



DELTA TRAILS

DELTA TOWNSHIP NON-MOTORIZED TRANSPORTATION PLAN

2012

Prepared By:
Landscape Architects & Planners, Inc.
Lansing, Michigan



“I, Patricia Gabriel, chairperson of the Delta Township Planning Commission, Hereby attest that the Commission approved the Delta Township Non-Motorized Transportation Plan following public hearings held on April 23 and June 11, 2012.”

Table of Contents

Table of Contents.....	2
Acknowledgements.....	3
Introduction	4
Background	4
Purpose	4
Methods.....	4
Public Input Process.....	5
Definition of Terms	5
Accomplishments 2006-2011	9
The Non-Motorized Transportation Plan.....	11
Goals and Objectives.....	11
Points of Interest Map	17
Sidewalk Plan	17
Non-Motorized Transportation Plan	17
Implementation	19
Strategies	19
Process	19
Tools.....	20
Further Considerations	23
Ordinances	23
Federal and State Funding Sources	24
Local Funding Sources.....	26
Private Funding Sources.....	27
Public-Private Partnerships.....	28
Maintenance	28
Universal Accessibility.....	29
Plan Amendment Process	30
Conclusion.....	31

Acknowledgements

The Delta Charter Township Non-Motorized Transportation Plan was a cooperative effort by Delta Charter Township, the Delta Township Community Development Department, the Delta Township Parks and Recreation Department and the citizens of Delta Township.

Township Board

Kenneth Fletcher, Township Supervisor
Howard Pizzo, Treasurer
Mary Clark, Clerk
Janice Cunningham
Barbara Poma
Jeffrey Hicks
Cara Spagnuolo

Administration

Richard Watkins, Township Manager

Parks and Recreation Department

Marcus Kirkpatrick, Director
Kathy Sobczyk

Community Development Department

Mark Graham, Director
Tim Hogg
Gary Bozek

Tri-County Regional Planning Commission

Harmony Gmazel

Contributors

Dick Benkert
Jeff Huard
Dick Cross

Consultant

Landscape Architects & Planners Inc.

Introduction

Background

Delta Township recognized the need for a non-motorized transportation plan in 2003 when it hired Landscape Architects & Planners, Inc., to develop the “Delta Township Non-Motorized Transportation Study” hereafter referred to as “The Study” or “The 2005 Study.” This plan was officially adopted by the Township Board in 2005 and focused primarily on east-west and north-south routes within the township to connect neighborhoods, schools, parks and shopping districts. The Study outlined several routes and identified a priority plan which was used as a guide for the township to implement non-motorized transportation projects during the next five years. Included in the Study was a Vision Plan, which visually illustrated non-motorized transportation improvements that may take twenty five to fifty years to fully implement. The study also provided implementation tools, funding sources and recommendations to the township in order to develop the priority routes. The plan also recommended updates every five years to remain current and as a result, prescribed the 2012 update.

Purpose

The purposes of the Non-Motorized Transportation Plan, hereafter referred to as “The Plan,” “The 2012 Update” or “The 2012 Plan,” is to update the 2005 Study to reflect completed non-motorized projects, adjacent community efforts, changes in non-motorized transportation trends, changes in the economic environment, changes in public opinion and identify new non-motorized projects. Once adopted, the Non-Motorized Transportation Plan will be used by the Township as a tool for implementing non-motorized transportation projects. The Plan will also facilitate inter-departmental communication at the Township as well as the Eaton County Road Commission and adjacent communities in order to advocate for non-motorized transportation facilities. The 2012 Plan may also be used to obtain funding from the State government, Federal government and other funding sources. Many funding sources require a comprehensive plan for eligibility.

Methods

A comprehensive review of the 2005 Study was conducted. Local and regional planning efforts were also reviewed and referenced. It is intended for the Non-Motorized Transportation Plan to support other related plans that the Township is pursuing such as:

- Road Improvement Plan
- Comprehensive Plan
- Sidewalk Plan
- Five-Year Parks and Recreation Master Plan

In addition to other planning efforts, a public input meeting was held and a public online survey was conducted. The information from these meetings was evaluated to obtain a better understanding of the public’s view of non-motorized transportation within their community.

The planning effort for the Non-Motorized Transportation Plan was performed in conjunction with the Delta Township Comprehensive Plan.

Public Input Process

Public Meetings

During the development of the 2005 Study, several public input meetings were held to determine non-motorized routes in the Township. As part of the 2012 update, a public meeting was held to gain opinions on the existing Priority Plan. Using immediate response voting methods, attendees of the meeting were able to respond to specific questions regarding non-motorized transportation concerns, preferences and routes. Once voting was completed, the public was invited to comment on specific issues regarding non-motorized transportation in an open-house setting. This information was used to develop the 2012 Plan and can be found in the Appendix of the Comprehensive Plan. Other meetings included the Planning Commission Public Hearing and the Township Board meetings at which the 2012 Plan was presented for review and approval.

Online Survey

The same survey given at the public input meeting was made available online for a period of three months. The online survey allowed an open ended opportunity to comment about the survey questions and non-motorized transportation in general. This information was used to assist planners in developing the 2012 plan and can be found in the Appendix of the Comprehensive Plan.

Definition of Terms

Sidewalk

- That portion of a street right-of-way improved with concrete and designed for pedestrian travel (Section 15, page 5-27 Delta Township Code of Ordinances)
- All new Concrete Sidewalks shall have a minimum width of 5 feet. (Delta Township Standards for Construction)
- Since 1993, Delta Township has mandated the installation of sidewalks for all new construction projects except on industrially zoned properties.
- Located in residential neighborhoods and along main roads.



Definition of Terms Continued

Shared Road

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



Shared Use Path

- A bikeway physically separated from motorized vehicular traffic by an open space or barrier and within an independent right-of-way. (AASHTO)
- Users also include pedestrians, skaters, wheelchair users, joggers and other non-motorized users. (AASHTO)
- Normally a paved area 8'-12' wide with a 2' unobstructed area adjacent to both sides of the path and vertical clearance of 8'.
- Path and roadway intersections should be carefully designed. (AASHTO)
- Example: East-West Pathway in Sharp Park



Bike Lane/Paved Shoulder

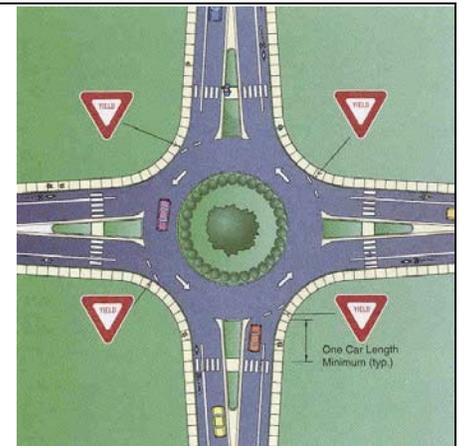
- A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. (AASHTO)
- 4' minimum width, 5' or wider on roads with speeds of 50 mph or greater. (AASHTO)
- Striping designates separation between vehicles and bicyclists.
- Example: Willow Highway between Elmwood Road and Canal Road



Definition of Terms Continued

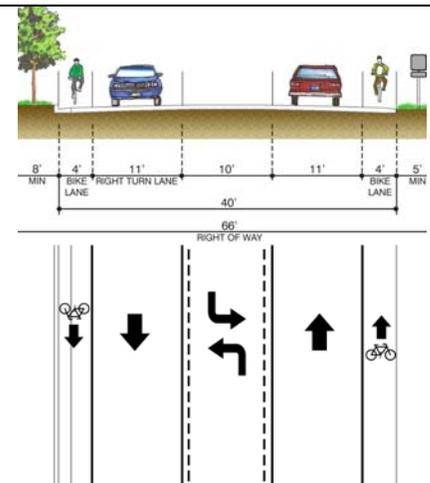
Round-a-bout

- A circular intersection with yield control of all entering traffic, channelized approaches and appropriate geometric curvature such that travel speeds on the circular roadway are typically less than 30 mph.
- Eliminates the need for traffic lights and signals.
- Road Commission has jurisdiction over installation and maintenance with the exception of MDOT routes.
- For safety, bicyclists are directed off bikeways and bike lanes to the sidewalks through round-a-bouts.
- Example: Canal Road and Willow Highway intersection



Lane Conversion

- The restriping of an existing four lane road into (2) vehicle lanes, a center turn lane and (2) bike lanes or bikeways adjacent to the curb.
- Also known as "Road Diet"
- May be implemented utilizing the existing road and restriping projects.
- Lane conversions are relatively inexpensive and effective method of traffic management vs. Reconstruction although special attention is warranted at intersections.
- Typically slows traffic by 5 mph or more.



