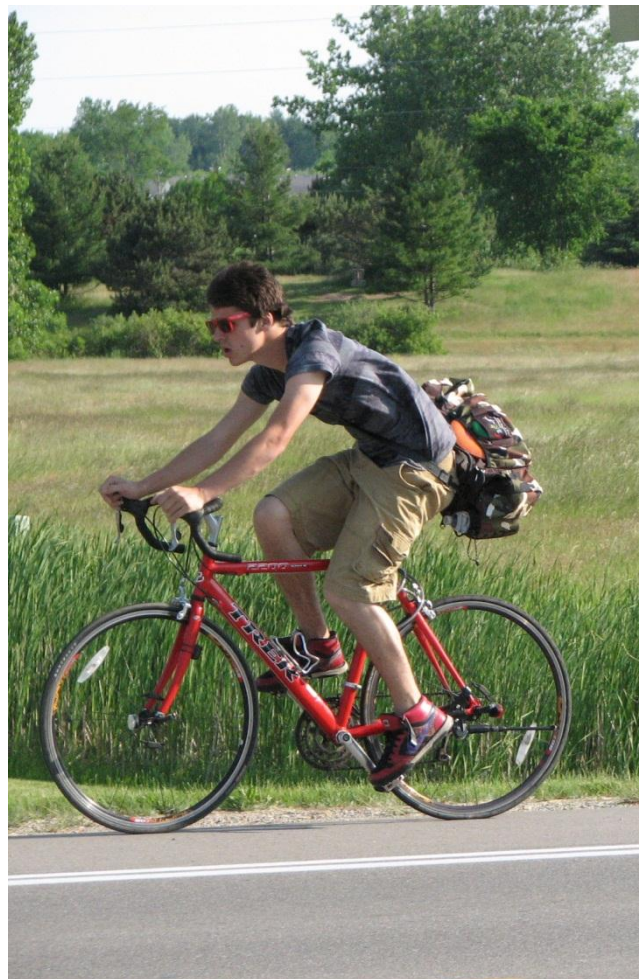
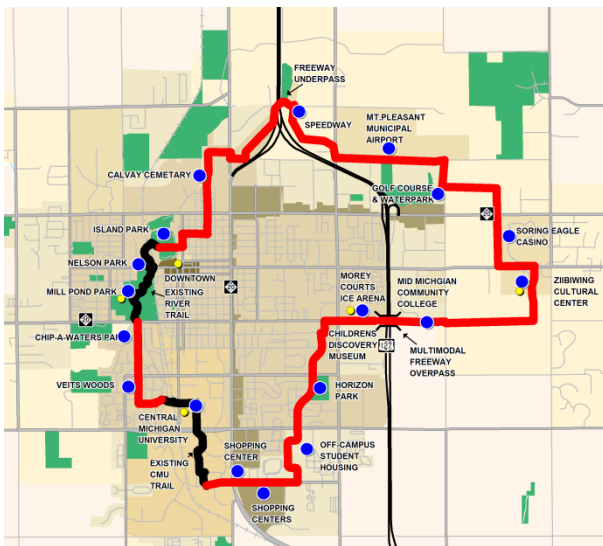


The Greater Mt. Pleasant Area Cultural Loop

APPLICATION FOR THE TIGER 2012 DISCRETIONARY GRANT



SUBMITTED BY:
Charter Township of Union
2010 S Lincoln Road
Union Township, MI 48858
(989) 722-4600

Application at a Glance

Proposal Title:	The Greater Mt. Pleasant Area Cultural Loop
Type of Project:	Bicycle and Pedestrian
Prime Applicant:	Charter Township of Union
DUNS Number:	05-228-1656
Contact Person:	Brian Smith, Township Manager Charter Township of Union 2010 S Lincoln Road Mount Pleasant, Michigan 48858 Telephone: (989) 772-4600 ex. 224. Email: bsmith@uniontownshipmi.com
Project Partners:	Charter Township of Union Chippewa Township City of Mt. Pleasant Isabella County Saginaw Chippewa Indian Tribe Central Michigan University
Location of the Project:	The project will be constructed in Isabella County Michigan in the communities of the Charter Township of Union, Chippewa Township and the City of Mt. Pleasant. All communities are in Michigan's 4 th Congressional District.
Project Classification:	Rural
Funding Request:	\$3,972,685
Economically Distressed:	Consistent with the Economically Distressed Area criteria published by FHWA on August 5 th , 2011 Isabella County and on February 12, 2011 The City of Mt. Pleasant both qualify as federally designated economically distressed areas
Supporting Documentation:	Appendix with backup and spreadsheets may be downloaded from the Cultural Loop grant webpage http://www.greenwaycollab.com/Projects/Mt_Pleasant_Tiger_III/MTPTIGER.html

Contents

I. Project Description	1
A. Executive Summary	1
B. Project Background.....	5
C. Multimodal Freeway Overpass Element.....	8
D. Greenway Loop Element.....	11
II. Project Partners.....	15
III. Grant Funds	16
IV. Selection Criteria	17
A. Long-term Criteria	17
State of Good Repair	17
Economic Competitiveness.....	18
Livability	19
Sustainability.....	20
Safety	20
B. Job Creation & Near-term Economics.....	21
C. Innovation	22
D. Summary of Cost-Benefit Analysis.....	23
V. Project Readiness and NEPA.....	25
VI. Federal Wage Rate Certificate	27

I. Project Description

A. Executive Summary

The Greater Mt. Pleasant Area Cultural Loop will provide for safe and convenient pedestrian and bicycle travel between the key destinations within the City of Mt. Pleasant, the Charter Township of Union, Chippewa Township, the Saginaw Chippewa Indian Tribe, Mid Michigan Community College and Central Michigan University. The Cultural Loop address the most significant impediment to non-motorized travel in the area, US-127, by providing two new freeway crossing opportunities for bicycles and pedestrians.

