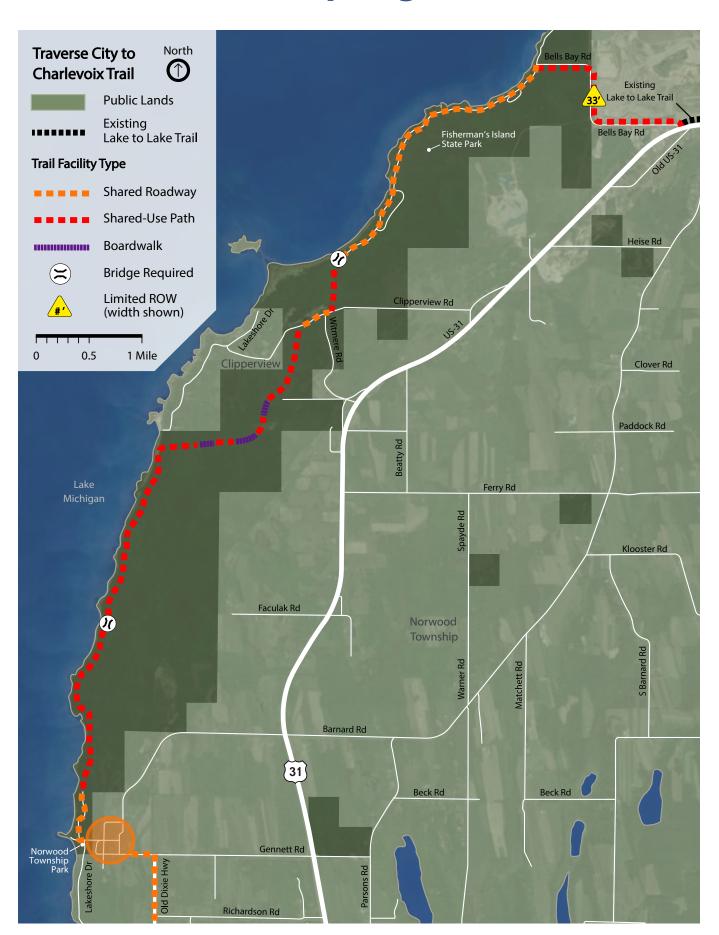
### **Shared Roadway**

6.0 miles





# **Norwood Township Segment**



# **Norwood Township Segment**

#### **Overview**

This segment passes through Norwood Township, where route and Township Park connections will need to be determined with the Township. A shared-use path, largely along an old road grade, is envisioned through MDNR property to Clipperview Road. At Clipperview Road, it will be a shared roadway for about 0.3 miles northeast before veering back onto MDNR property as a shared-use path to the Fisherman's Island State Park Campground Road. The route through MDNR property is currently being studied by the MDNR in cooperation with the TVC-CHX Planning Team and will ultimately be decided by the MDNR.

Fisherman's Island State Park is a major destination for regional trails with the recent completion of the Charlevoix Lake to Lake Trail, the Little Traverse Wheelway from Charlevoix to Harbor Springs, and the proposed TVC-CHX Trail. The preferred route for the TVC-CHX Trail through FISP was the focus of much discussion during the FISP General Management Planning process. The MDNR used a variety of methods to collect public input, including a survey which over 400 people responded. "The majority (84%) of survey respondents gave their support for a proposed regional trail initiative linking Charlevoix to Traverse City and extending the Little Traverse Wheelway south, with a portion of the trail running through FISP. Some stated their support for the trail was dependent on its location and that it should not run through the campground or the "wild" areas of the park."

The Draft General Management Plan directs the MDNR to work with regional partners to identify potential connections to trails beyond park boundaries and to study route options and the impact of a non-motorized trail running through the park. The Planning Team will continue to work with the MDNR to identify and assess alternatives routes to and through FISP that respect the purpose, significance, and resource characteristics of the Park as well as the Vision and Goals for the Traverse City to Charlevoix Trail.