Definition of Terms Continued

Mid-Block Crossing

- A crossing point positioned between intersections or within a block rather than at a road intersection.
- Can help supplement the number of crossings needed in an area.
- Preferred in some situations so the pedestrian is not required to travel additional distances to the next intersection for crossing and so the pedestrian is not conflicting with vehicular traffic at intersections.
- Designed to fit the specific situation. Many design forms include a pedestrian activated light, pedestrian refuge island with crosswalk striping and warning signage.
- Further study by the Road Commission and the Township is required prior to any implementation.
- Example: ¼ mile south of Michigan Avenue on Snow Road



Intersection Improvement

- A signalized intersection of two roads designated for vehicular use recommended for modifications to accommodate safe non-motorized transportation crossings.
- Designed to fit the specific crossing situation. Many design forms include a pedestrian activated light, pedestrian refuge island with crosswalk striping or other warning signage.
- May also include lanes designated specifically for bike travel.
- Example: Creyts Road and Willow Highway intersection.



Pedestrian Bridge/ Underpass

- A bridge or tunnel specifically designed for non-motorized transportation use to cross a road or highway.
- Provides a crossing for non-motorized users without interaction or interruption from motorized vehicles.
- Example: Saginaw Highway shared use path under I-96



Definition of Terms Continued

<p><i>Widen Bridge</i></p> <ul style="list-style-type: none"> - An existing bridge recommended for replacement or modification in order to accommodate non-motorized traffic. - Example: Millet Highway bridge over I-96 	
<p><i>Trail</i></p> <ul style="list-style-type: none"> - Any non-motorized transportation route not found within a road right-of-way. - Includes unpaved trails, hiking trails, mountain bike trails and shared use paths. 	

Accomplishments 2006-2011

<p>Hawk Meadows Park</p> <ul style="list-style-type: none"> - 2.5 mile long shared use path loop located within a 148 acre park - Park land was donated by a private individual. - The park was improved with the participation of the General Motors Jobs Bank, Eaton County Corrections and the Delta Parks and Recreation Department staff. 	
<p>East- West Pathway</p> <ul style="list-style-type: none"> - Shared use path between Canal Road and Elmwood Road through Sharp Park. - Partially funded by a Michigan Department of Natural Resources Trust Fund (MNRTF) Grant and a Congestion Mitigation Air Quality (CMAQ) grant - Amenities include benches, interpretive signs, fishing dock, entry gates, pathway maps, picnic shelters 	

Accomplishments 2006-2011 Continued

<p>Willow Highway</p> <ul style="list-style-type: none">- Sidewalks and paved shoulders from Waverly Road to Canal Road- Round-a-bout at the Canal Road and Willow Highway intersection- Completed by the Eaton County Road Commission	
<p>Creyts Road</p> <ul style="list-style-type: none">- Divided shared use path, 6 foot wide on each side of the road signed one way from Old River Trail to Saginaw Highway- Partially funded by a Congestion Mitigation Air Quality (CMAQ) grant	
<p>Mall Drive West</p> <ul style="list-style-type: none">- Shared use path between the East-West Pathway and Saginaw Highway- Partially funded by a Michigan Department of Natural Resources Trust Fund (MNRDF) Grant	
<p>Saginaw Highway</p> <ul style="list-style-type: none">- Shared use path between Marketplace Boulevard and Canal Road- Sidewalk Improvements- Part of the 2011 Saginaw Highway Reconstruction project- Partially funded by Delta Township	

Accomplishments 2006-2011 Continued

<p>Snow Road</p> <ul style="list-style-type: none">- Shared use path between Michigan Avenue and St. Joseph Highway- Signalized mid-block crossing at Waverly High School- Partially funded by a Safe Routes to School grant	
<p>Mt. Hope Highway</p> <ul style="list-style-type: none">- Paved shoulders between I-96 and Creyts Road- Part of the 2009 Mt-Hope Reconstruction project- Completed by the Eaton County Road Commission	
<p>Nixon Road</p> <ul style="list-style-type: none">- Paved shoulders between St. Joseph Highway and Rockbridge Road.- Part of the 2010 Nixon Highway and S. Joseph Highway Intersection Reconstruction Project- Completed by the Eaton County Road Commission	

The Non-Motorized Transportation Plan

Goals and Objectives

A goal is the final result one hopes to achieve. An objective is a series of action steps that are completed to accomplish a goal. The following goals and objectives were formulated to guide the development of the Delta Township Non-Motorized Transportation Plan. They were developed based upon input received from the Delta Township Board, Parks and Recreation Department, Community Development, public input and evaluation of physical characteristics, demographics, and other related planning efforts including the Township Comprehensive Plan, Parks and Recreation Master Plan and the planning efforts of adjacent communities.

The goals are numbered for organization purposes only and do not reflect any particular priority.

GOAL I. Provide better non-motorized connectivity

Objective A. Provide non-motorized links between key destinations within Delta Charter Township.

1. Connect neighborhoods, schools, colleges, parks, commercial areas, Township owned lands, natural, cultural and scenic features.
2. Provide continuous primary commuter routes running north to south and east to west.

Rationale:

Non-motorized links should connect where people live to significant and frequent destinations in the Township such as schools, parks and commercial areas. Continuous north-south and east-west routes will allow people to travel longer distances without having to change directions or go out of their way to get to their destinations.

Objective B. Provide non-motorized connections between Delta Charter Township and adjacent communities and regional destinations.

Rationale:

Planning efforts are underway in the region to connect the various communities with non-motorized transportation including the City of Lansing, Lansing Township, Watertown Township, Windsor Township and Tri-County Regional Planning Commission's Greening Mid-Michigan Plan.

Objective C. Continue to update the Non-Motorized Transportation Plan every five years.

1. Update the Priority Plan to reflect implemented routes, new routes, current conditions, evolving trends, development trends, regional non-motorized efforts, safety concerns and safety regulations.
2. Provide a phasing plan of the network in a realistic manner that takes into consideration costs and benefits.

Rationale:

The Non-Motorized Transportation Plan should be updated every 5 years in order to recognize routes that have been implemented, reflect current trends at the national, state and local levels, and to address specific community needs.

Objective D. Provide a complete non-motorized network plan.

1. Include features such as bike lanes/paved shoulders, shared use paths, shared roads, safe crossings, etc. and take into account the Township's Sidewalk Plan.
2. Provide appropriate identification and wayfinding signage for pedestrian and bicycle routes that link to key destinations in the Township.
3. Consider connections to public transportation such as CATA.
4. Take into account sidewalk connections and the Delta Township Sidewalk Plan.
5. Work with the Eaton County Road Commission to forecast future improvements

Rationale:

Various route features should be considered when planning and implementing non-motorized transportation to allow for the appropriate facilities, anticipated trip distance, road right of way and easements, safety, financial resources and maintenance. Not only do the proper facilities need to be in place, but people need to be aware of where they are located and how to get to key destinations. Non-motorized routes should connect to public transportation routes to allow people to travel longer distances where ability, time or weather limits bicycling or walking longer distances.

Objective E. Evaluate funding options for implementing the non-motorized network

1. Continue the practice of annual appropriations for non-motorized transportation improvements, including sidewalks in the Township's budget.

Rationale:

Various funding options are available for non-motorized transportation projects including SAFETEA-LU, Safe Routes to School, CMAQ, the MDNR Trust Fund and Recreational Trail programs, the MDNR Passport Fund as well as private, commercial and corporate sponsors. The Township officials should continue to set aside budget for matching funds to enhance the Townships chances of securing grants.