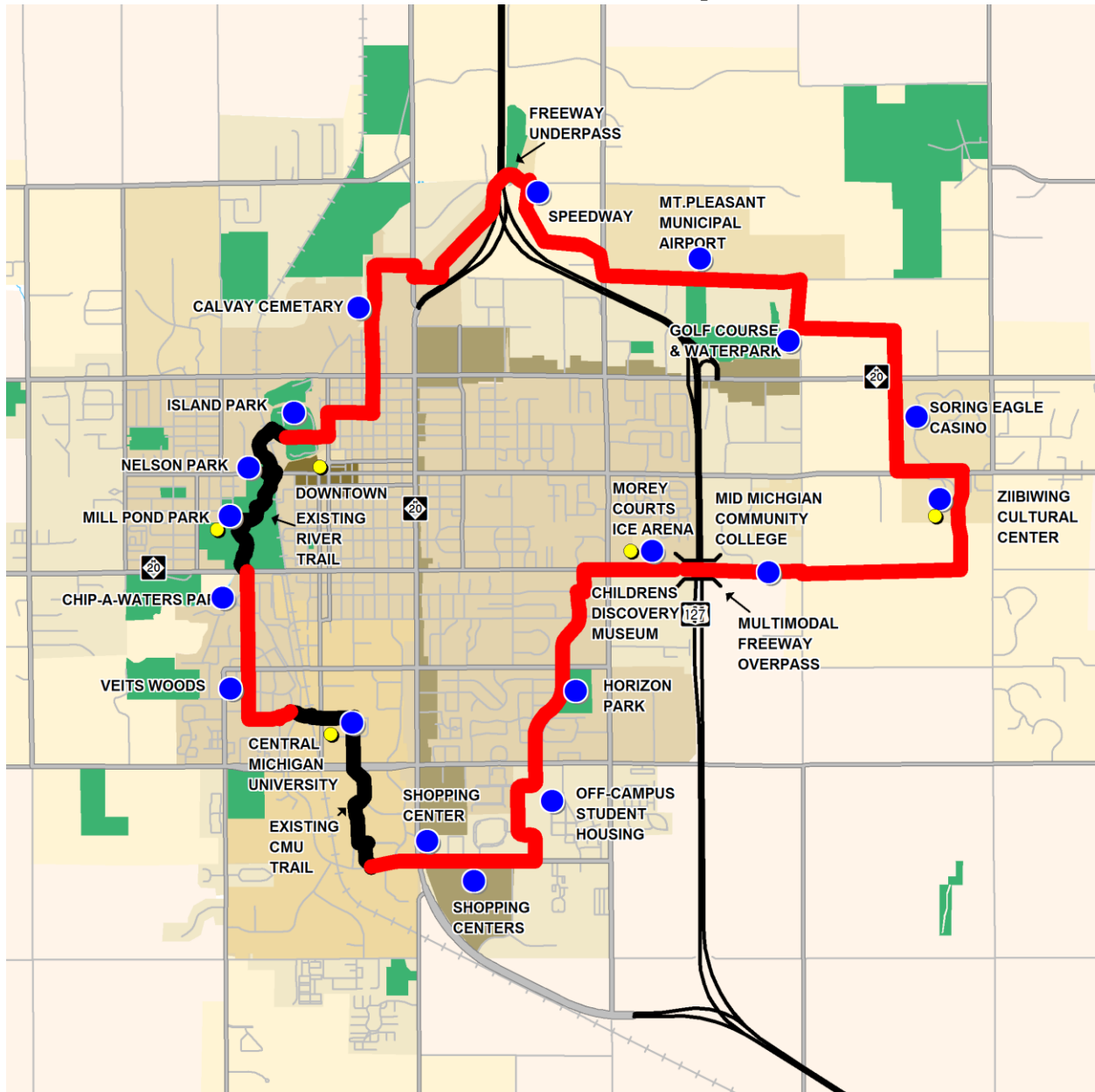


By building existing community resources, this project will establish the critical mass of non-motorized facilities necessary to instigate a substantial mode shift from driving to walking and bicycling within the greater Mt. Pleasant area. The project has two primary elements that work in concert:

1. **Multimodal Freeway Overpass** – US-127 currently bisects a rapidly developing area with numerous employment, housing, recreational, educational and cultural centers. The proposed multimodal freeway overpass will reconnect Remus Road which was severed when the freeway was constructed and provide a direct link between resources on either side of the freeway. There is only one crossing of US-127 in five miles of developed area that provides any non-motorized facilities and these are limited to sidewalks that transverse a busy freeway interchange. The existing freeway interchange is also impractical for most non-motorized trips as it requires many miles of out-of-direction travel and is not designed for bicycle use.
2. **Greenway Loop** – is a 15 mile greenway that links 18 major destinations. The Loop funnels non-motorized traffic across the freeway at the proposed Multimodal Freeway Overpass as well as providing non-motorized facilities at an existing underpass. The Greenway Loop is comprised of both on and off-road facilities designed such that the majority of residents would feel comfortable riding a bicycle on or walking along this route. The route includes extensive wayfinding and five active transportation hubs that provide information on walking and bicycling in the area as well as basic support facilities.

Key Elements for Success – The Mt. Pleasant area has all of the key ingredients to make this project a success: a major university, a downtown, high density housing, employment centers and a population that already has a significant number of pedestrian commuters. The project addresses the community's weak points and builds on its strengths.

Greater Mt. Pleasant Area Cultural Loop Overview



- Destination/Attraction
- Active Transportation Hub
- Cultural Loop

Long-term Outcomes

The project will have significant impact on the greater Mt. Pleasant area, fulfilling many of the Department of Transportation's desired long-term outcomes for the TIGER 2012 program.

Livability – this project will provide new economical transportation options for residents living in this economically distressed area. In particular, this project will help to link the Tribal cultural, residential and employment centers along with the Mid Michigan Community College on one side of the freeway, to the high density off-campus student housing, schools, recreation facilities, commercial centers and Central Michigan University on the other side of the freeway. By doing so it will provide an active transportation resource promoting public health and a common positive vision for the region.

Environmental Sustainability – surveys have shown a strong desire to walk and bike to destinations tied together by the proposed Cultural Loop should facilities be provided. Replacing motor vehicle trips with walking and bicycling trips will reduce greenhouse gas emissions.

Safety – the imposing nature of the freeway barrier and lack of viable bicycle and pedestrian facilities inhibit non-motorized travel and thus there are not a significant number of crashes along the cultural loop. But for those individuals who have no choice but to travel along busy roadways without any bicycle or pedestrian facilities, this project will significantly increase their safety. 20,245 people live within ½ mile of the proposed Cultural Loop.

Economic Competitiveness – the project circulates through much of the greater Mt. Pleasant area with nearly 1,200 parcels of land within 1/8 of a mile of the Cultural Loop. These parcels will likely see a direct increase in property values attributable to the construction of the Cultural Loop. Also, 19,075 jobs are within ½ mile of the proposed route. Many of these jobs are in the commercial and service industries that stand to have increased foot traffic due to their proximity to the Cultural Loop as well as some residents will see increased disposable income as the result of more economical transportation options.

Innovative Solutions – The project integrates two emerging concepts to promote bicycling and pedestrian use. First, the Cultural Loop makes extensive use of "Neighborhood Connectors" also known as "Bicycle and Pedestrian Boulevards" that optimize existing low speed local roadways in conjunction with connecting pathways to create routes comfortable for a wide spectrum of users. Second, spaced at key junctures along the Cultural Loop are Active Transportation Hubs that not only support current users, but are also used to recruit new bicyclists and pedestrians by showing safe and convenient ways to travel throughout the area to people who may have driven to a destination.

How the Proposal Was Developed

Based on a Comprehensive Plan – The Greater Mt. Pleasant Area Non-motorized Plan was developed in 2010 and 2011 and includes: detailed recommendations for a non-motorized network; an implementation plan; planning and zoning recommendations; proposed policies and programs; education and marketing; and design guidelines. This project is drawn directly from highest priority projects in the Implementation Section. The report may be downloaded from the Cultural Loop grant webpage

Extensive Community Engagement – 548 people completed a web survey conducted as part of the non-motorized plan. 60 people participated in the two public workshops for the plan and numerous meetings were conducted with key individuals. Throughout the process, public engagement techniques were used that obtained input from all participants, documented the input and employed consensus reaching techniques. The public engagement is fully documented in The Greater Mt. Pleasant Area Non-motorized Plan noted above.

Broad Partnerships – The non-motorized project's steering committee included representatives from the Michigan Department of Transportation, Isabella County Road Commission, Saginaw Chippewa Indian Tribe, Central Michigan University, Mid-Michigan Community College, Isabella County Parks and Recreation, Union Township and the City of Mt. Pleasant.

There are 26 letters of support for this project from an exceptionally broad array of governmental, economic, health, environmental, transportation and educational entities and elected officials. If this project is funded, the educators at Central Michigan University are committed to documenting the economic impact.

