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 - 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
Table of Contents

Traverse City to Charlevoix Trail

02  Introduction
03  Closing the Gap
04  The Economic Benefits of Trails

Project Description

06  Project History, Planning Process
07  Traverse City to Charlevoix Trail Vision

Regional Context

08  Northern Lower Michigan Trail Network
10  Traverse City to Charlevoix Trail Connections
12  Community Park, Recreation, Open Space & Greenway Plans

Assessment of Alternative Trail Routes

14  Assessment of Alternatives, Choosing by Advantages
15  Route Options Considered

The Preferred Trail Route

17  TVC-CHX Trail Route Overview
18  Preferred Trail Route Description
20  Trail Facility Types
22  Acme Township Segment
24  Elk Rapids Township Segment
26  Milton Township Segment
28  Torch Lake Township Segment
30  Banks Township Segment
32  Norwood Township Segment
34  Charlevoix Township Segment
36  Conceptual Project Costs

Management and Maintenance

38  Collaborative Partnerships
39  Michigan Enabling Legislature for Joint Provision of Recreation
40  Maintenance Schedule and Costs
42  Michigan Trail Management and Maintenance Models

Implementation

44  Action Plan and Action Steps
45  Phased Trail Implementation
46  Funding Strategy

Resources

47  Sample Resolution of Support
48  Acronym Glossary
49  Appendix
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 right-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 proposed 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 guests, 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 non-motorized transportation and recreation trail network in northern Lower Michigan.

Annual festivals and events occurring 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 Vasa Economic Impact Study, 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.

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 primary home purchases.”

Spending by Trail Users

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

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, a State Transportation Commissioner asked 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 Top of Michigan Trails Council (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.

A project website was set up in 2014 to further outreach and share project information, updates, and resources 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:**

- Develop a non-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 Trail Network

- Sleeping Bear Heritage Trail
- TART Trails
- Traverse City to Charlevoix Trail
- Lake to Lake Trail
- Boyne City to Charlevoix Trail

Map showing the trail network in Northern Lower Michigan, with cities such as Traverse City, Charlevoix, and Petoskey marked.
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, Mackinaw 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 (TART Trails)

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: [www.traversetrails.org](http://www.traversetrails.org)

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: [www.trailscouncil.org](http://www.trailscouncil.org)
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: http://www.trailscouncil.org/little-traverse-wheelway-17/

US Bike Route 35 (USBR 35)
The Michigan portion of US Bicycle Route 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: www.bicycletouringroutes.com
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: [www.laketolaketrail.com](http://www.laketolaketrail.com)

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

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: [http://www.trailscouncil.org/boyne-city-to-charlevoix-12/](http://www.trailscouncil.org/boyne-city-to-charlevoix-12/)

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: [www.michiganwatertrails.org](http://www.michiganwatertrails.org)
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

<table>
<thead>
<tr>
<th>Segment 1</th>
<th>Acme to Elk Rapids</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tart to M-72</td>
<td>Bunker Hill to Lautner, USBR 35 (Bike Lane)</td>
</tr>
<tr>
<td>US-31 West to Yuba (MDOT ROW, Shared-Use Path)</td>
<td></td>
</tr>
<tr>
<td>Bayside Park to Deepwater Pt to US-31 West (Shared Roadway)</td>
<td></td>
</tr>
<tr>
<td>Bates to Yuba South via USBR 35 (Shared Roadway, Shared-Use Path)</td>
<td></td>
</tr>
<tr>
<td>US-72 West under businesses to M-72 Underpass (Shared-Use Path)</td>
<td></td>
</tr>
<tr>
<td>US-31 East behind businesses to M-72 Underpass (Shared-Use Path)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Segment 2</th>
<th>Elk Rapids to Eastport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elk Rapids to Williams Road</td>
<td>North Bayshore to Williams (Shared Roadway)</td>
</tr>
<tr>
<td>US-31 West to M-88 (MDOT ROW, Shared-Use Path)</td>
<td></td>
</tr>
<tr>
<td>US-31 East to M-88 (MDOT ROW, Shared-Use Path)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Segment 3</th>
<th>Eastport to Charlevoix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yuba to Elk Rapids</td>
<td>US-31 West to Elk Rapids (MDOT ROW, Shared-Use Path)</td>
</tr>
<tr>
<td>US-31 East to Elk Rapids (MDOT ROW, Shared-Use Path)</td>
<td></td>
</tr>
<tr>
<td>US-31 West through Bayside Park to M-72 Underpass (Shared-Use Path)</td>
<td></td>
</tr>
<tr>
<td>US-31 East behind businesses to M-72 Underpass (Shared-Use Path)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Route Selection Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division of Trail into Segments and Identification of Route Options</td>
</tr>
<tr>
<td>Rating of Options and Selection of Preferred Routes</td>
</tr>
<tr>
<td>Recommendation of Trail Facilities</td>
</tr>
</tbody>
</table>
The Preferred Trail Route