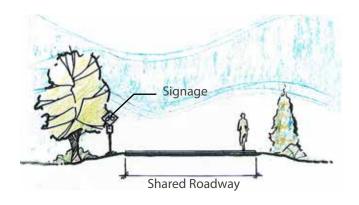
# **Red Flags**

- Shared roadway route through Norwood to be determined by Norwood Township
- In cooperation with St. Marys Cement, an alternate route through their property could be identified, connecting with Bells Bay Road and the Lake to Lake Trail
- Limited right-of-way (ROW) in the following area:
  - 33' ROW on Bells Bay Road

# **Recommended Facilities**

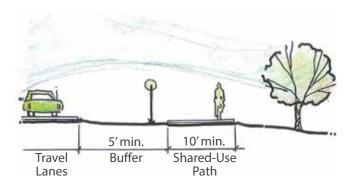
### **Shared Roadway**

2.7 miles



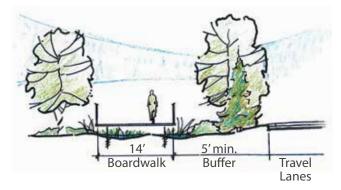
#### Shared-Use Path

4.5 miles



#### **Boardwalk**

0.7 miles



# **Charlevoix Township Segment**



### **Charlevoix Township Segment**

#### Overview

This segment connects Fisherman's Island State Park to the recently completed Lake to Lake Trail via a shareduse path along Bells Bay Road. A separate path is planned here to reduce interactions with truck traffic associated with St. Mary's Cement, and will be coordinated with the Road Commission, MDNR and St. Mary's Cement.

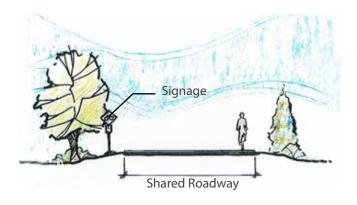
#### **Red Flags**

- This route would have to work with MDNR, County Road Commission and St. Marys Cement to develop an offroad trail to minimize conflict with commercial truck traffic.
- MDNR has authority to determine exact trail location in FISP based on route options and resource impacts.
- Limited right-of-way (ROW) in the following area:
  - 33' ROW on Bells Bay Road

#### **Recommended Facilities**

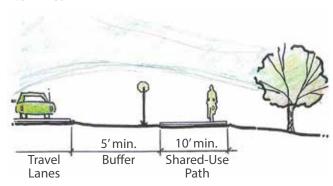
#### **Shared Roadway**

1.8 miles



#### Shared-Use Path

1.6 miles



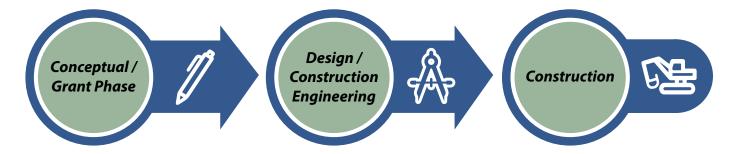


### The Preferred Trail Route

### **Conceptual Project Costs**

Conceptual estimated project costs have been developed to aid in planning funding strategies and phasing. The Conceptual Cost Estimate Basis table provides a rough breakdown of costs associated with the normal project phases. The Conceptual/Grant phase includes the planning and engineering work required to apply for project funding. It is important that an accurate scope and budget are established during this phase. The Design Engineering phase entails the detailed design required to produce construction documents and includes mapping, construction plans, specifications and contract documents.

The Construction phase consists of the contractor's costs to build the project. Construction Engineering includes inspection, testing and contract administration during construction. Estimate Contingencies are included to cover uncertainties or unforeseeable elements in the project costs. Please note that actual project costs can vary significantly depending on phasing, timing, market conditions and other factors unknown at this time. More detailed estimates will be required as individual projects are identified and scopes are defined in more detail.



