

Appendix A. Memorandum of Understanding

From: Bruce Snook, Co-Chair
St. Joseph County Land Use Council and
Cooperative Non-Motorized Pathway Planning Team
620 Pine St.
Three Rivers, MI, 49093
269-273-8356 (ph) - besnook@comcast.net

To: Name _____
Address _____
City, State, Zip _____

Date: _____

RE: Memorandum of Understanding: Proposed Non-Motorized Pathway

The intent of this Memorandum of Understanding is to declare our support for and involvement in the non-motorized pathway planning efforts for a portion of our St. Joseph County, Michigan property, located between Millard Road, Broadway Road, Roberts Road and U.S. 131. We acknowledge and agree that this is a joint effort by and between the City of Three Rivers, Fabius Township and ourselves, in providing this land on a voluntary basis. We understand that any pathway located on our property would be part of a larger non-motorized pathway connection between the Three Rivers Health Medical Center and Meyer Broadway Park, as delineated on Exhibit A (map).

We recognize that the development of the non-motorized pathway supports previous planning efforts that demonstrated community-wide interest in developing a regional pathway system. We recognize that the planning for and development of this pathway has been spearheaded through an inclusive and cooperative effort between by the City of Three Rivers and Fabius Township; in partnership with the St. Joseph County Land Use Council, St. Joseph County Parks and Recreation, the Branch-Hillsdale St. Joseph Community Health Agency and St. Joseph County MSU Extension. We also recognize that the development of the non-motorized pathway can provide a number of community-wide benefits and improve the overall quality of life of the community, and as such, desire to provide access to the property for generations to come.

We recognize that this is not a binding legal document. We recognize that by signing this Memorandum of Understanding, we are not obligated to provide our property for the future development of a non-motorized pathway. Rather, we understand that by signing this Memorandum of Understanding we are simply demonstrating consensus and mutual understanding between like property owners along the proposed non-motorized pathway route, and that we have been formally contacted and expressed interest in the exploration and development of a non-motorized pathway on our property.

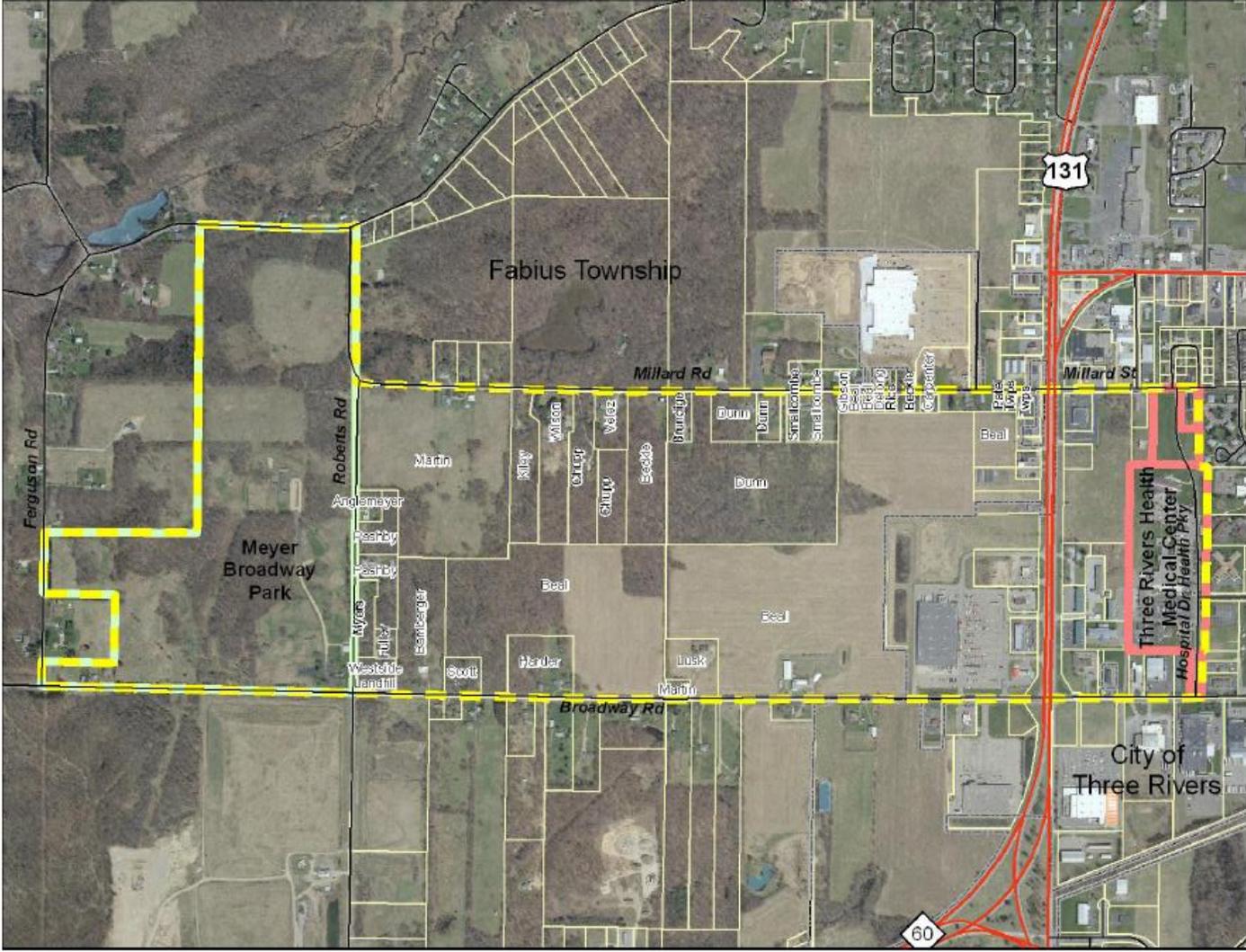
Signature _____ Date _____

Printed Name _____

Signature _____ Date _____

_____, Chair
Cooperative Non-Motorized Pathway Planning Team

Exhibit A.



Appendix B. Options for Inter-Jurisdictional Cooperation and Pathway Management

State enabling legislation has allowed local governments in Michigan to work across jurisdictional boundaries to provide for and finance a wide range of park and recreation services for many years. The following chart illustrates the different state statutes that support community recreation (and trail) planning and development. The chart is adopted from Appendix A of the *DNR Guidelines for the Development of Community Park, Recreation, Open Space and Greenway Plans*.

Act	Title	Government Units Covered	Governing Body Established by the Act
1905 PA 157	Township Parks and Places of Recreation	Townships	Township Park Commission or Board of Commissioners ¹
1913 PA 90	Parks, Zoological Gardens and Airports	Counties	County Park Trustees
1917 PA 156	Recreation and Playgrounds	Cities, Villages, Townships, Counties and School Districts	Recreation Board
1929 PA 312	Metropolitan District Act	Cities, Villages, Townships, and Parts Thereof	Charter Commission
1965 PA 261	County and Regional Parks	Counties	Parks and Recreation Commission ²
1989 PA 292	Metropolitan Councils Act	Cities, Counties, Villages and Townships ³	Metropolitan Area Council
Part 721 of 1994 PA 451	Michigan Trailways	Federal Government, Counties, Cities, Villages and Townships	Michigan Trailway Management Council ⁴
2000 PA 321	Recreational Authorities Act	Cities, Counties, Villages, Townships and Districts	Board of Directors

¹ Formed when two or more townships hold land jointly; it is made up of the supervisor or designee from each Township

² To oversee a Regional Park

³ With a Metropolitan Area

⁴ Councils are formed pursuant to the Urban Cooperation Act (1967 PA7)

Two state enabling statutes that appear well suited for the purpose of developing, maintaining and managing pathways are the *Metropolitan Districts Act* and the *Recreational Authorities Act*. Both statutes provide authority to cities, townships, and villages to form separate quasi-units of government for the acquisition and management of key recreational resources.

A management entity formed under the *Metropolitan District Act 312 of 1929* would establish an inter-jurisdictional body that handles the operation of the proposed pathway. The *Metropolitan District Act* permits any two or more cities, villages or townships (or part of these) to incorporate into a metropolitan district to purchase, own and manage parks or public utilities. The District's powers can include:

- The ability to own, operate and maintain facilities.
- Hire staff and contract for services.
- Borrow money and issue bonds on the credit of the district.
- Levy taxes up to ½ of 1% of real and personal property in the district (or a “special assessment district”).

This legislation requires the creation of a charter and charter commission, which must be approved by the voters of the participating jurisdictions. The charter may include a millage. Any subsequent amendment to the charter would require a similar public vote.

One of the most recent statutes to enable inter-jurisdictional cooperation for park and recreation services is the *Recreational Authorities Act 321 of 2000*. Currently there are twelve such Authorities in Michigan established under this act, representing over 30 local jurisdictions. The *Recreational Authorities Act* allows two or more villages, cities, townships, counties and/or districts to establish a Recreational Authority for the acquisition, construction, operation, maintenance, or improvement of public parks, including foot, bicycle and bridle paths.

Furthermore, a Recreational Authority may acquire and hold real and personal property inside or outside the territory of the authority through purchase, lease, land contract, installment contracts and other means. A Recreational Authority may also obtain grants, collect fees, receive revenue as appropriated by the legislature or participating municipalities, enter into contracts, provide for the maintenance of property, and retain employees and professional services. In addition, the Recreational Authority may request public funding through a millage of not more than 1 mill for not more than 20 years on all taxable property within its territory. Any millage proposed would require public approval through a formal election.

