

Harbor Springs Non-Motorized Trail Feasibility Study of the Alternative Routes

*A segment of the Little Traverse Wheelway,
Connecting the communities of Charlevoix, Petoskey, and Harbor Springs*



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Introduction

For many years the Little Traverse Bay area has been working to link the communities of Charlevoix, Petoskey, and Harbor Springs with a non-motorized trail. Locally this trail is called the Little Traverse Wheelway, or “the bike path”. Currently, except for a 1.5 mile section between Resort Township East Park and the City of Petoskey Magnus Park, the trail is complete from Charlevoix through Petoskey and to Pleasantview Road in Little Traverse Township, only 2.8 miles from Harbor Springs.

In 2001, the Michigan Department of Transportation (MDOT) with encouragement from local governments and trail advocacy groups had planned to build a trail from Pleasantview Road to Harbor Springs on the north side of M-119. At the last minute the trail was dropped from MDOT plans due to lack of right-of-way and cost. MDOT stated at that time that they planned to come back and finish Phase II of the trail. No action has been taken to complete it since that time.

H.A.R.B.O.R, Inc. and its members have made it a priority to help facilitate the completion of the trail into Harbor Springs. With that decision, the location of the trail came into discussion. There are, in general three alternative alignments being considered; they are shown on Map A and are as follows:

- A lower route, called the Beach Road alignment
- M-119 route, north or south side
- An upper route along a utility corridor parallel to Hathaway and Bester Roads, called the Northern Route.



It is the intention of this study to provide a history, details, limitations, obstacles, and ease of each route in terms of safety, land availability, environmental constraints, costs, and general use of a trail. It is also the intention of this report to provide some feasible alternatives in areas where the limitations appear too great to overcome. It is not the intention of this report to make a solid recommendation of one option or to provide a final route on a lot-by-lot basis. The intension of this study is to be a community resource when making a decision of what alignment should be pursued in order to complete the Little Traverse Wheelway.

Project History

The concept of the Little Traverse Wheelway, linking the communities around Little Traverse Bay is anything but new. Back in the 1890's there was a boardwalk bike trail that ran along the rim of Little Traverse Bay from Petoskey to Harbor Springs. Unfortunately, around the turn of the century when bike riding seemed obsolete to the train, the railroad built tracks on the bikeway in order to build the Petoskey-Harbor Railroad spur.

It wasn't until the 1970's when bike sales were at their highest point to date for the century that the community started to rethink the need for bikeways. In 1973, Dr. John Sheilds, President of the Little Traverse Travelers Bike Club, brought community leaders together and discussed the "Bay Area Bikeway" plan.

It was about this same time that the railroad indicated they were going to sell the Petoskey-Harbor rail spur because it was no longer profitable.

The original bike route discussed at the time, according to a newspaper article in 1973, stated the route used the railroad right-of-way, going into the state park and then ". . . hedge east of L'Arbre Croche and Menonaqua Beach to Beach Road, cutting along a ridge south of the Harbor Springs Airport, down to the old railroad right-o-way by Roaring Brook and Wequetonsing and into Harbor Springs."

At the same time a map dating back to 1973 showed the original route as a "Class I" facility (a completely separate bicycle trail) from Petoskey going along the railroad bed into the State Park. But, along Beach Road into Harbor Springs the map showed the route as a "Class III" (sharing the road) facility.

During the 1970's and 1980's work was done to try and gain right-of-way for the trail. It was during this time that Kiwanis took the project on as a priority. According to Max Putters, Emmet County Planner, the major concern was always to get a trail from Petoskey to the State Park, as there was no safe route. Because Beach Road existed, it appears that the use of that road was always part of plan "to get to Harbor Springs".

Segments of the trail started to be built including the waterfront in Petoskey and the widened sidewalk through Bay View. The Michigan Department of Natural Resources purchased the railroad behind Glens (although this took over 5 years due to a court case) and MDOT began discussions to resurface M-119. The trail along M-119 from the railroad to Beach Road was finished in 1995.

It was about this time, according to Emmet County and Top of Michigan Trails council (TOMTC) records, that discussion once again started on how to get to Harbor Springs. Letters from Menonaqua Beach and Breakers East residents were sent in concern of "accidents waiting to happen" along Beach Road as the trail just dumped riders onto the road. They asked for an alternative route.

In 1995, the City of Harbor Springs asked the Wheelway committee members to help find a solution and "complete the Beach Drive link of the trail".

In 1996 maps of the road right-of-way were created and it showed that there was not enough road right-of-way to accommodate a separate bike trail and in some places there was not even enough right-of-way to create a wide shoulder.

Associations along Beach Road were asked if they would give right-of-way for a non-motorized trail and all, unanimously, said no. In one letter from Wequetonsing in 1996 it specifically stated that the property owners voted unanimously against it and asked to put the trail on M-119.

In 1997, MDOT officials completed a preliminary engineering study to put a trail on the south side of M-119. Associations along Beach Road and M-119 were again notified and told that the committee, as requested, was pursuing a route along M-119 instead of Beach Road.

In 1997 a letter from 37 people stating they were against the M-119 route prompted MDOT to consider other alternatives. Later that year, MDOT completed a preliminary study on the possibility of a route on the north side of M-119.

In 1998 Top of Michigan Trails Council and the Little Traverse Wheelway recommended the south side of M-119 as the route to Harbor Springs. They specifically stated due to right-of-way problems on Beach Road, safety problems on the north side of M-119 and the use of Hathaway road seemed too out of the way to be utilized. Therefore both groups recommended the south side of M-119.

MDOT held a public hearing in June of 1998 on the bike trail proposal to be on the north side of M-119.

After Public Hearings MDOT developed a plan to utilize the south side (lake side) of M-119 to Pleasantview Road and then cross the highway and utilize the north side of M-119 into Harbor Springs. The trail was part of the resurfacing project to be let in 2000 and later postponed to 2001. MDOT was working on purchasing easements for the trail where needed.

In early 2000 local officials were notified that MDOT was dropping the trail west of Pleasantview Road as part of the road project but it would be completed as soon after getting the current project done.

The reasons for dropping the project were cost of the right-of-way as many property owners “refused to sell any portion of their land”. On the contrary, there are local community members who believe the reason was that the proper effort was not made to gain these grading easements.

2001 the trail was finished by MDOT to Pleasantview Road. As well, about this time discussions began regarding a Hoyt Road connector linking the soccer field complex at Hoyt and Quick Roads to the City of Harbor Springs.



M-119 and Pleasantview Road,
the end of the existing trail.

Project Need

There has been a long desire by local governmental units, trail advocates, and community members to finish the Little Traverse Wheelway linking the three cities around Little Traverse Bay. There are many reasons to have non-motorized trails in communities. They include:

- Safe routes for residents, especially children to get to city centers, recreation centers, parks, and schools
- Alternative transportation options
- Economic development and tourism enhancement
- Promotion of healthy living
- Linkage between local communities

According to the Trails and Greenways Clearinghouse, trails make communities better places to live as well as visit. They encourage physical fitness and healthy lifestyles because trails are convenient places to get outside and exercise. They strengthen local economies, protect the environment and preserve culturally valuable areas.

A current study done by the Surface Transportation Policy Project shows that 61% Americans don't walk because it is too far to get to a place in order to walk and it is not convenient. Another 30% said they don't walk because of traffic and lack of a place to go. In the same study, it was found that people decided where to live based on reasons of walkability including 79% saying exercise and sidewalks were very important and somewhat important in their decisions. Other reasons for choosing to live in walkable places were: 50% for walking pets, 56% walking to commercial centers, 50% walking distance to schools, and 48% walking to public transit.