### **Conceptual Cost Estimate Basis**

Project Phase	Cost of Facility per Mile of Trail				
	Shared Roadway	Bicycle Lane	Shared-Use Path	Boardwalk	Bridge
Conceptual / Grant Phase	\$700	\$1,200	\$8,000	\$10,000	\$10,000
Design Engineering (10% of Construction)	\$200	\$700	\$28,000	\$70,000	\$25,000
Construction Engineering (10% of Construction)	\$200	\$700	\$28,000	\$70,000	\$25,000
Construction (includes signage and amenities)	\$2,000	\$7,000	\$280,000	\$700,00	\$250,000
Contingencies (20% of Construction)	\$400	\$1,400	\$56,000	\$140,000	\$50,000
Total Cost Per Mile	\$3,500	\$11,000	\$400,000	\$990,000	\$360,000

## Estimated Mileage per Facility Type

Facility Type	Estimated Mileage per Section			
	Traverse City to Elk Rapids	Elk Rapids to Eastport	Eastport to Charlevoix	Total
Shared Roadway	1.6 miles	2.4 miles	10.7 miles	14.7 miles
Bicycle Lane	0 miles	1.0 miles	0	1.0 miles
Shared-Use Path	9.3 miles	12.7 miles	7.1 miles	29.1 miles
Boardwalk	0.1 miles	0.2 miles	0.7 miles	1.0 miles
Bridges	Qty: 2	Qty: 0	Qty: 2	Qty: 4
Total	11.0 miles	16.3 miles	18.5 miles	45.8 miles

## **Estimated Project Costs**

Facility	Estimated Cost per Section			
Туре	Traverse City to Elk Rapids	Elk Rapids to Eastport	Eastport to Charlevoix	Total
Shared Roadway	\$5,600	\$8,400	\$37,450	\$51,450
Bicycle Lane	\$0	\$11,000	\$0	\$11,000
Shared-Use Path	\$3,720,000	\$5,080,000	\$2,840,000	\$11,640,000
Boardwalk	\$99,000	\$198,000	\$693,000	\$990,000
Bridges	\$720,000	\$0	\$720,000	\$1,440,000
Total	\$4,544,600	\$5,297,400	\$4,290,450	<b>\$14,132,450</b> \$308,569 per mile

## Management and Maintenance

### **Collaborative Partnerships**

The 46 mile Traverse City to Charlevoix Trail will serve people across a large geographical area, and traverse multiple jurisdictions including three counties (Charlevoix, Antrim, and Grand Traverse), seven townships (Acme, Elk Rapids, Milton, Torch Lake, Banks, Norwood and Charlevoix), the Grand Traverse Band of Ottawa and Chippewa, and the Village of Elk Rapids. As a result, multi-jurisdictional cooperation will be necessary to construct, manage and maintain the trail.

There are numerous benefits associated with the creation of a collaborative partnership to address trail development, long-term operations, management and maintenance. Partner roles and responsibilities may include those listed below.

## Possible Partner Roles & Responsibilities:

- · Property acquisition and ownership
- Development of trail and associated amenities and facilities – trailheads, signage and restrooms
- Management authority set trail policies, regulations, standards, contracts
- Maintenance funding and coordination: routine, periodic, long term trail maintenance
- Fundraising fiduciary, securing private and public funding
- Policing and law enforcement
- Volunteer recruitment and management
- Promotion, programming, events



Trailhead signage at Millersburg Historic Park, on the North Eastern State Trail, displays contributing partners; Village of Millersburg, MDNR, and Presque Isle County

Intergovernmental Options in Providing for Parks and Recreation developed by LIAA identifies numerous administrative and legal tools for which local governments can work together across jurisdictional boundaries to manage and maintain trails. A simple form of cooperation is for two or more local governments to develop and adopt a joint recreation plan which emphasizes trail development for an entire community. A more formalized collaboration is where two or more local governments can establish a recreation authority, seek a millage, and oversee the development and operation of the trail and trail facilities. The unique provisions of various state statutes allow local governments to establish a cooperative arrangement that best fits the specific needs and desires of their community.



