

Map One

Existing Land Use

Brighton Township, Michigan

Single Family Residential	Private Recreation
Multiple Family Residential	Water
Manufactured Housing	Undeveloped
Commercial	Gravel Pits
Industrial	
Institutional	
Public Recreation	



Adopted September 2006

Data Sources:
Base Map - MCGI, Brighton Twp. Master Plan

0 0.25 0.5 1 1.5 2 Miles



LSL Planning, Inc.



Section One Introduction

Since the early 1970's, the popularity of pathways has increased for both transportation and recreation opportunities. A comprehensive non-motorized pathway network encourages alternative modes of movement within the community while contributing to a balanced transportation system. Further, pathway systems provide an outlet for much needed recreation. Statewide, a growing number of people have recognized the benefits of pathways including economic, cultural, social, and recreation, impacts which help define the quality of life for a community, not to mention the increased public health, safety, environmental protection and alleviated pollution which results from pathway systems.

The Charter Township of Brighton recognizes these benefits and has pledged a commitment to development of a comprehensive pathway system. In 2002, the Township updated their Master Plan which included a survey of Township residents and business owners. The survey revealed that the number one recreation facility that the respondents would like improved was the presence of nature trails, bridle trails and bikeways. In response, the Master Plan recommends the development of a coordinated public pathways system, and design that promotes, rather than prevents, their use. Additionally, the Future Land Use Plan recommends the installation of pedestrian paths and cycling trails in and between residential areas and subdivisions. The Plan further identified a number of main corridors throughout the Township that should be developed with non-motorized pathways. Since its adoption, the Township has updated the Zoning Ordinance, which was revised to require pathways or sidewalks along those corridors identified in the Master Plan.

Purpose of the Plan

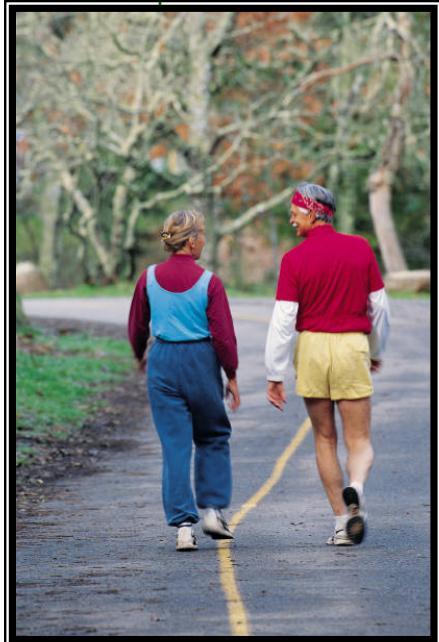
Brighton Township has experienced a steady period of growth, which is anticipated to continue. Development threatens to reduce access to some of the natural areas, public lands and recreational opportunities in the Township and surrounding area. Brighton Township is located amidst many regional park facilities and within a short distance of downtown Brighton and connectivity to these areas is important for a comprehensive system. While the automobile will certainly remain the primary mode of transportation here, many residents desire other choices as well. They want to be able to walk to a friend's house or to the store, or to take their bikes to the many nearby parks and schools. Now is the time for pathways planning in Livingston County before continued development makes future pathways more difficult. It is for these reasons that we are planning for our collective future in Brighton Township by developing this Pathways Plan.

This Plan is intended as a Township-wide pathways plan. This Plan recognizes the East Grand River Corridor Plan which was adopted by the Township Board in early 2006 in response to the planned road improvements to I-96. This corridor-specific Plan recommends eight to ten foot asphalt pathways along Grand River between Kensington and Old U.S. 23 in conjunction with the County's Plan to widen this segment of Grand River to accommodate the diverted traffic. Already in engineering and design phase, the Plan assumes the development of the pathways along Grand River, and therefore this section of Grand River was not analyzed as part of this Plan.

Benefits of Pathways

Pathways positively impact residents and improve communities by providing a number of benefits ranging from the obvious recreation and transportation opportunities to the more obscure benefits of improved economics, health, public education, and quality of life. Specifically, benefits provided by pathways include:

- **Recreation Opportunities.** The increased demand for recreation is resulting in the increased presence of pathways throughout the nation. Pathways provide for a diverse range of interests including walkers, joggers, hikers, runners, cyclists, rollerbladers, cross country skiers, and horseback riders. Pathways provide an opportunity for



residents to enjoy their community and take in the natural and cultural features of Brighton at their own pace, any time of the day.

- **Transportation Alternatives.** A network of non-motorized pathways in Brighton Township will ensure that residents, particularly children, can travel safely, without the use of an automobile. The Plan identifies pathway connections to residential neighborhoods, schools, recreation facilities, and commercial nodes to provide a safe alternative towards accessing these destinations.
- **Environmental Protection.** Pathways can help preserve important natural landscapes, provide needed links between fragmented habitats and offer numerous opportunities for protecting plant and animal species. In addition, reduced reliance on the automobile leads to reduced pollution and traffic congestion.
- **Enhanced Economics.** It has also been shown that pathways actually tend to reduce crime and increase property values. Experience nationwide has shown that well-planned trails attract families, local residents, and other friendly, responsible people, whose presence on the trails serves in effect as a neighborhood watch, driving troublemakers away. Access to pathways is one of the most desirable amenities that homebuyers seek, and the value of most properties is enhanced by being located near a pathway.
- **Improved Health.** Health problems such as heart disease, stroke, diabetes, and obesity are all linked to a lack of exercise. Pathways help people of all ages and health incorporate exercise into their daily routines by providing them with safe and easy access to the places they need or want to go and contribute towards the fight against obesity and inactivity. Possible health benefits of regular pathway use include weight loss, reduce blood pressure, protection against developing non-insulin dependent diabetes, and improve symptoms of depression and anxiety.



- **Outdoor Education.** Pathways traverse a wide range of environments and can be used as an outdoor classroom. The installation of interpretive signage can describe natural, cultural or historic aspects of community.
- **Quality of Life.** The quality of life is a primary attractor and marketing tool for communities and helps keep residents satisfied with their community. Areas perceived as having a high quality of life, often include amenities and features such as frequent parks, ample open space and good schools, with a safe and walkable environment.