To establish the Authority, Articles of Incorporation must be prepared, including: name of the Authority; participating jurisdictions; description of the territory; characteristics of the board (e.g. number of members and their selection; qualifications; terms and replacement). The articles of incorporation must be approved by the legislatures of each participating municipality.

In 2007, eleven jurisdictions worked together to establish the *Iron Ore Heritage Recreation Authority*. The Authority is charged with developing, maintaining and managing a 48-mile trail system in the Upper Peninsula. In 2010, in an effort to oversee the development of a community-wide non-motorized trail system, the City of Hillsdale, Village of Jonesville, Hillsdale Township and Fayette Township worked together to establish the *Headwater Recreation Authority*.

Community Stakeholders and Support

Among other things, local trail advocates, residents, businesses owners and community support groups can be very helpful in planning for and promoting trails, volunteering for small construction projects and helping to secure funding. In addition to local advocates and stakeholders - local, regional and statewide agencies, governments and organizations can be helpful in planning for and promoting trails, volunteering for small construction projects and helping to secure funding. Such stakeholders include:

- Road Agencies
- Recreational Groups (e.g., snowmobile association)
- Environmental Organizations
- Health Officials (e.g. doctors, hospital administrators)
- Regional Government Leaders
- Senior Organizations
- School Officials and Youth

Appendix C. Sample Pathway Easement

EASEMENT AGREEMENT

AGREEMENT made by and between WATERFRONT LIMITED HOUSING ASSOCIATION, a Michigan limited partnership, with offices at 320 Thomas Street, Three Rivers, Michigan 49093, (hereinafter called "WATERFRONT") and THE CITY OF THREE RIVERS, a Michigan municipal corporation, with offices at 333 West Michigan Avenue, Three Rivers, Michigan 49093, (hereinafter called the "CITY").

RECITALS

- A. WATERFRONT is the owner of the premises (hereinafter called the "Premises") situated in the City of Three Rivers, County of St. Joseph, State of Michigan, described in Exhibit "A" attached to and made a part hereof.
- B. The CITY desires an easement over, across and upon the Premises in order to enable the CITY to expand and maintain a public recreational walkway along the St. Joseph River (hereinafter called the "Riverwalk") on land owned by the CITY adjoining the Premises and on a portion of the Premises as shown on Exhibit "B" attached to and made a part hereof.
- C. WATERFRONT agreed to grant the requested easement in the public interest and to facilitate use of the Riverwalk by tenants of WATERFRONT's apartment complex which is situated on part of the Premises.

NOW THEREFORE, in consideration of the foregoing Recitals and the undertakings hereinafter contained, and other good and valuable considerations, WATERFRONT and the CITY mutually agree as follows:

1. Grant of Easement. Pursuant to the terms and conditions of this Agreement, WATERFRONT hereby grants to and creates for the benefit of the CITY an easement (hereinafter called the "Riverwalk Easement") located in, over, across and upon the Premises. As shown on Exhibit "B", the Riverwalk Easement shall include the paved surface of the Riverwalk; a ten (10) foot easement set-back; and the area around the pond marked by diagonal lines shown as "City Maintained Pond Area".
2. Limited Use of Easement By the CITY. The use of the Riverwalk Easement by the CITY shall be limited to constructing, operating, inspecting, maintaining, and repairing the Riverwalk, including light fixtures and underground utilities; and for access by the CITY's police and fire department in case of emergency. The City may maintain the "City Maintained Pond Area" as shown on Exhibit "B"

including the removal of debris, dead and diseased trees around and in the pond.

3. Access to Easement. The CITY, its employees, agents, and authorized representatives shall, at all reasonable times and from time to time throughout the duration of the Riverwalk Easement, have the right to enter upon, and exit from the Riverwalk Easement for any of the purposes set forth in and contemplated by this Agreement.
4. Use By the Public. It is understood that the Riverwalk in its entirety, as it now exists and as it may be extended, is for use by the general public for recreational purposes pursuant to rules and regulations as adopted and revised from time to time by the CITY. This use by the public shall be limited to the Riverwalk Easement area as shown on Exhibit "B". Tenants of WATERFRONT's apartment complex and its employees shall have access to the Riverwalk by way of the paved path of construction by the CITY and shown on Exhibit "B" as "Private Walkway for Waterfront Tenants Only".
5. Duration and Termination of Easement. Unless released by the CITY, the Riverwalk Easement shall endure and continue until it is no longer used by the CITY for any of the purposes described in this Agreement. The Riverwalk Easement shall automatically terminate when it is no longer used by the CITY as a public recreational walkway.
6. Obligation for Costs and Expenses. The CITY shall be responsible for the payment of all damages, costs and expenses incurred in and arising out of use of the Riverwalk Easement by the CITY for any of the purposes described in this Agreement.
7. Indemnification of WATERFRONT. The CITY shall indemnify WATERFRONT against, and shall hold WATERFRONT harmless from, losses, injuries or damages which shall be caused by or arise out of any use of the Riverwalk Easement by the CITY.
8. Interest in Realty. The Riverwalk Easement created by this Agreement is an easement over WATERFRONT's Premises for the use and benefit of the CITY owned land on which the Riverwalk is primarily situated including the land shown on Exhibit "B" attached to and made a part hereof. The Riverwalk Easement shall be an appurtenance to the land and shall run with the land.
9. Succession of Rights and Obligations. The terms, conditions, covenants and other provisions contained in this Agreement shall be binding upon and inure to the benefit of WATERFRONT and the CITY and their respective successors and assigns.

IN WITNESS WHEREOF, the parties have executed this Easement Agreement as of the ____ day of _____, 2009.

THE CITY OF THREE RIVERS, a Michigan municipal corporation WATERFRONT LIMITED HOUSING ASSOCIATION, a Michigan limited partnership

By: _____, Its Mayor
Allen J. Balog, Its Mayor

By: _____
Lindsay Howes, Its City Clerk

ACKNOWLEDGMENTS

STATE OF _____
COUNTY OF _____

The foregoing Easement Agreement was acknowledged before me this ____ day of _____, 20____, by _____, the _____ of WATERFRONT LIMITED HOUSING ASSOCIATION, a Michigan limited partnership, on behalf of the partnership.

Notary Public: _____
State of Michigan, County of _____
My Commission Expires: _____

STATE OF MICHIGAN
COUNTY OF ST. JOSEPH

The foregoing Easement Agreement was acknowledged before me this ____ day of _____, 2009, by Allen J. Balog and Lindsay Howes, the Mayor and City Clerk respectively of the City of Three Rivers, Michigan, a municipal corporation, on behalf of the corporation.

Notary Public: _____
State of Michigan, County of St. Joseph
My Commission Expires: _____

EXHIBIT "A"
(The Premises)

Easement Agreement Between Waterfront Limited Housing Association and The City of Three Rivers.

All that part of the Northwest fractional quarter of Section 19, Township 6 South, Range 11 West, City of Three Rivers, St. Joseph County, Michigan, described as follows:

Commencing at the Northeast Corner of King's Resubdivision and Addition to Three Rivers, according to the Plat of record in the office of the Register of Deeds for St. Joseph County, Michigan, in Liber 1 of Plats, page 32; thence South on the East line of said Addition to a point lying directly East of the North line of King Street; thence West to a point lying directly North of the East line Lot 72 of said Addition; thence Southerly to a point on the Easterly line of said King's Resubdivision and Addition to Three Rivers lying North 01°42' East, 24.25 feet from the Southeast Corner of said Addition; thence North 33°42' East, 499 feet to an iron stake; thence North 16°07' East, 1220.6 feet; thence South 89°59' East, 146.3 feet; thence Northeasterly 216.75 feet to the Section line between Section's 18 & 19, Township 6 South, Range 11 West; thence West along said Section line to the East line of Thomas Street extended; thence South along said East line of Thomas Street to a point lying due East of the South line of lot 1, Block 2 of Hick's Addition to the Village (now City) of Three Rivers, according to the Plat of record in the office of the Register of Deeds for St. Joseph County, Michigan, in Liber 1 of Plats, page 132; thence West to the East line of said Block 2 of Hick's Addition; thence South along said East line to the Southeast Corner of Lot 10, Block 2 of said Addition; then West along the South line of Lot 10 to the Point of Beginning.

Excepting therefrom: The North 33 feet.

Also excepting: Commencing 66 feet East of the Northeast Corner of Lot 1, Block 2 of said Hick's Addition; thence South 132 feet; thence East 341 feet to an iron stake on the West boundary of Fairbanks Morse Company Land; thence Northeasterly along said land to the South line of Millard Street; thence West to the Point of Beginning of the exception.

Also excepting: Commencing at the Southeast corner of Lot 91 of said King's Resubdivision and Addition; thence North 1°42' East, along the East plat line, 113.25 feet to the Northeast corner of Lot 90 of said Addition to the Point of Beginning of this exception; thence East 56.62 feet; thence South 33°40'15" West, to a point on the East line of said Addition, 106.89 feet; thence North 1°42' East, along said East line, 89 feet to the Point of Beginning of this exception.

Property Identification Number: 75-051-399-026-00

Appendix D. Intermunicipality Committees Act

INTERMUNICIPALITY COMMITTEES Act 200 of 1957

AN ACT to provide for the creation by 2 or more municipalities of an intermunicipality committee for the purpose of studying area problems; and to provide authority for the committee to receive gifts and grants.
History: 1957, Act 200, Eff. Sept. 27, 1957.