Traverse City to Charlevoix Trail

North
0  2.5  5 Miles

Lake Michigan

Grand Traverse Bay

Bayside Park
Deepwater Point Natural Area

Traverse City

Charlevoix

Elk Rapids

Acme

VASA

Torch Lake

Bill Good Day Park

Norwood Township Park
Banks Township Park
Antrim Creek Natural Area
Barnes Park
Torch Bay Beach and Preserve

Petoskey

Boyne City
East Jordan
Alba

Charlevoix

Bellaire
Central Lake

Traverse City

Northport
Suttons Bay

Empire

Maple City

Glen Arbor

Leland

Northport
Suttons Bay

Lake Leelanau

Williamsburg

Kalkaska

Acme

Elk Rapids

Charlevoix

Northport
Suttons Bay

Empire

Maple City

Glen Arbor

Leland

Lake Leelanau

Williamsburg

Kalkaska

Acme

Elk Rapids
**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.

<table>
<thead>
<tr>
<th>Assets &amp; Amenities</th>
<th>Parking</th>
<th>Restrooms</th>
<th>Picnic Area</th>
<th>Playground</th>
<th>Hiking Trails</th>
<th>Camping</th>
<th>Swimming</th>
<th>Paddling Access</th>
<th>Boat Launch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisherman’s Island State Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Norwood Township Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Banks Township Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Antrim Creek Natural Area</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Barnes Park and Campground</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Torch Lake Boat Launch</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Torch Bay Beach and Preserve</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Bill Good Day Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Birch Lake Roadside Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Wilcox-Palmer-Shah Preserve</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Kewadin Wetlands Natural Area</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Old Bathing Beach</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Edward C Grace Memorial Harbor</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Elk Rapids Rotary Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Veterans Memorial Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Elk Rapids Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Petobego State Game Area</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Maple Bay County Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Sayler Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Yuba Creek Natural Area</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Deepwater Point Natural Area</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>North Bayside Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Vasa</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>South Bayside Park</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>
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-of-way and/or easement(s) until it reaches the Village of Elk Rapids. Once it enters Elk Rapids, a crossing will be made 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 Township’s 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 M-72 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
The Preferred Trail Route

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 Bells 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
This area is made up of working agricultural lands, it will be important 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 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.

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 important 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.
**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.
**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 shared-use 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 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, 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

**Traverse City to Charlevoix Trail**

**Trail Facility Type**
- Shared-Use Path
- Limited ROW (width shown)

Note:
US-31 is a limited access Highway - no driveways from Elk Rapids to Cairn Hwy
**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

Regional Context

The Preferred Trail Route

- East Arm
- Grand Traverse Bay
- Rex Beach Rd
- Richardson Rd
- Byers Rd
- Antrim Rd
- Antrim Dells Dr
- Potts Rd
- Essex Rd
- Bennett Rd
- Maple Hill Rd
- Timberlake Shores Rd
- White Pine Dr
- Timberlane Dr
- White Pine Dr
- Timberlake Shores Rd
- Scott Rd

Traverse City to Charlevoix Trail

Trail Facility Type
- Public Lands
- Shared Roadway

Map showing Banks Township Segment with various roads and natural areas marked.
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 multiple modes of transportation for future improvements and maintenance.