GOAL II. Enhance Opportunities to Improve the Health of the Community

Objective A. Provide non-motorized routes so that pedestrians and bicyclists can reduce vehicle trips.

Objective B. Encourage physical activity by providing opportunities for residents to walk and bike on a regular basis.

Objective C. Increase the number of people walking and bicycling especially for daily trips such as commuting.

Objective D. Improve air quality (such as reducing CO2 emissions) by offering non-motorized transportation routes as an alternative to automobile trips.

Rationale:

Reducing the number of trips people make using automobiles and encouraging commuting by walking and bicycling will not only lead to a healthier community through physical activity, but also a reduction in emissions from fossil fuels and therefore, better air quality.

GOAL III. Improve pedestrian and bicycle safety

Objective A. Provide opportunities for all Township residents to use the non-motorized transportation system regardless of socio-economic status or physical abilities.

1. Create safe routes to schools, community facilities including parks, the Township Hall, Library and commercial areas.
2. Create safe connections between neighborhoods, multi-family and assisted living facilities to non-motorized routes.
3. Provide connections to public transportation.

4. Continue bike patrols on Township pathways by the Delta Patrol Division of the Eaton County Sheriffs Department.
5. Design and construct facilities to ADA standards.

Rationale:

Non-motorized routes should be designed to ADA standards, connect people to places they need to go and in a safe environment to allow everyone to benefit from their use.

Objective B. Reduce the number of bicycle and pedestrian crashes.

Objective C. Improve the safety of pedestrians and bicyclists at existing busy roads and road intersections.

Objective D. Provide safe options for pedestrians and bicyclists to cross roadways.

Rationale:

Designing transportation systems to take into account pedestrians, bicyclists and automobiles allows for safer travel for all modes of transportation. The non-motorized plan will take into account routes and methods to allow for safe travel along and across busy roads. Items that are taken into consideration include traffic counts, travel speeds, accident statistics, driveways, destinations, alternate routes and design standards.

Objective E. Improve the education of motorists in regards to pedestrians and bicyclist issues through the Township's website, magazine and pamphlets.

Objective F. Improve the education of pedestrians and bicyclists in regards to rules of the road, motorists concerns and safe travel by working with the road commission to develop pamphlets and websites and bicycle safety clinics.

Rationale:

The safety of the community can be improved by educating both the drivers and the non-motorized users. The Township may provide education opportunities by posting safety tips on their website, in the Delta Magazine and in promotional materials as well as hosting bicycle safety classes.

Objective G. Provide appropriate lighting on non-motorized routes along roadways.

Rationale:

Adjustments may be made to existing lighting or added to improve the visibility of non-motorized users at a minimum along major roads. The Township is not recommending lighting along trails in parks or other routes not associated with road ways for privacy of residents and due to dawn to dusk operation hours for parks. Non-motorized routes will be evaluated over time to balance safety of users and privacy of adjacent properties.

Objective H. Utilize current best practices in the design of non-motorized facilities and update standard plans and details to incorporate best practices

1. Refer to AASHTO, ADA, and other standards as necessary.

Rationale:

Federal, State and County road authorities require local governments to follow current standards in order to receive funding. Best management practices provide tried and proven methods for non-motorized route development.

Objective I. Maintain safe non-motorized facilities in a cost effective manner.

1. Consider maintenance costs, materials and new technologies prior to implementing non-motorized facilities.
2. Provide for maintenance in the annual budgeting process.
3. Plow the snow on Township pathways and enforce the sidewalk ordinance snow removal regulation on sidewalks in road right of ways.

Rationale:

By maintaining the non-motorized facilities the Township is protecting the safety of the user, their investment in the non-motorized system and extending the life of their facilities.

GOAL IV. Institute changes that support the health, safety and welfare of the Township that lead to a pedestrian and bicycle friendly community.

Objective A. Enhance the quality of life in the Township by continuing the development of the non-motorized transportation system.

Objective B. Identify and promote community assets such as greenways, a walkable/bikeable community, residential neighborhoods, schools and retail areas.

Objective C. Establish family friendly non-motorized facilities (such as neighborhood routes to parks and schools).

Objective D. Create, distribute and post on the Township website a guide map that shows pedestrian and bicycle facilities, recommend walking and biking routes and safety topics.

Objective E. Enhance the sense of community through increased social interaction between non-motorized transportation users.

Objective F. When designing non-motorized routes enact context sensitive design principals and look at issues such as privacy, access and beautification.

Rationale:

Promote Delta Township as a walkable/bikeable community. Quality of life factors such as non-motorized transportation are known to attract residents and businesses. Communities throughout the country that have incorporated walkable and bikeable features into their developments have weathered the economic downturn better than others because they are seen as desirable places to live.

Objective G. Obtain citizen input during the public planning process and at regular intervals before and after the implementation of projects.

1. Gather public input during the update of the non-motorized transportation plan.

2. At regular intervals, gather public feedback on implemented pathways through surveys and user interviews.
3. Prior to the implementation of new routes or other projects, gather public input.

Rationale:

By collecting public input and tracking projects the Township can learn what leads to a successful project and where improvements can be made.

Objective H. Evaluate, update or add ordinances

1. Consider implementation of a bicycle parking ordinance that would provide bike parking and a range of bike parking options (shopping centers, etc.)
2. Evaluate the sidewalk ordinance that requires a 5' walk and consider increasing the minimum width to 6' where feasible.
3. Consider working with the Eaton County Road Commission on developing a Complete Streets Ordinance.

Rationale:

Consider updating ordinances to promote a more pedestrian/bicyclist friendly community. Several nearby communities have or are considering bike parking ordinances including the City of Lansing and Meridian Township. The minimum passing space required for 2 able bodied people is 4.67' and for 2 wheel chair users it is 5'. By providing a 6' sidewalk, there is adequate and comfortable passing space to accommodate different situations. A Complete Streets Ordinance takes into account all modes of transportation. In the near future all counties will be required to adopt this type of ordinance to be eligible for Federal funds. The City of Lansing was the first municipality in Michigan to adopt a Complete Streets Ordinance and now Michigan leads the country in number of municipalities with these ordinances.

Objective I. Work with EATRAN to provide bike racks on buses.

Rationale:

By providing bike racks on buses, people may be more willing to take public transportation to one point and bike the rest of the way to their destination. All CATA buses already have bike racks, but CATA services only a small portion of the Township.

Objective J. Improve the aesthetics of the area's transportation system (such as by adding street trees, benches and landscaping, etc.).

Objective K. Work with the Eaton County Road Commission on developing a street tree program.

Rationale:

Aesthetic features such as trees not only improve the quality of life of an area, but also provide a traffic calming effect. Trailheads provide access and identification of trails.

Objective L. Provide input to the Eaton County Road Commission as to how they spend their mandated 1% on non-motorized transportation projects (Act 51) in Eaton County.

Rationale:

The Eaton County Road Commission (ECRC) has authority over the public roads in the Township. The Township should coordinate and work with the ECRC to implement non-motorized transportation in the Township. Proposed non-motorized projects may be accomplished with scheduled road projects for a fraction of what they would cost to complete separately. The Road Commission is mandated by Michigan law to provide funding for non-motorized transportation. By developing a close, working relationship, more can be accomplished in the Township.

Points of Interest Map

The Points of Interest Map shows possible destinations for the Non-motorized routes. These destinations were identified through the planning process. The destinations depicted on this map include:

schools	parks	churches
shopping centers	public facilities	colleges

The updated map includes more schools and public facilities than the 2005 Plan to show new or popular destinations for non-motorized routes.

It is recommended that these destinations become anchors of activity to provide a solid foundation for the non-motorized transportation system.

Sidewalk Plan

The sidewalk plan shows existing and proposed sidewalks in the Township. Sidewalks are an important part of the non-motorized transportation system and provide pedestrians safe routes between destinations. It is important for the sidewalk system to be complete without gaps. It is the goal of the sidewalk plan to complete sidewalk connections between other non-motorized transportation routes, destinations and neighborhoods.