Sleeping Bear Heritage Trail Ribbon Cutting Partners shown: MDOT, National Park Service, Networks Northwest, TART Trails, Friends of Sleeping Bear

### Michigan Enabling Legislation for Joint Provision of Recreation

Act	Title	Government Units	Governing Body
1905 - PA157	Township Parks and Places of Recreation	Townships	Board of Commissioners
1917 - PA156	Recreation and Playgrounds	Cities, Villages, Townships, Counties and School Districts	Recreation Board
1929 - PA312	Metropolitan District Act	Cities, Villages, Townships, Counties and Parts Thereof	Charter Commission
1965 - PA261	County and Regional Parks	Counties	Parks and Recreation Commission
1989 - PA292	Metropolitan Councils Act	Cities, Counties, Villages and Townships	Metropolitan Area Council
1994 - PA451 pt. 721	Michigan Trailways	Cities, Counties, Villages and Townships	Michigan Trailway Management Council
1967 - PA7	Urban Cooperation Act	Cities, Counties, Villages and Townships	Recreation Board
2000 - PA321	Recreation Authorities Act	Cities, Counties, Villages, Townships and Districts	Board of Directors

The most common options for management and maintenance of multi-jurisdictional trails include the Urban Cooperation Act, the Michigan Trailways Act, and the Recreational Authorities Act which are described below. In some cases, when the trail corridor is owned in its entirety by the State (MDOT or the MDNR), then agreements or contracts for maintenance are entered into with individual municipalities. Rather than administering a number of individual contracts. the State prefers entering into one agreement with a management entity which represents the multiple jurisdictions. Many non-motorized trails are supported by friends groups who help with routine or light maintenance, fundraising.

#### 1. <u>Urban Cooperation Act</u> [Public Act 7 of 1967: MCL 124.501 - 512]

This act permits, "public agencies" (including school districts) to jointly provide for parks and recreation services. Under the Act, joint exercise of power is established through an inter-local agreement, which may provide for the the purpose, function, organization, funding, allocation of resources, and other specifics for

the new arrangement. Local governments can also share tax revenue to provide for park and recreation facilities. The Urban Cooperation Act is mentioned in the Michigan Trailway Act (PA 451) for creating Trailway Councils or Authorities.

#### 2. The Michigan Trailways Act Part 721, Section 324

This act permits two or more governmental agencies to establish a trail management council for the development and management of a trail in accordance with the Urban Cooperation Act of 1967. Upon formation, a council shall adopt operating procedures and shall elect officers as the council considers appropriate. A council may do 1 or more of the following as authorized in an inter-local agreement entered into in accordance with the Urban Cooperation Act of 1967:

- 1) Operate and maintain that portion of 1 or more trails that are owned or under the control of the governmental agencies establishing the council.
- 2) Operate and maintain that portion of 1 or more trails that are located on state owned land.

## Management and Maintenance

#### **Continued:**

#### The Michigan Trailways Act Pt. 721, Sect. 324

- 3) Coordinate the enforcement of trail rules and regulations and other applicable laws and ordinances, including permitted uses of the trail.
- 4) Receive any grant funding related to that portion of a trail within its jurisdiction.
- 5) Acquire or hold real property for the purpose of operating a trail.
- 6) Perform other functions consistent with this part.

#### Examples include:

The Betsie Valley Trail Council, The Polly Anne Trails Council, The Mid-West Michigan Trail Authority – Fred Meijer River Valley Rail Trails

## 3. Recreational Authorities Act [Public Act 321 of 2000: MCL 123.1131 et seq.]

The Act allows two or more municipalities and/ or districts to establish a Recreation Authority for the acquisition, construction, operation, maintenance or improvement of: parks, foot and bicycle paths, campgrounds, conservation and wildlife areas, open or scenic space, and other outdoor recreation facilities.

PA 321 also allows the recreational authority to acquire and hold real and personal property inside or outside the territory of the authority through purchase, lease, land contract, installment contracts, bequest and other means. To establish a recreational authority, the articles of incorporation must be adopted by the legislative body of each participating municipality. Recreation Authorities have bonding and taxing authority, they may apply and accept grants, assess fees, receive revenue and enter into contracts.

#### Examples Include:

Traverse City/Garfield Township Recreation Authority, Charlevoix Recreation Authority, Iron Ore Heritage Recreation Authority

#### **Maintenance Schedule & Costs**

The average cost to maintain and manage a mile of developed rail trail is estimated by the MDNR to be between \$1,000 and \$1,250 per year. Although costs can range as widely as \$500 to \$3,000 per mile per year depending on level of care, trail site conditions, trail surface/s, and trail amenities.