Recreational trails are an important part of community, they need to be convenient and they help local economies because they are reasons for people to live and work in an area. They are also needed to provide connections from where people live, to where they are going, especially between parks, schools, and community centers. Recreational trails, a shared use path, a bike route, or a non-motorized trail is most important in linking the small towns around Little Traverse Bay in order to strengthen connections for cultural, personal, and economic reasons.

The Little Traverse Wheelway is for more than just bicyclists but for simplicity sake this report will refer to the federal standards that describe the different type of designation of user groups for bicycle facilities, which help in determining users of the future trail. These user groups are listed below, slightly altered from the American Association of State Highway and Transportation Officials (AASHTO) wording in order to fit the multi-use needs as well as the unique community needs of this area. These standards are referred to throughout the report and are as follows:

- Type A:** Advanced road bicyclists who like the road regardless of what facilities are provided and who want direct access to their destinations. Many road bike tours and bike club members fall into this category. Most do not use trails and would rather be on the road.
- Type B:** Basic riders who use their bicycles for transportation and recreation. Many of these folks will travel on lightly traveled roads or trails when there is that alternative. Many of these folks avoid busy roadways that Type A riders utilize and will use trails when the alternative is a busy highway. Many tourists who bike ride fall into this category.
- Type C:** Children riding on their own or with families. This category also includes other uses such as in-line skating, dog walking, jogging, walking, etc. Trails with very few driveways and road crossings are the most safe and are most ideal users of this

category. Routes on sidewalks and lightly traveled roads can be utilized for such users if they to provide a safe alternative in order to get to schools and parks.

It is H.A.R.B.O.R., Inc.’s intention to have facility for Type B and Type C users, and to have a trail that is both recreational as well as a non-motorized transportation route. Therefore, the need reviewed in this report is for a facility that provides alternatives for Type B and C users.

Existing Non-Motorized Use

Every segment of the Little Traverse Wheelway that has been completed has immediately gotten extensive use. In some cases, it was hard to keep users off the trail while putting on the blacktop! Many of the sections completed were integral links as there were no safe alternative routes such as around Glen’s north plaza. There is no doubt that a trail into Harbor Springs, regardless of where it is located, will be utilized.

Most of the highways that the existing trails are along had very little non-motorized traffic prior to the building of the Little Traverse Wheelway. This is because it was unsafe, not attractive, and not fun to ride on the highway. Therefore existing non-motorized use, or bicycle counts on existing roads, is not a strong indicator of need or location of a trail. The AASHTO guidebook states, “these numbers can considerably underestimate potential users.” It can be used as part of an analysis, but should not be used as the only decision-making tool.

In the case of the areas between the existing Wheelway and Harbor Springs, there is a local road alternative to the highway, which is very scenic, has a slower speed limit, and does get extensive use by existing trail users. This alternative is the Beach Road Alignment, see Map A for all route locations.

According to a survey done in 2002 by the Top of Michigan Trails Council, 49% of the trail users along M-119 went along Beach Road, the other 51% went along the non-motorized trail that goes to Pleasantview Road. In this same study it shows that 86% of the users were bicyclists. See table below for details.

<i>2002 Trail Use Survey, Completed by the Top of Michigan Trails Council</i>	
<i>Beach Road versus M-119</i>	
Trail users going down Beach Road	49%
Trail users going along M-119 Trail	51%
<i>Type of User</i>	
Walk/Run	12%
Bicycle	86%
Other including in-line skating	2%
<i>Local or Visitor</i>	
Petoskey or Harbor Springs Resident	36%
Other	64%

As stated earlier, Type B riders (as well as Type A riders) seek out the less traveled roads and the more scenic routes, therefore opting for the Beach Road Alignment. As well, many people living

in Harbor Springs and below the bluff also use these less traveled roads for walking, running, and getting to town.

Although a scientific survey of pedestrian and bicycle counts was not completed for the different routes, by observation it appears that there are very few users on the shoulder along M-119 to Harbor Springs after Pleasantview Road. This is probably because it appears unsafe, it is not scenic, and for many people there is an alternative that appears safer (Beach Road). However, it appears that many users do head north up Pleasantview Road at the end of the trail. The Little Traverse Township Park at the M-119 and Pleasantview Road intersection appears to get a lot of trailhead parking, therefore many people are getting onto the existing trail at this location. There are many bicyclists, joggers, and walkers along Beach Road.

Non-Motorized traffic generators

When determining the location of trail facilities it is important to understand where there are generators for potential pedestrian and bicycle users including where people live, where public facilities such as parks, recreation centers, and schools are located, and the commercial centers. This is because many trail users are “going somewhere” and it is usually people going from home to parks, schools, and community centers. As well, in this area, a lovely bicycle route between the Little Traverse Bay communities is a destination in and of itself and should also be considered as its own generator of non-motorized traffic.

When looking at Map B, it is evident that many of the potential non-motorized traffic generators are within the City of Harbor Springs including the many parks, schools, and public buildings. The destination of the City of Petoskey is a generator and most importantly the Petoskey State Park. Other generators include Boyne Highlands and the Commercial areas at the airport curve of M-119. The new Little Traverse Bay Bands of Odawa Indians (LTBB) complex is also a generator. Therefore, safe routes for Harbor Springs area residents are needed to get to the various public facilities.

Existing Pedestrian/Bicyclist shed

When looking at development patterns, it is evident that there is a high population center in the City of Harbor Springs and a large, primarily summer population, below the bluff along Beach Road. Most likely, the folks in these two areas who are trying to get to Petoskey, the State Park, or just want to recreate outside, use the Beach Road alignment because it is relatively safe (see section on safety below for details) and scenic. Many folks living north or northwest of Harbor Springs who like to bike farther distances will use this alignment as well, see Map B for details.

It is the areas north of M-119 between Pleasantview Road and the City limits where this pattern most likely changes. Non-motorized users will most likely take relatively safe county roads into Harbor Springs, but to get to Petoskey there is little choice but to go down to M-119. Most folks living in this area, unless they are Type A users, do not leave from their home to travel to the State Park or beyond because there is no safe alternative.

Future Needs

According to existing building trends, local master plans, and 2002 Build –out Study completed for H.A.R.B.O.R., Inc, show the major growth areas around Harbor Springs to be in the area north of M-119 between Pleasantview Road and the City of Harbor Springs, north to the ski areas, see Map B. When looking at where land is available, existing zoning, and building constraints, the year-round population will continue to grow north. There is no room for large developments below the bluff along Beach road.

With new residential developments and general population growth, there will be more cars using the local roads and state highways and it will make it more and more difficult to utilize these roads for Type B and Type C users, especially younger folks trying to get to schools and parks without vehicles. Therefore it appears there is or will be a future need for safe access to the Harbor Springs area public facilities. This type of facility appears to be a separate need from the Little Traverse Wheelway connecting our communities.

At the same time, M-119 is relatively unsafe now with a 50 mile per hour speed limit for non-motorized users. According to AASHTO, when there are higher speeds along a roadway there is more of a demand for a separate bike trail than on the lower speed roads. As the population grows north of M-119, there will be more and more of a demand for a separate trail along this road in order to get people safely from their home, to the recreational trail.

Safety

The intent of H.A.R.B.O.R, Inc. is to have a safe non-motorized alternative to link Harbor Springs to Petoskey and the existing trail. Many people have stated that the exiting use of Beach Road is unsafe and therefore a trail is needed in that location. But, statistically speaking, Beach Road is not unsafe for pedestrians and bicyclists. Actually, there have only been three accidents with pedestrians or bicyclists along this route in the past five years, two of which there were injuries. There have been no accidents with pedestrians or bicyclists along M-119 between Pleasantview and Harbor Springs. See the Table Below for Emmet County accident statistics.