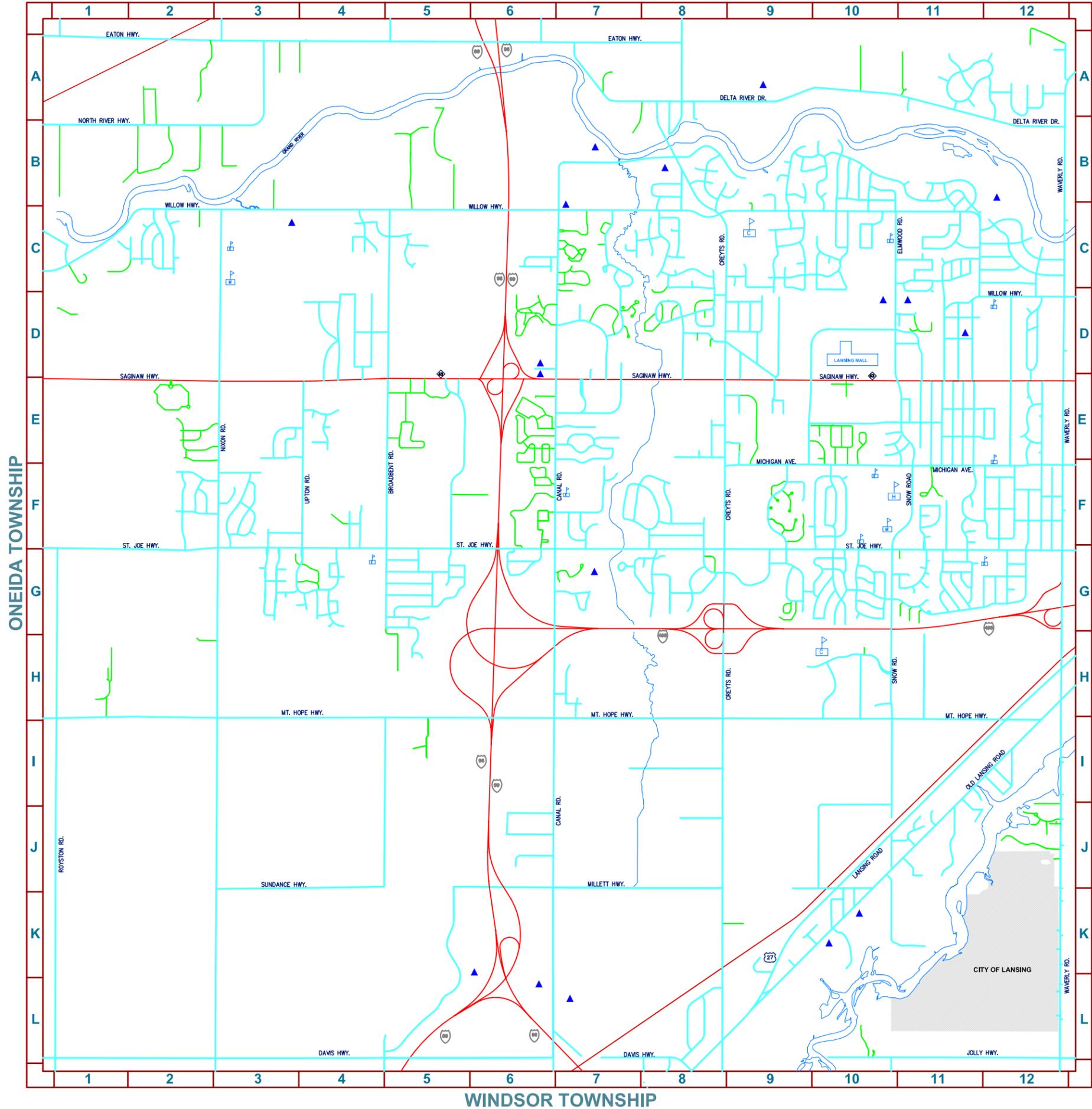
It is recommended that the sidewalk plan be completed in conjunction with future road improvements and non-motorized transportation improvements. It is also recommended that future residential development include sidewalks to provide connections between neighborhoods and main non-motorized transportation routes.

Non-Motorized Transportation Plan

It was determined that the need for north-south, east-west routes is still relevant. Due to the implementation of several routes since 2005, priority routes have changed and other routes have become redundant. The revised plan reflects a focus on three major types of routes:

1. Bike Lanes/ Paved Shoulders
 - Used along road corridors only

WATERTOWN TOWNSHIP / CLINTON COUNTY



DELTA CHARTER TOWNSHIP

POINTS OF INTEREST

SCHOOLS

ANDERSON NATURE PARK	K-10	COLT ELEMENTARY	E-12
COMMUNITY CENTER	C-7	DELTA CENTER	F-7
DELTA MILLS PARK	B-8	ELMWOOD ELEMENTARY	C-10
EATON COUNTY SHERIFF	D-6	GREAT LAKES CHRISTIAN COLLEGE	C-9
ENRICHMENT CENTER	D-11	LCC WEST CAMPUS (MTEC)	H-10
ERICKSON PARK	L-6	HAYES MIDDLE SCHOOL	C-3
GM WILDLIFE AREA	K-6	NEW COVENANT CHRISTIAN	G-12
GRAND WOODS PARK	B-12	OUR SAVIOR LUTHERAN	G-5
HAWK MEADOWS	A-9	SEVENTH DAY ADVENTIST	F-10
HUNTER'S ORCHARD PARK	B-7	ST. GERARD'S	D-12
LAKE DELTA	L-7	WAVERLY HIGH SCHOOL	F-10
LANSING MALL	D-10	WAVERLY MIDDLE SCHOOL	F-10
LIBRARY	D-11	WILLOW RIDGE ELEMENTARY	C-3
LOOTENS PARK	C-3	WINANS ELEMENTARY	F-10
PLAYER'S CLUB PARK	G-7		
SHARP PARK	C-10		
TOWNSHIP OFFICES	D-6		
WOLDUMAR NATURE CENTER	K-10		