Maintenance of the TC to Char Trail will require a collaborative effort between the State, local municipalities, friends groups, and the private sector. MDOT and MDNR, depending on property ownership or funding, will require that maintenance agreements be in place as each phase of the project is constructed.

Friends group volunteers, such as TART Trails, are critical to keeping routine maintenance costs down. They can help provide monthly monitoring of trail conditions, brush and limb removal, mowing and edging, clearing culverts, and coordinating annual cleanups.

There are three levels of maintenance; Routine Maintenance, Periodic Maintenance and Long Term Maintenance. Because the frequency of maintenance performed and methods of handling maintenance situations vary, please use the information on page 41 as a guide.



#### Maintenance Schedule

#### **Routine Maintenance**

- Litter control and trash removal
- Vegetation Management mow and edge shoulders
- Cleaning blow or sweep debris off trail
- Trim and prune brush and limbs
- Maintain "clear vision areas" at all driveways and road crossings
- Down-tree and root removal
- Clear drainages and culverts
- Seasonal inspections

## Periodic Maintenance (annual or as needed)

- Grade and compact aggregate surface
- Add aggregate if needed
- Seal cracks on asphalt surface
- Re-stripe on asphalt surface
- Remove encroaching vegetation
- Repair signs, replace posts
- Bridge inspections
- Repair boardwalk decking, replace hazardous boards

## Long Term Maintenance (5-30 years)

- Asphalt seal coating (5 years)
- Asphalt repairs, overlayments (10 years)
- Asphalt tread replacement (20 years)
- Aggregate pull material from outside of trail to form berm, crown or outslope (5 years)
- Refill and regrade aggregate (10 years)
- Reseal boardwalk decking (5-7 years)
- Bridge structural repair/decking replacement (25-30 years)



Routine Maintenance - mow and edge shoulders



Routine Maintenance - down-tree removal



Periodic Maintenance - repair signs, replace posts



Long Term Maintenance - asphalt repairs

## Management and Maintenance

### Michigan Trail Management and Maintenance Models

	Fred Meijer River Valley Rail Trail	Iron Ore Heritage Trail	Betsie Valley Trail
Agreement, Legal Authority used to establish cooperative trail management	Urban Cooperation Act – Established Trail Authority made up of local units of government. Mid-West Michigan Trail Authority	Recreational Authorities Act allows 2 or more units of government to establish a Recreation Authority – Iron Ore Heritage Recreation Authority	MI Trailways Act 1991, allows establishment of Trails Council to represent multiple units of gov. (Functions like a Co. road commission) Betsie Valley Trail Management Council
Partners primary partnership for managing and maintaining trail	MDNR, Trail Authority, Ionia County, Shiawassee County, City of St. Johns.	City of Marquette, City of Negaunee, City of Ishpeming, Chocolay Township, Marquette Township, Negaunee Township, Tilden Township, Republic Township	Betsie Valley Trail Management Council (TMC) – appointed by County Board of Commissioners. County/ Council has contract with MDNR to maintain Trail.
Property Ownership title, overall liability	State MDOT	99% of trail is now public, through City, State or Rec. Authority ownership. A small portion is private with lease agreements for 25-50 years	The Trail is owned by the MDNR and is operated and maintained by Benzie County TMC.
Funding financing trail management and maintenance	Community Foundation Maintenance Endowment of \$3 million administered by Authority, generates =\$125,000 annually for maintenance. Some villages maintain within their limits.	.20 millage for 6 years - \$1.6 million. Rec Authority applies for MDOT, MNRTF grants for trail development. Donations from Cliffs Foundation, Cliffs Eagle MineCF - interpretive displays, trailhead	MDNR Friends of Betsie Valley Trail, Foundation Grants, establishing an Endowment Fund
Fundraising private grants, donations & events	Friends of the CIS, Friends of The River Valley Rail Trails	IOHT Rec Authority - Donations for interpretive signage, events	FBVT – advocate and support the trail
Administration of Contracts & Agreements	The Authority, Municipalities Large Contracts MDOT, MDNR with grant funding	Iron Ore Heritage Trail Authority, Municipalities, MDOT	Benzie County TMC, MDNR
Overall Management Authority policies, standards & regulations	Overall MDNR, Act 295 – State Rail Banking Act	Iron Ore Heritage Trail Rec Authority	MDNR – State Land Use Rules and Land Use Order of the Director, Betsie Valley Trail Management Council
Maintains Trails and Facilities	Friends – routine City/Village DPW The Authority – routine and emergency maintenance Periodic - Authority Long Term - MDNR	Combination of City DPW, volunteers, and adopt-a-trail groups. Authority contracts for mowing outside of city limits. Long Term, may go for millage extension to establish \$1mil maintenance endowment	Benzie County, TMC volunteers, Friends – Adopt a Trail program. Long term – MDNR, Friends – fundraising County – pass through or front the \$, get reimbursed by MDNR or Friends.
Promotion, Programming and Events	Friends, City Chambers of Commerce	Iron Ore Heritage Trail Rec Authority, City/County Chambers	FBVT – mapping efforts, Benzie Visitors Bureau