The People of the State of Michigan enact:

123.631 Intermunicipality area problem study committee; municipalities, definition.
Sec. 1. As used in this act, "municipalities" means any city, village, township, chartered township or other incorporated political subdivision of this state.

History: 1957, Act 200, Eff. Sept. 27, 1957.

123.632 Intermunicipality study committee; organization, purposes.
Sec. 2. The governing bodies of any 2 or more municipalities, by resolution, may establish and organize an intermunicipality committee, to be known as the intermunicipality committee, for the purpose of studying area governmental problems of mutual interest and concern, including such matters as facility studies; on sewer and sewage disposal, water, drains, roads, rubbish and garbage disposal, recreation and parks, and ports, and to formulate recommendations for review and action thereon by the member governing bodies.

History: 1957, Act 200, Eff. Sept. 27, 1957.

123.633 Intermunicipality study committee; surveys, recommendations, reports.
Sec. 3. The intermunicipality committee may employ personnel to coordinate and conduct all types of surveys and studies relating to the mutual problems of its member municipalities; or may enter into agreements for such surveys and studies to be conducted by other public or private agencies. It shall adopt, by resolution of a majority of its full membership, any recommendation for submission to the several member governing bodies. It may publicize its purposes, objectives and findings, and may distribute reports thereon. It shall make an annual report of its activities to the several member governing bodies.

History: 1957, Act 200, Eff. Sept. 27, 1957.

123.634 Intermunicipality study committee; funds.
Sec. 4. For the purpose of providing funds to meet the expenses of the intermunicipal committee, the member governing bodies, by resolution, may authorize the allocation of municipal funds for such purpose. The proportion of the total amount of funds to be provided by each member municipality shall be based on the recommendation of the intermunicipality committee, or shall be provided for in the bylaws of the committee, which shall have been approved by the member governing bodies.

History: 1957, Act 200, Eff. Sept. 27, 1957.

123.635 Intermunicipality study committee; contributions of services of personnel, equipment, office space.

Sec. 5. Services of personnel, use of equipment and office space and other necessary services may be accepted from member municipalities; and may be considered as a part of the financial support of that municipality.

History: 1957, Act 200, Eff. Sept. 27, 1957.

123.636 Intermunicipality study committee; gifts and grants from governmental units and from private sources.

Sec. 6. The intermunicipal committee may accept gifts and grants from the federal government, state government and local governments, also from private individuals, foundations or agencies, if the grants are made for furtherance of the objectives for which the committee is established.

History: 1957, Act 200, Eff. Sept. 27, 1957.

123.637 Intermunicipal committee; audit.

Sec. 7. (1) The intermunicipal committee shall obtain an audit of its financial records, accounts, and procedures not less frequently than biennially as determined by the intermunicipal committee.
(2) The intermunicipal committee shall submit the results of an audit under subsection (1) to the state treasurer.

(3) An audit under subsection (1) shall satisfy all audit requirements set forth in the uniform budgeting and

Rendered Wednesday, November 17, 2010

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Michigan Compiled Laws Complete Through PA 200 and
includes 202-207 of 2010

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Courtesy of www.legislature.mi.gov

accounting act, 1968 PA 2, MCL 141.421 to 141.440a.

History: Add. 1995, Act 143, Eff. Oct. 22, 1999.

Appendix E. Pathway Benefits

There are numerous human, health and general community benefits associated with non-motorized pathways. These benefits have been the subject of many studies and reports published in recent years. In fact, this literature is quite extensive. The following benefits were identified in the *2007 Three Rivers Area Non-Motorized Trail Study*, prepared by Fleis & Vandenbrick Engineering, Inc.

Community Benefits of Increased Trails

1. Reduced traffic congestion - More people walking and bicycling means fewer cars on the road.
2. Quiet and clean transportation - Bicycling and other forms of foot traffic keep motor-traffic noise and pollution out of neighborhoods.
3. Efficient use of public facilities and funds - More bicycling and walking increase the “people moving” capacity of public facilities without the large investment required to add motor-vehicle lanes of traffic.
4. Improved public health & lower healthcare costs - Increased levels of exercise and reduced air pollution. Exercise becomes part of the normal daily activities done close to home.
5. Improved access to affordable transportation for citizens of all income levels.
6. Improved neighborhood security - Increased effectiveness of neighborhood watch activity and encouragement of police-on-bicycle patrol units.
7. Increased energy independence - Reduced reliance on foreign oil sources.
8. Increased mobility - More transportation choices means less dependence on the single occupant automobile.

Benefits of Trails - Businesses along the Hart-Montague Trail, a 22 mile trail in West Michigan, found that their sales revenues increased 25 to 30 percent within the first six months of the trails existence.

- *Connecting Michigan*
Michigan Trails & Greenways Alliance

Benefits of Trails - In a 2000 Midland Area Community Foundation survey, area citizens rated the Pere Marquette Rail trail the number one community asset in Midland. The trailway was more highly regarded than many local churches.

- *Connecting Michigan*
Michigan Trails & Greenways Alliance

9. Improved retail climate - Increases the number of customers for shopping and business areas without the negative impacts of increased motor vehicle traffic (increased congestion & parking space demand). Encourages shopping close to home, which benefits local retailers.
10. Improved housing market - Good bicycling and walking facilities improve the livability and market demand for residential areas.

Throughout the community planning process, a number of citizens and land owners expressed concern regarding the perceived negative effects the pathway will have on neighborhood safety and home values. The following article (in full)⁵, published by *American Trails*, a national nonprofit organization working on behalf of trails, works to debunk these assumptions. Reviewing research from three state, local and national studies, the article finds there is no evidence that crime will increase in neighborhoods where trails are located. In addition, the studies found that property values actually increased the closer they were to the trail.

Trail Effects on Neighborhoods: Home Value, Safety, Quality of Life

Are trails safe? How do they affect property values of adjacent residents?

Compiled by Suzanne Webel, Boulder Area Trails Coalition

Are trails safe? How do they affect property values of adjacent residents? These perennial issues have been the subject of a few studies which find that trails are quite benign in their social impact. The facts haven't stopped groups organized against rail trail development from trumpeting that the few instances of crime are proof that trails are unsafe.

Homeowners nationwide express the same concerns and fears about proposed trails in their neighborhoods. But studies in various parts of the United States seem to show that concerns about trails lowering property values and increasing crime are unfounded. In fact, trails have consistently been shown to increase (or have no effect on) property values, to have no measurable effect on public safety, and to have an overwhelming positive influence on the quality of life for trail neighbors as well as the larger community.

⁵ Trail effects on Neighborhoods: Home Value, Safety and Quality of Life. *American Trails*. 2000
<http://www.americantrails.org/resources/adjacent/sumadjacent.html>

1. The Effect of Greenways on Property Values and Public Safety; The Conservation Fund and Colorado State Parks, State Trails Program (1995)

"The study of Property Values and Public Safety was to determine what effect, if any, the presence of urban trails has had on public safety to property owners who live adjacent to a trail and on property owners who live within one block of a trail. The study also evaluated the level of public acceptance for urban trails and their effect on the quality of life in these neighborhoods...

"The need for the study arose due to concerns expressed by several different neighborhoods over the proposed construction of new trails. These concerns included fears that the presence of an urban trail might lower property values and also create a risk to public safety, thus adversely affecting the quality of life in the neighborhood. These concerns are similar to concerns voiced in the past over proposed trails that are now established and accepted...."

Three Denver trails were studied in detail: "Data was collected in the summer of 1994 by telephone interviews of residents adjacent to or near to the trails, real estate agents who buy and sell homes in metro-Denver, patrol officers who work the trails, and biweekly surveys of the Denver Post Real Estate advertisements...."

Results of the survey show that "urban trails are regarded as an amenity that helps to attract buyers and to sell property. For residents of single family homes adjacent to a trail:

- 29% believed that the existence of the trail would increase the selling price of their home (and 43% said it would have no effect).
- 57% of the residents felt that the trail would make the home easier to sell (with 36% saying no effect).
- 57% of these residents had lived in their homes prior to construction of the trail
- 29% of those surveyed were positively influenced by the trail in their decision to buy the home.

Results were similarly positive for residents who lived near but not adjacent to the trail..."

"Of the real estate agents interviewed:

- 73% believed that a home adjacent to a trail would be easier to sell
- 55% agreed that the home would sell for more than a comparable home from a different neighborhood
- 82% of real estate agents used the trail as a selling point
- 100% believed trails are an amenity to the community around it...

"No public safety issues could be directly linked to the trail. Only one resident interviewed was concerned with this issue, and none of the officers interviewed believed trails had any effect on public safety....

"[In summary,] concerns that urban trails might adversely affect [sic] public safety and property value in surrounding neighborhoods are not substantiated by the results of this study. The effect of a trail is beneficial, rather than detrimental."

2. The Impact of the Brush Creek Trail on Property Values and Crime; Santa Rosa, CA, Michelle Miller Murphy, Sonoma State University, (1992)

"The purpose of this study was to determine what effect, if any, a bicycle/pedestrian trail has on property values and crime rates. Concerns by local property owners that proposed trails may negatively affect property values or increase crime prompted this survey. Due to its 9 year existence, the Brush Creek Trail, built along Brush Creek in Santa Rosa's Rincon Valley, was selected as the focus of this survey....