Emmet County Crash Data involving Pedestrian and Bicyclists from 1998 through 2002						
<i>Source: Michigan State Police Criminal Justice Information Center</i>						
Pedestrian/Bicyclist Accidents	1998	1999	2000	2001	2002	TOTAL
In the City of Petoskey	9	4	6	3	2	24
In the City of Harbor Springs	2	2	2	0	2	8
Along US-31 and M-119 Bike Trail and the Beach Road	2	0	1	2*	2**	7
Other	3	7	4	8	6	28
Total in Emmet County	16	13	13	13	12	67
Total # of all Automobile Accidents in Emmet County	1567	1851	1833	1756	1819	7259
<i>*One of these accidents was on Beach Road near M-119</i>						
<i>**Both of these accidents were on Beach Road and/or Pennsylvania Avenue</i>						

Along Beach Road, in two particular locations, there are curvy narrow roads that make the road enjoyable to bike ride, but also provide for some car/bicycle conflicts as the cars barely can make the turns within their own traffic lane. These two particular areas also have limited site distance for both automobiles and bicyclists to anticipate the approach of one another, see Map B for location.

Although there have been relatively few accidents, it is reported that there are many “near misses” where there are narrow and curvy areas. Otherwise, most of the other routes described are relatively flat and straight with decent site distances for drivers and pedestrians.

A Conversation with the local Sheriff

For this study, an interview was conducted with County Sheriff Pete Wallin in regards to bike safety and other various issues related to a bike trail. The following paraphrases the discussion.

The Beach Road route does appear unsafe but it really is not statistically. Sheriff Wallin has not seen an increase in accidents with the new trail and he did say there has been a huge increase of riders along M-119 trail since it was built. Regardless of accident statistics, he did state that he would like to see a separate bike trail along Beach Road to resolve the close calls, often caused by sun glare.

Sherriff Wallin said that the County Roads north of M-119 appear very safe for bicyclists because they are lightly traveled. He added that Beach Road area does have automobile speeding problems. Many people use it as a shortcut and speed through the straight-aways. They are patrolling the area and enforcing the 45 mile per hour speed limit along Beach Road and the 25 mile per hour speed limit through Wequetonsing.

Bikes are allowed on the road and education of both drivers and riders is necessary to better share local roads.

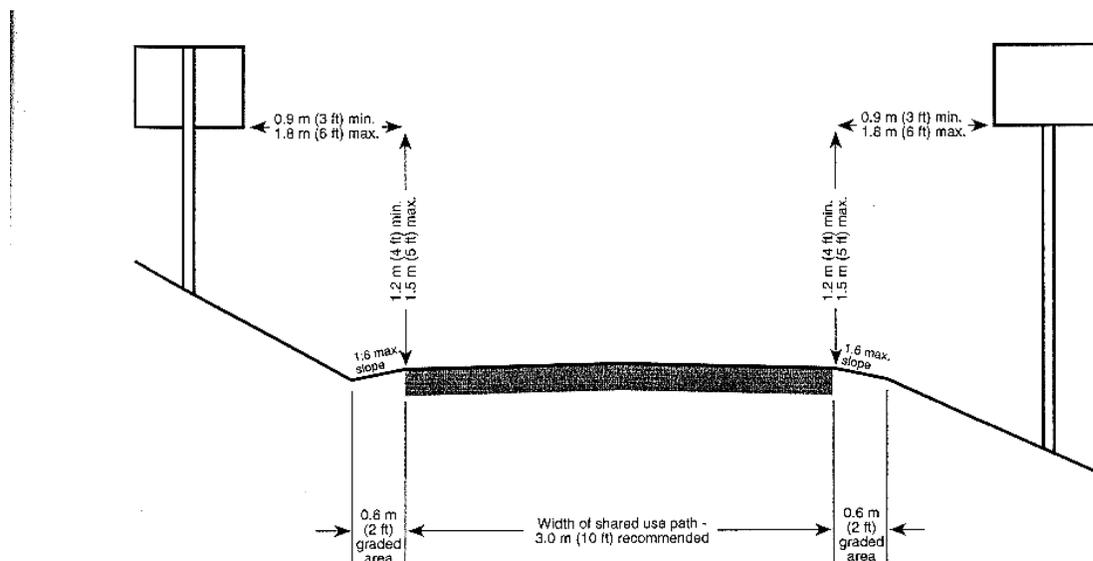
Conversations with State and Local Road Officials

The Emmet County Road Commission Engineer Manager Brian Gutowski stated that County Roads are built for the “motoring public” and not for non-motorized use. Therefore, his agency does not really consider non-motorized use when planning and building their facilities. Gutowski stated he would like to have better education of riders to share the road with cars. He said that he would like the facility to be built along M-119 because that is where it currently ends.

Discussions with MDOT non-motorized division expert, Cindy Krupp, said that bike lanes are often more safe in urban areas and that a designated bike route, signed, on the shoulders of M-119 may be most appropriate for this area. She said often a separate trail could be less safe than riding on the road and that a signed bike route along the highway utilizing the wide shoulders may be more appropriate. She added that regardless, because the Wheelway is a long-term project and MDOT promised completion of it, that the M-119 route is still a feasible alternative. She also said that a trail below the bluff would not be an MDOT alternative route and therefore may not be eligible for any federal grants for transportation enhancements monies.

General Trail Characteristics

AASHTO standards describe a separate non-motorized trail as a shared use path which in this report is called a non-motorized trail. Standards for a two-way shared use path are 10' in width with a 2' wide, one on six (1:6) slope graded shoulder on either side of the trail. Therefore there is need for 14' in width for the trail surface area alone, plus a 3 to 6 foot buffer and/or grading area on either side of the trail. In total at least 20' of land is needed for a trail, but 26' is desired. When looking at a 66' wide road right-of-way with a road in the center, there would be enough room for the trail, but a grading easement might be needed, depending on the width of the road surface. See AASHTO diagram below for shared use path specifications.



Prior to 1999 the AASHTO standards for a shared use path were only eight feet in width rather than ten feet. Along Bay Harbor the trail is only eight feet wide whereas the trail to Charlevoix is ten feet wide. Using these two trails it is evident that the ten feet in width is desired. AASHTO does allow for a reduction to eight feet from the ten feet requirement when necessary due to engineering limitations, but it is recommended that this trail be designed to be the required ten feet in width because of the high use that is predicted for such a trail.

The AASHTO standards recommend the following regarding all shared use paths:

- That they be located in a park, along waterfront, railroad and utility rights of way, and connecting between parks.
- Shared use paths DO NOT preclude the use of on-road bicycle facilities such as bike routes, wide shoulders, and shared roadways.
- They have a minimum design speed of twenty miles per hour.
- Grades should be no more than five percent.
- There be at least five feet between the path and roadway and if that is not possible that a suitable barrier is recommended.
- That paths along highways can cause problems by encouraging bicyclists and motorists to operate in a manner inconsistent with the rules of the road.
- Alternating between a shared path and bike lane is inappropriate and inconvenient because street crossings by bicyclists may be required when the route changes

The AASHTO guide for the development of bicycle facilities goes into more details regarding the choosing, planning, and design of bicycle facilities.

Considered Routes - Descriptions

The three routes being considered are the Beach Road Alignment, M-119, and the Northern Route. Each route is described below in detail.

Beach Road Route, M-119 to Zoll Street, 3.7 miles

The Beach Road Route has historically been used as a bike route and was marked on many maps bikeway maps since the 1970's. Today, most recreational and road bike riders use this route as there is less traffic and it is more scenic. The route is from M-119 along Beach Road to Pennsylvania Avenue and into Harbor Springs, See Map C. Although, many riders use Fern Avenue and/or Beach Drive (versus Pennsylvania Avenue) because they are more scenic and along the waterfront.