Planning Process

The planning process was a cooperative effort spanning six months. Initiated by the Township staff and government, the planning effort was led by the Township planning consultants LSL Planning, Inc. and engineers Orchard, Hiltz & McCliment. The following highlights the major steps involved in the Plan development:

- **Pathway Committee Meetings.** The Township held a number of meetings with an informal pathway committee consisting of representatives from local communities, SELCRA, MDOT, Livingston County and others to develop the vision for the pathway system. These meetings were used to confirm the goals and recommendations of the Plan, to coordinate planning efforts occurring at the various governmental levels, discuss issues in regard to potential non-motorized routes, and review draft versions of the Plan.
- **Focus Groups.** Focus Group sessions were held in February 2006 to gain input from stakeholder groups regarding the development and maintenance of pathways in the Township and to reach general consensus on the preferred routes. Individuals from neighboring communities, community and interest groups, and county, regional and state agencies were invited to participate.
- **Public Workshop.** A public workshop was held in March 2006 to introduce citizens to the pathways Plan concept, answer questions, and identify needs, concerns and issues regarding the proposed pathways. The workshop asked participants to describe the type of trails that they would like to see, to identify opportunities for pathway development, to prioritize trails for current and future development, to comment on various pathway proposals, and to express their ideas

and concerns. A summary of the comments heard at the meeting and in the survey distributed at the meeting are as follows:

- a. The vast majority agreed that pathways will be beneficial to Brighton Township.
- b. About half were in favor of all off road multi-modal paths while others wanted to see a mixture of both off-road multi-modal paths and on-road lanes.
- c. Concern was expressed regarding the amount and width of pathways proposed.
- d. Pathway segments that were viewed as the most important include those that lead to schools (Hilton, Spencer, Hyne, Hacker & Taylor), those that lead to parks (Kensington, Spencer, Old U.S. 23), Grand River (north of City of Brighton), those that lead to activity nodes (Hilton, Spencer, Old U.S. 23 & Grand River) and Kensington Road.
- e. Over half of the participants were willing to support a slight increase in taxes or millage in order to support the development of pathways.
- f. Participants wanted to ensure that maintenance and funding sources were identified.

The concerns that were heard are typical issues heard during almost any pathway project. Although these concerns are typical, they reflect real issues that will need to be addressed.

- **Plan Development.** The planning for a Brighton Township pathway system began with the collection and gathering of data on the existing conditions for non-motorized travel. Needs and safety concerns are identified as well as an analysis of current roadways and pathways in relation to their suitability for various types of pathways. This data, along with input heard from the pathways committee, general public, and Township staff was used in the development of the Plan goals, objectives and recommendations.
- **Plan Completion and Adoption.** The Planning Commission held a public hearing to present the Plan in June 2006 and solicit public input prior to adoption by the Township Board. In general those in attendance were supportive of pathways and the Plan. Following minor edits to the Plan, the Plan was recommended for approval to the Township Board. The Plan was made available for public review prior to adoption.



Section Two

Existing Conditions

An evaluation of Brighton Township's existing conditions is essential towards understanding the community's unique physical and social environment. Analyzing past and present demographic and physical data may help anticipate future needs. As part of the planning effort for this Plan, a wide range of community data including demographic, land use destinations, transportation system, and natural features, and regional facilities were inventoried to provide important guidance for pathway recommendations.

Demographics

Population and Housing. Population and housing data was gathered from the Southeast Michigan Council of Governments (SEMCOG). Recent trends and projections indicate a continued increase in terms of population and the number of households. *Figure One* illustrates the relationship between population and housing in Brighton Township between 1990 and 2030. In 2000, over 75% of the households were made up of traditional married-couple families and 44% of all households contained children under the age of 18. The median age in Brighton Township was 37.6 in 2000.

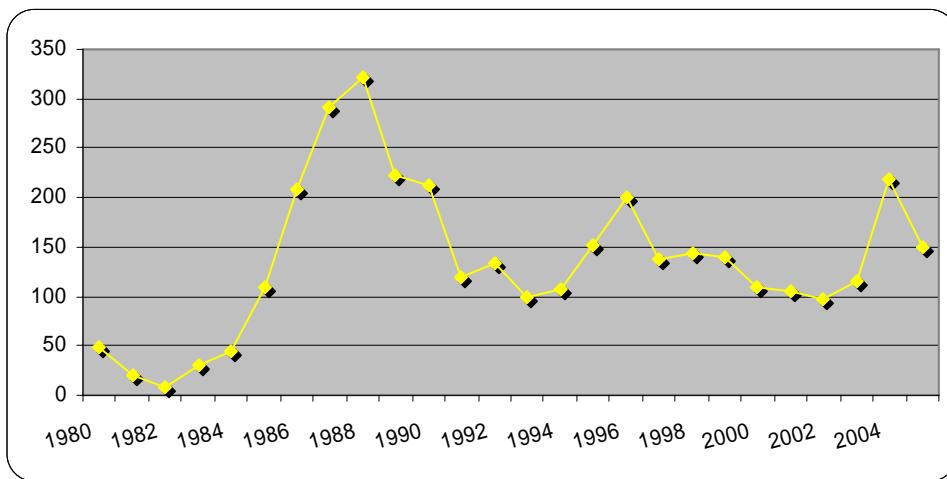
Figure One**Population and Housing, 1990 - 2030**

Brighton Township	1990 Census	2000 Census	% Change 1990-2000	April 2006 Estimate	2010 Forecast	2030 Forecast	% Change 2000-2030
Population	14,541	17,673	21.5%	18,760	19,983	24,409	38.1%
Households	4,577	5,950	30.0%	6,578	7,044	9,190	54.5%

Sources: Southeast Michigan Council of Governments (SEMCOG), Community Profile for Brighton Township

Figure Two

Residential Building Permits, 1980 - 2005



Source: SEMCOG

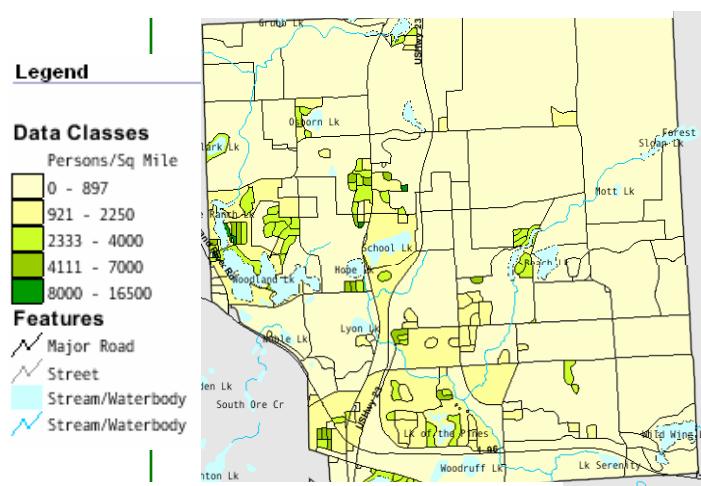
Construction Activity.

An indicator of economic health of a community and rate of growth can be determined through trends in residential construction. Building permit information tends to fluctuate in accordance to market demands paralleling the national economic strength. Many factors contribute to the patterns of residential construction including

interest rates, inflation, size and age of households, and consumer preferences. Figure Two illustrates the building permits issued in Brighton Township between 1980 and 2005. The amount of residences steadily increased throughout the 1980's, with a slight decrease in development in the early 1990's. Brighton Township has generally had at least 100 new residences per year, with another peak in construction in 2004.