Huron Sunrise Trail	Little Traverse Wheelway	North Central State Trail	TART
Contracts between MDOT and City of Rogers City, as well as MDOT and Presque Isle County	Contracts between MDOT and Emmet County, Charlevoix County, and City of Petoskey (requirement of transportation enhancement grant)	MOU between MDNR and Friends of NCST for light maintenance	Contracts between MDOT and Grand Traverse County Road Commission and City of Traverse City (requirement of MDOT grant)
MDOT, City of Rogers City, Presque Isle County	City of Petoskey, Counties of Charlevoix and Emmet, Townships of Charlevoix, Hayes, Little Traverse, Bear Creek, Resort, Local Service Clubs	MDNR	Grand Traverse County Road Commission, Grand Traverse County Facilities Department, City of Traverse City, TART Trails, East Bay and Acme Township help support maintenance
MDOT ROW	MDNR, MDOT, City of Petoskey	MDNR	Easements held by Grand Traverse County and City of Traverse City. Some portions of the TART are owned fee simple by City of Traverse City
MDOT developed but City, county assume maintenance costs, MDOT reimburses for sweeping	Charlevoix County, Emmet County, City of Petoskey general funds	MDNR	Grand Traverse County, Grand Traverse County Road Commission, City of Traverse City, Acme Township, East Bay Township TART Trails - grant match
ТОМТС	No Friends Group	TOMTC, Friends Group for trail amenities	TART Trails
MDOT, City of Rogers City, Presque Isle County	Counties, Municipalities, Large Contracts MDOT, MDNR with grant writing	MDNR	Grand Traverse County, Grand Traverse County Road Commission, City of Traverse City
MDOT, City of Rogers City	MDOT, MDNR, City of Petoskey	MDNR	Grand Traverse County Road Commission, City of Traverse City, MDOT
City and County provide routine maintenance, MDOT provides long term maintenance	City of Petoskey, Charlevoix and Emmet County - Parks and Rec Departments. Service groups help with a small section in Emmet County	MDNR, MOU with Friends Group, Local agreements to maintain trails and trailheads in towns	Grand Traverse County Road Commission, Grand Traverse County Facilities, City of Traverse City. TART Trails provides volunteer support for trail clean up and routine maintenance efforts
Rogers City Chamber	TOMTC, Visitor's Bureaus, Chambers, Emmet County Public Relation Department, local businesses distribute maps	TOMTC, Chambers, Visitor's Bureau, Businesses	Primarily supported through TART Trails, Visitors' bureau, surrounding businesses and organizations

## *Implementation*

#### **Action Plan**

This document was created as a tool for communities to use to build trail support and take the next steps to develop and manage the Traverse City to Charlevoix Trail. The Concept Plan and project website provide tools that can be used to help make the case for the trail and support efforts to adopt and implement the trail. These include; detailed maps showing the trail route, trail facilities, and trail connections; powerpoint presentation, case statment, sample resolution of support and helpful resource links.