"Seventy five residents were surveyed on how long they had lived in the neighborhood, how the trail has affected their overall quality of life; what effect the trail would have on selling their homes, what effect the trail had in their decision to buy their homes; how the trail has affected their privacy, and what problems, if any, they have had with crime caused by trail users. Additionally, interviews were conducted with apartment and mobile home park managers near the trail, real estate agents with listings adjacent to trails, and law enforcement agencies; fifteen other cities were contacted for information on surveys regarding the effect of trails on property values and crime..."

- 64% of respondents felt the trail increased the quality of life in the neighborhood, with another 13% saying "no effect"
- 33% said the trail would make their home easier to sell, with 49% saying "no effect"
- 23% said the trail would make their home sell for more, with 69% saying "no effect"

Of real estate agents:

- 19% said homes next to a public trail would sell for slightly more, with another 48% saying "no effect"
- 61% of real estate agents said they use proximity to trails as selling points

"The law enforcement agencies had no data to determine crime statistics; survey results from 15 other cities showed only a small number of minor infractions including illegal motorized use of the trail, litter, and unleashed pets.

"The study shows neither increased crime nor decreased property values due to trails. On the contrary, the most overwhelming opinion by residents along the Brush Creek Trail is that the trail/creek has a positive effect on the quality of life in the neighborhood."

3. Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors: a Resource Book (1990), Rivers and Trails Conservation Assistance, National Park Service;

This comprehensive volume includes studies from across the U.S., analyzed by impacts on Real Property Values, Expenditures by Residents (i.e. how people spend their leisure dollars), Commercial Uses, Agency Expenditures, Tourism, Corporate Relocation, Public Cost Reduction, Benefit Estimation, etc.

"The effect on property values of a location near a park or open space has been the subject of several studies... Many studies have revealed increases in property values in instances where the property is located near or adjacent to open spaces..."

A 1978 study of property values in Boulder, Colorado, noted that housing prices declined an average of \$4.20 for each foot of distance from a greenbelt up to 3,200 feet. In one neighborhood, this figure was \$10.20 for each foot of distance. The same study determined that, other variables being equal, the average value of property adjacent to the greenbelt would be 32% higher than those 3,200 feet away.

The same study revealed that "the aggregate property value for one Boulder neighborhood was approximately \$5.4 million greater than if there had been no greenbelt. This results in approximately \$500,000 additional property tax revenue annually. The purchase price of the greenbelt was approximately \$1.5 million. Thus, the potential increase in property tax alone could recover the initial costs in only three years."

A different 1988 Boulder study found that "the public cost for maintaining non-open space, such as developed acres, was estimated to be over \$2,500 per acre, and could be as high as \$3,200 per acre

when utilities, flood control, transportation, and subsidiary governmental entities' costs are included. The cost for maintaining open space in the City was only \$75 per acre, or less than three percent of the cost on non-open space..."

4. Effects of Three Cary Greenways on Adjacent Residents (1995), Lauren A. Tedder, University of North Carolina at Chapel Hill

"The purpose of this study was to determine if such problems plague the adjacent and nearby residents of three Cary, North Carolina greenways... a survey of those living near the three greenways was conducted. Respondents were asked questions designed to reveal their satisfaction with the greenway, their initial feelings toward the greenway, the frequency of problems they experienced, their use of the greenway, and their perceptions of the effect of the greenway on their property value. "The results of the survey, which achieved a 75% response rate, supported the hypothesis that most residents feel satisfied with the greenways and that problems are minimal.

"Planners should take care to instill positive feelings among affected residents toward a proposed greenway by involving them in the planning process, educating them on the benefits of greenways, presenting data that refute their fears of perceived problems, and calming their greatest fears of crime through crime prevention efforts. Reducing the number of occurrences of the most commonly reported problems will require adapting greenways to specific circumstances. For example, noise and loss of privacy problems may be ameliorated by increased buffers between the greenway and home, while open wood rail fences may more clearly signify property lines and reduce trespassing."

What a Non-Motorized Trail System Should Do

In addition to the benefits listed on the previous pages, the City of Ann Arbor Non-Motorized Transportation Plan⁶ states that a well-implemented non-motorized transportation system will reap rewards by:

- Providing viable transportation alternatives for individuals who are capable of independent travel yet do not hold a driver's license or have access to a motor vehicle at all times
- Improving safety, especially for the young and old who are at most risk due to their dependence on non-motorized facilities and their physical abilities
- Improving access for the 20% of all Americans who have some type of disability and the 10% of all Americans who have a serious disability
- Improving the economic viability of a community by making it an attractive place to locate a business while simultaneously reducing public and private health care cost associated with inactivity
- Encouraging healthy lifestyles by promoting active living
- Reducing the water, air, and noise pollution associated with automobile use by shifting local trips from automobiles to walking or bicycling
- Improving the aesthetics of the roadway and community by adding landscaping and medians that improve pedestrian environment and safety
- Providing more transportation choices that respect an individual's religious beliefs, environmental ethic, and/or uneasiness in operating a vehicle
- Creating a stronger social fabric by fostering the personal interaction that takes place while on foot or bicycle
- Reducing dependence on and use of fossil fuel with the resulting positive impact on climate change.

⁶ City of Ann Arbor Non-Motorized Transportation Plan, 2007. Prepared by the Greenway Collaborative, Inc.

Appendix F. Design Considerations, Maintenance and Local Planning and Zoning

The design of a non-motorized pathway is important. The design of a non-motorized pathway can influence the number of, and the way in which, people interact on the pathway. According to suggested standards identified by the American Planning Association (APA)⁷, *contemporary trail planning should focus on creating an integrated trail system that accommodates a wide range of users - placing great emphasis on the recreational “value” of an individual trail and the trail system.* As noted in later sections of the plan, many trail users utilize trails for a variety of activities including, recreation, transportation and personal well-being. To support this wide-range of potential experiences, trails should provide high quality recreational experiences that⁸:

- Are visually appealing and located in a pleasant, natural open space or linear park corridor that is away from traffic and the built environment
- Provide a continuous experience that takes users from their neighborhood to a variety of destinations
- Offer continuity with limited interruptions and impediments to travel
- Are not too difficult of a grade
- Are safe for a family to use, as well as those with limited technical skills.

Public officials, citizens and planners should also consider the following design elements in determining what type of community trail system to develop.

Skill Level

An important consideration in the design and development of a trail system is to understand the different needs and skill levels of potential trail users - specifically bicyclists. In general, bicycle users fall into one of three categories.⁹

Experienced Riders - Generally use their bicycles for fitness or transportation. Speed, convenience and directness are important factors in route selection. Although they are comfortable riding in traffic,

⁷ *Planning and Urban Design Standards*, American Planning Association, 2006. John Wiley & Sons, Inc.

⁸ Ibid

⁹ Ibid

adequate operating space is important to safe riding and avoiding confrontations with motor vehicle operators.

Recreational Riders - Typically use their bicycles for recreation and fitness, less so for transportation. These riders tend to avoid busy roads with higher traffic speeds, unless there is a defined area for bicyclist such as a wide shoulder or a designated bikeway. These riders are generally comfortable riding on local streets and busier trails.

Youth and Children Riders - Tend to be slower and less confident than adults. Children use trails for recreation and getting to key destinations in the community, such as school, convenience stores, parks and recreational facilities. Residential streets with low motor vehicle speeds are acceptable, but trails are preferred by this group.

In order to reach the greatest number of users, the trail should be designed to accommodate the *least skilled* bicyclist while still being of interest to the most skilled.¹⁰

Pathway Categorization

The definitions for pathways often vary from community to community. The pathway definitions used in this plan are provided in *Planning for Pathways*¹¹, an implementation resource guidebook developed by the Northwest Michigan Council of Governments to aid local governments in their efforts to implement policies outlined in the New Designs for Growth Guidebook, including bike and pedestrian circulation. These pathway definitions were selected for use in this plan to help establish a common language among local governments and provide consistency with future pathway development efforts throughout the greater Northwest Michigan region.

Pathways

Facilities used for non-motorized transportation, primarily walking and biking, including bike lanes, bike routes, sidewalks, and shared use paths.

¹⁰ Ibid

¹¹ Planning for Pathways - An Implementation Resource of the New Designs for Growth Guidebook. Northwest Michigan Council of Governments 2009 www.ndfg.org

Bicycle Lanes

A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists

Shared Use Paths

A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way. Shared use paths may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. Paths should be constructed at a minimum width of 10 feet, with a maximum separation of 10 feet from the roadway, and should conform with standards established in the most recent edition of AASHTO’s Guide for the Development of Bicycle Facilities.

Bike Route

A shared roadway which has been designated by signing as a preferred route for bicycle use.

Shared Roadway

A roadway which is open to both bicycle and motor vehicle travel. This may be an existing roadway, street with wide curb lanes, or road with paved shoulders.

Sidewalks

The portion of a street or highway right-of-way designed for preferential or exclusive use by pedestrians. Sidewalks should generally be designed at a minimum of 5 feet. Standards for the engineering and design of sidewalks should conform with the standards established in the most recent edition of the AASHTO Guide for the Development of Pedestrian Facilities.

Trail

Linear route on land or water with protected status and public access for recreation or transportation purposes such as walking, jogging, hiking, bicycling, horseback riding, mountain biking, canoeing, kayaking, backpacking, and vehicular travel by motorcycle or all-terrain vehicles.

Pathway Categorization - Bike Lane



Pathway Categorization - Shared Use Path



Pathway Categorization - Bike Route



Pathway Categorization - Shared Roadway



Pathway Categorization - Trail



Additional Pathway Categorizations

As previously noted, the definitions of pathways vary from community to community. The following sections provide additional pathway definitions from national, state, and local agencies. The additional definitions are included in this document to provide local officials with a broader understanding of pathways and alternative design and development criteria.