Integrates Long-standing Community Plans – Plans for the Multimodal Freeway Overpass precede the Non-motorized plan by a number of years and a number of public meetings have taken place specifically for this project. The Saginaw Chippewa Indian Tribe developed plans for a Shared-Use Trail to link key destinations on Tribal land that also preceded the non-motorized plan. The non-motorized plan integrated these two preceding efforts into the proposed non-motorized network.

Builds on Existing Resources – The Cultural Loop ties together and extends two existing off-road trails that have reached a combined length of over five miles. The Cultural Loop in conjunction with the existing trails and seven miles of existing bike lanes and paved shoulders will further leverage these existing investments.

B. Project Background

Project Location – The project is located in Isabella County, Michigan. The project will provide non-motorized connections to key destinations in the City of Mt Pleasant, Union Township, Chippewa Township, Saginaw Chippewa Indian Tribe and Central Michigan University.

Economically Distressed Area – The project is located in an economically distressed area. The following statistics are drawn from the 2010 Census and the 2005-2009 American Community Survey.

- Mt. Pleasant had a population of 26,016 with a Median Household Income of \$25,033 and 15% of families living below the poverty level.
- Union Township has a population of 12,927 with a Median Household Income of \$26,794 and 13% of the families living below the poverty level.
- Chippewa Township has a population of 4,654 with a Median Household Income of \$37,238 and 20% of the families living below the poverty level.

Project Goals – As part of The Greater Mt. Pleasant Area Non-motorized Plan, four goals were developed based on public input:

1. Provide better non-motorized connectivity
2. Advance community health
3. Improve pedestrian and bicycle safety
4. Institute changes that lead to a pedestrian and bicycle friendly community

Benefits – If selected for the grant, The Greater Mt. Pleasant Area Cultural Loop will provide the following benefits:

- More active transportation choices and improved non-motorized connectivity
- leading to an increase in the number of walking and bicycling trips
- Shifting some trips from automobile to walking or bicycling
- Improved safety for bicyclists, pedestrians, motorists and transit users
- Reduction in greenhouse gas emissions
- Encourages tourists who come to the area for one attraction to stay in the community an extra day or two.
- Help position the area for the new economy by creating an attractive environment for knowledge workers.

Planning Process

As indicated previously, this project is the result of a comprehensive non-motorized transportation plan that is based on a broad partnership. The plan initiated from a Regional Planning Charrette that was held on February 5, 2008. After that meeting, a working group was formed. The working group resulted in a successful \$50,000 grant application to the Saginaw Chippewa Indian Tribe. The proceeds from the grant were used to hire a consultant to prepare a non-motorized plan for the Greater Mt. Pleasant Area and Isabella County.

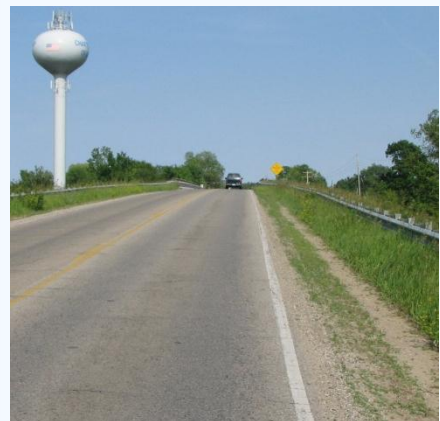
Non-motorized Transportation Plan Purpose & Community Vision

"Identify the non-motorized network and the support systems necessary for safe and convenient non-motorized travel throughout the Greater Mt. Pleasant Area and Isabella County. As a network and systems are implemented, it is envisioned that this will result in more people freely choosing to walk and bicycle...it is further envisioned that this will in turn lead to a healthier and more socially engaged community where walking and bicycling is a natural choice because there are easy and convenient ways to get from one destination to another."

To view the complete non-motorized transportation plan, please visit the following website: http://www.greenwaycollab.com/Projects/Mt_Pleasant/MPMNMP.htm

Current Challenges

- **High health risks tied to physical inactivity** – In Isabella County 4.4% of the residents have diabetes, 22% have high blood pressure and 21.5% are obese. All of these diseases are related to physical inactivity. One in five residents report getting no exercise and an additional 13% get minimal or no exercise.
- **US – 127 presents a major barrier** – the freeway separates the Saginaw Chippewa Indian lands and Mid Michigan Community College on the east side from the City of Mt. Pleasant, Central Michigan University and high density student housing to the west.
- **Isolated off campus housing** – Many of these high density off-campus housing complexes do not have any bicycle or pedestrian links to their surroundings, yet campus, job centers and shopping centers are within easy walking and bicycling distance.
- **Key community resources inaccessible by pedestrians and bicycle** – even though these resources are easy walking and bicycling distance from residential areas and each other, they are only accessible via motorized travel.
- **Busy roadways act as a barrier to travel** – Many direct connections from neighborhoods to schools, commercial areas and other neighborhoods are impeded by the need to cross busy roadways without the aid of any designated facilities.



Existing overpasses to the north and south of the proposed freeway overpass at Remus Road have narrow bridge decks with no bicycle or pedestrian facilities. Existing pedestrian use can be seen by the presence of the warn path on the side of the road

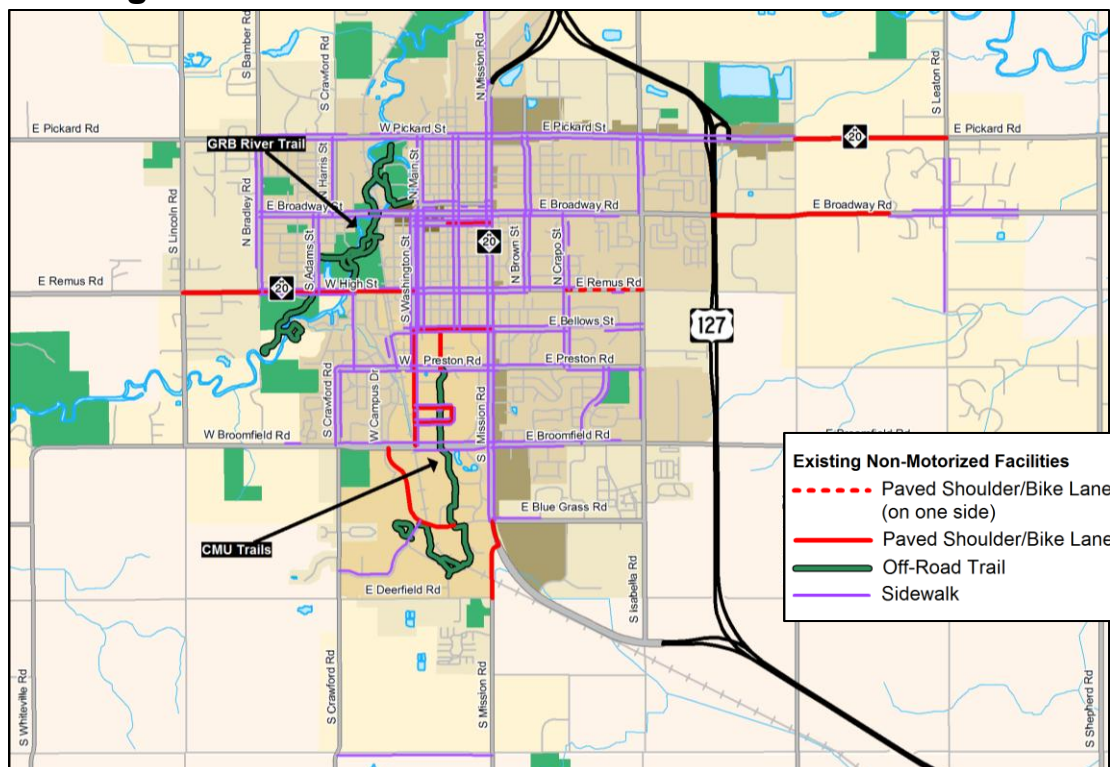
Current Opportunities

Although there are many transportation challenges to address in the area there are also many existing opportunities and resources to build upon and help support the Cultural Loop.