Figure Three

Residential Density, 2000



Source: US Census Bureau

Residential Density. In addition to determining how much growth is occurring, it is also important to determine where the concentration of people are located, often referred to as density. As depicted in Figure Three the vast majority of the Township is considered low density, with less than 900 persons per square mile. The areas with the highest density include older established subdivisions and neighborhoods surrounding lakes, mostly in the southwestern portion of the Township. It is important to note that since the 2000 U.S. Census, the Township has seen the introduction of attached condominium units in the Township, which leads to an increased density of residents.

Land Use Destinations

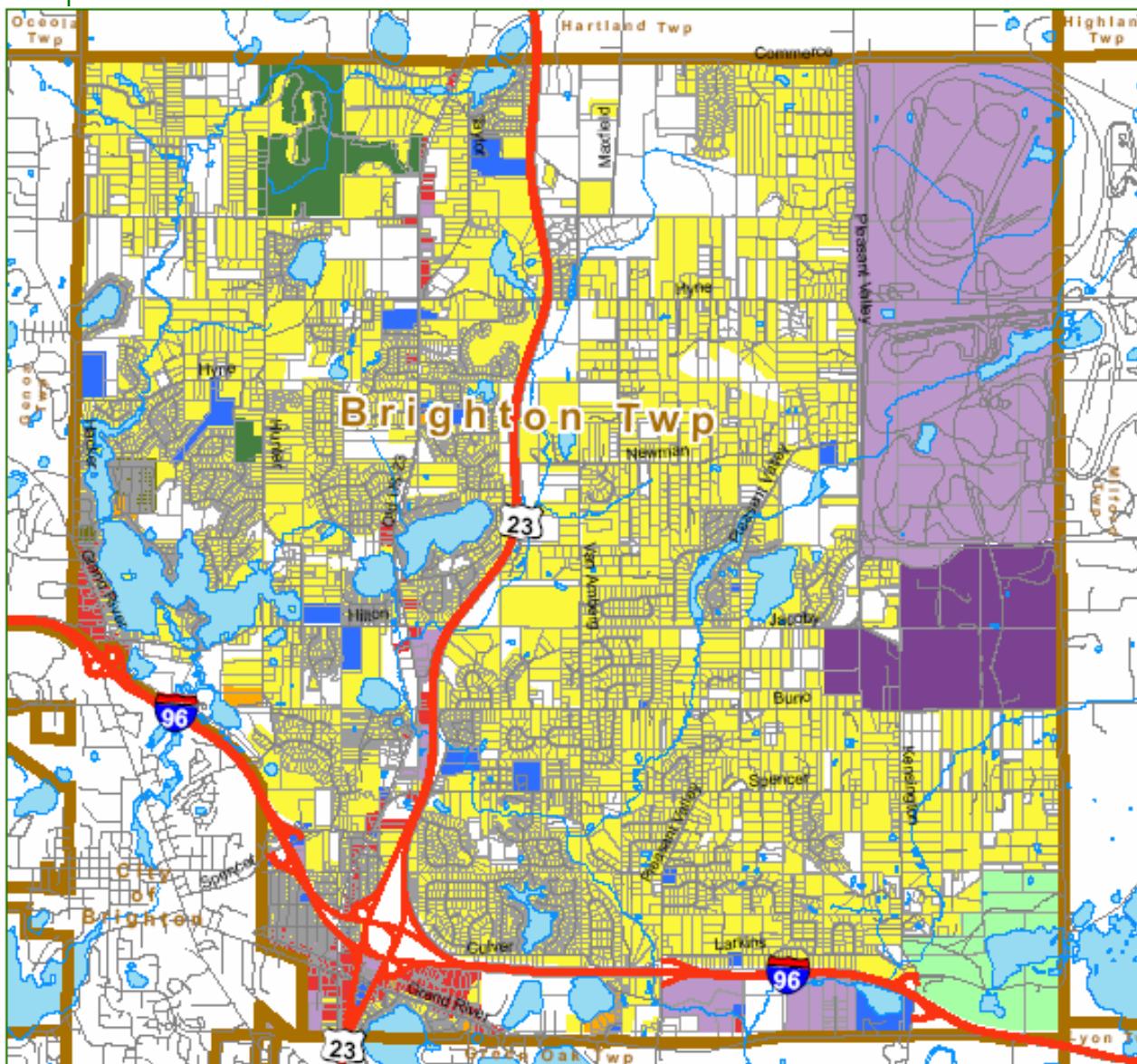
Activity Nodes. Brighton Township is primarily a residential community with residential uses accounting for nearly 40% of the total land in 2000 (SEMCOG). *Map One Existing Land Use* illustrates the existing land uses, as adopted in the 2002 Master Plan. Non-residential uses are scattered primarily along Grand River and Old U.S 23. Four activity nodes have been identified, based on existing and future land use patterns, that will serve as destinations to meet the everyday commercial and service needs of local residents. These nodes are identified at the intersections of Grand River and Old U.S. 23, Grand River and Hilton, Old U.S. 23 and Spencer, and Old U.S. 23 and Hyne. The activity nodes are depicted on *Map Two Land Use Destinations*.

School Facilities. Four public schools, incorporating four different districts serve Brighton Township residents. Spencer Elementary School, located on Spencer near Van Amberg, and Hilton Road Elementary school, which is located on Hilton west of Old US-23, are part of the Brighton Area School District. Lakes Elementary and Farms Intermediate Schools are both on Taylor and are under the jurisdiction of Hartland

Consolidated Schools. Portions of the Howell Public School District and Huron Valley School District also serve Brighton Township, however no facilities are located within the Township. In addition to these public schools, a number of Township students attend private schools in the Township such as Cornerstone Presbyterian and Shepherd of the Lakes. These school facilities are depicted on *Map Two Land Use Destinations*.



Public Facilities. Brighton Township contains a handful of buildings that serve the public interests of the residents. These facilities may be destinations for community meetings or events. Public facilities within the Township include the Township Hall on Buno, north of Spencer, the State Police Station on the east side of Old U.S. 23, between Spencer and I-96 and two fire stations located on Old U.S. 23 south of Hyne and on Weber just west of Old U.S. 23. These public facilities are depicted on *Map Two Land Use Destinations*.