Trail Classifications

Trail classifications can help public officials and planners plan trails for specific user groups. However, in most instances, *the distinction between trail types or classifications is as much about their location and recreational value as it is about technical design considerations.*¹² In general trails can be grouped into three classifications¹³.

1. Destination Trail
2. Linking Trail
3. Natural Trails

The following section provides a brief description of the three types of trails and some of their design considerations.

Destination Trail

Due to its location and recreational appeal, this type of trail often becomes a destination unto itself. A destination trail typically will accommodate walkers, bicyclists and in-line skaters. Access on the trail is usually provided through distinct use lanes (e.g. bike/walk) or as a shared use.

Design Priority: Creating a compelling recreational experience that includes a variety of landscapes and community settings

Surface: Asphalt/bituminous, crushed compacted aggregate or concrete

Trail Width: 8 to 12 feet, depending on surrounding landscape

User Speeds: 10 to 20 mph. depending on surroundings

Sight Distances: Minimum of 50 feet with 100 feet preferred

Trail Gradients: Average less than 5%

Overhead Clearance: Minimum of 10 feet

Other Considerations:

- o Roadway crossings must be at safe locations

¹² *Planning and Urban Design Standards*, American Planning Association, 2006. John Wiley & Sons, Inc.

¹³ Ibid

- Trail amenities (e.g. benches, picnic tables) should be provided at appropriate locations
- Trail lighting should be provided at intersections
- Access for general public-safety and maintenance vehicles is important

Linking Trail

Linking Trails emphasize safe travel for pedestrians to and from parks and around the community

Design Priority: Providing safe connection between specific destinations

Surface: Asphalt/bituminous, crushed compacted aggregate or concrete

Trail Width: 8 to 10 feet, depending on surrounding landscape

User Speed: 10 to 20 mph. depending on surroundings

Sight Distances: Minimum of 50 feet with 100 feet preferred

Trail Gradients: Average less than 5%

Overhead Clearance: Minimum of 10 feet

Other Considerations:

- Roadway crossings must be at safe locations
- Trail amenities (e.g. benches, picnic tables) should be provided at appropriate locations
- Trail lighting should be provided at intersections and for security
- Access for general public-safety and maintenance vehicles is important

Nature Trail

Nature Trails area located in natural areas, parks, and open spaces where experiencing nature is the primary objective

Design Priority: Simple and intimate - keeping with the setting/landscape

Surface: Natural soil's, turf or crushed aggregate

Trail Width: 4 to 8 feet

User Speed: 10 to 20 mph. depending on surroundings

Grade: Flexible - can be steep

Overhead Clearance: Minimum of 8 feet

Other considerations:

- Roadway crossings must be at safe locations
- Trail amenities (e.g. benches, picnic tables) should be provided at appropriate locations
- Small shelters should be provided for storm protection
- Trail lighting at entrance

Trail Accessibility

Accessibility is a very important component of design and development of a trail system. Because trails are considered transportation and recreation facilities, accessibility is mandated by the Federal Americans with Disabilities Act of 1990 (ADA). In addition, general accessibility *to* and *from* (outside the actual trail) trails is very important. Public accessibility can be accomplished by providing easily identifiable and appropriate signage, hard surfaced connections, and parking.

Linear Trail Surface Types

Understanding surface types can also help public officials and planners plan for specific user groups. The steering committee has discussed using either concrete or crushed limestone for this pathway. The following section identifies the design standards of linear trail surfaces. Each standard listed below is outlined in *Connecting Michigan*, a statewide trailways vision and action plan developed by the Michigan Trails and Greenways Alliance.¹⁴ Each surface type identifies positive and negative aspects in regard to durability, seasonal use, ADA requirements, maintenance costs and installation costs.

Native or Natural Rail Surface

This surface consists of the sub-base once the steel rails, ties and large ballast are removed. This underlying base material would be a combination of well drained fines, gravel cinder.

Surface Positives: Raised surface from neighboring land, under 2% slope.

Surface Negatives: Soft, un-compacted surface, vegetation and erosion issues and hard to maintain ADA requirements.

Costs: Extensive maintenance costs due to the raised grade made of well drained fines, surface will be rugged, and rutted. Limited development cost if used as passive trail in rugged condition.

Lineal Trail or Utility Corridors

Vary in width and provide greenbelts for native plant life and wildlife habitats. The width of some corridors allow for off grade side multi-use paths for runners, equestrian or snowmobile use.

Surface Positives: Utilizes native soils, take advantage of any topography changes in the corridor, and would be maintained by clearing, brushing or by mower.

¹⁴ *Connecting Michigan* a Statewide Trailway Vision and Action Plan. Michigan Trails and Greenway Alliance

Surface Negatives: Not a compacted surface, vegetation and erosion issues, hard to maintain ADA requirements.

Costs: Limited, if only a path is mowed or maintained as a passive greenbelt or habitat corridor.

Soft or Installed Surface

Application would consist of compacted gravel, limestone, steel slag or it could consist of a sub-base of compacted gravel with a finish base of limestone or slag over the existing sub-base

Surface Positives: Provides a “soft” surface for runners, joggers, wide-wheeled bikes and strollers, meets ADA requirements, is stable and compacted as needed in the season, compatible with snowmobile use. Limestone can repel some invasive vegetation on the trail.

Surface Negatives: Dust issues during dry seasons, not compatible with inline skaters and narrow wheel road bikes. Needs seasonal grading.

Costs: \$60,000 to \$80,000 per mile depending on surface materials; this figure does not include culvert repairs, bridge work and road crossings.

Hard Surface Asphalt

Application would consist of a single 2-inch lift or two (1.5 inch lifts) of MDOT 13A material over a 6” aggregate base with 2 foot wide gravel shoulders installed over the existing sub-base

Surface Positives: Meets the needs of all varieties of wheeled trail users. Provides a well-drained surface, easy to brush clean and maintain.

Surface Negatives: Root or plant damage, linear cracks and asphalt separation along the trail edge. Snowmobile stud damage

Costs: The estimate to asphalt pave a section of the Fred Meijer White Pine Trail in Kent County ranges from between \$150,000 to \$183,000 per mile.

Hard Surface Concrete

Surface would consist of a single 4’ thick run of concrete over a graded and compacted railroad sub-base. Little history for use on linear trails. Municipalities have used concrete for sidewalks for years.

Surface Positives: Meets the needs of all varieties of wheeled trail users. Provides a well-drained surface, easy to brush clean and maintain.

Surface Negatives: Limited history on this surface for linear trail, and how the surface responds to winter snowmobile stud use

Costs: The estimate for this surface type is \$200,000 per mile.

Trail Maintenance

Trail maintenance is a very important component of providing for a non-motorized trail system. Properly maintained trails can provide for pleasant and safe experiences for users, encourage repeat visits, and minimize adverse impacts on the surrounding environment. In addition, most funding agencies require applicants to clearly identify maintenance costs and responsibilities. An understanding of who will be responsible for trail maintenance and how maintenance will be funded must be discussed among trail providers.

There are a number of activities associated with trail maintenance. The following “maintenance checklist” is provided from *Trails America*¹⁵, a national non-profit organization working for trail development. The checklist was developed by Jed Wagner, a Supervisor with the City of Denver Parks and Recreation Department. The City of Denver has 130 miles of paved trails, open 24 hours a day and maintained for year-round use. While some of the items listed below may be beyond the scope of the Three Rivers Community, they illustrate some of the key trail maintenance considerations.

Maintenance to be performed on a continuous, scheduled basis:

1. Trail user safety
2. Trails inspection
3. Trail sweeping
4. Trash removal
5. Tree and shrub pruning
6. Mowing vegetation
7. Scheduling maintenance tasks

Maintenance to be performed on an irregular or as needed basis:

1. Trail repair
2. Trail replacement
3. Snow and ice removal
4. Weed control
5. Trail edging
6. Trail drainage control

¹⁵ Maintenance Checklist for Greenways and Urban Trails, Jed Wagner. 1999 – American Trails: www.americantrails.org

7. Trail signage
8. Re-vegetation
9. Habitat enhancement and control
10. Public awareness
11. Trail program budget development
12. Volunteer coordination
13. Records
14. Graffiti control
15. Mapping
16. Coordination with other agencies
17. Education and interpretation
18. Law enforcement
19. Proper training of employees

Liability

Local governments should discuss and be aware of liability considerations. However, most non-motorized trails are covered by local municipal insurance policies. In general, the public liability risk of trails is small compared to the liability of roads and other recreation facilities.¹⁶ The most proactive action any community can take to prevent un-wanted lawsuits is to design a safe trail, make it user-friendly and develop and implement a comprehensive maintenance program.

Coordination with Planning and Zoning

Planning for community pathways is generally part of a larger comprehensive or recreation planning process. However, community pathways can also be addressed through a specific pathway or community transportation planning process. In these instances, it is important for local jurisdictions to incorporate or reference the goals, objectives and implementation strategies of the pathway plan into the community master plan, recreation plan and capital improvement plan. This will ensure that pathway facilities are properly addressed, planned for, funded and integrated into the overall development of the community.