The project's non-profit partners; TART Trails, Grand Traverse Regional Land Conservancy, and Top of Michigan Trails Council are here to provide project and community support. They can provide local trail efforts with:

- Technical expertise on trail issues & trail design
- Negotiation of easements or acquisitions
- Presentations & public engagement assistance
- Grant writing and fundraising assistance
- Promotion and advocacy for the trail

The planning team has knowledge and years of experience in trail planning and development that generated the following recommended actions. TART Trails and TOMTC are willing to work with each community each step of the way to make the TVC-CHX Trail vision a reality.



Sleeping Bear Heritage Trail Users

### **Action Steps**



## Identify or Establish A Local Steering Committee/Trail Team

- Identify regional trail champions
- If a new committee/team, recruit team members
- TART or TOMTC convene trail team meeting
- Agree upon a community engagement strategy that works for your community



#### **Develop Local Trail Expertise**

- Familiarize yourself with the Concept Plan and Development Guide
- Investigate, ground truth the preferred route
- Identify environmental constraints and areas of concern
- Identify segments that fall within the MDOT road right-of-way, segments outside of the ROW where easements may need to be sought
- Understand and address the trail issues, identify trail opponents



## Engage and Inform the Community, Secure Support

- Ensure that the trail is a priority in the community's park and recreation plan, master plan, amend if necessary
- Schedule trail presentations to inform, update, solicit feedback
- Seek resolutions of support from:
  - Park and Recreation Commission
  - Planning Commission
  - Township/Village Commission
  - County Commission



#### **Generate Some Buzz - Promotion**

- Launch a "Name the Trail" contest in cooperation with TART and TOMTC once all counties pass resolutions of support for Trail
- Form a name selection committee
- Generate media and promotion
- Select Trail name



## **Determine Maintenance and Management Strategy**

- Evaluate options for collaboration for trail maintenance and management
- Assess available resources for park and recreation facilities and services, budgets, funding sources
- Consider staff and equipment requirements
- Evaluate previous collaborative experiences
- Convene facilitated meeting/s of local officials from each participating municipality to discuss multi-jurisdictional options for trail management and maintenance. May require several meetings.
- Determine best option or arrangements for trail management and maintenance. Agreement on how the trail will be managed and maintained is required for State funding.



#### Launch Trail Council, Authority or Enter into Local Agreements

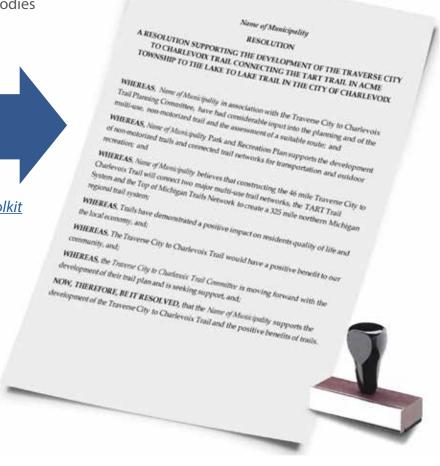
- Draft Agreement (e.g., Articles of Incorporation)
- Formal Agreement with TART or TOMTC
- Legal Review if necessary
- Adopted/approved by governing bodies

### **Phased Trail Implementation**

three primary elements of implementation conceptual are planning and grant application, design/construction engineering, and construction. The cost to engineer and construct a trail will vary based on the surface materials and other unique project characteristics such as road and drive crossings, bridges and culverts, and attention to other sensitive items such as cultural, historical and natural features. Trail construction is often phased and accomplished in multiple segments. Surveying and preliminary engineering of the proposed trail corridor are required to predict more detailed cost estimates. Once preliminary engineering is complete, grants can be applied for based on cost estimates from the engineering studv.

# Sample Resolution of Support

Find full version of the Resolution of Support at: <u>TVC-CHX Toolkit</u>



## *Implementation*

### **Funding Strategy**

To construct the 46 miles of trail from Acme to Charlevoix will require a comprehensive strategy utilizing state and federal grants, contributions from the local units of government, and other private funds. Non-motorized multi-use trail development is typically funded through competitive grant programs.