Map One

Brighton Township, Michigan

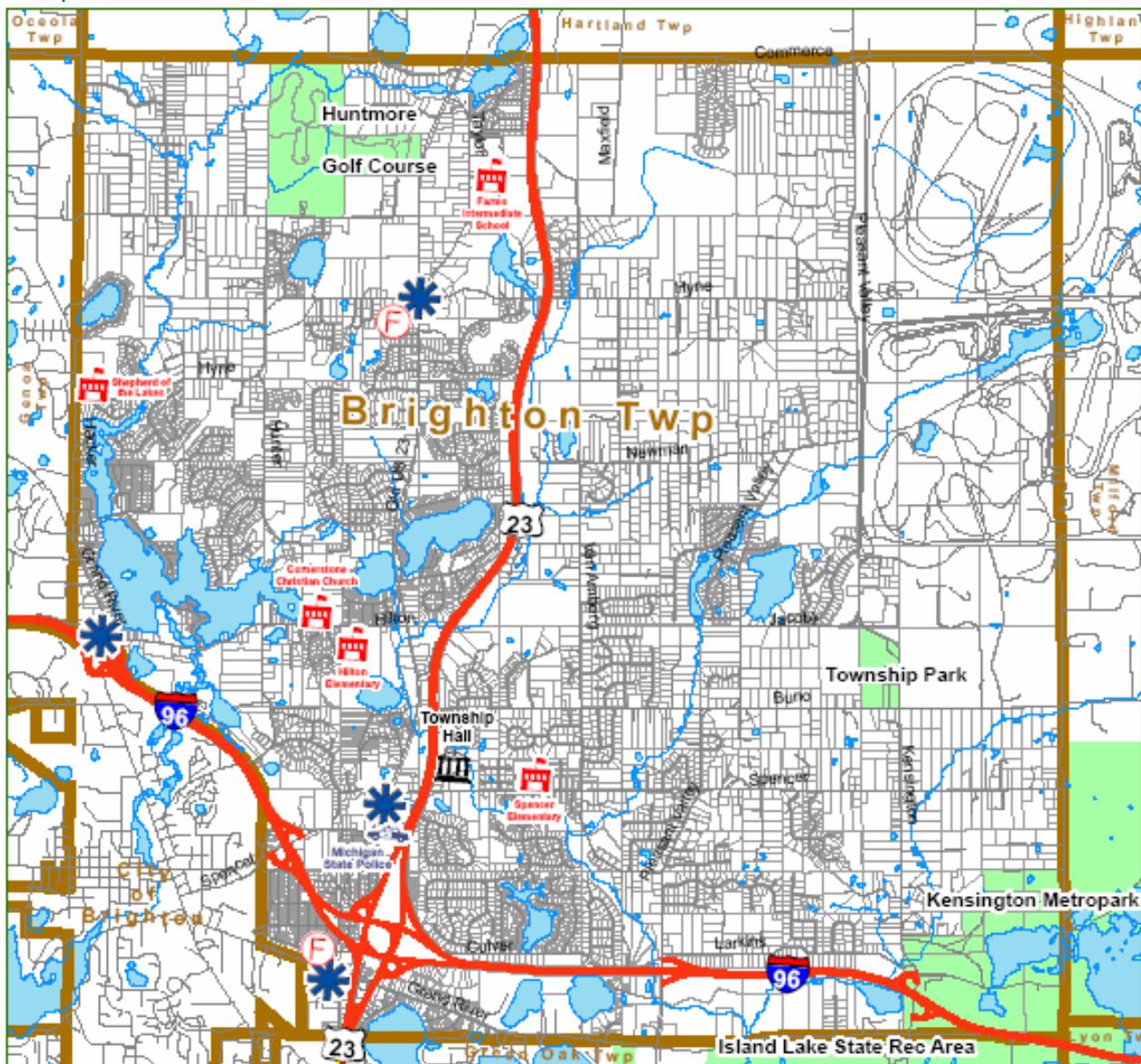


Adopted September 2006

Data Sources:



Brighton Township Pathways Plan



Map Two

Land Use Destinations

Brighton Township, Michigan

- * Activity Node
- Building Township Hall
- School
- Fire
- Police
- Green Parks



Adopted September 2006

Data Sources:
Base Map - MCGI, Brighton Twp. Master Plan

0 0.25 0.5 1 1.5 2 Miles



Parks in the Brighton Township Area. Recreation facilities, parkland and pathways are offered by various entities within or abutting the Township as described below:

- **Township Park.** This 60 plus acre park is a joint venture between Brighton Township and Sunset Sand and Gravel. The park is expected to be developed within the next couple of years and will feature passive recreation areas, picnic areas, fishing dock, wading beach, tot lot, jogging path, fitness course, sledding hill, cross country skiing areas, and an active recreation area with tennis courts and fields for soccer, lacrosse, and rugby.
- **Huntmore Golf Club.** Formerly the Golf Club of Michigan, Huntmore is the only golf course located within the Township. This 18-hole public course on 290 acres, has a rich and diverse landscape, enhanced by gently rolling meadows, abundant hardwood forests, native grasses, one hundred acres of untamed wetlands and natural lakes and streams.
- **Island Lake Recreation Area.** This Michigan State Park is located along the Township's southeastern edge, and covers 3,466 acres. The park offers camping, hunting, shooting/archery range, fishing, canoeing/kayaking, picnicking, snowmobiling, cross country skiing. In addition, the park contains four miles of paved trail that connects to Kensington Metropark and the Lyon Township Bike Trail, more than 18 miles of trails for hiking, running and hunting, and more than 14 miles of mountain bike trails.



- **Kensington Metropolitan Park.** A Huron-Clinton Metropolitan Park Authority property, Kensington covers 340 acres in the southeast corner of the Township and offers a diverse range of recreational opportunities including an 18-hole golf course, ball diamonds, swimming, boating, hiking, fishing, picnicking, bicycling, horseback riding, ice skating, cross-country skiing and sledding.

- **Schools and Public Facilities.** Schools are the primary source of recreation in the Township. The various public and private schools offer numerous athletic fields, playgrounds, and acres of open space. In addition, the many public facilities offer opportunities for passive recreation and the North Fire Station on Old U.S. 23 offers ball diamonds for residents use.