Recommended Facilities

Shared Roadway
6.0 miles

Context
Norwood Township Segment

Traverse City to Charlevoix Trail

- Public Lands
- Existing
- Lake to Lake Trail

Trail Facility Type
- Orange: Shared Roadway
- Red: Shared-Use Path
- Purple: Boardwalk
- Black: Bridge Required
- Orange Triangle: Limited ROW (width shown)

Map showing the trail route, trail facility types, and trail segments within Norwood Township.
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

The Preferred Trail Route

Traverse City to Charlevoix Trail

- **Public Lands**
- **Existing Lake to Lake Trail**

**Trail Facility Type**

- **Shared Roadway**
- **Shared-Use Path**
- **Limited ROW (width shown)**

0 0.5 1 Mile

- Bells Bay Rd
- Lake Shore Dr
- Eaton Ave
- W Garfield Dr
- Division St
- Taylor Rd
- Clark Rd
- Marion Township
- Norwood Township
- Charlevoix Township
- Fisherman’s Island Skate Park
- Round Lake
- Lake Michigan
- 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 shared-use 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

Context
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

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Cost of Facility per Mile of Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shared Roadway</td>
</tr>
<tr>
<td>Conceptual / Grant Phase</td>
<td>$700</td>
</tr>
<tr>
<td>Design Engineering (10% of Construction)</td>
<td>$200</td>
</tr>
<tr>
<td>Construction Engineering (10% of Construction)</td>
<td>$200</td>
</tr>
<tr>
<td>Construction (includes signage and amenities)</td>
<td>$2,000</td>
</tr>
<tr>
<td>Contingencies (20% of Construction)</td>
<td>$400</td>
</tr>
<tr>
<td>Total Cost Per Mile</td>
<td>$3,500</td>
</tr>
</tbody>
</table>
### Estimated Mileage per Facility Type

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Traverse City to Elk Rapids</th>
<th>Elk Rapids to Eastport</th>
<th>Eastport to Charlevoix</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Roadway</td>
<td>1.6 miles</td>
<td>2.4 miles</td>
<td>10.7 miles</td>
<td>14.7 miles</td>
</tr>
<tr>
<td>Bicycle Lane</td>
<td>0 miles</td>
<td>1.0 miles</td>
<td>0</td>
<td>1.0 miles</td>
</tr>
<tr>
<td>Shared-Use Path</td>
<td>9.3 miles</td>
<td>12.7 miles</td>
<td>7.1 miles</td>
<td>29.1 miles</td>
</tr>
<tr>
<td>Boardwalk</td>
<td>0.1 miles</td>
<td>0.2 miles</td>
<td>0.7 miles</td>
<td>1.0 miles</td>
</tr>
<tr>
<td>Bridges</td>
<td>Qty: 2</td>
<td>Qty: 0</td>
<td>Qty: 2</td>
<td>Qty: 4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11.0 miles</strong></td>
<td><strong>16.3 miles</strong></td>
<td><strong>18.5 miles</strong></td>
<td><strong>45.8 miles</strong></td>
</tr>
</tbody>
</table>

### Estimated Project Costs

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Traverse City to Elk Rapids</th>
<th>Elk Rapids to Eastport</th>
<th>Eastport to Charlevoix</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Roadway</td>
<td>$5,600</td>
<td>$8,400</td>
<td>$37,450</td>
<td>$51,450</td>
</tr>
<tr>
<td>Bicycle Lane</td>
<td>$0</td>
<td>$11,000</td>
<td>$0</td>
<td>$11,000</td>
</tr>
<tr>
<td>Shared-Use Path</td>
<td>$3,720,000</td>
<td>$5,080,000</td>
<td>$2,840,000</td>
<td>$11,640,000</td>
</tr>
<tr>
<td>Boardwalk</td>
<td>$99,000</td>
<td>$198,000</td>
<td>$693,000</td>
<td>$990,000</td>
</tr>
<tr>
<td>Bridges</td>
<td>$720,000</td>
<td>$0</td>
<td>$720,000</td>
<td>$1,440,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4,544,600</strong></td>
<td><strong>$5,297,400</strong></td>
<td><strong>$4,290,450</strong></td>
<td><strong>$14,132,450</strong></td>
</tr>
</tbody>
</table>

$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 Indians, 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

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.
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 maintenance and fundraising.