Two of the most popular programs are the Michigan Natural Resources Trust Fund (MNRTF) Program administered by the MDNR and the Transportation Alternatives Program administered by the MDOT. The MNRTF provides funding for natural resource protection and outdoor recreation and can be used for land acquisition and/or recreation facilities and development projects. The maximum grant amount for development projects from the MNRTF is \$300,000 and requires a 25 percent minimum match.

http://www.michigan.gov/dnr/0,4570,7-153-58225 58301---,00.html

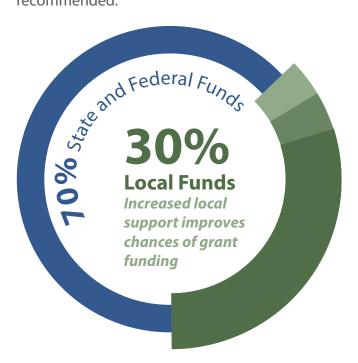
The Transportation Alternatives Program (TAP) is a competitive grant program administered by MDOT that funds projects such as bicycle facilities and shared-use paths that improve pedestrian safety that enhance Michigan's intermodal transportation system and provide safe alternative transportation options. TAP funding requires matching funds of at least 20 percent of the eligible project cost. In both cases, additional consideration is given to projects whose match exceeds the minimum required. http://www.michigan.gov/mdot/0,1607,7-151-9621\_17216\_18231---,00.html

Another source of funding for the TVC-CHX Trail is the Michigan Department of Environmental Quality, Coastal Zone Management Program (CZM). The CZM Program provides grant funds to coastal communities and partners to assist in the development of vibrant and resilient coastal communities. Examples of eligible projects include; comprehensive plans for non-motorized trails, assessments of existing trails to identify gaps in access, signage, user amenities; development of engineering/design plans; and low-cost construction of universally accessible pathways. Grant maximum is \$100,000 with a 1-to-1 match requirement.

http://www.michigan.gov/documents/deg/deg-ogl-czm-fy17rfp\_502408\_7.pdf

### **Typical Funding Scenario**

Due to the competitive nature of these grant programs a comprehensive funding strategy that utilizes local and private funding sources in conjunction with federal and state grants is recommended.



### Resources

### **Appendix**

**Bicycle and Pedestrian Facilities** 

MDOT - Bicycle and Pedestrian Terminology

MDOT - Best Design Practices for Walking and Bicycling in Michigan

MDOT, FHA, AASHTO -Manual on Uniform Traffic Control Devices

<u>Federal Highway Administration - Pedestrian and Bicycle Facilities</u>

National Association of City Transportation
Officials - Urban Bikeway Design Guide

<u>Americans with Disabilities Act (ADA) - Standards for Outdoor Recreation Facilities</u>

Multi-Jurisdictional Options for Management and Maintenance

Intergovernmental Co-op for Recreation

Example Articles of Incorporation of Recreational Authority

Example of Interlocal Agreement for Managing and Maintaining Multi Jurisdictional Trailway

<u>Presentation of Intergovernmental Options for</u>
<u>Managing and Maintaining Outdoor Recreational</u>
Facilities and Trails

Michigan Recreational Authorities Act

<u>Urban Cooperation Act 1967 Act 7</u>

MI Trailways Act 451-1994-III-4-1-Trailways-721

**Economic and Trail User Information** 

MSU, Top of Michigan Trails Survey

MSU, Top of Michigan Trails Powerpoint

**Vasa Economic Impact Study** 

MDOT Economic Impact Study

Outdoor Industry Association Outdoor Recreation Economy Report

**Background Information** 

MDNR - State Trail Implementation Plan

Charlevoix to Traverse City Trail Connection

Regional Non-Motorized Comprehensive Strategy of Northwest Michigan

Pure Michigan Trails Act No. 210, 2014

#### **Up North Trails**

For more information on the over 5,000 miles of hike, bike, ski, equestrian, ORV and snowmobile trails in Northern Michigan, visit: <a href="http://www.upnorthtrails.org/">http://www.upnorthtrails.org/</a>





For more information on the Traverse City to Charlevoix Trail, please visit:

www.traversecitytocharlevoixtrail.org