Brighton Township Pathways Plan

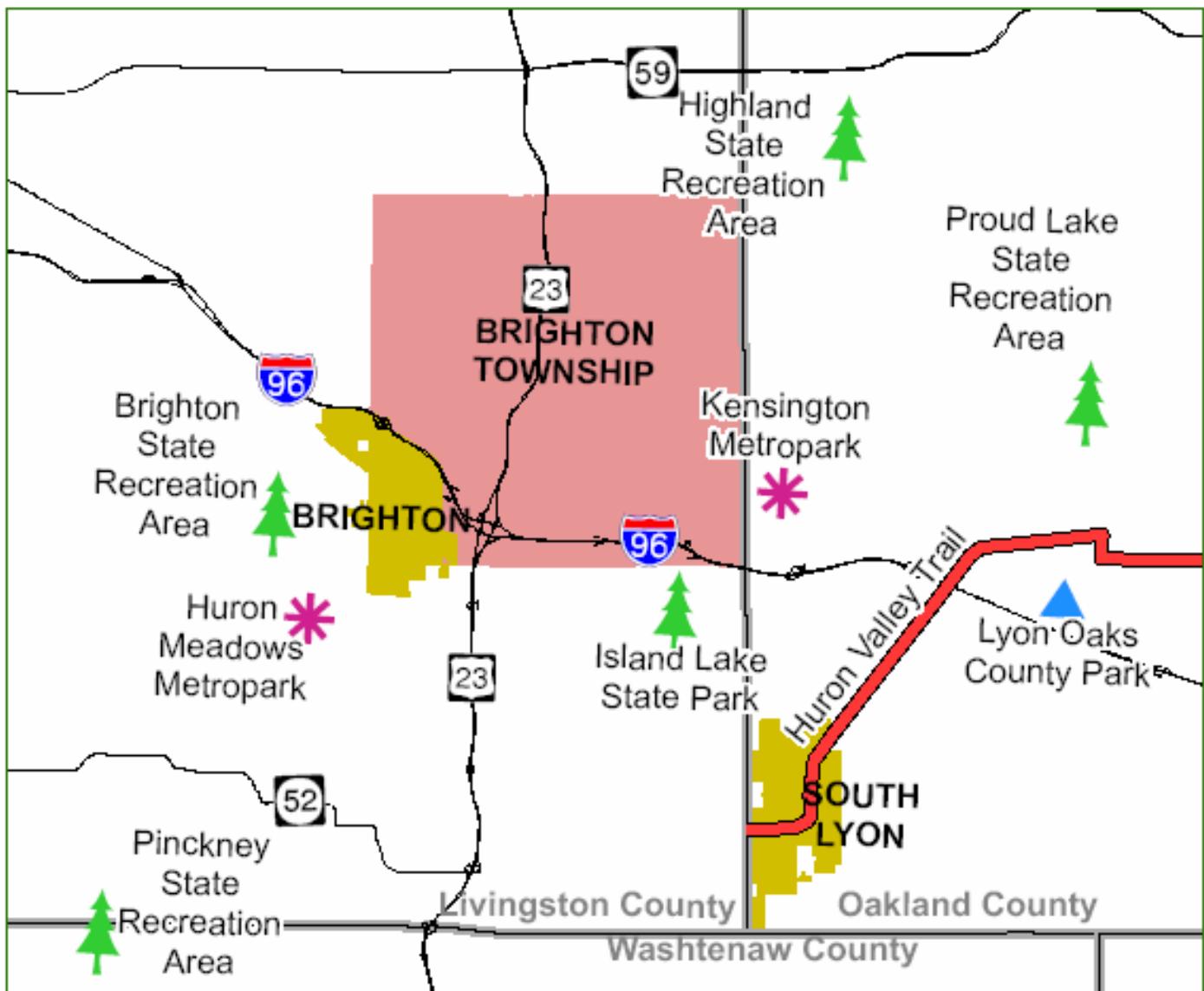
- **Surrounding Communities.** A number of recreation opportunities are available just outside of the Township limits. Additional playfield space is accessible to Brighton Township residents at locations in neighboring communities including school and City facilities which offer playgrounds, athletic fields, tennis courts, track facilities and swimming pools.

Regional Recreation. In addition to local community facilities, Brighton Township residents have the benefit of numerous regional recreation facilities provided by the Huron-Clinton Metropolitan Park Authority, Livingston, Oakland and Washtenaw Counties, and the State. The following parks and trails described below and depicted on *Map Four Regional Attractions* are all located within a short trip from Brighton Township.

- **Brighton Recreation Area (Michigan State Park).** Located in Howell, this 4,947-acre park offers campsites, organization camp, and cabins. Facilities include picnic equipment, playgrounds, beach house, boat launch, and complete equestrian facilities.
- **Highland Recreation Area (Michigan State Park).** This 5,524-acre park located in White Lake Township has campsites, an organization camp, and cabins. Facilities include picnic equipment, playgrounds, beach house, boat launch, and nature trails.
- **Huron Meadows Metropark (Huron-Clinton Metropolitan Authority Park).** Located along the Huron River three miles south of Brighton, this 1,539-acre park features an 18-hole public golf course, golf-activity center, picnicking, and hiking.



- **Huron Valley Trail.** The Huron Valley Trail is a network of paved trails utilizing the former railroad corridor connecting the cities of Wixom and South Lyon. It begins at Lyon Oaks County Park, accessible from Pontiac Trail, and follows the former "Airline Railroad" corridor westward through Milford Township. At I-96, a connector trail heads west toward Kensington Metropark and Island Lake State Recreation Area, where a unique boardwalk provides access from Island Lake Recreation Area to Kensington Metropark.



Map Three

Regional Destinations

Brighton Township, Michigan

- ▲ Michigan State Parks
- * Huron - Clinton Metro Parks
- ▲ Oakland County Parks



Adopted September 2006

Data Sources:
Base Map - MCGI, Brighton Twp. Master Plan

0 0.5 1 2 3 4 Miles



- **Lyon Oaks (Oakland County Park).** This 1,024-acre park was recently developed in the spring of 2002. The park, located west of Wixom on Pontiac Trail, will contain a new Arthur Hills designed 18-hole golf course, driving range, banquet and meeting facilities, dog park, nature center, picnic areas, and a trail system.
- **Pinckney Recreation Area (Michigan State Park).** This 11,000-acre recreation area located in Pinckney has campsites and an organization camp. Facilities include picnic equipment, playgrounds, a beach house, and a boat launch.
- **Proud Lake Recreation Area (Michigan State Park).** Located along Wixom's western border, this 4,000-acre recreation area has campsites, an organization camp, mini cabins, and tent rentals. Facilities include picnic equipment, playgrounds, a beach house, and boat launch.

Regional Plans. Several significant planning efforts that relate to non-motorized transportation have developed in the region and surrounding communities that influence the Pathways Plan.

- **Southeast Livingston Greenways Plan.** In 2000, a Greenways Plan for Southeastern Livingston County was developed, including Brighton, Green Oak, Hamburg, and Genoa Townships and the City of Brighton. The Plan outlines a system of open spaces and trails to connect people and places.
- **Southeast Michigan Greenways Plan.** In 1998, the Rails-to-Trails Conservancy developed a vision for Southeast Michigan Greenways. The Plan developed a conceptual vision for an interconnected greenway system for the seven counties of southeast Michigan, including Livingston, and is intended to give communities and counties guidance regarding the acquisition of land for public greenway use.

Transportation System

The transportation system affects the delivery of and accessibility to recreational facilities and services. The current transportation system in Brighton Township is predominantly oriented toward the automobile. The system of roads and freeways in and near the Township provides reasonably good access by automobile. However, access to recreation facilities can be difficult for certain segments of the population, primarily children, who do not have access to an automobile. Currently there are no forms of

Brighton Township Pathways Plan

mass transit that serve the Township and the limited amount of existing pathways that were installed as required for new development are disconnected and do not follow a cohesive system that can be used for transportation.