¹⁶ Management and Maintenance, Rails to Trails Conservancy, 2008. www.railstotrails.com

Zoning is a valuable tool that can bring about orderly development, ensure that new uses are compatible, promote the welfare of the community and implement community policies¹⁷. *According to the Northwest Michigan Council of Governments Planning for Pathways*¹⁸, “zoning offers a number of opportunities for local governments to achieve specific objectives. While it hasn’t been used exclusively in the past to implement non-motorized transportation objectives, there is a role for zoning in ensuring that these objectives are addressed, either by the jurisdiction itself or by private developers.” “By incorporating pathway requirements into site plan or development review, planned development, and overlay zoning language, local governments can address where and what type of facilities should be constructed, as well as what design standards must be met”.

¹⁷ Mark Wyckoff, Michigan Zoning Guidebook for Citizens and Local Officials 2nd Addition. May 2009 - Planning & Zoning Center at MSU Michigan State University extension, and the Michigan Association of Planning

¹⁸ Planning for Pathways - An Implementation Resource of the New Designs for Growth Guidebook. Northwest Michigan Council of Governments 2009 www.ndfg.org

Appendix G. Funding

New funding will be required to implement the non-motorized transportation initiatives outlined in this plan. Non-motorized trails and maintenance can be financed through several funding sources.

Michigan Natural Resources Trust Fund

The Michigan Department of Natural Resources and Environment (DNRE), Michigan Natural Resources Trust Fund (MNRTF) provides funding assistance for state and local outdoor needs, including land acquisition and development. This assistance is directed at creating and improving outdoor recreational opportunities and providing protection to valuable natural resources. In 2010, the MNRTF Board listed “trails and greenways” as its number one priority for funding. Grant amounts range from \$15,000 to \$500,000, with a required minimum local match of 25%. Between \$30 - 35 million in grant funding is available each year. For more information, please visit their website at: www.michigan.gov/dnr.

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) provide grants to local units of government to acquire and develop land for outdoor recreation. A minimum 50% match on either acquisition or development projects is required from local governments. The Michigan Department of Natural Resources makes recommendations to the National Park Service (NPS), which grants final approval. Grant amounts range from \$30,000 to \$100,000. Approximately \$533,000 in grant funding was available during the 2010 fiscal year. For more information, please visit the DNRE website at: www.michigan.gov/dnr.

Michigan Trail-Way Fund

In 1993, the state of Michigan enacted “trailways” legislation calling for a statewide system of smooth-surfaced trails passing through Michigan’s natural areas and communities. The legislation allows communities to formally designate existing trails as a “Michigan Trailway” through the DNRE Natural Resources Commission. Trails under development can be considered for trailway designation and receive financial assistance from the Michigan Trailways Fund, if a master plan or other documentation that provides a basis for evaluation is presented for review. For more information, please visit the DNRE website at: www.michigan.gov/dnr.

Transportation Enhancement Program

In 1992, the Michigan Department of Transportation (MDOT) established the *Transportation Enhancement Program* to improve the quality of life for Michigan citizens by providing funding and other assistance and creating and responding to opportunities to enhance Michigan's transportation system. The program was the result of the *Intermodal Surface Transportation Efficiency Act* of 1991. In 1998, the program was re-authorized in the *Transportation Equity Act for the 21st Century (TEA-21)*. In 2005, the program was re-authorized again under the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)*. Under previous programs, activities eligible for funding included the provision of facilities for pedestrians and bicycles including new or reconstructed sidewalks, walkways, wide paved shoulders and off-road trails, acquisition of scenic easements and scenic or historic sites, landscaping and other scenic beautification improvements including trail and waterfronts, and the preservation of abandoned railway corridors to acquire railroad right-of-way, construct multi-use trails, and develop rail with trail projects. Between \$20 - 25 million is available for funding each year. Federal law requires the applicant to provide a minimum match of 20% of the project cost. However, regional MDOT representatives are now recommending applicants provide between a 35% and 40% match. In addition, local jurisdictions can leverage MNRTF grant funding (in addition to local funding) to meet the MDOT match requirement. For more information, please visit the MDOT website at: www.michigan.gov/mdot.

Safe Routes To School

Section 1404 of the SAFETEA-LU formally created the federal Safe Routes to School (SRTS) Program. The Safe Routes To School Program dedicates funding to every state to help with infrastructure improvements and non-infrastructure activities to encourage and enable students to walk and bicycle to school. Among other things, funding can be dedicated to develop and construct new bike-lanes, pathways, and sidewalks. In addition, funding can be provided for education and programming. No local match is required for this program. However, infrastructure projects must be constructed within a 2-mile radius of an elementary or middle school. For more information, please visit the SRTS website at: www.saferoutesmichigan.org/

Michigan Transportation Funds

Under Public Act 51 of 1951, revenue from state fuel taxes and license plate fees are deposited in the Michigan Transportation Fund. This revenue is shared among local and state transportation agencies for construction, maintenance and operation of state transportation systems. The state transportation law (MCLA 247.660k) requires that a minimum of 1% of state transportation funds be spent for non-

motorized transportation. For more information, please visit the MDOT website at: www.michigan.gov/mdot.

Michigan Cool Cities Initiative

In 2003, the Governor established the *Cool Cities Initiative* - a comprehensive grant program designed to build community prosperity, grow investment in financial and human capital, attract a talented workforce to Michigan, and retain its college graduate population. At this time, no grants are available through the Cool Cities Initiative. However, there may be funding opportunities in the future. In 2007, the Cool Cities Initiative, in partnership with the Michigan State Housing Development Authority (MSHDA) awarded grants to four communities to participate in the Cool Cities Michigan Main Street Program and Cool Cities Blueprints for Michigan's Downtowns Program. Under the grant, the four communities will receive five years of intensive technical assistance through MSHDA, with a focus on revitalization strategies designed to attract new business investment and job creation to its central business district. We believe trail development could be a significant component to any downtown revitalization effort. For more information about the Cool Cities Initiative, please visit: www.coolcities.com

Michigan Recovery and Reinvestment Plan

Under the recently adopted American Recovery and Reinvestment Act (ARRA), federal stimulus funding has been allocated to states in an effort to jump start the economy and create jobs. As a result, the new Michigan Economic Recovery Office has posted descriptions of available grants and links to granting agencies. For example, it appears the *Rural Community Facilities Program*, under the U.S. Department of Agriculture provides funding for public safety and health care facilities. For more information about possible grant opportunities (including the Rural Community Facilities Program) please visit: www.michigan.gov/recovery

Active Living by Design Grants

Established under the Robert Wood Johnson Foundation in 2001, this national grant funds technical assistance to 25 action oriented community partnerships to develop and implement projects that support physical activity and active living. For more information about the grant please visit: www.activelivingbydesign.org

DALMAC Fund

Established in 1975 to promote bicycling in Michigan, the DALMAC Fund is administered by the Tri-county bicycle Association and supported by proceeds from the DALMAC (Dick Allen Lansing to

Mackinaw) bicycle tour. The Fund has provided over \$500,000 to safety and education programs, bicycle trail development, route mapping projects and bicycle organizations all across the state. For more information about possible grant opportunities please visit: www.biketcba.org

Bikes Belong

The Bike Belong program strives to put more people on bicycles more often by funding important and influential projects that leverage federal funding and build momentum for bicycling in communities across the United States. These projects include bike paths and large-scale bicycle advocacy initiatives. Since 1999, Bikes Belong has awarded 215 grants to municipalities and grassroots agencies in 49 states, investing \$1.7 million in community bicycling projects and leveraging close to \$650 million in federal, state and private funding. Bikes Belong has awarded grants to organizations in Jackson and Petoskey and to the cities of Cadillac and Mayville.

Other Funding Sources

General Fund

Funding can be provided by general fund appropriations from each participating jurisdiction and/or organization.

Donations

Businesses, corporations, private clubs, community organizations and individuals may contribute to non-motorized improvement programs to benefit the communities in which they are located. Private sector contributions may be in the form of monetary contributions, the donation of land, the provision of volunteer services, or the contribution of equipment and/or facilities.

Millage

A community property tax millage may be used to finance non-motorized trail initiatives for land acquisition, new facilities and operation. The Recreational Authorities Act (PA 321 of 2000) authorizes a Recreation Authority to levy a tax of not more than 1 mill for a period of not more than 20 years on all the taxable property within the territory of the Authority.

Pay Boxes on Trails

Each of the participating jurisdictions could place pay boxes at primary access points on the trail to collect donations.

Utility Leases

Public pathway corridors can obtain lease revenue from compatible uses, such as buried pipelines or communication lines. There can be one-time payments for acquisition for operation and maintenance.

Foundations

There are a number of state and national foundations that may provide funding for non-motorized initiatives. In addition, the Three River Community Foundation has pledged to help with funding needs.

Applying for Funding

The following tips for fund raising and grant writing are outlined in the 2007 Genesee County Regional Trail Plan¹⁹. The tips were collected from the *Rails-to-Trails Conservancy* and can be useful as officials in the Three Rivers Community consider future funding options.

Develop a fund raising plan for your projects: Begin with your estimated project cost and set funding goals from key resources. This is a valuable resource because foundations often require you to show percentages of funding anticipated from each source.

Identify key components of your project that can be tailored to specific funding sources: Without compromising your project, try to develop a list of mini projects tailored to the interests of a number of different funding sources.

Complete all planning elements prior to submitting funding requests: seeking funding prematurely is not advisable as you often only get one chance to make a positive impression on a potential funder.

¹⁹ Genesee County Regional Plan, 2007 – Genesee County Metropolitan Alliance

Start by writing a two-page summary letter: This helps to succinctly define your project and your request for support. Many funding sources provide guidelines for the initial “inquiry letter”. Make sure you follow their guidelines.