ONEIDA TOWNSHIP

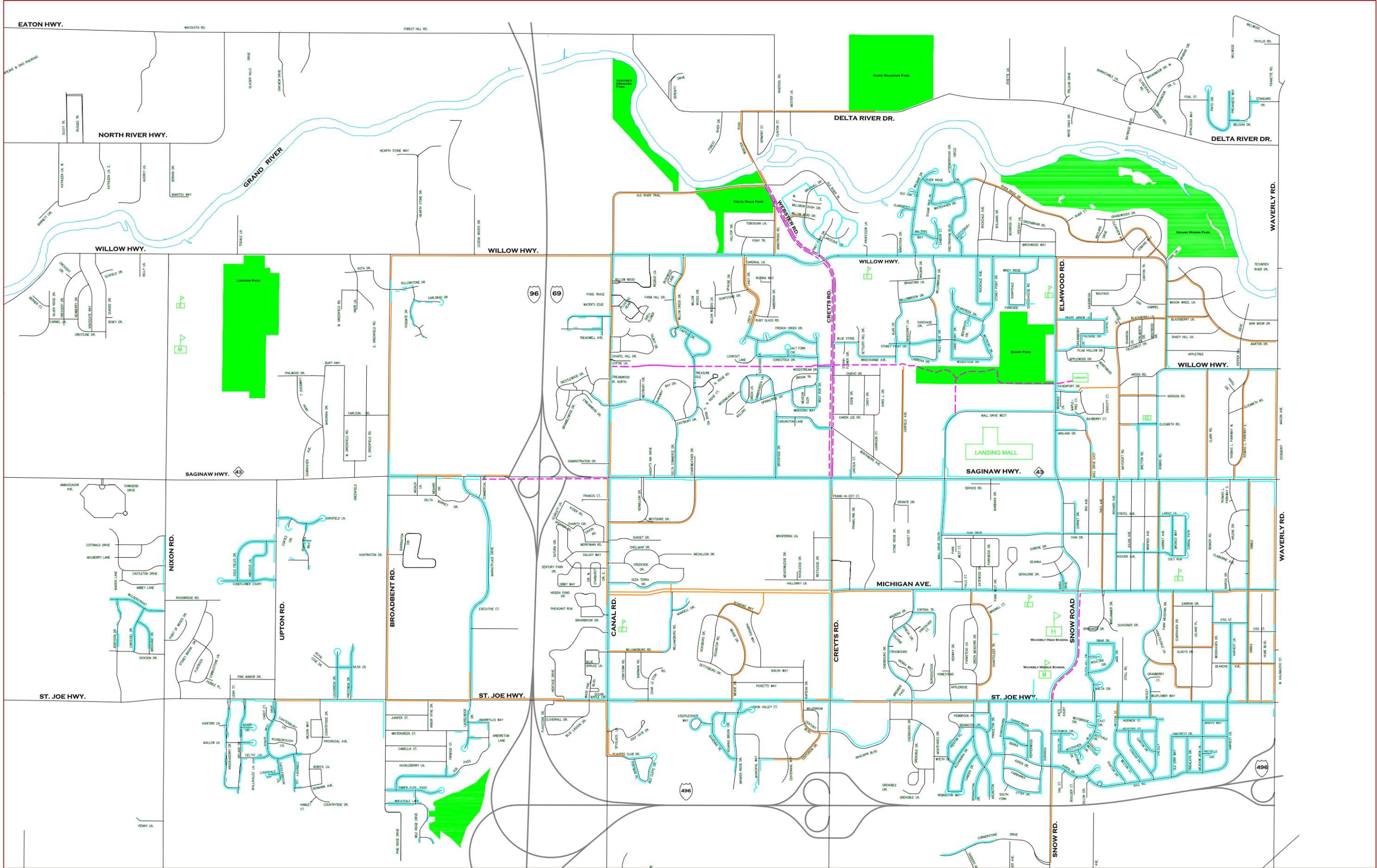
CITY OF LANSING / LANSING TOWNSHIP / INGHAM COUNTY

WINDSOR TOWNSHIP

Legend

-  PUBLIC ROADS
-  PRIVATE ROAD
-  POINTS OF INTEREST
-  SCHOOLS





DELTA CHARTER TOWNSHIP
EXISTING AND PROPOSED SIDEWALKS

EXISTING SIDEWALK ————
 EXISTING PATHWAY ————
 PROPOSED ————



NO SCALE



DELTA TOWNSHIP

2. Shared Use Paths

- Used primarily in off-road situations and along roads with few driveway or road intersections

3. Shared Roads

- Used on residential streets with little traffic and speed limits of 25 miles per hour or less.
- Used as connections between other routes

Information on specific priority routes found on the Plan are listed below:

Parks

The Township's Five-Year Parks and Recreation Master Plan identifies non-motorized trails within the Township parks for future capital improvements. To reflect this, the Non-Motorized Transportation Plan identifies loop trails in developed Township parks as a priority.

North Grand River Corridor

In the northern third of the Township, the east-west routes shown connect parks and schools primarily along and around the Grand River corridor. They include Willow Highway and the East-West Pathway. North-south routes connect east-west routes with public service and commercial destinations along Saginaw Highway including the Township Offices and the Lansing Mall. A shared use path connection between Hunter's Orchard Park and Hawk Meadows Park has been identified as a priority connection. Improvements between Creyts Road and Hawk Meadows Park include intersection improvements, mid-block crossings and a widening of the Webster Road bridge over the Grand River.

East-West Pathway

Improvements along the East-West Pathway include obtaining easements between Nixon Road and Marketplace Boulevard and between Elmwood Road and Willow Highway. Mid-block crossings are also needed at Creyts Road, and Elmwood Road.

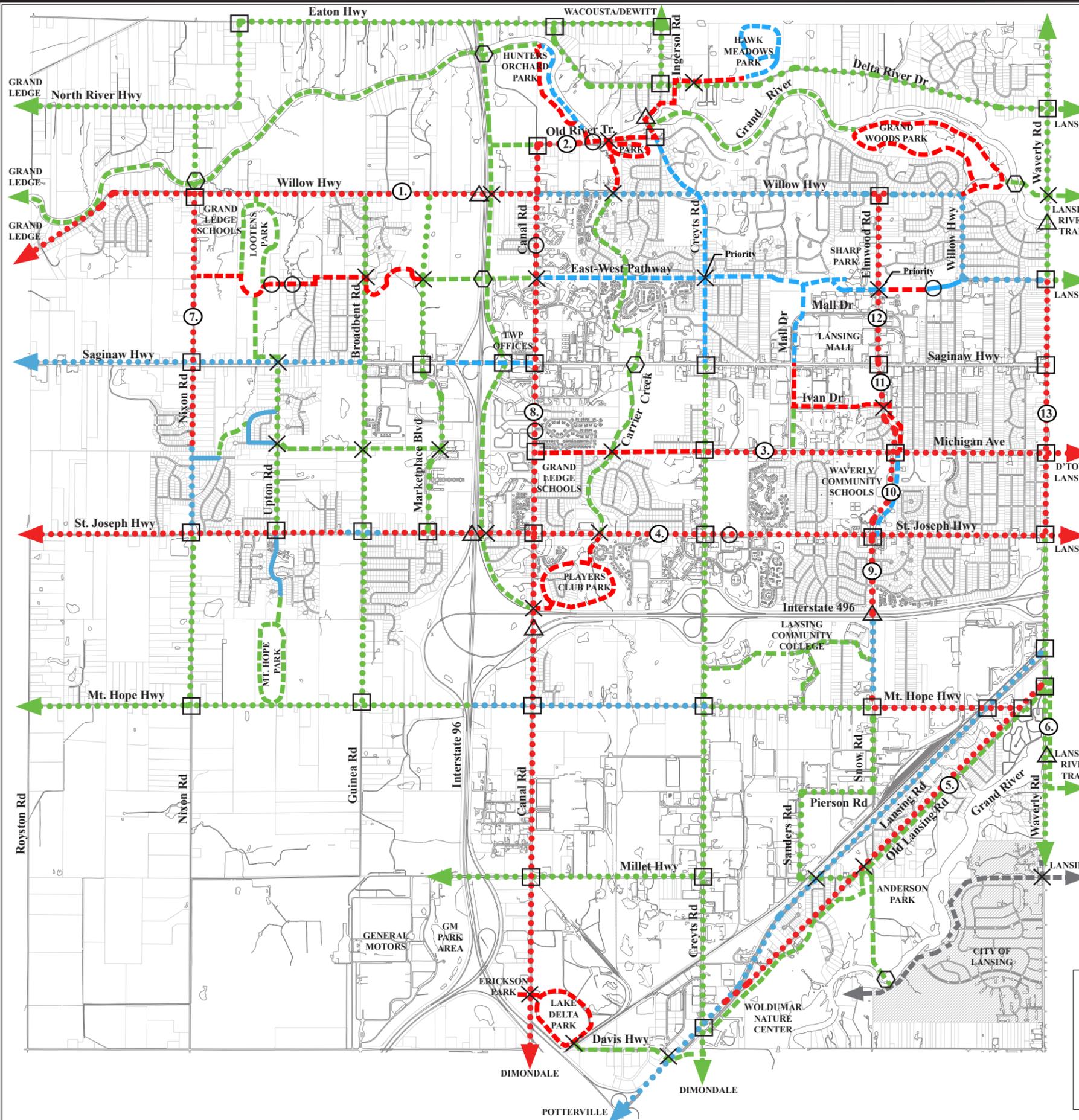
Saginaw Highway

Saginaw Highway is a high vehicular volume east-west corridor in Delta Township. Due to the heavy traffic, it is recommended that non-motorized transportation along this road be limited to sidewalks. West of Broadbent Road, sidewalks and an existing bike lane/paved shoulder is recommended. To safely provide bicycle connections to north-south routes from Saginaw, several intersection improvements are recommended, including Nixon Road, Canal Road, Elmwood Road and Waverly Road.