Throughout this route the road right-of-way varies between 23' and 80', limiting the ability to have the trail within the road right-of-way. The speed limit is 45 mph from M-119 to Wequetonsing and then it changes to 25 mph into Harbor Springs.

Beach Road to the Curve, .7 miles

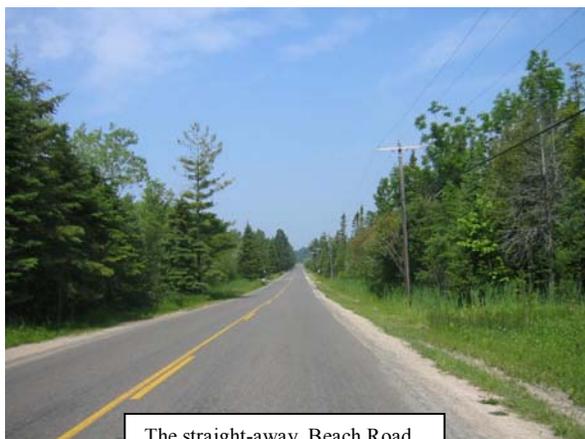
Beach Road from M-119 to the curve at the lake is about .7 miles and is a winding road with critical dunes coming down to the pavement at two points on the south side and wetlands in one large area on the north side of the road. There is thick forest that creates a canopy. Little Traverse Conservancy (LTC) is the primary property owner on both sides but the land is deed restricted and cannot allow construction of a trail. This stretch of road is considered to be unsafe for bicyclists due to the curves and sun glare.



Bicycle riders along Beach Road curves

Curve to Fern Avenue, 1.1 mile

At the curve, Beach Road turns west and continues basically straight for the next 1.1 miles to Fern Avenue. In this area the former railroad right of way is on the south (lake side of the road). In some areas, like Cedar Shores, the development was built on the right-of-way, bisecting the continuity of the former railway line.



The straight-away, Beach Road

At the same time, these developments have grassy landscaped areas along the road, which could possibly accommodate, with easements, an off-road trail.

At the curve the road does go through part of Menonaqua Beach and there are a few homes and driveways near the curve that has limited site distance.

LTC owns much of the land on the north side of the road and in many places, but not all places, their ownership goes as far north as the base of the bluff, most of this land is wetlands. Harbor Cove owns property just on both sides of Page Hill Road and they do have existing pedestrian wood chip trails through it.

On the south side of the road Harbor Cove owns a large joint beachfront area and LTC has a large parcel both with trails along the former railroad bed. Otherwise, the waterfront side of the road is primarily made up of Cedar Shores Condominiums and Breakers East Condominiums; in these two areas the entire right-of-way is a paved parking lot. There are also a few individual property owners on this side of the road.

Because of both LTC lands and condominium projects with shared access, there are relatively few driveway curb cuts in this stretch making it a safe section of roadway for pedestrians and bicyclists.

Fern Avenue to Pennsylvania Avenue, .5 miles

At the intersection of Fern Avenue and Beach Road, many existing riders opt for Fern Avenue, a public road that is closer to the lake. Fern is a residential road with large trees that create a canopy. The site distances are also better on Fern, rather than Beach Road.

When staying on Beach Road the road continues in its straight alignment for about .35 miles. Again LTC owns much of the land on either side of the road and most of the area is wetlands. In the LTC Fisher preserve there are wood chip trails and a beautiful fountain. There is some private ownership and homes on the south side of the road. There are only two driveways and one private road along this stretch.



Former railroad grade near Harbor Cove



Narrow, winding road through LTC Roaring Brook Preserve

At about .35 miles the road becomes narrow and curvy. It intersects with Bridge Road at a difficult (non 90 degree) intersection alignment with limited sight distance and then connects with Fern at Pennsylvania Avenue. The former railroad right-of-way is fairly intact through this section including the James and Roaring Brook LTC preserves. These preserves could be utilized as a trail and would take trail users to the intersection at Pennsylvania Avenue.

This short tenth of a mile plus section is the most dangerous part of the roadway. The curves, road width and sight distance make it difficult for two cars to pass each other. On either side of the road streams and cedar swamp abound. Boardwalk trails exist through the LTC preserves on both sides of the road. The Road Commission owns only 33' of road right-of-way in this area.

Pennsylvania Avenue to Beach Drive, .3 miles

At this point, the former railroad right-of-way is now on the north side of the road. Pennsylvania



Parking areas along Pennsylvania Avenue

Avenue goes primarily straight right to Zoll Street in Harbor Springs. On the south side of the road there are lake front houses and driveways about every 50 –100 feet creating 11 curb cuts in this short section. On the north side of the road LTC owns the land but there are six large parking areas on the north side of the road, which are on the former railroad grade. The parking areas are about 30' from the edge of the road back and vary in length. Although the former railroad grade is adjacent to these parking areas, with landscaping and such it is no longer visible and the grade itself has been utilized for parking. It appears that north of the parking areas are wetlands.

Beach Drive to First Avenue, .5 miles

At the stop sign is the intersection of Pennsylvania and Beach Drive. Most recreational riders go left and along Beach Drive because it is more scenic and there are relatively few curb cuts because the lake is on the south side of the road and there are few driveways on the north side of the road. At this stop sign marks the beginning of Wequetonsing. In the next ½ mile there is a dense summer population. The first ¼ mile has 15 driveways on the south side of the road and has parking areas on the north side, as shown in the picture above. The speed limit is only 25 mph.

The next ¼ mile goes through the “town” of Wequetonsing with many private roads and pedestrian intersections. In most of this section there is on-street parking on the north side of the road and the former railroad right-of-way is Wequetonsing open space with a sidewalk going along the former grade.

The road itself is very unsafe for bicycle riders in the summer months due to the congestion, parking along streets, and curb cuts. Pedestrians, joggers and the like have many options through Wequetonsing as there are many sidewalks within the development that connect to the City of Harbor Springs. In non-summer months, this area is safe for bicycle riders as there are few people living in the area.

The road right-of-way is only 23' wide through Wequetonsing, which is the width of the paved surface of the road.

First Avenue to Zoll Street, .5 miles

The first short section of this stretch has houses very close to the road and there are 8 driveways in just about 800'. The former railroad right-of-way disappears. LTC and the City of Harbor Springs own the rest of the land on the north side of the road to Zoll Street. There is only one curb cut to enter the City of Harbor Springs property. On the south side of the road there are houses, a hotel and some multi-family housing. There are many driveways and private roads on the south side of the road.

M-119, from Pleasantview Road to Lake Street, 2.8 miles

In 1997, MDOT Engineer Phil Becker completed a preliminary engineering report to build a paved trailway on the south side or lakeside of M-119. In 1998 R.S. Scott and Associates Engineer Staci Gouin, working on contract for MDOT, completed a preliminary engineering report to build a paved trailway on the north side of M-119. The following information has been taken from those reports as well as observations.

M-119 road right-of-way varies but is primarily 66' wide, 33' from centerline but there are some places where the right-way widens up to 150' in width. The road is known to be primarily in the center. There are many curb cuts and driveways on both sides of M-119, although the south side has less, see the following table for details.

<i>Driveways intersecting with M-119</i>		
	North Side of M-119	South Side of M-119
Public Roads	3	3
Private Roads	3	6
Residential driveways	34	23
Commercial* driveways	4	4
Driveways to vacant land	6	0
TOTAL	50	37
*Includes City and Township Parks		

Rather than repeating the details of each of these reports, a summary of the general problems of each side of the road are below and highlighted on Map D. In addition, the preliminary engineering reports have been included in the appendix of this study.