1. **Urban Cooperation Act**  
   **[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 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.

---

<table>
<thead>
<tr>
<th>Act</th>
<th>Title</th>
<th>Government Units</th>
<th>Governing Body</th>
</tr>
</thead>
<tbody>
<tr>
<td>1905 - PA157</td>
<td>Township Parks and Places of Recreation</td>
<td>Townships</td>
<td>Board of Commissioners</td>
</tr>
<tr>
<td>1917 - PA156</td>
<td>Recreation and Playgrounds</td>
<td>Cities, Villages, Townships, Counties and School Districts</td>
<td>Recreation Board</td>
</tr>
<tr>
<td>1929 - PA312</td>
<td>Metropolitan District Act</td>
<td>Cities, Villages, Townships, Counties and Parts Thereof</td>
<td>Charter Commission</td>
</tr>
<tr>
<td>1965 - PA261</td>
<td>County and Regional Parks</td>
<td>Counties</td>
<td>Parks and Recreation Commission</td>
</tr>
<tr>
<td>1989 - PA292</td>
<td>Metropolitan Councils Act</td>
<td>Cities, Counties, Villages and Townships</td>
<td>Metropolitan Area Council</td>
</tr>
<tr>
<td>1967 - PA7</td>
<td>Urban Cooperation Act</td>
<td>Cities, Counties, Villages and Townships</td>
<td>Recreation Board</td>
</tr>
<tr>
<td>2000 - PA321</td>
<td>Recreation Authorities Act</td>
<td>Cities, Counties, Villages, Townships and Districts</td>
<td>Board of Directors</td>
</tr>
</tbody>
</table>
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 Trail 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 TVC-CHX 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 Costs

| Surface Type, Number and Type of Facilities | $1,000 - 1,250 |
| Basic Repairs, Routine Maintenance | $1,000 per mile |
| Larger Quantity of Facilities, Higher Level of Grooming | $3,000 per mile |
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)
## Michigan Trail Management and Maintenance Models