St. Joseph Highway/ Michigan Avenue

The St. Joseph Highway and Michigan Avenue corridors were determined to be a priority due to the number of neighborhoods they connect. These streets are identified in the Lansing Township and City of Lansing Non-Motorized Transportation Plans as connections to Delta Township.

Non-Motorized Transportation Plan



LEGEND

- Intersection Improvement
- ⬡ Pedestrian Bridge/Underpass
- △ Widen Bridge
- × Mid-Block Crossing
- Priority Easement

Existing Facilities

- Bike Lanes/ Paved Shoulders
- - - - Shared Use Path
- Shared Road

Priority Facilities (2012-2021)

- Bike Lanes/ Paved Shoulders
- - - - Shared Use Path

Future Facilities (2022 and beyond)

- Bike Lanes/ Paved Shoulders
- - - - Shared Use Path

Notes:

Sidewalks exist on Saginaw Hwy from Broadbent Rd to Waverly Rd.
See Sidewalk Plan for other existing and proposed sidewalk facilities.

SPECIFIC ROUTE DETAILS

East- West Route Details

- ① Willow Hwy - pave shoulders, add sidewalk and pedestrian bridge over I-96
- ② Old River Tr - pave shoulders, add sidewalk
- ③ Michigan Ave - lane conversion, add sidewalk
- ④ St. Joseph Hwy - lane conversion, add sidewalk
- ⑤ Old Lansing Rd - add bike lane and shared use path
- ⑥ Waverly Rd - add shared use path

North - South Route Details

- ⑦ Nixon Rd - pave shoulders, add sidewalk
- ⑧ Canal Rd - pave shoulders, add sidewalk and pedestrian bridge over I-496
- ⑨ Snow Rd - stripe road for bike lane
- ⑩ Snow Rd - narrow lanes to add bike lane
- ⑪ Elmwood Rd - lane conversion, add sidewalk
- ⑫ Elmwood Rd - lane conversion, add sidewalk
- ⑬ Waverly Rd - lane conversion or widen road, add sidewalk



April 23, 2012



North-South Routes

The priority north-south routes through the Township were identified because they connect destinations along the routes and for their proximity to neighborhoods. These routes include Nixon Road, Canal Road, Elmwood Road/Snow Road and Waverly Road. Canal Road and Elmwood Road/Snow Road were identified as one of the top priorities due to their centralized locations and the connections they provide to neighborhoods, shopping centers and parks.

South Grand River Corridor

The Lansing Non-Motorized Transportation Network identifies an extension of the Lansing River Trail along the Grand River continuing southwest into Delta Township. In order to provide a connection from the Lansing River Trail to Delta Township destinations, a connection along Waverly Road to Mt. Hope Highway and Old Lansing Road is identified as a future facility. A bike lane / paved shoulder on Old Lansing Road is a priority for this corridor. These connections will serve as access points to the Lansing River Trail, Anderson Park and Woldumar Nature Center.

Implementation

Strategies

The following implementation strategies should be considered by the Township when implementing the Non-Motorized Transportation Plan.

1. Ensure that the Plan is adopted. This is crucial to apply for funding.
2. Actively pursue acquisition of land or easements as necessary for recommended route implementation. (See "Priority Easements" on the Non-Motorized Transportation Plan)
3. Actively pursue projects that connect with adjacent community projects.
4. Utilize non-motorized transportation language or terms included in this report.
5. Implement nationally recognized AASHTO design standards when designing non-motorized transportation facilities.
6. Design to ADA standards.
7. Continue working with State and local review agencies during the implementation process.
8. Prepare a maintenance plan to ensure proper upkeep of each route being implemented.
9. Gather public input at appropriate times during the design and construction process.
10. Continue educating the public on the value of a non-motorized transportation system and how each type of route is used.
11. Actively pursue Federal, State, local and private funding sources.
12. Continue to promote the routes that are available in the Township.

Process

It is recommended that a process be considered for implementation of each priority route proposed. The following process is an example:

Planning

1. Collect the base information.
2. Analyze data.
3. Determine ownership of land. (park, road right-of-way, private, etc.)
4. Prepare a preliminary design.
5. Determine policies to govern the route.
6. Prepare a detailed cost estimate.

Funding

1. Apply for grant funding - Federal and State funding opportunities, private foundations, others.

Design Development

1. Meet with the public to discuss design parameters.
 - A. Discuss specific needs:
 - i. Trail location within the proposed route
 - ii. Individual access to the trail from adjacent property
 - iii. Privacy issues - landscaping, setbacks, security
 - B. Review specific design issues
 - i. Vehicle deterrents - bollards, gates, barriers
 - ii. Drainage - trench drains, culverts, catch basins, bioswales
 - iii. Road crossings and intersections
 - iv. Signs - location, type, size
 - v. Amenities - benches, trail markers, litter receptacles
 - vi. Materials - asphalt, concrete, limestone, cinders, boardwalk
 - vii. Refine cost estimate

Construction Documents

1. Prepare construction documents based on the design development process
2. Prepare written specifications
3. Develop final cost estimates
4. Publicly bid the project and award a contract
5. Perform daily inspections during construction
6. Conduct a maintenance and post construction evaluation

Tools

Utilize the following tools during the implementation of specific portions of the Non-Motorized Transportation Plan.

1. Conservation Practices

The most up to date conservation practices are recommended when developing a trail within any vegetated or environmentally sensitive area. Enhance and/or avoid sensitive natural

features wherever possible (primarily large healthy trees and wetlands). Use interpretive signage and education where feasible to allow for a greater appreciation of natural resources. Develop conservation policies that protect and enhance the natural systems associated with this area.

2. Lighting

Lighting is not recommended along trails. Typically, hours of operation for non-motorized trails are from dawn until dusk. The need for lighting usually appears in densely populated areas where after dark use is promoted such as near downtown business centers, retail areas and event venues.

3. Noise

Non-motorized trails are generally quiet. Noise usually becomes a factor if large events are scheduled on the trail. An occasional barking dog or a person's voice is the main sources of noise. If this is an area of concern, enforcement of noise regulation can control most of these disturbances.

4. Trail Heads and Access Control

A trail head acts as a point of entrance and exit. Many times they include parking lots. A more intimate connection is recommended for neighborhoods using barriers and/or gates to deter motor vehicles from entering the trail. Signs should be posted to inform users of these regulations.

5. Publicly Owned Land

Routes are being recommended primarily on publicly owned land. Any path design must respect the rights of the adjacent landowners as much as possible. Individual landowners should be consulted during the preliminary design stage of the route to address their concerns among other design issues.

6. Privately Owned Land

There are two ways to develop trails on privately owned land. One way is to obtain land and place it in public ownership. The second way is to secure an easement which allows the trail to be constructed on private land. Both options are accomplished by either purchase or donation. It is not recommended that eminent domain or condemnation be used to secure private land. Riparian rights come with the landowner's bundle of rights and cannot be granted without the owner's permission through an easement or purchase.

7. Public Easements

It is recommended that when the Township seeks easements for public use such as utilities and maintenance that they attempt to include a provision in the easement agreement to allow for recreational use or future trail construction within that easement.

8. Private Easements

Private easements are a good method of acquiring the land for a path and do not require as much money as the purchase of entire parcels.

9. Other Agencies

It is recommended to communicate with and utilize the expertise of other agencies during the design, development and management of the trail system. Other agencies include the Drain Commission, Road Commission, Sherriff's Department, Park's Department and Community Development Department.

10. Screening

It is recommended that areas be identified where screening may be needed between the trail and the adjacent property owners.

11. Advocacy Groups

A non-motorized transportation advocacy group would allow public participation in the development and monitoring of the routes. Work with local law enforcement agencies to implement police patrols and neighborhood watch programs from the initial stages of development. Continue the bike patrol program with the Eaton County Sherriff's Department. Allow designated neighbors to participate in the patrol of the routes and encourage communication and participation. Continue the Township's current advocacy efforts which include the annual bike rodeo at the Township Administration Building and the annual bike helmet give-away with participating local retailers.