Road Right-of-Way. All of the public roads in the Township are under the jurisdiction of the Livingston County Road Commission or Michigan Department of Transportation. The amount of existing and planned right-of-way (ROW) must be examined at the time of design and construction of any pathways to determine the location of the pathways along the corridors. Generally, the paths should be located one-foot inside the edge of the master-planned right-of-way in order to accommodate future road improvements. *Figure Four* lists the existing and planned right-of-way for all of the roads that pathways are proposed along. Although there are several areas where no platted or deeded ROW exists, a minimum statutory 66 foot wide road easement exists along all public roadways, and is available for pathways.

Figure Four
Public Road Right-of-Way/Easements

Road	Segment	Existing	Planned
Buno	Pleasant Valley to Kensington	66 ft.	100 ft.
Culver	Spencer to Pleasant Valley	66 ft.	100 ft.
Grand River	Hacker to Hilton	66-120 ft.	120 ft.
	City of Brighton to Old U.S. 23	100 ft.	120 ft.
	Old U.S. 23 to Pleasant Valley	100 ft.	120 ft.
	Pleasant Valley to Kensington	100 ft	120 ft.
Hacker	Hyne to Grand River	66 ft.	120 ft.
Hilton	Grand River to Hunter	66-93 ft.	120 ft.
	Hunter to Old U.S. 23	66-93 ft.	120 ft.
Hunter	Hyne to Hilton	66-93 ft.	120 ft.
Hyne	Hacker to Hunter	66-120 ft.	120 ft.
	Hunter to Old U.S. 23	66-93 ft.	120 ft.
	Old U.S. 23 to Pleasant Valley	66-93 ft.	120 ft.
Kensington	Pleasant Valley to Jacoby	66 ft.	120 ft.
	Jacoby to Buno	66 ft.	120 ft.
	Buno to Spencer	66 ft.	120 ft.
	Spencer to Larkins	66 ft.	120 ft.
	Larkins to Grand River	66 ft.	120 ft.
Larkins	Pleasant Valley to Kensington	66-83 ft.	100 ft.

Figure Four
Public Road Right-of-Way/Easements

Road	Segment	Existing	Planned
Newman	Van Amberg to Pleasant Valley	66 ft.	120 ft.
Old U.S. 23	Hartland Twp. to Hyne	120 ft.	120 ft.
	Hyne to Hilton	120 ft.	120 ft.
	Hilton to Spencer	140 ft.	120 ft.
	Spencer East to Spencer West	120-145 ft.	120 ft.
	Spencer to Grand River	100-120 ft.	120 ft.
	Grand River to Green Oak Twp.	100 ft.	120 ft.
Pleasant Valley	Commerce to Hyne	66 ft.	120 ft.
	Hyne to Kensington	66 ft.	120 ft.
	Kensington to Newman	66 ft.	120 ft.
	Newman to Jacoby	66-93 ft.	120 ft.
	Jacoby to Buno	66-93 ft.	120 ft.
	Buno to Spencer	66-93 ft.	120 ft.
	Spencer to Larkins	66-93 ft.	120 ft.
	Larkins to Grand River	66-156 ft.	120 ft.
Spencer	West Township Border to Old U.S. 23	66 ft.	120 ft.
	Old U.S. 23 to Buno	66-75 ft.	120 ft.
	Buno to Van Amberg	66-125 ft.	120 ft.
	Van Amberg to Pleasant Valley	66-174 ft.	120 ft.
	Pleasant Valley to Kensington	66-93 ft.	120 ft.
	Kensington to Kensington Metropark	66 ft.	120 ft.
Taylor	Old U.S. 23 to School	66 ft.	100 ft.
Van Amberg	Newman to Buno	66 ft.	120 ft.
	Buno to Spencer	66-93 ft.	120 ft.

Source: OHM & Livingston County Road Commission

Traffic Volume. Traffic volume data is measured by average daily traffic counts (ADT), which is an estimate of typical daily traffic on a road. Information for the Township's ADT was collected to help understand the amount of traffic on these roads. Figure Five on the following page depicts the ADT counts gathered for the roadways that pathways were considered for within the Township.

Figure Five

Average Daily Traffic

Road	Segment	24 Hour Count (Date Taken)	Road	Segment	24 Hour Count (Date Taken)
Buno	Spencer to Village Square	2,448 (08/16/04)	Hyne	Hilton to Hyne	3,152 (05/28/03)
	Village Square to Van Amberg	1,400 (08/16/04)		Hacker to Hunter	5,991 (06/30/03)
	Starshine Trail to Pleasant Valley	429 (05/29/03)		Hunter to Old U.S. 23	5,388 (06/22/04)
	Pleasant Valley to Kensington	314 (06/03/03)		Old U.S. 23 to Maxfield	4,201 (05/29/03)
	Kensington to Muir	6,033 (06/02/03)		Corlett to Pleasant Valley	3,092 (05/29/03)
Culver	Spencer to Kenicott	2,653 (06/03/03)	Jacoby	Pleasant Valley to Kensington	2,429 (06/03/03)
	Kenicott to Pleasant Valley	2,360 (06/03/03)		Pleasant Valley to Stobart	2,768 (06/03/03)
Grand River	Hilton to Herbst	32,482 (06/16/05)	Kensington	Jacoby to Buno	6,296 (06/09/03)
	Old U.S. 23 to City of Brighton	23,405 (06/24/04)		Spencer to Larkins	12,341 (06/09/03)
	Old U.S. 23 to Academy	21,314 (05/19/03)		I-96 East Ramp to Grand River	15,414 (07/15/04)
	Academy to Pleasant Valley	14,833 (06/21/04)		Pleasant Valley to Kensington	657 (06/09/03)
	Pleasant Valley to Kensington	8,710 (06/21/04)		Van Amberg to Corlett	939 (05/29/03)
Hacker	Grand River to Bendix	7,712 (05/13/02)	Newman	Corlett to Pleasant Valley	361 (05/29/03)
	Bendix to Hyne	10,959 (05/14/02)		Old U.S. 23 to End of Pavement	2,598 (05/29/03)
	Hyne to Clark Lake	5,254 (05/14/02)		End of Pavement to Dead End	375 (05/19/05)
Hilton	Grand River to Flint	9,059 (06/30/03)	Taylor	Pleasant Valley to Spencer	276 (06/05/03)
	Hunter to Old U.S. 23	9,112 (06/30/03)		Spencer to Buno	4,311 (06/05/03)

Source: SEMCOG

Crash Rates. Large traffic volumes on roads do not necessarily lead to greater traffic hazards; however, they tend to accentuate traffic hazards. The ability of any road to carry larger volumes of traffic is related to the design of the road, number of lanes, and number of ingress and egress points along the road, all of which must be considered when designing on and off-road pathways. *Figure Six* shows the ten intersections with the highest frequency of crashes within the Township as of 2004. Many of these intersections have since received upgrades that may improve traffic circulation.