- 3 miles of the Riverwalk that follows the Chippewa River.
- 2.25 miles of Central Michigan University off-road trails.
- 6.8 Miles of bike lanes and paved shoulders in the community.
- Isabella County Transportation Commission Bus
- Based on the non-motorized plan web survey. 44.3% of respondents said that they would ride their bicycle for transportation if a system of sidewalks, pathways, crosswalks and bike lanes were provided.
- Nearly complete sidewalk system in the downtown and surrounding populated areas.
- A diverse group of representatives from different municipalities and organizations dedicated to working together to help establish a non-motorized system in the Greater Mt. Pleasant area.



Existing Facilities



C. Multimodal Freeway Overpass

The new bridge will include a shared use pathway, bike lanes and motor vehicle lanes. Although this bridge will not have as big an impact on motor vehicles as it does bicycles and pedestrians, it will provide benefits to motor vehicle travel. Currently, a majority of the land on the east side of US-127 is under development or undeveloped. The bridge would provide a connection for future development in the area. Recently, the Mid Michigan Community College relocated to the east side of the freeway and a corporate park has just been constructed. The bridge will also provide an alternative motor vehicle route when there are accidents or construction on the near-by bridges or interchange.

Transportation benefits of the Multi-modal Bridge include:

- Providing a critical non-motorized connection across US-127
- Provide alternative route for motor vehicles
- Provide connection for future development in the area

Alternatives Development

MDOT's Mt. Pleasant Transportation Service Center has been working with the Saginaw Chippewa Indian Tribe on a multi-modal overpass of US-127 at Remus Road which is currently bisected by the freeway. It was determined that adding a new facility to Remus Road would be more cost effective than retrofitting the existing overpasses at Broadway Road or Broomfield Road and it was in a much more strategic location.

In 2010, MDOT held workshops with the Tribe and Union Township. During these meetings three options for providing non-motorized connections over the freeway at Remus Road were explored:

1. Pedestrian / bicycle only underpass
2. Pedestrian / bicycle only overpass
3. Multimodal overpass.

Each of the alternatives was evaluated based on the costs, feasibility, user comfort and safety.

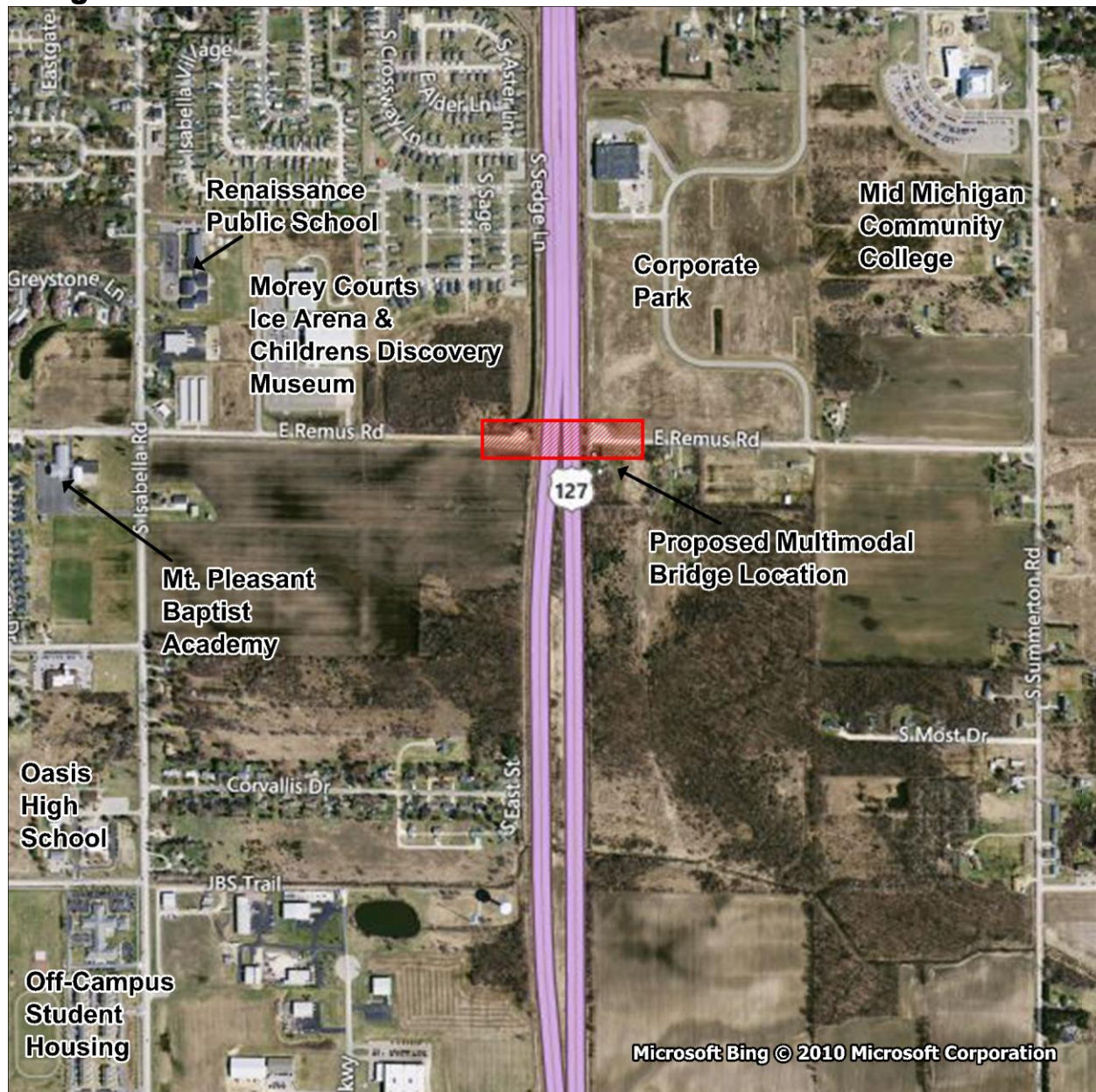
In summary, the pedestrian / bicycle underpass was considered undesirable from a personal safety and user comfort standpoint. In addition, there were costs and reliability issues associated with having to have to install, operate and maintain a water pump.

The pedestrian / bicycle overpass was seen as a viable option. But the option had little aesthetic value and the users would be exposed to excessive freeway noise.

The multimodal overpass was deemed the most desirable alternative. For 1.1 million dollars more than the pedestrian overpass, the project would provide the benefit of a vehicular crossing that directly linked the schools and community recreation centers on the west side of the freeway with a new corporate park and the new campus of Mid Michigan Community College on the east side of the freeway.

The multimodal overpass option incorporates a pre-cast concrete arch bridge which would allow for a wider bridge deck on which landscaping between the roadway and the path and the path and the edge of the bridge deck. This would make for a much higher quality experience for the non-motorized users than a typical pedestrian overpass.