South Side of M-119

The original study and most desired route by trail planners was on the south side of M-119 because the trail would not have to cross the highway and crosses less driveways. As well, many of these driveways are seasonal and the roads are more residential in nature. In most places along the south side of the highway grading easements would be needed and utility poles moved. There is one section of approximately three tenths of a mile on either side of Page Hill Road for a total of sixth tenths of mile that has a wider right-of-way and no grading easement would be needed. As well, adjacent to the City park at the entrance to Harbor Springs provides ample right-of-way for a trail.

There are significant problem areas on the south side of the road, see Map D for details.

1. The grade differences along side the LTC Meadowgate preserve make it impossible to build a trail in the right-of-way. This LTC preserve is deed restricted to any development. The only way to build a trail along this 1230' area is for a government "takings" of the property. See Section G of the Preliminary Engineering Study.
2. In an area of approximately 1590 feet, all west of Emmet Heights Road, there are grade issues within the right-of-way. In order to build a desirable designed trail that would not require moving utilities and hydrants, 15' of right-of-way would need to be purchased. But, a less desirable design is possible with only the need of grading easements. See Sections I, J, and K of the Preliminary Engineering Study.
3. Another section of approximately 500 adjacent to the plat of Wequetonsing there is question of the location of the road and that it may be off center limiting the ability to have a trail

within the right-of-way. It is in this area that a trail would almost literally “go through the kitchen” of a home. See Section L of the Preliminary Engineering Study.

4. For 870 feet the trail would have to be on the shoulder due to cliff just of the shoulder edge. See Section M of the Preliminary Engineering Study.

North Side of M-119

Although the north side of M-119 has more driveway and major County Road crossings, it does not have as many problem areas as the south side study showed. In general, the area with the most problems was near Hedrick Road as a large embankment made it very costly to buy the right-of-way and build a retaining wall for a trail. But, during the road construction a few years ago, they did this and built a small section of trail below the retaining wall. Therefore in this difficult section, the cost and work has been completed.

Otherwise, the areas near Page Hill Road and near Lake Street, just as with the south side route, have larger right-of-way and a trail could be accommodated. The rest of the areas would need grading easements for the trail. There is some issues with drainage near the Wequetonsing Golf Course that has created a wetland in the ditch area and some drainage issues would need to be resolved.

The north side telephone poles would need to be moved where necessary.

Northern Route, 4.5 miles

This route would best serve local year-round residents to get to the City of Harbor Springs facilities as well as to get to the existing trail which goes to the State Park, the City of Petoskey, and beyond. It would continue directly north from the bike trail crossing of M-119, see Map E for details of this route.

A utility corridor that runs parallel to Hathaway and Bester Roads, with very few road and driveway crossings, make this an ideal location for a trail. The wide Harbor Springs Utility Corridor is cleared of trees and rolling hillsides in nature. This route would also link to the proposed “Hoyt Road Connector” trail in Harbor Springs.

The City of Harbor Springs has a very specific easement in this case and it is for their utilities only. Development of a trail would need the approval to change the easement language or get a new easement of *every* property owner along the route, which are approximately thirty-two. The route is described below:

M-119 to Hathaway Road, .5 miles

There is 100’ of road right-of-way in this half mile stretch of road allowing for room for an off road trail. In this section there are two residential street crossings, one public road crossing (Hathaway), five residential driveways, and the township hall driveway.

Pleasantview to Hedrick Road, 1 mile

This one mile stretch crosses one driveway, the Little Traverse Bay Bands of Odawa Indians Government Complex entry road. Otherwise than that it crosses four residential properties and three vacant properties. The corridor goes through a large wooded property that is slightly rolling.

Hedrick to Emmet Heights, 1.2 miles

The utility corridor crosses Hedrick Road and then cuts on a northerly angle toward Bester Road. While on an angle the corridor crosses three private subdivisions and their roads Bay Meadows, Willows, and Blackwood. This area is wide open and flat. The corridor crosses approximately ten properties, some being small residential lots.



Utility Corridor looking east from Hedrick Road

Emmet Heights to ¼ mile east of Hoyt Road, .75 miles

The utility corridor crosses Emmet Heights and continues west for three quarters of a mile. In this area the land is wide open and slightly rolling making for an excellent rural trail. It crosses only eight properties and no residential driveways.

¼ mile east of Hoyt to Lake Street, .6 miles

About ¼ miles east of Hoyt Road the corridor turns on a southerly tight angle toward Hoyt Road just north of Lake Street. This area goes down a steep embankment and crosses about eight properties.



Utility Corridor looking northeast from Hoyt Rd near Lake Street.

Due to the topography, following the utility corridor does not appear possible from Bester Road down to Hoyt Road. Instead, the route should follow through to Hoyt Road above the bluff and connect to what is hoped to be the future “Hoyt Road Connector Trail” that has been proposed by community members in the past, see Map E. The Hoyt Road Connector, shown in the appendix, is very important to link community resources and provide a safe alternative to the steep, narrow, crumbling local road.

Having the trail go along the Bester Road right-of-way may be possible, but would cross six or eight driveways. An internal route may be possible if the appropriate right-of-way or easement was obtained.

Pro/con review of each route

The following are tables, which summarize the pros and cons of each route:

BEACH ROAD ALIGNMENT ROUTE			
ISSUE	PRO	CON	NEEDS / ISSUES
<u>Land ownership</u> <u>General</u>	<p>Due to conservancy lands and condo developments from M-119 to Pennsylvania Avenue, there are few driveway crossings.</p> <p>The City of Harbor Springs owns 1300' or .25 miles, on the north side of the route, east of Zoll Street.</p>	<p>Due to limited amount of road right-of-way, many easements would have to be obtained in order to build an off road trail.</p>	<p>Getting through Wequetonsing, due to the road right-of-way limitations, appears to not be possible; making the only option through Wequetonsing to be a "shared roadway".</p>
<i>Conservancy Properties</i>	<p>There are many LTC owned properties on north side of this route, which "may" allow for a trail, with LTC approval.</p> <p>Unrestricted LTC properties border the road for 8810' or 1.67 miles,</p>	<p>Menonaqua Preserve, which borders both sides of Beach Road from M-119 to the curve is deed restricted and will not allow the building of a trail without a vote of the Menonaqua Association.</p>	<p>Vote of Menonaqua Association</p> <p>Approval of LTC</p>
<i>Right-of-way</i>	<p>A road separated trail could be accommodated where there is 80' of road right-of way, which is for 3,300' or .63 miles of the route.</p> <p>A shoulder trail or a trail with minimum separation from the road may be accommodated when there is 66' of right-of-way, which is for 3,310' or .63 miles.</p> <p>A wide shoulder trail may be accommodated with 50' of road right-of-way, which is for 4045' or .77 miles.</p>	<p>Most of this route along the road, 12,145' or 2.3 miles, has less than 66' of road right-of-way making a road separated trail within the right-of-way impossible.</p> <p>For a 5460' or 1.03 miles the road right-of-way is 33' or less, making any sort of trail, even a wide shoulder, impossible within the right-of-way.</p> <p>Easements or approval would be needed on approximately 34 properties including deed-restricted properties and association properties in order to have a road separated trail.</p>	<p>A trail that goes from being road separated to a wide shoulder is not recommended by AASHTO because it often puts bicyclists on the wrong side of the road. For instance, if a rider is using the two way trail but going against automobile traffic, when they get on the shoulder they will also be going against traffic.</p> <p>Easements would be needed in many areas in order to have a consistent off-road trail.</p> <p>Vote of various associations would be needed.</p>
<i>Other land limitations</i>		<p>Areas through Wequetonsing and Roaring Brook have structures and parking area that are very close to a narrow (23') right-of-way, making it difficult to locate an off-road trail.</p>	<p>There is a need to get off the road corridor to avoid parking areas. Approval would be needed from LTC, Wequetonsing Association, and Roaring Brook.</p>