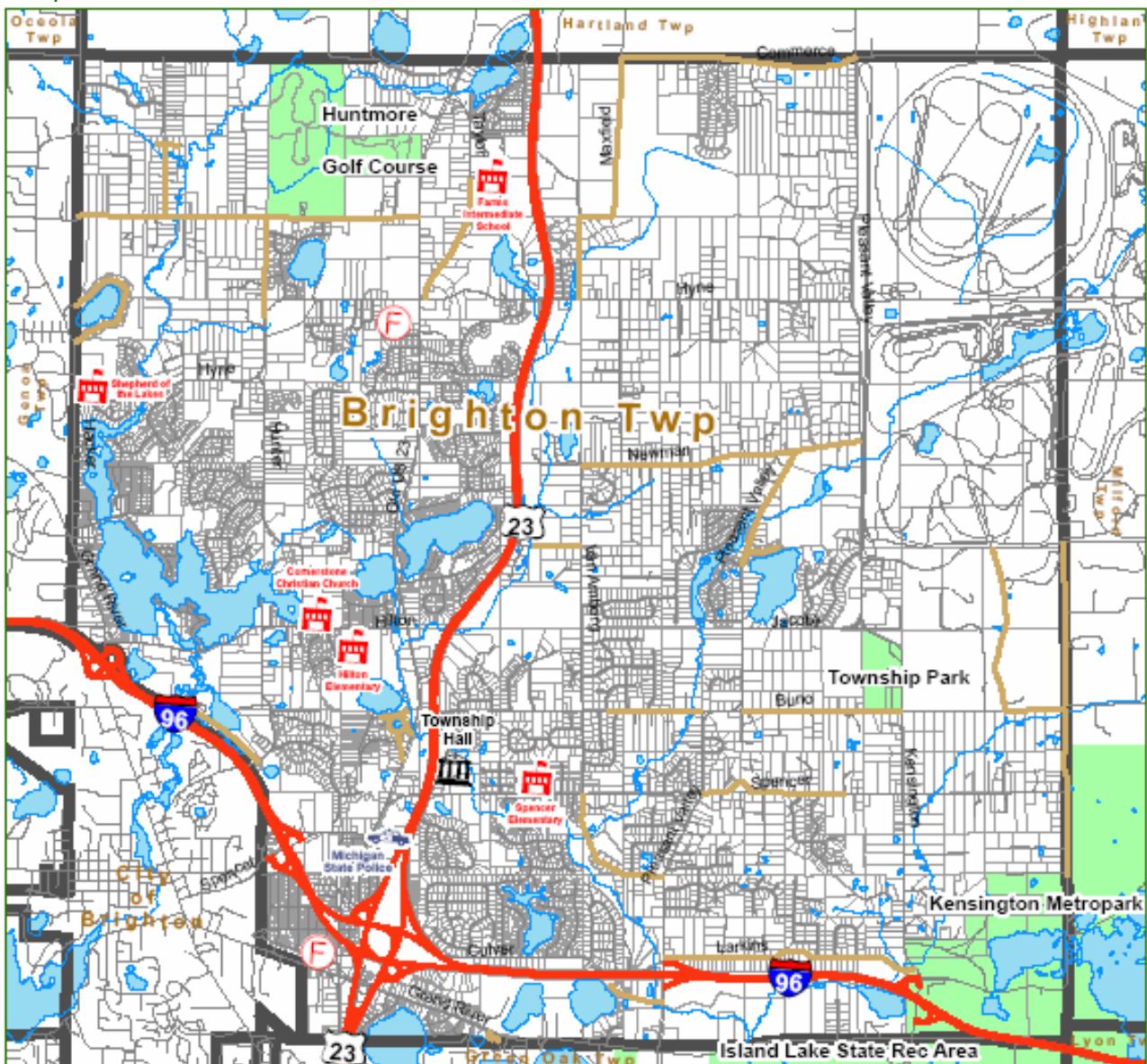
Figure Six
High Crash Intersections

Intersection	Twp. Rank	County Rank	Total Crashes 1999-2004
Grand River at Old U.S. 23	1	6	178
Grand River at Hilton	2	13	136
Grand River at Kensington	3	27	83
Old U.S. 23 at Spencer (northern intersection)	4	33	75
Hilton at Old U.S. 23	5	42	57
Eastbound I-96 at Northbound US 23 Ramp	6	44	56
Spencer at Westbound I-96 Spencer Ramp	7	51	54
Buno at Culver Rd. at Spencer	8	54	51
Grand River at Westbound I-96 Grand River Ramp	9	56	49
Hyne at Old U.S. 23	10	65	43
Old U.S. 23 at Spencer (southern intersection)	10	65	43

Source: SEMCOG

Paved Roads. *Map Four Road Conditions* illustrates the public roads in the Township that are paved and those that are gravel. Pathways are proposed primarily on paved roads, however there are certain segments that are currently gravel that provide logical extensions of pathways to connect to activity nodes or parks or to finish a continuous loop. It may be appropriate to construct crushed stone or rock pathways along some of these segments until a greater need is established. There are no plans at this time to pave any of the gravel roads.

Brighton Township Pathways Plan



Map Four

Road Conditions

Brighton Township, Michigan

- Unpaved Public Roads
- Paved Public Roads
- Township Hall
- School
- Fire
- Police
- Parks



Adopted September 2006

Data Sources: Roads - OHM
Base Map - MCGI, Brighton Twp. Master Plan

0 0.25 0.5 1 1.5 2 Miles



LSL Planning, Inc.

Planned Road Improvements. When planning for pathways, it is important to coordinate the timing of the design and construction with planned road improvements in order to reduce costs. The following road improvements are planned by Michigan Department of Transportation (MDOT) and/or the Livingston County Road Commission (LCRC):

- **Kensington & Jacoby Roads (LCRC Summer 2006).** This is a roundabout construction project that will include 0.4 mile of roadway.
- **Grand River East (LCRC 2007).** Widen Grand River east of Old US-23 to Pleasant Valley to five lanes.
- **Pleasant Valley Bridge (MDOT 2009).** Resurfacing of the Pleasant Valley Bridge over I-96.
- **Kensington Bridge (MDOT 2009).** Replacement of the Kensington Bridge over I-96.

In addition to the above planned improvements, Southeast Michigan Council of Governments (SEMCOG), in the 2030 Regional Transportation Plan, has proposed the following projects. These projects represent priorities for the future based on anticipated needs, land uses, and development conditions and forecasts of available revenues. While these projects have been identified, they are not funded like the above four projects.

- **Old U.S. 23.** SEMCOG has recommended the widening of Old U.S. 23 to five lanes as follows:
 - ✓ (SEMCOG RTP 2006-2010). Grand River to Spencer West.
 - ✓ (SEMCOG RTP 2011-2015). Grand River to Lee.
 - ✓ (SEMCOG RTP 2016-2020). Spencer East to Hilton.
 - ✓ (SEMCOG RTP 2021-2025). Hilton to Hyne.
 - ✓ (SEMCOG RTP 2026-2030). Hyne to M-59.
- **I-96 Bridge. (SEMCOG RTP 2006-2010).** Widen the I-96 Bridge over U.S. 23 to five lanes.
- **Spencer Bridge (SEMCOG RTP 2011-2015).** Widen the Spencer Bridge over U.S. 23 to five lanes.