<table>
<thead>
<tr>
<th>Agreement, Legal Authority</th>
<th>Fred Meijer River Valley Rail Trail</th>
<th>Iron Ore Heritage Trail</th>
<th>Betsie Valley Trail</th>
</tr>
</thead>
<tbody>
<tr>
<td>used to establish cooperative trail management</td>
<td>Urban Cooperation Act – Established Trail Authority made up of local units of government. Mid-West Michigan Trail Authority</td>
<td>Recreational Authorities Act allows 2 or more units of government to establish a Recreation Authority – Iron Ore Heritage Trail Recreation Authority</td>
<td>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</td>
</tr>
<tr>
<td>Partners</td>
<td>MDNR, Trail Authority, Ionia County, Shiawassee County, City of St. Johns.</td>
<td>City of Marquette, City of Negaunee, City of Ishpeming, Chocolay Township, Marquette Township, Negaunee Township, Tilden Township, Republic Township</td>
<td>Betsie Valley Trail Management Council (TMC) – appointed by County Board of Commissioners. County/ Council has contract with MDNR to maintain Trail.</td>
</tr>
<tr>
<td>Property Ownership title, overall liability</td>
<td>MDOT, MDNR</td>
<td>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</td>
<td>The Trail is owned by the MDNR and is operated and maintained by Benzie County TMC.</td>
</tr>
<tr>
<td>Funding</td>
<td>Community Foundation Maintenance Endowment of $3 million administered by Authority, generates ≈ $125,000 annually for maintenance. Some villages maintain within their limits.</td>
<td>.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</td>
<td>MDNR Friends of Betsie Valley Trail, Foundation Grants, establishing an Endowment Fund</td>
</tr>
<tr>
<td>Administration of Contracts &amp; Agreements</td>
<td>The Authority, Municipalities Large Contracts MDOT, MDNR with grant funding</td>
<td>Iron Ore Heritage Trail Recreation Authority, Municipalities, MDOT</td>
<td>Benzie County, TMC, MDNR</td>
</tr>
<tr>
<td>Overall Management Authority</td>
<td>Overall MDNR, Act 295 – State Rail Banking Act</td>
<td>Iron Ore Heritage Trail Recreation Authority</td>
<td>MDNR – State Land Use Rules and Land Use Order of the Director, Betsie Valley Trail Management Council</td>
</tr>
<tr>
<td>Authority policies, standards &amp; regulations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintains Trails and Facilities</td>
<td>Friends – routine City/Village DPW The Authority – routine and emergency maintenance Periodic - Authority Long Term - MDNR</td>
<td>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</td>
<td>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.</td>
</tr>
<tr>
<td>Promotion, Programming and Events</td>
<td>Friends, City Chambers of Commerce</td>
<td>Iron Ore Heritage Trail Recreation Authority, City/County Chambers</td>
<td>FBVT – mapping efforts, Benzie Visitors Bureau</td>
</tr>
<tr>
<td>Huron Sunrise Trail</td>
<td>Little Traverse Wheelway</td>
<td>North Central State Trail</td>
<td>TART Trail</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------</td>
<td>--------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Transportation enhancement grant(s) required maintenance agreement btw MDOT and Rogers City and Presque Isle County</td>
<td>Transportation enhancement grant(s) required maintenance agreement btw MDOT and Emmet and Charlevoix Counties and City of Petoskey</td>
<td>MOU between MDNR and Friends of NCST for light maintenance</td>
<td>Contracts between MDOT and Grand Traverse County Road Commission and City of Traverse City (requirement of MDOT grant)</td>
</tr>
<tr>
<td>MDOT, City of Rogers City, Presque Isle County</td>
<td>City of Petoskey, Counties of Charlevoix and Emmet, Townships of Charlevoix, Hayes, Little Traverse, Bear Creek, Resort, Local Service Clubs</td>
<td>MDNR</td>
<td>Grand Traverse County Road Commission, Grand Traverse County Facilities Department, City of Traverse City, TART Trails, East Bay and Acme Township help support maintenance</td>
</tr>
<tr>
<td>MDOT ROW, permits granted for trail operation</td>
<td>MDNR, MDOT ROW, City of Petoskey</td>
<td>MDNR</td>
<td>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</td>
</tr>
<tr>
<td>MDOT developed but City, county assume maintenance costs, MDOT reimburses for an annual sweeping</td>
<td>Charlevoix County, Emmet County, City of Petoskey general funds</td>
<td>MDNR</td>
<td>Grand Traverse County, Grand Traverse County Road Commission, City of Traverse City, Acme Township, East Bay Township TART Trails - grant match</td>
</tr>
<tr>
<td>TOMTC</td>
<td>No Friends Group</td>
<td>TOMTC, Friends Group for trail amenities</td>
<td>TART Trails</td>
</tr>
<tr>
<td>MDOT, City of Rogers City, Presque Isle County</td>
<td>Counties, Municipalities, Large Contracts MDOT, MDNR with grant writing</td>
<td>MDNR</td>
<td>Grand Traverse County, Grand Traverse County Road Commission, City of Traverse City</td>
</tr>
<tr>
<td>MDOT (AASHTO standards), City of Rogers City</td>
<td>MDOT (AASHTO standards), MDNR, City of Petoskey</td>
<td>MDNR</td>
<td>Grand Traverse County Road Commission, City of Traverse City, MDOT</td>
</tr>
<tr>
<td>City and County provide routine maintenance</td>
<td>City of Petoskey, Charlevoix and Emmet County - Parks and Rec Departments. Service groups help with a small section in Emmet County</td>
<td>MDNR, MOU with Friends Group, Local agreements to maintain trails and trailheads in towns</td>
<td>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</td>
</tr>
<tr>
<td>Rogers City Chamber</td>
<td>TOMTC, Visitor’s Bureaus, Chambers, Emmet County Public Relation Department, local businesses distribute maps</td>
<td>TOMTC, Chambers, Visitor’s Bureau, Businesses</td>
<td>Primarily supported through TART Trails, Visitors’ bureau, surrounding businesses and organizations</td>
</tr>
</tbody>
</table>
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 statement, 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.