Create a credible team prior to seeking funding: Funders are interested in not only the quality of your project, but the quality of your organization or team as well.

Establish strong partnerships and demonstrate coordination: Funders are interested in strong partnerships and coordination among agencies. They especially like to see public and private sectors working together to leverage funds.

Establish broad community support prior to seeking funding: At a minimum, all project partners should provide “lead” funding, both cash and in-kind services, where feasible. If you do not have “lead” funding, attach support letters from individuals, local businesses, civic groups and others to your request.

Submit proposals: Once the research is completed, partners are in place, backed by a solid plan, submit proposals to your target list of funders. Make sure to follow any and all guidelines set forth by potential funders.

Complete all follow-up documentation: Thank and recognize donors: make sure you send thank-you letters recognizing receipt of donations and complete any required follow-up documentation.

Appendix H. Cost Estimates

The financial commitment required of local jurisdictions to plan for, develop and maintain non-motorized trails can be substantial. Therefore, communities need to be aware of some of the costs associated with trail development (e.g. brush clearing, engineering, paving) and maintenance (e.g. drainage, clearing, mowing, minor repairs). Local officials who carefully review and consider these issues can better develop a reasonable vision for their trail system. Based on the “Connecting Michigan” a comprehensive trailways document/vision for Michigan the average cost for a *soft or installed surface* is between \$60,000 and \$80,000 per mile. The cost for a *hard-surface, asphalt surface* is between \$150,000 and \$180,000 and the cost for a *hard surface, concrete surface* is about \$200,000 per mile. The figures at right list the estimated cost for a 1.5 mile pathway in the Three Rivers Community (from the U.S. 131/Millard intersection to Meyer Broadway Park).

The following “cost estimate” charts were collected from the 2007 Genesee County Regional Trail Plan²⁰. The charts were developed from the “Trails for the 21st Century” a 2001 Rails-to-Trails Conservancy Publication and adopted from the Virginia Department of Transportation. Please note, the development and maintenance costs provided below will vary from location to location and are designed to provide a general cost estimate.

Estimated Cost Per Mile For Non-Motorized Development		
Surface Material	Cost Per Mile	Longevity
Wood Chips	\$ 65 - 85K	Short Term (1 -3 years)
Granular Stone	\$ 60 - 100K	7-10 years
Resin Stabilized	Varies Based On Application	7-15 years
Asphalt	\$ 200 - 300K	7-15 years
Concrete	\$ 300 - 500K	20+ years
Boardwalk	\$1.5 - 2 Million	7-15 years

Source: "Trails for the 21st Century", Rails-to-Trails Conservancy, 2001

Cost Estimates For Retrofitting Existing Road Sections for Bike Paths	
Paved Shoulder Per Mile 4 feet each side	\$70,000
Bike Lanes Per Mile 5 feet each side w/curb & gutter	\$281,000
Wide Curb Lane Per Mile 2 feet each side	\$50,000

Source: Adapted from the Virginia Department of Transportation, 2000

Cost Estimates: Proposed Trail (1.5 miles) -

Soft or installed Surface:

\$90,000 - \$120,000

Hard Surface, Asphalt:

\$225,000 - \$270,000

Hard Surface, Concrete:

\$300,000

Cost estimates do not include improvements to U.S. 131 intersection and other unforeseen development issues.

Typical Yearly Maintenance Costs For One-Mile Paved Trail	
Drainage and storm channel maintenance	\$500
Sweeping/blowing debris off trail	\$1,200
Pickup and removal of trash	\$1,200
Weed control and vegetation management	\$1,000
Mowing of grass shoulder	\$1,200
Minor repairs to trail surface/safety features	\$500
Maintenance supplies for work crews	\$300
Equipment fuel and repairs	\$600
<i>Total Estimated Cost per mile</i>	<i>\$6,500</i>

Source: "Trails for the 21st Century", Rails-to-Trails Conservancy, 2001

²⁰ Genesee County Regional Plan , 2007 - Genesee County Metropolitan Alliance

Appendix I. Resources

Establishing new non-motorized transportation systems and/or pathways can be a very time consuming and complex endeavor for any community. Fortunately, there are a number of easily accessible resources that can help communities plan for and develop non-motorized transportation systems and/or pathways.

Smart Growth

Smart Growth is a land use planning movement that emphasizes a set of planning principles designed to serve the economy, community and the environment. Smart Growth provides a framework for communities to make informed decisions about how and where they grow. Proponents of Smart Growth say that the principles make it possible for communities to grow in ways that support economic development and jobs; create strong neighborhoods with a range of housing, commercial, and transportation options, and achieve healthy communities that provide communities with a clean environment.²¹

The *Ten Tenets or Principles of Smart Growth* have been widely adopted and promoted by a wide range of planning and developmental organizations, environmental agencies, local communities and state agencies - including the Michigan Land Use Leadership Council in 2004. Several of the Smart Growth Principles address concepts associated with non-motorized transportation, trail development and pedestrian circulation.

Smart Growth Principles

1. Mix land uses
2. Take advantage of compact building design
3. Create a range of housing opportunities
4. Create walkable communities
5. Foster distinctive, attractive communities with a strong sense of place
6. Preserve open space, farmland, natural beauty, and critical environmental areas
7. Strengthen and direct development towards existing communities
8. Provide a variety of transportation choices
9. Make development decisions predictable, fair, and cost effective
10. Encourage community and stakeholder collaboration in development decisions

²¹ Getting to Smart Growth, 100 Policies for Implementation: Smart Growth Network Publication
www.smartgrowth.org

Complete Streets

Complete Streets is a diverse coalition of groups that has joined together to work in support of complete streets. Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street. Creating complete streets means transportation agencies must change their orientation toward building primarily for cars. Instituting a complete streets policy ensures that transportation agencies routinely design and operate the entire right of way to enable safe access for all users. Places with complete streets policies are making sure that their streets and roads work for drivers, transit users, pedestrians, and bicyclists, as well as for older people, children, and people with disabilities.²² The Complete Streets website provides a number of resources, including reports, presentations, sample ordinances and design guidelines.

This past August, Governor Granholm signed into law Public Acts 134 and 135 - the Complete Streets legislation ensures that MDOT and local transportation plans take into consideration the needs of all users including pedestrians, bicyclists, seniors, people with disabilities and children in all phases of road project planning, development and construction. The act will also encourage local units of government to consider Complete Street principles when updating their master plans. While complete streets accommodations may vary between communities, they include sidewalks, bike lanes, special bus lanes, accessible transit stops, frequent crossing opportunities and accessible pedestrian signs. A statewide Complete Streets Advisory Council will also be formed under this legislation.

Context Sensitive Solutions

Initially started as an effort by the Federal Highway Administration (FHWA) to find ways to design highways to fit better in the environment, context sensitive solutions has now evolved into a coalition of groups supporting broader contextual solutions to transportation design issues. As indicated on the Context Sensitive Solutions website, "Context sensitive solutions (CSS) is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic and environmental resources, while maintaining safety and mobility. CSS is an approach that considers the total context within which a transportation improvement project will exist."²³

²² Complete Streets: www.completestreets.org

²³ Context Sensitive Solutions: www.contextsensitivesolutions.org

In 2003, Governor Jennifer Granholm issued an Executive Directive that requires MDOT to incorporate context sensitive solutions into transportation projects whenever possible. Under CSS, MDOT solicits dialogue with local governments, road commissions, industry groups, land use advocates, and state agencies early in a project's planning phase. This dialogue helps to ensure that bridges, interchanges, bike-paths and other transportation projects "fit" into their communities. The CSS approach results in projects that respect a community's scenic, aesthetic, historic, economic, and environmental character.²⁴

Greenway Collaborative

The Greenway Collaborative is a small consulting firm based in Ann Arbor, Michigan that focuses on greenway, trail, open-space and non-motorized transportation planning.²⁵ The Greenway Collaborative designs each project with the underlying goals of creating a more healthy, active and sustainable community. Over the next year, the Greenway Collaborative is hosting a free webinar series. The webinars provide in-depth information on a specific trail or non-motorized transportation issues. Some of the Greenway Collaborative's most recent webinar presentations can be found at their website.

Connecting Michigan - A State Trailways Vision and Action Plan

Connecting Michigan is a proactive and broad-based initiative to identify and address the critical issues that are impeding Michigan's progress on developing a statewide interconnected system of trailways and greenways. The Connecting Michigan Initiative (and publication) was spearheaded by the Michigan Trails & Greenway Alliance (MTGA), in partnership with the National Park Service: Rivers, Trails, and Conservation Assistance Program (NPS-RTCA) and the Michigan Recreation and Park Association (MRPA). The MTGA is committed to fostering and facilitating the creation of an interconnected statewide system of trails and greenways for environment/cultural preservation purposes. MTGA works at both the state and local levels by assisting public and private interests in trail and greenway planning, funding, development and maintenance.²⁶ The Connecting Michigan publication (and accompanying CD) includes information pertaining to: the history of trailways in Michigan; state studies and action plans; implementation strategies; and information resources. The action plans discuss future goals and actions related to ten targeted issues.