12. Maintenance Program

Designate who will be maintaining the off-road portions of the non-motorized transportation system. The routes will require regular trash pick-up, sweeping and snow plowing. Provide personnel and equipment necessary to perform these functions.

13. Adjacent communities

Each municipality located adjacent to Delta Township's non-motorized transportation routes should work together to discuss connections between each municipality. It is important that timing and exact connection points are agreed upon prior to implementation.

14. Bridges

Work with MDOT and the Eaton County Road Commission to coordinate any future improvements to roadway bridges. Accommodations should be made to include non-motorized transportation provisions whenever a bridge reconstruction or new bridge is considered.

15. Law Enforcement

Work with the Eaton County Sheriff's Department, local police departments and neighborhood watch programs to ensure safety and security along all routes.

16. Crossings

Perform traffic studies to determine the safest location for pedestrian crossings and ensure that the safest and best practices are used in the design and implementation.

17. Accessibility Design

Ensure persons with disabilities are actively sought to gain input during the design process, and implement designs necessary to fully accommodate and maximize participation of persons with disabilities on non-motorized transportation routes. Such input should recognize the varying needs of different disabling conditions including, but not limited to, visual impairments, hearing impairments and physical disabilities.

Further Considerations

Ordinances

Some communities have completely restructured their zoning ordinances to encourage more pedestrian friendly development and implementation. It is recommended that the Township continue to review its zoning ordinances to ensure pedestrian friendly policies. It is also recommended that the Township work with the Eaton County Road Commission to review their policies for non-motorized transportation, and to work towards adopting a “Complete Streets” policy as pioneered by MDOT. This policy advocates that all future road construction projects take into consideration ALL users, including bicycles and pedestrians.

Principles that should be considered are:

1. Discuss pedestrian and bicycle accommodations early in the site planning process so that existing transportation efforts can be coordinated with any proposed developments.
2. During review of new residential and commercial developments consider sidewalk design that includes connectivity between adjacent parks, schools, residential communities and commercial centers.
3. In commercial districts, consider placing a higher emphasis on pedestrian and bicycle access by evaluating the amount of parking required, encouraging shared parking and by providing direct access to the front of building sites with direct sidewalk connections to the main streets.
4. Enforce regulations in the Township ordinances mandating that the developer pay for improvements such as sidewalks and shared use paths as indicated on the final plan for all new developments. This would include sidewalks and shared use paths within the development as well as in the adjacent right-of-ways.

Many of these principles are included in the LEED Certification requirements as governed by the Green Building Certification Institute (GBCI). As interest in LEED certified projects grows, many developers have started to implement LEED principles in their projects.

Federal and State Funding Sources

There are a number of federal, state and private grants available for non-motorized projects and community improvements. These programs are listed below:

Michigan Natural Resources Trust Fund (MNRTF)

The MNRTF is available through the MDNR. The maximum development grant is \$300,000 and the minimum is \$15,000. There is no minimum or maximum for acquisition grants. A 25% match for either acquisition or development projects is required from local applicants; however, a 50% match is more common due to increased competition. This match can be either cash, donations of labor and/or materials, force account labor using the applicant's work force, or any combination thereof. Development and acquisition grant applications are accepted each year no later than April 1.

Applicants applying for the MNRTF grant are required to have a current community recreation plan approved by the MDNR. The plan must demonstrate the need for the project designated in the MNRTF application. For more information regarding the MNRTF, please refer to the web site: www.michigan.gov/dnr-grants.

Land and Water Conservation Fund (LWCF)

This federal program, administered by the MDNR, funds the planning, acquisition, and development of land for federal and non-federal (known as "state-side") outdoor recreation. State agencies and local municipalities are eligible for state-side LWCF funds. These funds can generally be used to acquire land, build or repair recreation or park facilities, provide riding and hiking trails, enhance recreational access, and provide wildlife and hunting areas. The program matches up to 50% of the cost of a project. The annual deadline for the application is April 1st. Visit www.michigan.gov/dnr-grants for more information.

Recreation Passport Grant

This program is administered through the MDNR and is captured through the sale of recreation passports in order to gain vehicle access to State recreation sites. The maximum development grant is \$30,000 and the minimum is \$7,500. A 25% match for either acquisition or development projects is required from local applicants. This match can be either cash, donations of labor and/or materials, force account labor using the applicant's work force, or any combination thereof. This grant program does not require a community recreation plan. Grant applications are accepted each year no later than April 1. For more information, visit the web site: www.michigan.gov/dnr-grants.

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)

The two landmark bills that brought surface transportation into the 21st century—the "Intermodal Surface Transportation Efficiency Act of 1991" (ISTEA) and the "Transportation Equity Act for the 21st Century" (TEA-21)—shaped the highway program to meet the Nation's changing transportation needs. SAFETEA-LU builds on

this firm foundation, supplying the funds and refining the programmatic framework for investments needed to maintain and grow our transportation infrastructure.

SAFETEA-LU maintains a core program focused on transportation infrastructure while targeting specific examples such as:

SAFE ROUTES TO SCHOOL (SR2S)

SR2S was enacted as part of the SAFETEA-LU in August of 2005. The SR2S program is administrated by the Office of Transportation Economic Development and Enhancement (TEDE) a division of MDOT.

Eligible recipients include state, local and regional agencies including nonprofit organizations. SR2S is 100% federally funded and no matching funds are required. Infrastructure projects must be in a 2-mile range of the school. In Michigan, a school-based planning process must be completed as a prerequisite for funding.

Visit Michigan's SR2S web site at www.saferoutesmichigan.org for information on the required planning process and for the status of application guidance.

CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ)

The CMAQ program provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. CMAQ funds are applied through local planning agencies and administered through MDOT. Visit www.fhwa.dot.gov/environment/air_quality/cmaq/policy_and_guidance/cmaq08gm.cfm for more information.

TRANSPORTATION ENHANCEMENT PROGRAM (TE)

The Transportation Enhancement (TE) Program was established with the passage of the ISTEA of 1991, reauthorized in 1998 in TEA-21 and again in 2005 under SAFETEA-LU. 10% of Surface Transportation Program (STP) funds are set aside which is about \$20-25 million annually. This program is administered through MDOT and the Office or Economic Development (OED). TE requires a match of at least 20% of the project cost and the project must be related to surface transportation. Visit www.michigan.gov/tea for more information.

NON-MOTORIZED TRANSPORTATION PILOT

SAFETEA-LU funds pilot projects to construct a network of non-motorized transportation infrastructure facilities. The purpose is to demonstrate the extent to which walking and bicycling can represent a major portion of the transportation solution in certain communities. Applications must be submitted by an Act 51 agency. Applicants can apply for funding with a match as low as 20% for your application to receive full consideration. However, a larger match will increase the likelihood of receiving funding.

All applications must be reviewed and approved by the MDOT MPO. Visit safety.fhwa.dot.gov/safetealu/fact_sheets/ for more information.

SCENIC BYWAYS PROGRAM

The Scenic Byways Program offers grant money to be used for the construction of facilities for pedestrians and bicyclists along scenic highways. SAFETEA-LU authorizes the use of federal funds to identify and designate federal, state, and local scenic byways. The byways are typically back roads and are intended to showcase areas of great beauty or history. For more information visit www.byways.org/.

SECTION 10K OF PUBLIC ACT 51 OF 1951

Michigan's transportation law (MCLA 247.660k) reserves 1% of state transportation funds for non-motorized transportation in each county. Any improvement in a road, street, or highway, which facilitates non-motorized transportation, is considered a qualified non-motorized facility for the purpose of this section. For more information contact the Non-motorized Coordinator with the Bureau of Transportation Planning at MDOT.

The Energy Efficiency and Conservation Block Grant (EECBG)

The purpose of the EECBG is to assist eligible entities in implementing energy efficiency and conservation strategies. The main goal of the block grant is to reduce fossil fuel emissions created as a result of activities within the jurisdiction of eligible entities and to reduce total energy use by improving energy efficiency in the transportation, building and other appropriate sectors. Visit www.eecbg.energy.gov for more information.