ISSUE	PRO	CON	NEEDS / ISSUES
<u>Environmental Wetlands</u>	Due to the high number of wetlands along the trail, much of the land (now owned by LTC) is undeveloped	<p>Most all of the undeveloped lands adjacent to the road right-of-way are wetlands, making it difficult to build an off-road trail.</p> <p>There is no way to get completely around the wetlands, although the impact can be limited if the trail was to meander through the woods along the drier areas closer to the bluff and utilizing boardwalks where necessary.</p>	<p>Wetland Permits will be needed for any work off the road surface. (Even within the road right-of-way permits will be needed.)</p> <p>Costs will increase due to boardwalk development and/or a longer, meandering the trail.</p>
<i>Critical Dunes</i>		Along Beach Road from M-119 to the curve there are critical dunes some that come right down to the road. Going around them would be the best option to reduce the environmental impacts and permit process.	Dune Permits will be needed. Increase in trail development costs if the trail is to work around the dunes and/or construct the trail to minimize impact.
<i>Steep Slopes / Topography</i>	<p>The proposed route is entirely below the bluff and therefore has no steep slopes.</p> <p>The topography is generally flat and tree covered</p>	Tree removal and grading will be necessary for most of the trail location.	Many trees will have to be removed.
<i>Safety</i>	An off-road trail may increase safety in the curvy areas of the route where “near misses” have occurred.	Type A and some Type B riders will still use the road and having non-motorized users in two locations may decrease safety and cause general confusion.	Studies do not show that this route is currently unsafe.
	Limited number of driveway and road crossings and possible use of LTC lands would make a safe trail.	If the trail crosses the road and/or utilizes wide shoulders and a trail, safety could be decreased over the existing situation.	
	Speed of automobiles on the straight away section of road is very fast and getting bikes off it would be beneficial	An off-road trail will most likely <u>increase</u> automobile traffic speeds on the roads as pedestrians and bicyclists are a natural traffic calming mechanism.	<p>Enforcement of speed limit necessary</p> <p>Other measures to slow traffic down, called traffic calming, could be utilized to naturally slow traffic.</p>
	Local law enforcement agencies believe a trail would be safer.	Studies show that off-road trails can often give the impression of being safer, but actually are not.	

ISSUE	PRO	CON	NEEDS / ISSUES
Ease of Development		<p>In many places easements from associations will be required to have any sort of a trail and in the past, many have voted against granting such easements.</p> <p>Environmental permits will be needed.</p> <p>Costs are higher and the route may not be eligible for certain grants.</p>	
Costs	<p>With LTC as the major property owner along the route and if they allow the trail to go through their property, the acquisition costs should be minimal for an off-road trail.</p>	<p>Boardwalks are very expensive to build and maintain.</p> <p>Because this is not adjacent to the highway and because the M-119 trail has already been partially built, it is doubtful that the project would qualify for enhancement funds (the major grant-funder of non-motorized trails)</p> <p>Many other grant agencies may not fund this project because M-119 is already partially complete.</p> <p>Emmet County has agreed to maintain the M-119 trail into Harbor Springs; if they would agree to maintain a trail along Beach Road is unknown.</p> <p>It does not appear that any amount of money will help purchase land or gain easements through Wequetonsing.</p> <p>The length of this route is longer than the M-119 route by .9 miles making it more costly to construct.</p>	<p>Big local donors to help pay for trail construction.</p> <p>Need to get a local government to agree to maintain the trail.</p>
Use of Route	<p>Riders will seek the most scenic route, so many will take this route regardless if there is trail somewhere else.</p>	<p>Many pedestrians and bicyclists will continue to use the road.</p>	
Type A Rider		<p>They will use the road regardless of what trail is built; many existing users of the route are Type A riders</p>	

ISSUE	PRO	CON	NEEDS /ISSUES
<i>Type B Rider</i>	<p>Provide a safer alternative for these users who are probably using the road today as is but may not be comfortable</p> <p>Tourist riders look for routes that are published and are on maps. Having one continuous off-road trail between local communities would be good for both recreation and tourism/economic enhancement</p>	<p>Tourists/ Resorters may still opt for the roads because they are relatively straight, direct, and scenic. They especially will continue to use the routes closest to the water.</p> <p>Type B riders who live north of Harbor Springs will not have direct access to this route, and most likely will not ride their bikes to get to it.</p>	
<i>Type C Rider</i>	<p>There are very few Type C facilities in Harbor Springs and a route of this sort would provide family recreational opportunities.</p>	<p>If there are a lot of boardwalks it may not be a great surface for such Type C users as in-line skaters, scooters, and skateboards.</p> <p>If it is not a continuous off road trail it may not be a great Type C facility limiting its use as such.</p>	<p>If the trail is built only from M-119 to Pennsylvania Avenue, a trailhead will be needed for Type C riders as families will drive to use this trail section.</p> <p>If the entire route is built it is suggested that the City of Harbor Springs municipal building complex have parking for a trailhead.</p>
Population Connectivity	<p>Connect residents and visitors between the Cities of Petoskey and Harbor Springs.</p>	<p>People living north of M-119 will not have a safe route to get from their homes to Harbor Springs schools, parks and commercial centers</p> <p>This route does not provide a safe alternative to get from Petoskey to Harbor Springs if living north of M-119.</p> <p>The population growth is expected to continue north of Harbor Springs, therefore the trail will not accommodate future residents needs from their homes.</p>	<p>May need more than one route to accommodate both recreation and transportation connections.</p>

M-119 ROUTE

ISSUE	PRO	CON	NEEDS /ISSUES
<u>Land ownership</u> Conservancy Properties		<u>South Side</u> The LTC Meadowgate Nature Preserve is deed restricted to development.	<u>South Side</u> A taking of the LTC property is the only way to get around this problem on the south side of the road.
<i>Right-of-way</i>	There is between 66' and 150' of right-of-way throughout this area allowing for the trail to be in the road right-of-way. <u>North Side</u> No additional right-of-way is needed for the trail although grading easements would be necessary.	<u>South Side</u> For 1590' or .3 miles, to make a better trail, 15' of right-of-way would be necessary. In another area of about 500', the trail would come close to residences.	<u>South Side</u> Many of the homeowners close to the right-of-way are against the trail on this side of the road.
<u>Environmental</u> <u>Wetlands</u>	There are no wetlands along this route.	<u>North Side</u> Near the Wequetonsing Golf Course there is a wet drainage area, although this is not a regulated wetland there are that would be needed to mitigate problems.	<u>North Side</u> Fixing existing drainage problems near the golf course.
<i>Critical Dunes</i>	There are no critical dunes along this route		
<i>Steep Slopes / Topography</i>	<u>North Side</u> The one critical topographic problem near Hathaway was resolved during road construction.	<u>South Side</u> There is one small area, 870' or .16 miles, where there is a steep slope adjacent to the road.	<u>South Side</u> The shoulder would have to be utilized in order to avoid this sensitive slope area.
Safety	A trail would buffer non-motorized users from the high-speed traffic along the highway. <u>North Side</u> Road Commission Engineer recommends continuing the trail on the north side as planned.	Could decrease bicycle safety along the road due to the number of driveway crossings.	
Costs	Being only 2.8 miles, this route is the least costly to develop. <u>North Side</u> No right-of-way needs to be purchased for development. The trail should be eligible for Enhancement Grant funds. Emmet County has already agreed to maintain this trail. Public funding has already built part of this route.	Grading easements are necessary on both sides of the road, but these costs are minimal compared to actual acquisition costs for a trail.	Grading easements would need to be obtained. Existing utilities would have to be moved where necessary.
ISSUE	PRO	CON	NEEDS /ISSUES