Connecting Michigan Action Plans Targeted Issues

1. Trailway Funding
2. Trailway Database & Website
3. Property Issues (easements & titles)
4. Trailway Usage
5. On-Road Connections
6. Building Trailways Support
7. Overcoming Boundaries (gaining cooperation)
8. Coordinating Resources
9. Multi-Use Trails & Design
10. Statewide Trailways Network

²⁴ Michigan Department of Transportation, Context Sensitive Solutions: www.michigan.gov/mdot

²⁵ The Greenway Collaborative: www.greenwaycollab.com

²⁶ Michigan Trails & Greenway Alliance: www.michigantrails.org

Michigan Trails Finder²⁷ - Michigan Trails and Greenways Alliance

The Michigan Trails and Greenways Alliance in cooperation with Michigan State University's Remote Sensing & Geographic Information Science Research and Outreach Services, have developed an interactive website/viewer database that allows users to find and view built trails throughout the state. The statewide data base is still very much a work in progress - not all trailways have been mapped.

Rails-to-Trails Conservancy

The Rails-to-Trails Conservancy is a non-profit organization working with communities to preserve unused rail corridors by transforming them into trails that enhance the health of America's environment, economy, neighborhoods and people²⁸. The organization's website includes a number of helpful resources, including publications, report and links.

Michigan Trails at the Crossroads: A Vision for Connecting Michigan (2006)

Developed by the Michigan Department of Natural Resources, in cooperation with MDOT, this report outlines (including funding sources) how the state will work to create a statewide trail system. A copy of report can be found at: www.michigan.gov.

City of Davis Comprehensive Bicycle Plan

One of the most prolific bicycle communities in the country, the City of Davis California has led an effort to make bicycles the primary mode of transportation. This master plan is a great example of how bike-trails can be incorporated into the community. A copy of the plan can be found at: <http://cityofdavis.org>

Planning for Pathways

This document was designed to aid local governments in their efforts to implement policies outlined in the New Designs for Growth Guidebook, including bike and pedestrian circulation. Among other things, *Planning for Pathways* provides definitions for pathways and information on pathway maintenance, engineering standards and zoning ordinance examples. A copy of the document can be requested by calling the Northwest Michigan Council of Governments.

²⁷ Michigan Trails & Greenway Alliance: www.michigantrails.org

²⁸ Rails-to-Trails Conservancy: www.railstrails.org

Trail Towns - Capturing Trail Based Tourism

This document outlines how communities can take advantage of economic opportunities associated with biking and hiking. Among other things, *Trail Towns* provides information on how to design trails into your current public amenities, how to understand user needs, how to promote trail systems and how to create a comprehensive trail oriented community. A copy of the document can be found at: www.atatrail.org/pdf/1TTManual.pdf

Additional Information Resources (Adapted from *Connecting Michigan*)

National Advocacy Groups

Active Living By Design www.activelivingdesign.org	Professional Trail Builders Association www.trailbuilders.org
American Canoe Association - Water Trails www.americancanoe.org	Rails-to-Trails Conservancy www.railtrails.org
American Trails www.americantrails.org	Thunderhead Alliance www.thunderheadalliance.org
National Center For Bicycling and Walking www.bikewalk.org	The Conservation Fund www.conservationfund.org
National Recreation and Park Association www.nrpa.org	The Trust for Public Land www.tpl.o

Other National Groups

Pedestrian and Bicycle Information Center www.pedbikeinfo.org	Walkable Communities, Inc. www.walkable.org
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State Advocacy Groups

League of Michigan Bicyclists
www.lmbike.org

Michigan Mountain Biking Association
www.mmba.org

Michigan Environmental Council
www.mecprotects.org

Michigan Recreation and Park Association
www.mrpaonline.org

Michigan Trails and Greenway Alliance
www.michigantrails.org

State Government Agencies

Michigan Department of Community Health
www.michigan.gov/mdch

Michigan Department of Transportation
www.michigan.gov/mdot

Michigan Department of Natural Resources
www.michigan.gov/dnr

Travel Michigan
www.michigan.org

Federal Government Agencies

Federal Highway Administration
www.fhwa.dot.gov

National Park Service: Rivers, Trails, and Conservation Assistance Program
www.nps.gov/rtca

Other Groups

Governor's Council on Physical Fitness
www.michiganfitness.org

Regional Trail Groups

Genessee Regional Trail Council
www.co.genessee.mi.us/gcmpr-plan/Trails.htm

Heart of Michigan Trails
www.michigantrails.org/heart_og_mi.asp

Huron Greenways Initiative
www.hurongreenways.info

Macomb County Trails
www.wadetrin.com/resources/macomb/index.htm

Noquemanon Trails Network
www.noquetrails.org

Oakland Trails Advisory Council
www.oakgov.com/parksrec

St. Clair County Trails
www.stclaircounty.org/offcies/parks/btob.asp

The GreenWays Initiative
Community Foundation for Southeast Michigan
<http://greenways.cfsem.org/>

Top of Michigan Trails Council
www.topofmichigantrails.org

West Michigan Trails and Greenways Coalition
www.trails.org

Publications

Trails for the 21st Century, 2nd Edition
Rails-to-Trails Conservancy, 2001
www.railtrails.org

Guide for the Development of Bicycle Facilities, 3rd Edition
American Association of State Highway and Transportation
www.transportation.org

Designing Sidewalks and Trails for Access - Parts I and II
Beneficial Designs, Inc
www.fhwa.dot.gov/hep/pubs.htm

Making the Connection: Rail-Trails in Michigan Today - DVD
Michigan State University
www.carrs.msu.edu/trails

Appendix J. Conservation Easements

The following fact sheet was collected from the Little Traverse Conservancy website:
<http://landtrust.org/protecting Land/EasementInfo.htm>

What is a Conservation Easement?

A conservation easement is a voluntary agreement that allows a landowner to limit the type or amount of development on their property while retaining private ownership of the land. The easement is signed by the landowner, who is the easement donor, and the Conservancy, who is the party receiving the easement. The Conservancy accepts the easement with understanding that it must enforce the terms of the easement in perpetuity. After the easement is signed, it is recorded with the County Register of Deeds and applies to all future owners of the land.

Another way to visualize a conservation easement is to think of owning land as holding a bundle of sticks. Each one of these sticks represents the landowner's right to do something with their property. The right to build a house, to extract minerals, to lease the property, pass it on to heirs, allow hunting are all rights that the landowner has. A landowner may give up certain development rights, or sticks from the bundle, associated with their property through a document called a conservation easement.

Why do people grant conservation easements?

People grant conservation easements because they want to protect their property from unwanted development but they also wish to retain ownership of their land. By granting a conservation easement a landowner can assure that the property will be protected forever, regardless of who owns the land in the future. An additional benefit of granting a conservation easement is that the donation of an easement may provide significant financial advantage to the donor.

What kind of financial advantages result from donating a conservation easement?

Many landowners receive a federal income tax deduction for the gift of a Conservation Easement. The Internal Revenue Service allows a deduction if the easement is perpetual and donated "exclusively for conservation purposes." The amount of the tax deduction is determined by the value of the conservation easement. In addition, the donor may have estate and property tax relief.

What activities are allowed on land protected by an easement?

The activities allowed by a Conservation easement depend on the landowner's wishes and the characteristics of the property. In some instances, no further development is allowed on the land. In other circumstances some additional development is allowed, but the amount and type of development is less than would otherwise be allowed. Conservation easements may be designed to cover all or only a portion of a property. Every easement is unique, tailored to a particular landowner's goals and their land.

Can the landowner still sell or give the property away?

The landowner continues to own the property after executing an easement. Therefore, the owner can sell, give or lease the property, as before. However, all future owners assume ownership of the property subject to the conditions of the easement.

Does the public have a right of access to easement-protected property?

The public does not have access to property protected by an easement unless the original landowner who grants the easement specifically allows it. Most easement donors do not want, and therefore do not allow, public access to their property.

How long does an easement last and who upholds it in the future?

To be eligible for a federal income tax deduction the easement must be "perpetual," that is, it must last forever. The Conservancy monitors the property, generally once a year, to assure that the easement is not being violated. If the easement has been breached the Conservancy will take whatever steps are necessary to uphold the terms of the easement, including taking legal action. Because of this obligation the Conservancy asks all easement donors to make a financial contribution to the Conservancy's Endowment Fund. This fund ensures long-term monitoring and enforcement of every easement the Conservancy receives.

Who owns the conservation easement?

To qualify for a tax deduction the easement must be donated to the government or a qualifying conservation or historic preservation organization. The Little Traverse Conservancy qualifies as a federally recognized public charity under Internal Revenue Code Section 501(C)(3). In addition, the Conservancy is qualified to receive conservation easements under Michigan's Conservation and Historic Preservation Easement Act, PA 197 of 1980.

Who owns and manages easement protected land?

The landowner retains full rights to control and manage their property within the limits of the easement. The landowner continues to bear all costs and liabilities related to ownership and maintenance of the property. The Conservancy monitors the property to ensure compliance with the easement's terms, but it has no other management responsibilities and exercises no direct control over other activities on the land.

Does the easement have to cover all of the landowner's property?

No, some easements only cover a portion of the landowner's property. Again, it depends on the landowner's wishes. For example, if someone owns 80 acres, of which 35 acres are wetlands, the landowner may decide to restrict development only on these 35 acres. The remaining 45 acres would not be covered or affected by the easement.

What kind of land can be protected by conservation easements?

IRS regulations require that the property have "significant" conservation values. This includes forests, wetlands, endangered species habitat, beaches, scenic areas and more. The Conservancy also has its own criteria for accepting easements. At the invitation of the landowner Conservancy staff will evaluate the property to determine whether it meets these Conservancy criteria.

Appendix K. Potential Pathway Images