Local Funding Sources

Transportation Improvement Program (TIP) and Capital Improvements Program (CIP)

Non-motorized improvements, especially those located within road right-of-ways, are likely to be funded as incidental parts of larger transportation projects. These non-motorized improvements should qualify for the same transportation funds as the rest of the roadway project.

Downtown Development Authorities (DDA's)

DDA districts are defined that qualify for TIF (Tax Increment Financing) and other special funding formulas. The public infrastructure improvements that are part of downtown revitalization often include pedestrian facilities and amenities. Bicycle facilities could be accomplished within these infrastructure improvements.

Millages, Bonds, Assessments

Local, county, or state millages and bond issues may be passed by voters or governing bodies. Numerous Michigan communities have millages for park operations, maintenance, development, and land acquisition. This can be one of the most effective approaches for funding local trailways.

Utility Leases

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

Private Funding Sources

American Greenways Dupont Awards Program.....www.conservationfund.org

-Provides funding for mapping, conducting ecological assessments, surveying land, hosting conferences, developing brochures, producing interpretive displays, incorporating land trusts and building trails.

Recreational Equipment Incorporated (REI) Environmental Grants.....www.rei.com/aboutrei/grants02.html

-Non-profit organizations eligible by nomination from REI employee. Grants are organized in two areas, conservation grants and outdoor recreation grants.

Robert Wood Johnson Foundation.....www.rwjf.org

- Seeks to improve health and health care across America.

The DALMAC Fund.....www.biketcba.org

- Michigan based organization promoting bicycling and bike related projects throughout the state.

Bikes Belong Coalition.....www.bikesbelong.org

- Funding important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S.

Guide to Foundation Grants for Rivers, Trails, and Open Space Conservation, 2nd Edition

-Available through National Park Service

Michigan Foundation Directory.....www.cmif.org

-Directory of private foundations that offer funding sources.

The Foundation Directory, & The Foundation Directory Part 2.....www.fdncenter.org

-Directory of private foundations that offer funding sources.

Land Trusts

-National, state, regional, county, and local private land trusts can purchase land for resale to public agencies, buy options to protect land, receive land donations, put together land deals, and provide technical assistance.

Businesses

-Local businesses are frequent partners in the promotion of non-motorized transportation and trail projects.

Friends Groups and Other Organizations

-Friends groups often support a project from inception to implementation.

Community and Other Foundations

-Established to maintain or aid charitable, educational, religious, or other activities serving the public good.

Public-Private Partnerships

Opportunities may become available along several portions of the Plan to form a private-public partnership in order to construct a shared use path on private property. Typically, these partnerships exist when there is a mutual advantage for both the public and the private investment. An example of this may be a residential developer recognizing the value of offering easy access to the non-motorized path for potential buyers. To accomplish this, the developer agrees to let the proposed shared use path go through the private development property. While this offers easier access for the development residents, it also provides more opportunity for aesthetic characteristics to the route such as landscaping and other site amenities.

Maintenance

Proper trail maintenance is just as important as using correct design and construction techniques. A sidewalk that becomes inaccessible because of inadequate maintenance can be just as inconvenient or undesirable as failing to construct the proper pedestrian facilities in the first place. Lack of proper maintenance can also create use barriers especially for seniors, those with mobility limitations and persons with disabilities.

Maintenance Activities

The Township should have a program for routine maintenance checks of trails and should have a process in place to quickly respond to citizen reports of damaged surfaces, particularly along high-priority routes. This will prevent pedestrians from using unsafe alternatives.

Snow removal programs for trails and sidewalks should also be in place which will ensure that the most heavily used pedestrian routes are cleared, including street crossings so that snow plows do not create impassible areas.

Vegetation along trails can be a safety issue. Prevent vegetation from encroaching into walkways. Roots should be controlled to prevent break-up of the surface. Adequate clearances and sight distances should be maintained at driveways and intersections; pedestrians must be visible to approaching motorists.

A regular pruning and maintenance program is recommended. Vegetation and litter, including leaves and branches, should be removed on a regular basis. A checklist of surface repair and vegetation maintenance items should include:

- Frequent inspection of walkways for surface irregularities
- Responding to citizen complaints in a timely manner
- Repairing potential hazardous conditions immediately
- Performing preventative maintenance operations in drains and cutting tree roots
- Sweeping of a project area after repair to any surface
- Cutting back vegetation to prevent encroachment in the path's clear zone

No matter what the funding source is to develop the routes, some of the money allocated in an annual budget should be reserved for routine maintenance. Maintenance is an on-going expense that should be discussed and the Township needs to decide what level of maintenance will be required to do an adequate job of maintaining the route. Maintenance costs may also be associated with on-road facilities (paved shoulders/bike lanes). The Road Commission typically suggests a cost sharing system for maintenance and construction purposes.

Universal Accessibility

Universal accessibility describes the process of going beyond basic ADA requirements to apply the principles of universal design thereby maximizing access and utility by *all segments* of the population; representing *both* persons with and without disabilities. This includes, but is not limited to disabling conditions such as visual impairments, hearing impairments, physical disabilities and other mobility limitations. A few examples of universal accessibility are listed below:

1. Provide sound cues at mid-block crossing signals which will allow the visually impaired to use the crossing safely.
2. Install pedestrian buttons for traffic signal activations at intersections such that they are accessible to those in wheelchairs.
3. Provide crosswalks at all locations where shared use paths cross public roads to facilitate crossings by the physically impaired.
4. Provide "audio interpretive panels", such as those installed along the East-West Pathway in Sharp Park to give audio descriptions of the surroundings to the visually impaired.
5. Design shared use paths to a minimum width of 10 feet whenever reasonably possible to better accommodate all modes of travel including wheelchairs and bicycles.

The application of universal accessibility design principles traditionally offers benefits to persons with and without disabilities and enhances their utility for all. In the application of universal design principles to non-

motorized transportation routes, it is important to gain review and input throughout the process from all segments of the population who may represent potential users.

Plan Amendment Process

The Non-Motorized Transportation Plan should be reviewed and updated every five years by the board and their consultant in order to reflect significant changes in community conditions, needs and changes in land acquisition. Any changes to the Plan should be presented at a public meeting.

At a minimum, amendments or updates should include the following:

- Review current base information and inventory changes such as new developments that have taken place since the adoption of the last revision.
- Public Input - This should include a description of the public involvement process in the report, at least one public meeting, electronic and newspaper announcement 10 days prior to the public meeting and meeting minutes.
- Adopt the change(s) by the Township Board.
- Discuss new technology for construction methods and materials.
- Review progress of securing easements or newly acquired public properties.
- Review and evaluate overall connectivity to destination points such as parks, schools, neighborhoods and commercial areas, adjacent communities and public land.
- Review and discuss possible funding opportunities both public and private.
- Communicate and distribute the revised amendments to the general public and other public agencies.

References and Standards

2005 Delta Non-Motorized Transportation Plan

American Association of State Highway and Transportation Officials (AASHTO)

American with Disabilities Act (ADA)

Delta Township's 5-Year Parks and Recreation Master Plan

Conclusion

A thorough review of the 2005 Delta Township Non-Motorized Transportation Study, followed by opportunities for citizen input, has culminated in the 2012 Non-Motorized Transportation Plan. The 2012 Plan was transmitted to the Delta Township Planning Commission as well as the Parks, Recreation and Cemeteries Department for review and comment. The Township Board was provided with a copy of the Plan for their review and comment. The Planning Commission conducted a public hearing pertaining to the 2012 plan.

As per Section 39 of the Michigan Planning Enabling Act, it is recommended that the 2012 Non-Motorized Transportation Plan be adopted as a component (chapter) of the Township's Comprehensive Plan. The 2012 Non-Motorized Plan would initially be a free-standing document until later in 2012 when it is anticipated that the entire Comprehensive Plan would be adopted. Copies of the 2012 Non-Motorized Transportation Plan were provided to all of the local communities abutting Delta Township for their review and comment.