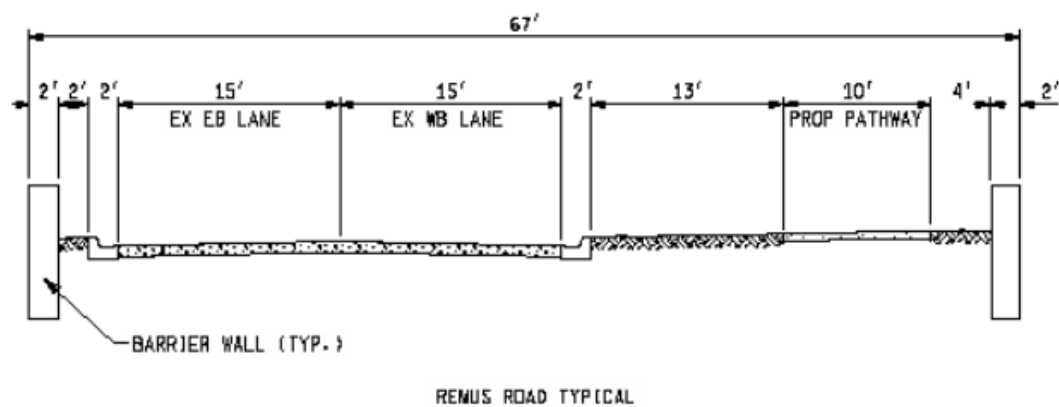
Bridge Location



Example of Bridge Style as Viewed from Freeway



Proposed Bridge Cross Section



Multimodal Freeway Overpass Costs

Multimodal Freeway Overpass		Amount
	Pre-Cast Concrete Arch Bridge	\$ 1,873,000
	Bridge Approaches	\$ 907,000
	Remus Road	\$ 320,000
	ROW Acquisition	\$ 100,000
	Engineering	\$ 372,000
Total Project Cost		\$ 3,572,000

A detailed cost estimate has been prepared for the pre-cast concrete arch bridge, bridge approaches and Remus Road paving leading up to the approaches. These estimates may be downloaded from the grant application website.

D. Greenway Loop

While the multimodal freeway overpass is critical to solving the dilemma of getting bicyclists and pedestrian across US-127, the majority of people are only going to use the overpass if they have a safe, comfortable and convenient way to get to the overpass and to the destinations on the other side of the freeway

The Greenway Loop connects major destinations in the greater Mt. Pleasant area and is part of a planned regional trail that will stretch north/south across Isabella County. The Greenway Loop is a combination of on and off-road non-motorized facilities with minimal interaction with high speed, high volume motor vehicle traffic. The Greenway loop is about 15 miles long and is comprised of:

- 2.4 miles of existing off-road trails
- 5.3 miles of neighborhood greenway routes comprised of traffic calmed bike routes on residential roads in combination with short off-road trails
- 2.2 miles of bike lanes and sidewalks on low volume roadways
- 4.7 miles of proposed off-road trails.

Transportation benefits of the Greenway Loop include:

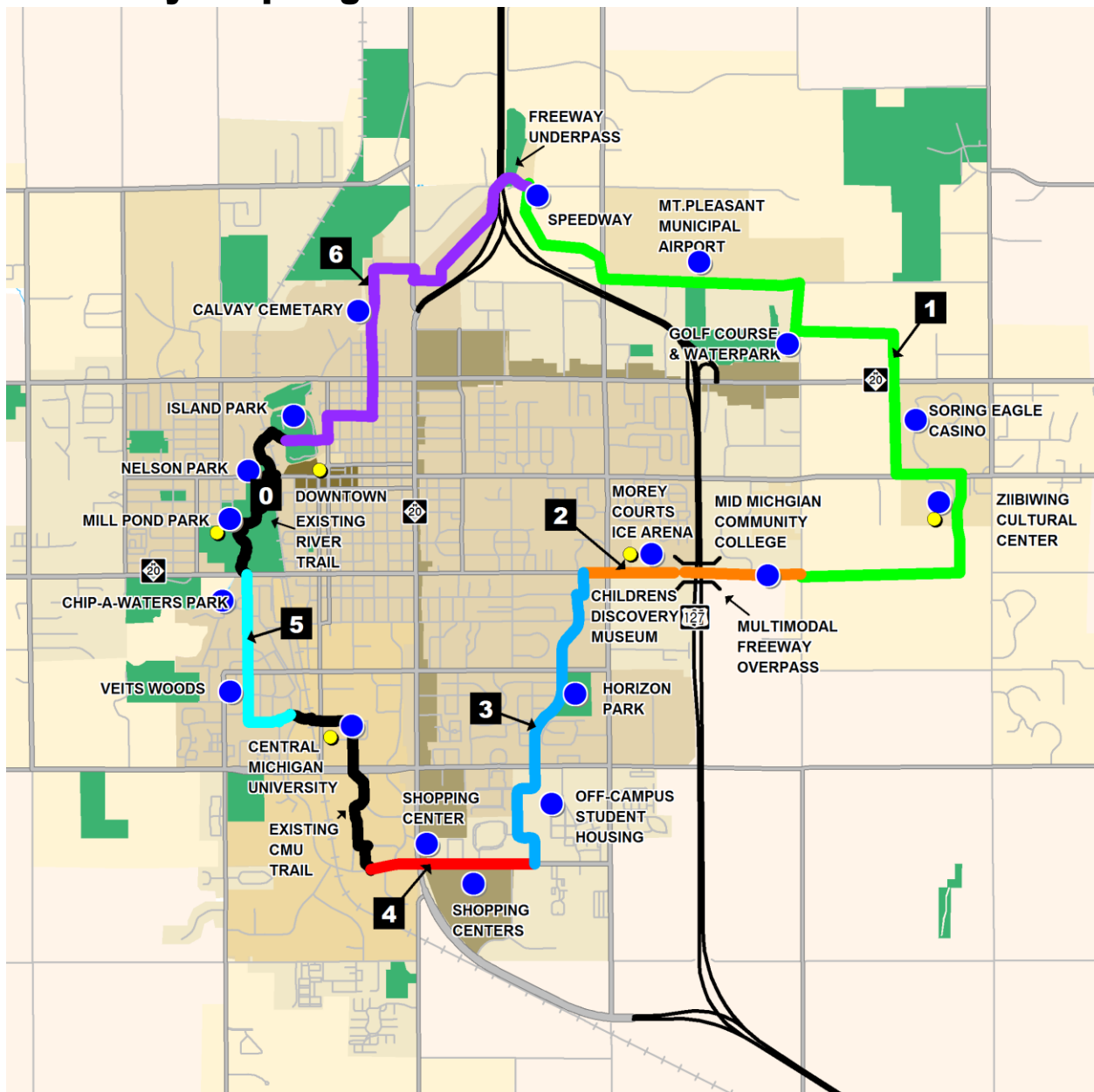
- Providing non-motorized connections to major destinations in the community
- Providing extensive wayfinding aids along the route
- Incorporation of active transportation hubs
- Linking the City, Townships, Major University, Local College, and Tribe

The Greenway Loop is strategically aligned to link the majority of community resources and be easily accessible to the residents.

- 20,245 people live within ½ mile of the Greenway Loop
- 19,075 jobs are within ½ mile of the Greenway Loop
- 1,195 properties are within 1/8 of a mile of the Greenway Loop
- 8 high density off-campus student housing complexes abut the Greenway Loop
- 4 large scale commercial developments abut the Greenway Loop
- A new corporate park abuts the Greenway Loop

The project was divided into six segments of relatively uniform character for the purposes of benefit analysis. Additional information on the cross section of each segment may be found in the Appendix.