Action Steps

1. 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

2. 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

3. 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

4. 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
**Phased Trail Implementation**

The three primary elements of trail implementation are conceptual 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 study.

**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

---

**Sample Resolution of Support**

Find full version of the Sample Resolution of Support on Page 47

---

A RESOLUTION SUPPORTING THE DEVELOPMENT OF THE TRAVERSE CITY TO CHARLEVILLE TRAIL PLAN TO CHARLEVILLE TRAIL CONNECTING THE TART TRAIL IN ACME.

WHEREAS, [Name of Municipality] in association with the Traverse City to Charlevoix Trail Planning Committee have had considerable input into the planning and of the multi-use, non-motorized trail and the assessment of a suitable route; and

WHEREAS, [Name of Municipality] Park and Recreation Plan supports the development of non-motorized trails and connected trail networks for transportation and outdoor recreation; and

WHEREAS, [Name of Municipality] believes that constructing the 48-mile Traverse City to Charlevoix Trail will connect two major multi-use trail networks, the TART Trail regional trail system; and

WHEREAS, [Name of Municipality] Trail has demonstrated a positive impact on residents' quality of life and the local economy; and

WHEREAS, The Traverse City to Charlevoix Trail would have a positive benefit to our community; and

WHEREAS, the Traverse City to Charlevoix Trail Committee is moving forward with the development of their trail plan and is seeking support; and

NOW, THEREFORE, BE IT RESOLVED, that the [Name of Municipality] supports the development of the Traverse City to Charlevoix Trail and the positive benefits of trails.
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](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](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/deq/deq-deq-oql-czm-fy17rfp_502408_7.pdf](http://www.michigan.gov/documents/deq/deq-deq-oql-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.
Sample Resolution of Support

Name of Municipality

RESOLUTION

A RESOLUTION SUPPORTING THE DEVELOPMENT OF THE TRAVERSE CITY TO CHARLEVOIX TRAIL CONNECTING THE TART TRAIL IN ACME TOWNSHIP TO THE LAKE TO LAKE TRAIL IN THE CITY OF CHARLEVOIX

WHEREAS, Name of Municipality in association with the Traverse City to Charlevoix Trail Planning Committee, have had considerable input into the planning and of the multi-use, non-motorized trail and the assessment of a suitable route; and

WHEREAS, Name of Municipality Park and Recreation Plan supports the development of non-motorized trails and connected trail networks for transportation and outdoor recreation; and

WHEREAS, Name of Municipality believes that constructing the 46 mile Traverse City to Charlevoix Trail will connect two major multi-use trail networks, the TART Trail System and the Top of Michigan Trails Network to create a 325 mile northern Michigan regional trail system;

WHEREAS, Trails have demonstrated a positive impact on residents quality of life and the local economy, and;

WHEREAS, The Traverse City to Charlevoix Trail would have a positive benefit to our community, and;

WHEREAS, the Traverse City to Charlevoix Trail Committee is moving forward with the development of their trail plan and is seeking support, and;

NOW, THEREFORE, BE IT RESOLVED, that the Name of Municipality supports the development of the Traverse City to Charlevoix Trail and the positive benefits of trails.