<p>Ease of Development</p>	<p>Easiest to develop due to the MDOT promise to come back for Phase II.</p> <p>Only grading easements needed, not property for the trail itself.</p> <p>No environmental permits needed.</p>		<p>Many grading easements are needed which takes time and effort.</p>
<p><u>Users of Trail</u> <u>Type A Riders</u></p>	<p>Provide a safe, direct route into Harbor Springs.</p>	<p>A good wide shoulder exists along this route providing decent Type A riding.</p>	
<p><i>Type B Riders</i></p>	<p>Provide an opportunity for many Type B riders to utilize a non-motorized trail right from their homes north of Harbor Springs (those who currently do not because M-119 appears unsafe and not an enjoyable ride).</p> <p>Provide a loop with the existing Beach Road route, eliminating some existing use along that residential road.</p> <p>Provide a direct route for non-motorized users to Harbor Springs, encouraging more Type B users to get out of their car and walk or bike from their home.</p>	<p>Many Type B riders will still use Beach Road because it is more scenic.</p>	
<p><i>Type C Riders</i></p>	<p>Provide an access to the Wheelway for residents north of M-119 to get to other recreational facilities.</p> <p>Trailhead exists at Little Traverse Township Hall.</p>	<p>Nor a great “in and of itself” recreational facility for Harbor Springs Area Residents.</p>	
<p>Population Connectivity</p>	<p>This route will connect Petoskey and Harbor Springs as well as link Harbor area residents to public facilities and commercial centers.</p> <p>This route will continue to provide access to community centers and such for new developments and the growth expected to take place north of Harbor Springs.</p>	<p>Those people living below the bluff, along Beach Road would most likely not use the route and continue to use Beach Road.</p>	

NORTHERN ROUTE

ISSUE	PRO	CON	NEEDS / ISSUES
Land ownership	Almost the entire route is along the Harbor Springs Utility which is cleared, rolling, and would be ideal for trail development	The utility easement is very specific for the utility line ONLY therefore <i>not</i> allowing for trail development	Easements from 30+ property owners would be needed to allow for trail development.
Road Right-of-Way	Along Pleasantview Road from M-119 to Hathaway, the Road Commission has 100' of right-of-way making it possible to have a road separated trail entirely within the right-of-way.		
Environmental Wetlands	There are no wetlands along this route.		
Critical Dunes	There are no critical dunes along this route		
Steep Slopes /Topography	The rolling terrain is very open limiting tree removal.	Getting from Bester Road down to Harbor Springs will be difficult because of the steep slopes.	Hoyt Road is narrow and difficult for non-motorized users and a Hoyt Road connection between the schools and soccer fields is important. Any trail built in this alignment would then be aligned to link to this resource.
Safety	Provide a safe alternative for residents and children to get to the schools, recreation lands, and community centers.	The roads now are not unsafe as there are many options and are lightly traveled.	
Costs	Clearing costs are very minimal because the entire corridor is already cleared for the utility.	Most costly of the options because it is 4.5 miles long with more varied slope terrain. Maintenance of the trail would have to be resolved.	Maintenance agreement by a local unit of government would be needed.
Ease of Development		Most every property owner would have to agree to the trail easement because the corridor is not along another public facility, like a road, (other private land is between the utility and road), to option to when an easement is not available. Most likely this route is not eligible for Enhancement Funds because of its distance from M-119.	

ISSUE	PRO	CON	NEEDS /ISSUES
<p><u>Users of Trail</u> <i>Type A Riders</i></p>		<p>Most will continue to utilize existing roads.</p>	
<p><i>Type B Riders</i></p>	<p>Encourage more commuters to use non-motorized transportation.</p>	<p>This route will not service the Wheelway riders or tourists linking between the two communities.</p> <p>Many, if not coming from the north, will continue to use Beach Road if this is the only route.</p>	
<p><i>Type C Riders</i></p>	<p>Encourage school children as well as residents to walk into town rather than driving.</p> <p>Provide for a nice family recreational trail for the Harbor Springs area.</p>		<p>The existing Little Traverse Township Park can serve as a decent trailhead. One other small parking facility may be needed to accommodate Type C Riders.</p>
<p>Population Connectivity</p>	<p>This route will connect Township people living north of M-119 to the City with a safe alternative to public roads.</p> <p>Link the new Tribal Complex to other community resources.</p> <p>Provide a safe spur trail up Pleasantview Road to get non-motorized users off this heavily traveled road and to the existing Wheelway.</p> <p>Help to initiate the Hoyt Road connector spur, this trail would link to it or be a part of that spur trail.</p>	<p>It will not serve as a link between Petoskey and Harbor Springs.</p>	<p>A continuation of the Wheelway will still be necessary is this trail is built.</p>

Possible Alternatives along Beach Road

Being that there are some difficult areas to get around due to environmental constraints, limited road right-of-way, and land ownership, there are a few suggested alternatives that could be utilized along Beach Road. Map F refers to these possible alternatives.

1. Have the trail go off Beach Road just south of M-119 and below bluff line to Page Hill Road. This route is totally dry and tree removal would be minimal. A full canopy of trees would line the trail along the trail. The trail would then go in the road right-of-way down Page Hill Road.

- a. This option would still need approval of Menonaqua Association for more land parallel to Beach Road and to get through their LTC deed-restricted preserve to the West.
- b. Easement / Property acquisition from Harbor Cove would be necessary as the trail would cross the northern corner of their property.
- c. Approval from the Harbor Springs Airport Authority and/or the City Harbor Springs would be necessary because the trail would go through their property.



2. Have the trail go off Beach Road just South of M-119 but instead of as listed above, go along the top of the bluff. This area is not as scenic as most of the trees were removed for the airport and it would go behind the mini-storage facilities, although there are views of the bay along the bluff line.

- a. This option would still need approval of Menonaqua Association for more land parallel to Beach Road and to get through their LTC deed-restricted preserve to the West.
- b. This option could possibly still need approval from Harbor Cove, depending on the route.
- c. Approval would be needed from the Harbor Springs Airport Authority and/or the City of Harbor Springs.
- d. Getting back to Page Hill Road is more difficult due to topography and the runway location.
- e. This option is getting closer to the existing route of the Wheelway and consideration of extending the existing trail to Page Hill Road and down may be more prudent.



3. Utilize the James preserve and connecting into the Roaring Brook Preserve in order to avoid the narrow winding road past Bridge Street and connecting to Pennsylvania Avenue. This would go along the former railroad bed.

- a. This would require the trail to cross the road, which is not recommended by AASHTO but some times unavoidable.
 - b. Approval from LTC would be needed to use their preserves.
 - c. Building along a former railroad grade is most desirable and less costly.
4. In a small area, make Beach Road one-way going west from Fern to Pennsylvania and make Fern Avenue one-way going east from Pennsylvania back to Beach.
 - a. This is the least expensive way and would keep both automobile and pedestrian traffic going the same direction. Bike lanes could be added to the existing pavement.
 - b. This is a very inexpensive way to solve a difficult problem because the trail would use existing pavement.
5. Make Pennsylvania to the stop sign and then Beach Drive along the waterfront a designated bike route. Along Beach Drive (not road) there are very few driveways or automobile intersections making this an ideal spot for recreation. Consider making Beach Drive a pedestrian only street during the summer months, with the exception of automobile use for those that live along the road and emergency vehicles. This would be a very inexpensive way to solve a difficult problem.
6. Cross the road to the south side of Beach Road near Page Hill Road and utilize the landscaped areas long the front of Cedar Cove and Breakers East as well as any possible railroad right-of-way that still may be available. When no other choice, utilizing the shoulder would be necessary. This would avoid the wetlands on the north side of the road.
7. Utilize known traffic calming devices such as narrowing the road in areas to limit the speeds of drivers along this route, making the straight always safer for non-motorized users. See appendix for proven traffic claming measures.