Greenway Loop Segments



Cultural Loop Segments

- Existing Shared Use Path
- 1. Mostly Off-Road Shared Use Path
- 2. Bike Lanes and Sidepath
- 3. Neighborhood Greenway
- 4. Sidepath
- 5. Neighborhood Greenway
- 6. Mostly Bike Lanes and Sidewalks

Active Transportation Hubs



Active Transportation Hubs are located on the Greenway Loop. They serve as orientation and resource centers for non-motorized trips. They help those who are already walking or bicycling find community resources. They also introduce people to new walking and bicycling opportunities and events.

Active Transportation Hubs include the following amenities:

- Four Sided Information Kiosk with:
 - County Trail Map
 - Local Attractions / Walking Map
 - Bulletin Board with Events
 - General Tourist Information
- Drinking Fountain
- Bicycle Maintenance Station with Air Pump
- Bike Parking, Bench and Trash/Recycling Receptacles

Community Benefits

Completion of the project will have a major impact on the Greater Mt Pleasant Area's quality of life. It will move the community towards becoming a healthier place and greatly reduce energy use by providing alternatives to motorized transportation.

Childhood and adult obesity are serious problems in the community and providing active transportation could help change the culture and how residents think about getting from one place to another. Currently, it is a challenge for families who want their children to walk or bicycle to school. Joggers and walkers take their lives in their hands when they try to use some streets that have no shoulders or sidewalks. In many situations, only the most avid bicyclists can get around the community.

If this grant is funded it would have a transformative impact on the Greater Mt Pleasant Area. It will have a highly positive economic impact on the region over the two years of construction. The long term benefits include making the community a very attractive place for visitors as well as businesses and residents.

The Greenway Loop will help establish a physical and cultural environment that supports and encourages walking and bicycling for both utilitarian purposes and for physical fitness. It is anticipated that the physical and cultural changes will result in a greater number of individuals walking and bicycling as their preferred mode of transportation for many trips. These choices will in turn lead to healthier lifestyles, improved air quality, and a more energy efficient and sustainable transportation system.

Greenway Loop Costs

Greenway Loop		Amount
	Off-Road Shared Use Pathways	\$ 1,930,000
	Road Crossing Improvements	\$ 340,000
	Bike Lanes	\$ 27,000
	Traffic Calming Improvements	\$ 200,000
	Active Transportation Hubs	\$ 155,000
	Landscaping	\$ 200,000
	Wayfinding Signage	\$ 100,000
	Design and Construction Documents	\$ 591,000
Total Project Cost		\$ 3,543,000

A detailed cost estimate has been prepared for Greenway Loop. This estimate may be downloaded from the grant application website.

II. Project Partners

The project has exceptionally broad support from multiple governmental, economic, health, environmental, transportation and educational entities and elected officials. The following table summarizes the 26 letters of support that are included in the Appendix.

Project Partners	Letter of Support	Implementing Agency
Chippewa Township	Yes	
Charter Township of Union	Applicant	Yes
Charter Township of Union Economic Development Authority	Yes	
Central Michigan University - Office of the President	Yes	Yes
CMU - Vice President of Finance and Administration	Yes	
Central Michigan University - Economic Department	Yes	
CMU - Great Lakes Institute for Sustainable Systems	Yes	
Central Michigan Community Hospital	Yes	
Central Michigan District Health Department	Yes	
City of Mt. Pleasant	Yes	Yes
Isabella County Board of Commissioners	Yes	
Isabella County Commission on Aging	Yes	
Isabella County Drain Commission	Yes	
Isabella County Parks and Recreation Commission	Yes	
Isabella County Road Commission	Yes	Yes
Michigan Sierra Club	Yes	
Michigan House of Representatives, 99th District, Kevin Cotter	Yes	
Michigan State Senator, 33rd District, Judy Emmons	Yes	
Mid-Michigan Community College	Yes	
Middle Michigan Development Corporation	Yes	
Mt. Pleasant Public Schools	Yes	
Mt. Pleasant Area Chamber of Commerce	Yes	
Saginaw Chippewa Indian Tribe of Michigan	Yes	Yes
United States Senator Stabenow	Yes	
United States Senator Levin	Yes	
United States Congressman, 4th District Michigan, Dave Camp	Yes	

III. Grant Funding

The Charter Township of Union and its project partners request \$3,972,685 in TIGER 2012 funding for The Greater Mt. Pleasant Area Cultural Loop. The total project cost is estimated to be \$7,115,000.

Committed funds of \$3,142,315 comprise 44% of the total project cost. The following table summarizes the grant funding.

Funding Source		Amount	Share
Requested TIGER Funds		\$ 3,972,685	56%
Committed Non-TIGER Funds:			
	Saginaw Chippewa Indian Tribe	\$ 2,000,000	28%
	Charter Township of Union / EDA	\$ 1,039,340	15%
	City of Mt. Pleasant	\$ 102,975	1%
Total Committed Non-TIGER Funds		\$ 3,142,315	44%
Total Project Cost		\$ 7,115,000	100%

Project Elements Cost		Amount	Share
	Multimodal Freeway Overpass	\$ 3,572,000	50%
	Greenway Loop	\$ 3,543,000	50%
Total Project Cost		\$ 7,115,000	100%

IV. Selection Criteria

A. Long-term Outcomes

State of Good Repair

The success of a non-motorized transportation system ultimately depends on thorough and timely maintenance of all its facilities. In order to keep the system functioning to its full potential a regimented maintenance plan has been established for the non-motorized facilities. The plan includes the following key elements:

- Development of an inspection program to identify any hazardous sidewalks
- Asset management system to track conditions and repairs
- Tree and brush trimming program at least twice a year
- Frequent sweeping of bike lanes
- Annual restriping program for bike lanes and refreshing pavement markings on trails and bike routes to maintain high contrast
- Periodic resealing of asphalt on trails
- Enforcement of snow removal

For more information on project maintenance please see Page144, Section 7.5 Maintenance of Non-motorized Facilities in the Greater Mt. Pleasant Area Non-motorized Plan¹.

The involved communities have committed to appropriate funds necessary for maintenance and operations into their own budgets should funding be successful.

¹ Greater Mt. Pleasant Area Non-motorized Plan, 2011. Section 7.5 Maintenance of Non-motorized Facilities, p.144—147. http://www.greenwaycollab.com/Projects/Mt_Pleasant/MPMNMP.htm

Economic Competitiveness

Consistent with the Economically Distressed Area criteria published by FHWA, Isabella County and the City of Mt. Pleasant both qualify as federally designated economically distressed areas¹. If funded, this project will provide improvements that allow for growth in the private and public sectors of the Greater Mt. Pleasant Area.

Major Private Sector businesses that will be affected by the project include:

- Soaring Eagle Inn and Water Park – A new tourist attraction to the Mt. Pleasant Area, the Soaring Eagle Inn and Water Park is the largest indoor water park in Michigan. The Cultural Loop will have a direct connection to this destination, providing an additional amenity to vacationers who visit the water park.
- New Business Park planned near Remus Road and US-127 – The multimodal freeway overpass will provide better automobile access to the planned business park as well as non-motorized links.
- Off-Campus Student Housing – the Cultural Loop will provide a direct link to both Central Michigan University and Mid Michigan Community College.