Communities can use and/or modify this sample resolution of support to seek and document support for the TVC-CHX Trail.
# Resources

## Acronym Glossary

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
</tr>
<tr>
<td>BCCT</td>
<td>Boyne City to Charlevoix Trail</td>
</tr>
<tr>
<td>CBA</td>
<td>Choosing by Advantages</td>
</tr>
<tr>
<td>CZM</td>
<td>Michigan Department of Environmental Quality Coastal Zone Management Program</td>
</tr>
<tr>
<td>DPW</td>
<td>Department of Public Works</td>
</tr>
<tr>
<td>FBVT</td>
<td>The Friends of The Betsie Valley Trail</td>
</tr>
<tr>
<td>FISP</td>
<td>Fisherman’s Island State Park</td>
</tr>
<tr>
<td>FHWA</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>GTRLC</td>
<td>Grand Traverse Regional Land Conservancy</td>
</tr>
<tr>
<td>IOHT</td>
<td>Iron Ore Heritage Trail</td>
</tr>
<tr>
<td>LIAA</td>
<td>Land Information Access Association</td>
</tr>
<tr>
<td>LTW</td>
<td>Little Traverse Wheelway</td>
</tr>
<tr>
<td>MDNR</td>
<td>Michigan Department of Natural Resources</td>
</tr>
<tr>
<td>MDOT</td>
<td>Michigan Department of Transportation</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of understanding</td>
</tr>
<tr>
<td>MNRTF</td>
<td>Michigan Natural Resources Trust Fund</td>
</tr>
<tr>
<td>NCST</td>
<td>North Central State Trail</td>
</tr>
<tr>
<td>NDG</td>
<td>Northwest Design Group</td>
</tr>
<tr>
<td>NPS - RTCA</td>
<td>National Park Service - Rivers, Trails, and Conservation Assistance Program</td>
</tr>
<tr>
<td>ROW</td>
<td>Right-of-way</td>
</tr>
<tr>
<td>SBHT</td>
<td>Sleeping Bear Heritage Trail</td>
</tr>
<tr>
<td>TART Trails</td>
<td>Traverse Area Recreation and Transportation Trails</td>
</tr>
<tr>
<td>TOMTC</td>
<td>Top of Michigan Trails Council</td>
</tr>
<tr>
<td>TVC-CHX</td>
<td>Traverse City to Charlevoix Trail</td>
</tr>
<tr>
<td>USBR 35</td>
<td>United States Bicycle Route 35</td>
</tr>
<tr>
<td>US-31</td>
<td>United States Highway 31</td>
</tr>
</tbody>
</table>
Resources

Appendix

Bicycle and Pedestrian Facilities

MDOT - Bicycle and Pedestrian Terminology

MDOT - Best Design Practices for Walking and Bicycling in Michigan

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

FHWA - Pedestrian and Bicycle Facilities

Americans with Disabilities Act (ADA) - Standards for Outdoor Recreation Facilities

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

Presentation of Intergovernmental Options for Managing and Maintaining Outdoor Recreational Facilities and Trails

Michigan Recreational Authorities Act

Urban Cooperation Act 1967 Act 7

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

Economic and Trail User Information

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

Vasa Economic Impact Study

MDOT - Economic Benefits of Cycling Study

Outdoor Industry Association - Outdoor Recreation Economy Report

Background Information

MDNR - State Trail Implementation Plan

Charlevoix to Traverse City Trail Connection Powerpoint

Regional Non-Motorized Transportation Strategy for Northwest Michigan

Pure Michigan Trails Act No. 210, 2014

Sources of Technical Assistance

National Park Service – Rivers, Trails, and Conservation Assistance Program

American Trails

Rails to Trails Conservancy

Trails Research and Searchable Benefits Library

National Center for Bicycling and Walking

Michigan Trails and Greenways Alliance

Michigan Recreation and Parks Association

Michigan Department of Natural Resources Trails and Pathways

Michigan Department of Transportation, Bicycling

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: www.upnorthtrails.org
For more information on the Traverse City to Charlevoix Trail, please visit:

www.traversecitytocharlevoixtrail.org