Summary and Findings

It appears that the most desired route for the Little Traverse Wheelway to continue into Harbor Springs is Beach Road. But with that come the most limitations and most obstacles. The Northern Route is a wonderful idea to get local residents to the existing trail and into Harbor Springs, but it would not be a continuation of the Wheelway because it is not a direct route between communities. Therefore the Northern Route is an excellent idea for the Harbor Springs area but it does not meet the needs of users to be the completion of the Little Traverse Wheelway.

The route along the south side of M-119 was dropped by MDOT for good reasons related to trail design and right-of-way. So it appears that the most feasible of routes and the easiest to implement is the north side of M-119. With that, my summaries and findings will highlight the needs around M-119 and Beach Road, but with suggestions for spur trails to help alleviate known and future problem areas.

In order to simplify the issue and to try and see if one route stood out, the following chart shows trail issues and a chosen “winner” for each. The result is a basic tie between the north side of M-119 and Beach Road.

Route Winner	
ISSUES	WINNER
Continuity of trail	M-119, North
Least amount Environmental Impacts	M-119, North
Increase Safety from today	Beach Road
Increase Users from today	M-119, North
Least Expensive to build	M-119, North
Better tourism/economic tool	Beach Road
Most Scenic	Beach Road
Least Number of easements needed	Beach Rd (not including Wequetonsing)
Least Number of difficult/costly easements to obtain	M-119, North
Safer trail when built	Tie <i>With driveway crossings on M-119 and change in trail type on Beach road, neither location is ideal.</i>

The Beach Road Alignment in and of itself is a bike route; it always has been and will continue to be regardless of where a trail is built. It is a route that highlights the community with its views of the Bay, its forested preserves, dunes, wetlands, and historic communities. The route is relatively safe and with some proper education of both drivers and riders, it would be even safer. As it is today, it is a good route for both Type A and B riders. If looking to build a facility for Type C riders, and with the limitations of such a route through Wequetonsing, it must be considered as a recreational facility for Type C riders and needs for such users must be considered, such as parking areas, benches, and the like.

M-119 should be the easiest route to build, it would provide an alternative and loop to Beach Road, and would also provide a route for non-motorized users who are using no route today. Having an M-119 route should also help to advocate for a trail along Beach Road, as there will be options for trail users and not everyone will be routed through the residential area near the water. Having a route on M-119 would proved a loop option with Beach road, taking away some of the existing riders along the road and alleviating some existing problems.

Along with an M-119 trail, it is possible to build an off-road route along the Beach Road alignment in phases, finding alternatives first to get around the two curvy, narrow areas of the roadway. Then later finding a route to connect the two either with boardwalks through the wetlands, a shoulder side trail, or along the front of the existing condominium associations. Through Wequetonsing either easement an would have to be granted or the bike route would just stay on the local roads into Harbor Springs.

Consultant Recommendations:

With these findings, recommendations and immediate needs are outlined and listed below:

1. Throughout this process it has been discussed that there needs to be an alternative to Beach Road because it is unsafe the way it is being used today. Statistically, this is untrue. Bicycles, who are the majority of users of non-motorized trails, are legally allowed to use public roadways (unless specifically stated otherwise) and can ride two abreast. At the same time, when the roads are curvy and there is limited site distance, bicyclists need to be aware of these automobile limitations. An education campaign is needed on both sides.
NEED: With the help of local road agencies, visitors bureaus and the like, start a two-way education campaign for both automobile drivers to respect the rights of bicyclists and for bicyclists to be more aware of problem areas along the roads. Publish bicycle maps that show problem areas. These users CAN share the road.
2. Immediately start to work with MDOT to finish Phase II of the non-motorized trail along the north side of M-119.
NEED: Strong and united consensus from the area government agencies and non-profits is needed to get MDOT to finish the job they started.
3. Continue to work with the local community to find solutions to problem areas along Beach Road, especially where there are safety concerns.
NEED: Start dialogue with associations and suggest various alternatives for the routing in order to make the road safer for non-motorized users, which includes their own members who currently jog, bike, and walk along the road.
NEED: With preliminary support for some alternatives, consider doing a preliminary engineering study on a set route with a few alternatives. Have the engineer work with Tip of the Mitt Watershed Council and LTC on routing around wetlands and to find a small parking area for local users.
4. Build the Hoyt Road connector in some fashion to get people safely into the city of Harbor Springs from the north. Currently the only unsafe part of the road north of M-119 in this project area was Hoyt Road.
NEED: Start Dialogue with the School District and the City of Harbor Springs to make this plan a reality.
5. Create a spur trail from M-119 on the west side of Pleasantview Road to Hathaway and possibly link to the LTBB Complex. Possibly consider a longer route to Highland Drive to link with Boyne Highlands.
NEED: Start dialogue with Little Traverse Township, LTBB and Boyne USA to initiate this spur trail.

6. Advocate for bike lanes or paved shoulders on any new resurfacing project along county roads.
NEED: Work with the Emmet County Road Commission to include bike lanes or wide shoulders when resurfacing County roads, such as Hathaway, Bester, Hedrick, Emmet Heights, etc.
NEED: Advocate for changes in the law to require road agencies to consider and build roads for both motorized and non-motorized uses.

7. If the community wants to consider a future Northern Route along the utility corridor or another route in the area, start talking with landowners today.
NEED: Start a community dialogue and approach property owners along the utility corridor.

8. Work with Little Traverse Township, Emmet County Planning Department and the Emmet County Road Commission to initiate traffic calming measures along Beach Road.
NEED: Bring a traffic calming expert to the area as a speaker in an education session and specifically invite Beach Road association members, local government staff and leaders and the Road Commission staff and board.

Sources:

1. Project History was gained from records at:
 - a. Emmet County Planning and Zoning Office at 3434 Harbor-Petoskey Road, Harbor Springs, MI 49740
 - b. Top of Michigan Trails Council Office, 445 E. Mitchell, Petoskey, MI 49770
2. Specifications and standards:
 - a. *Guide for the Development of Bicycle Facilities*, American Association of State Highway and Transportation Officials, 1999
 - b. *Trails for the Twenty-First Century*, Charles Flink, Kristine Olka, and Robert Searns, Rail-to-Trails Conservancy, 2001
 - c. “Traffic Calming Techniques,” Michele Manning, *Planning and Zoning News*, February 2000.
3. Community benefits of trails:
 - a. *Benefits of Trails and Greenways*, Trails and Greenways Clearinghouse, Technical report, www.trailsandgreenways.org.
 - b. “New Poll Shows Americans Eager to Walk More, Support Spending on a Better Walking Environment,” Surface Transportation Policy Project, *Planning & Zoning News*, June 2003.
 - c. Other online resources include:
 - i. Rails to Trails Conservancy: www.railtrails.org
 - ii. American Trails: www.americantrails.org
 - iii. Bicycling Information: www.bicyclinginfo.org

Appendix:

The following documents are attached for further reference as well as support information that could be used during the decision-making process.

1. Chronology
2. Hoyt Road Connector Preliminary Map
3. M-119 South study
4. M-119 North study
5. Traffic Calming techniques