According to a web survey, that was completed as part of the Greater Mt. Pleasant Non-motorized Plan, if a complete and safe non-motorized network was established the shopping centers would see the most growth by non-motorized users.³

Based on the Cost Benefit Analysis the Cultural Loop will result in an increase of \$4,202,612 in property values within 1/8 of a mile of the Cultural Loop.

An increase in non-motorized trips also leads to an increase in the purchase of equipment, such as bicycles, reflective clothing, walking shoes, umbrellas, and jackets. According to the League of American Bicyclists operating a bicycle costs around \$120 a year².

¹ Consistent with the Economically Distressed Area criteria published by FHWA on August 5th, 2011 Isabella County and on February 12, 2011 The City of Mt. Pleasant both qualify as federally designated economically distressed areas. http://hepgis.fhwa.dot.gov/hepgis_v2/GeneralInfo/Map.aspx

² League of American Bicyclists. <http://www.bikeleague.org/>

³ Greater Mt. Pleasant Area Non-motorized Plan, 2011. Section 10.1 Web Survey Results. p.253-314. http://www.greenwaycollab.com/Projects/Mt_Pleasant/MPMNMP.htm

Livability

This project will significantly contribute to broader traveler mobility through intermodal connections. With approximately 12% of households without vehicles¹, 7% of the population above the age of 65², and over 20,000 students at Central Michigan University³, there is a high demand for alternative transportation services.

In the web survey conducted as part of the Greater Mt. Pleasant Area Non-motorized Plan, approximately 38% of respondents said they currently walk and about 24% said they bike daily or weekly for transportation. When asked if they would walk or bike for transportation if facilities were available, about 55% of participants said they would walk daily or weekly and 56% of participants said they would bike daily or weekly⁴.

It is estimated that about 40% of all trips are less than two miles which is an easy distance for walking or bicycling, provided appropriate facilities are available. In practice, automobiles are used for 76% of all trips under one mile and 91% of all trips between one and two miles. By providing alternate transportation facilities it is anticipated that a portion of shorter trips will be undertaken by non-motorized means

Based on the Cost-Benefit Analysis:

- \$342,822 per year in health cost savings from 602 daily bicycle trips and 3,598 daily pedestrian trips (combination of utilitarian and recreational trips)
- \$120,882 annual fuel cost savings from 77 daily utilitarian bicycle trips and 2,206 utilitarian pedestrian trips.

¹ The 2000 US Census shows 12.7% of the households without vehicles with a +/- 2.6% margin of error, the 2010 US Census, show 14% of households without vehicles with +/- 4% margin of error. <http://www.census.gov/>

² 2010 US Census. <http://www.census.gov/>

³ Central Michigan University, Fall Semester Enrollment Statistics.
http://www.cmich.edu/documents/OIR/enrollment/fall_2010_misc_stats.pdf

⁴ Greater Mt. Pleasant Area Non-motorized Plan, 2011. Section 10.1 Web Survey Results. p.253-314.
http://www.greenwaycollab.com/Projects/Mt_Pleasant/MPMNMP.htm

Environmental Sustainability

Not all of the bicycle and pedestrian trips generated by this project will be replacing an automobile trip. Some will be induced recreation travel. Using a very conservative model it is anticipated that only about 54% of all of the bicycle and pedestrian trips will actually replace motor vehicle trips. This will result in:

- 468 tons annually in CO2 emission savings from 77 daily utilitarian bicycle trips and 2,206 daily utilitarian pedestrian trips.

Safety

The current non-motorized facilities contain many gaps and unconnected segments that force bicycle and pedestrians into and across the roadway at dangerous locations. In a five year period from 2004 – 2009 for the Greater Mt. Pleasant area, there were 64 pedestrian crashes and 95 bicycle crashes.

The proposed non-motorized network is based on current best-practices for safety and accommodation. The network has been designed so that it meets the needs of a wide-range of bicyclist and pedestrian types and attracts people who may not currently bicycle or walk.

Studies have shown that the most effective way to increase the safety of pedestrians and bicyclists is to increase the numbers of pedestrians and bicyclists as they become an expected roadway user. Pedestrian and bicycle safety is often a big concern where there is sporadic bicycle and pedestrians traffic. In these cases high visibility facilities are proposed to highlight the potential of encountering a pedestrian or bicyclist.

B. Job Creation and Economic Stimulus

This project will bring a much needed economic boost to the Greater Mt. Pleasant area. Michigan is one of the hardest hit states during the recent economic downturn; the average unemployment rate in 2010 was 10.2% for Union Township, 8.8 % for Chippewa Township and 8.6% for the City of Mt. Pleasant¹. If awarded the grant, this project will begin quickly providing a prompt increase of dollars into the local economy.

Based on the assumption that \$1,000,000 in construction costs will generate 13 job years, the two years of construction for this project will generate 92.5 job years. The maintenance costs will support about 1 job year each year for the life of the project

Construction Administration

As this is a multi-jurisdictional project, involving a number of government agencies, there will be a number of bidding processes employed. Union Township will be acting as the fiscal agency and as such will require all of the participating agencies to meet the following best practices:

- Including disadvantaged business enterprises in its procurement process
- Assure hiring of contractors/subcontractors with proven performance on labor practices and compliance with federal laws regarding safety and fairness
- Adhere to project practices that are consistent with the America's civil rights and equal opportunity laws.
- Provide federal rate wage certification

The jurisdictions involved are all public agencies that have well established public bidding process. The Multimodal Freeway Overpass will be a Michigan Department of Transportation project; therefore the bridge will be bid through the Michigan Department of Management and Budget bidding procedures. All trail projects on tribal lands will be handled through the Saginaw Chippewa Indian Tribe standard bidding process. The remaining project parts will be handled by the City of Mt. Pleasant, Charter Township of Union and the Isabella Road Commission and will be bid through their bidding procedures.

See Section V. Project Readiness and NEPA for additional information

¹ 2011 US Census

² Heidi Garrett-Peltier. Pedestrian and Bicycle Infrastructure: A National Study of Employment Impacts: Political Economy Research Institute, University of Massachusetts. 2011

C. Innovation

The project also makes use of two newer concepts. The first are Neighborhood Greenways – also known as Bicycle and Pedestrian Boulevards. These have proven extremely popular where they have been employed in other Cities. The second are the Active Transportation Hubs.

D. Partnership

This project includes numerous partners ranging from community organizations to regional agencies. The participation of these partners varies from providing support and assistance to providing funding. Approximately 44% of the Project Cost will be paid for by non-federal funds. The following partners are providing financial commitments to the project:

- Saginaw Chippewa Indian Tribe – Contributing \$2,000,000 investments towards the construction of the Segment 1 of the Greenway Loop and Multimodal Freeway Overpass.
- Charter Township of Union EDA – Contributing \$1,039,340 investments towards improvements of the Greenway Loop on the east side of Union Township
- City of Mount Pleasant – Contributing \$102,975 investments towards improving the Greenway Loop within the City

The following non-transportation agencies are in support of and pursuing similar objectives to this project:

- Central Michigan Community Hospital – Improving overall health in the greater Mt. Pleasant area.
- Central Michigan University – CMU has strong community support for alternatives to automobile transportation. Additionally, CMU is working on research with the Great Lakes Institute for Sustainable Systems on the potential impact of expanding non-motorized access to the southern retail district of Mt. Pleasant.
- Commission on Aging – Improving the lives of local citizens.
- Central Michigan District Health Department – Achieve the TWC Health Improvement Council goal of improving walkability and bikeability of our streets and promoting the use of non-motorized transportation options.
- Isabella County Parks and Recreation – By improving non-motorized facilities it will further enhance the quality of life for our community and visitors to the Greater Mt. Pleasant Area.

Letters of support from the agencies listed above and many more are available in section III of the Appendix.

D. Results of Cost Benefit Analysis

Impact Matrix

Current Status/ Baseline & Problem to Be Addressed	Change to Baseline / Alternatives	Type of Impacts	Population Affected by Impacts
US-127 is a barrier for non-motorized travel between numerous employment, housing, recreational, educational and cultural centers.	Provide safe, comfortable and convenient means to cross US-127 for bicycles and pedestrians as well as an additional crossing for motorized vehicles.	Improved mode choice options will result in an increase in the number of utilitarian and recreational bicycle and pedestrian trips between key destinations.	<p>20,245 people live within ½ mile of the Cultural Loop.</p> <p>43,597 people live in the project area.</p> <p>19,075 jobs are within ½ mile of the Cultural Loop.</p>
There are limited to no bicycle or pedestrian facilities between key destinations in the project area.	Provide safe, comfortable and convenient bicycle and pedestrian facilities along with wayfinding and support facilities between key destinations	The greenway loop will have a positive impact on the value of properties adjacent to the Cultural Loop.	1,195 properties are located within 1/8 of a mile of the Cultural Loop including eight high density off-campus student housing complexes, four large scale commercial developments and a new corporate park.

Economic Benefit	Summary of Results	Page Referenced in BCA
<p>The exercise associated with each 3 mile bicycle or 1 mile pedestrian trip generates 53 cents of health care savings.</p>	<p>\$342,822 per year in health cost savings from 602 daily bicycle trips and 3,598 daily pedestrian trips (combination of utilitarian trips and recreational trips).</p>	<p>17-23</p>
<p>Fuel savings of 0.18 gallons for each 3 mile utilitarian bicycle trip and 0.07 gallons for each utilitarian pedestrian trip that replace motorized trips reduce personal fuel purchases at \$3.90 gallon.</p>	<p>\$120,882 annual fuel cost savings from 77 daily utilitarian bicycle trips and 2,206 utilitarian pedestrian trips.</p>	<p>17-23</p>
<p>CO2 emission savings of 1581 grams for each 3 mile utilitarian bicycle trip and 575 grams for each 1 mile utilitarian pedestrian trip that replace motorized trips.</p>	<p>468 tons annually in CO2 emission savings from 77 daily utilitarian bicycle trips and 2,206 utilitarian pedestrian trips.</p>	<p>17-23</p>
<p>Increase in property values of 6% for the 272 properties located immediately adjacent to the Cultural Loop and an increase in values of 2% for the additional 923 properties located within 1/8 of a mile of the Cultural Loop.</p>	<p>Increase of \$4,202,612 in property values of property within 1/8 of a mile of the Cultural Loop.</p>	<p>25-27</p>

V. Project Readiness and NEPA

Multimodal Freeway Overpass

MDOT is currently in the early preliminary engineering phase for the bridge. A scoping review document has been prepared. This document may be found in the Appendix. The document did not find any agricultural, endangered species, historic or archaeological concerns. It was noted that official consultation with the Saginaw Chippewa Indian Tribe will be required. It was also noted that a visit by MDOT's Historian will be necessary as there are a few properties east of US-127 that cannot be seen in existing project documentation. Surveys are currently being prepared for the bridge area. As the bridge is currently envisioned, additional ROW will likely not be necessary.

Greenway Loop

The regional connector loop and neighborhood connectors will all be built within existing road ROW or across publicly held land. A preliminary assessment has determined that the route will not be traversing any wetlands, significant natural features or impacting any historic structures. There is only one creek crossing and this may utilize existing farm crossings. Upon a more formal assessment, we anticipate a Finding of No Significant Impact. There are also, numerous alternatives should a particular route segment prove impractical upon design development.

Project Schedule

A project schedule is included that demonstrates how quickly construction can begin upon receipt of a TIGER grant. Funds will be obligated by June 30th 2013 and spent steadily and expeditiously once construction starts.

Task	2012		2013				2014			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Multimodal Freeway Overpass										
Preliminary Design	■									
Permitting		■								
Construction Documents		■	■							
Bidding & Contracting				■						
Construction					■	■	■	■	■	■
Greenway Loop										
Preliminary Design	■									
Permitting		■								
Construction Documents		■	■							
Bidding & Contracting				■						
Construction					■	■		■	■	■

Legislative Approvals

The following state and local elected officials support this project. Letters of support can be found in the Appendix.

- Carl Levin, U.S. Senator
- Debbie Stabenow, U.S. Senator
- Judy K. Emmons, Michigan State Senator, 33rd District
- Kevin Cotter, Michigan State Representative, 99th District
- Robert Smith, Supervisor, Chippewa Township
- George E. Ross, President, Central Michigan University
- David A. Ling, Chair, Isabella County Board of Commissioners

As a matter of statewide policy, Michigan Department of Transportation cannot support communities that are applying for the TIGER Grants as the department is applying for grants themselves. However, MDOT has indicated that if this project is approved for a TIGER Grant, the project could be on the STIP within about 2 months after the approval. MDOT is currently working with the Saginaw Chippewa Indian Tribe on the early preliminary engineering of the bridge.

State and Local Planning

This project is the result of the Greater Mt. Pleasant Area Non-motorized Transportation Plan. Since this project was developed by numerous partners (City of Mt Pleasant, Union Township, Isabella County, Central Michigan University and the Saginaw Chippewa Indian Tribe) each agency adopts the plan individually. The communities are all in the process right now of adopting the plan.

The multimodal freeway overpass will be MDOT responsibility and as soon as this project receives funding they could include the bridge in their STIP within about 2 months after approval. For more information on the project planning documentation please visit, http://www.greenwaycollab.com/Projects/Mt_Pleasant/MPMNMP.htm.

Technical Feasibility

The proposed project is straight forward road and trail construction.

Financial Feasibility

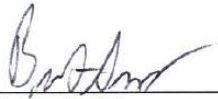
The funding request considers all construction, preliminary engineering, construction engineering, and construction contingencies to completely finish the proposed project. Union Township will be the recipient of the grant and has a history of effectively managing funds and programs. Union Township will oversee and manage the funds and implementation of the project among the project partners.

The Saginaw Chippewa Indian Tribe has indicated their intent to commit 2 million dollars towards this project. The EDA's commitment of \$1,039,340 is shown on their plan amendment that is close to being approved. The City of Mt. Pleasant's commitment of \$102,975 is already in their Capital Improvement Plan.

VI. Federal Wage Rate Certification

Federal Wage Rate Requirement Certification

In accordance with ARRA, §1606, the Charter Township of Union, Isabella County Michigan, assures that it and its contractor(s) and subcontractor(s) shall fully comply with said section in that, notwithstanding any other provision of law and in a manner consistent with other provisions of ARRA, all laborers and mechanics employed by vendors, contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the federal government, pursuant to ARRA, shall be paid wages at rates not less than those prevailing on projects of a similar character in the locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (Davis-Bacon Act). It is understood that the Secretary of Labor has the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.) and section 3145 of title 40, United States Code.



Brian Smith

Township Manager,

Charter Township of Union, Isabella County, Michigan

10-31-11

Date