- **Spencer East (SEMCOG RTP 2016-2020).** Widen Spencer to five lanes from Old U.S. 23 to Van Amberg.
- **Hyne (SEMCOG RTP 2016-2020).** Add intersection turn lanes and modify alignment from Hacker to Old U.S. 23.
- **Kensington (SEMCOG RTP 2021-2025).** Add intersection turn lanes from I-96 to Hacker.
- **Hilton (SEMCOG RTP 2026-2030).** Add intersection turn lanes and modify alignment from Grand River to Old U.S. 23.
- **Pleasant Valley (SEMCOG RTP 2026-2030).** Widen Pleasant Valley from Grand River Avenue to I-96 to three lanes.
- **Spencer West (SEMCOG RTP 2026-2030).** Widen Spencer to five lanes from I-96 to Old U.S. 23.

Natural Features

The natural environment is a critical element of the physical basis upon which the community develops. The conservation of these natural features will increase the quality of life for the residents of the Township and will serve a variety of aesthetic and recreation functions as well as protect the rural character of the community. *Map Five Natural Features* depicts the key natural features within the Township.

Topography. The attractive topography of Brighton Township consists primarily of gently rolling hills with a few steep areas. Steep areas, which range in gradients from 15%

to greater than 25%, need to be carefully examined before excavation is permitted which may destroy this attractive resource.



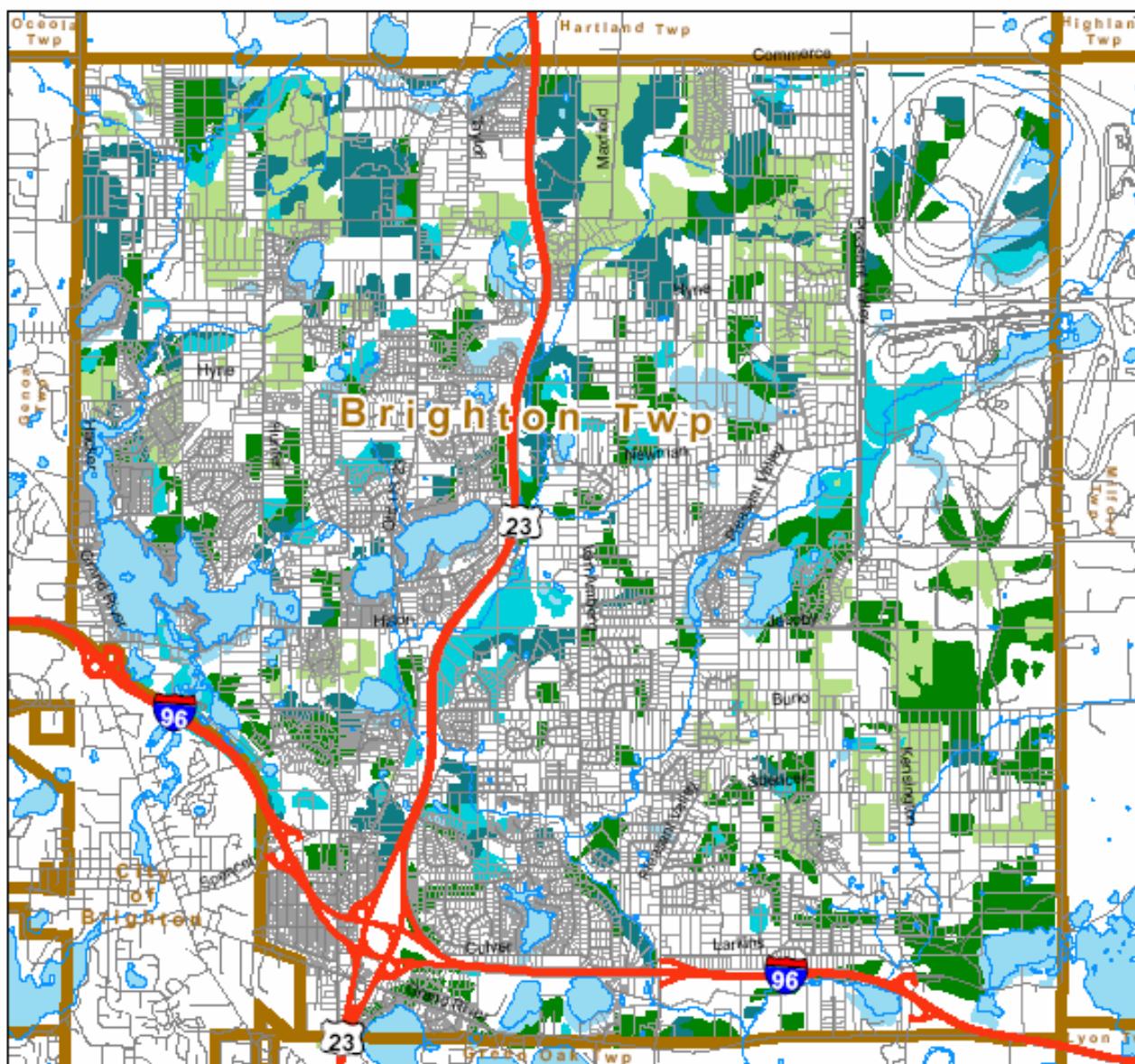
Surface Water. Brighton Township is fortunate to contain several small bodies of water, over twenty named lakes, many more ponds, and several streams which account for about 1,000 acres, many of which are used for recreational purposes.

Wetlands. Wetlands are transitional areas between the aquatic ecosystems and the surrounding upland areas, and are vital to the maintenance of high quality surface and ground waters. This may include areas that are seasonably wet, by a surface or ground

water influence, to areas that are more permanently saturated throughout the year. Wetlands within the Township consist of mixed wooded, lowland hardwood, conifer, emergent, deep marsh and shrub/scrub wetlands. All wetlands that are contiguous with (within 500 feet) a waterway or any wetland that is greater than five acres in size are regulated by the Michigan Department of Environmental Quality (MDEQ). The Township also regulates wetlands over 2 acres through its own Wetland, Wetland Edge and Watercourse Protection Ordinance.



Woodlands. While many of the woodland areas were cleared over the years as the Township developed, some significant areas of woodlands remain scattered throughout the Township. Woodlands and hedgerows along property lines and roads provide a natural buffer and give the Township much of its “rural character.” Woodland areas in the Township consist of Central Hardwood and Pine Forests.



Map Five
Natural Features

Brighton Township, Michigan

- Agricultural Land
- Non-Forested Wetlands
- Forested Wetlands
- Woodlands
- Water

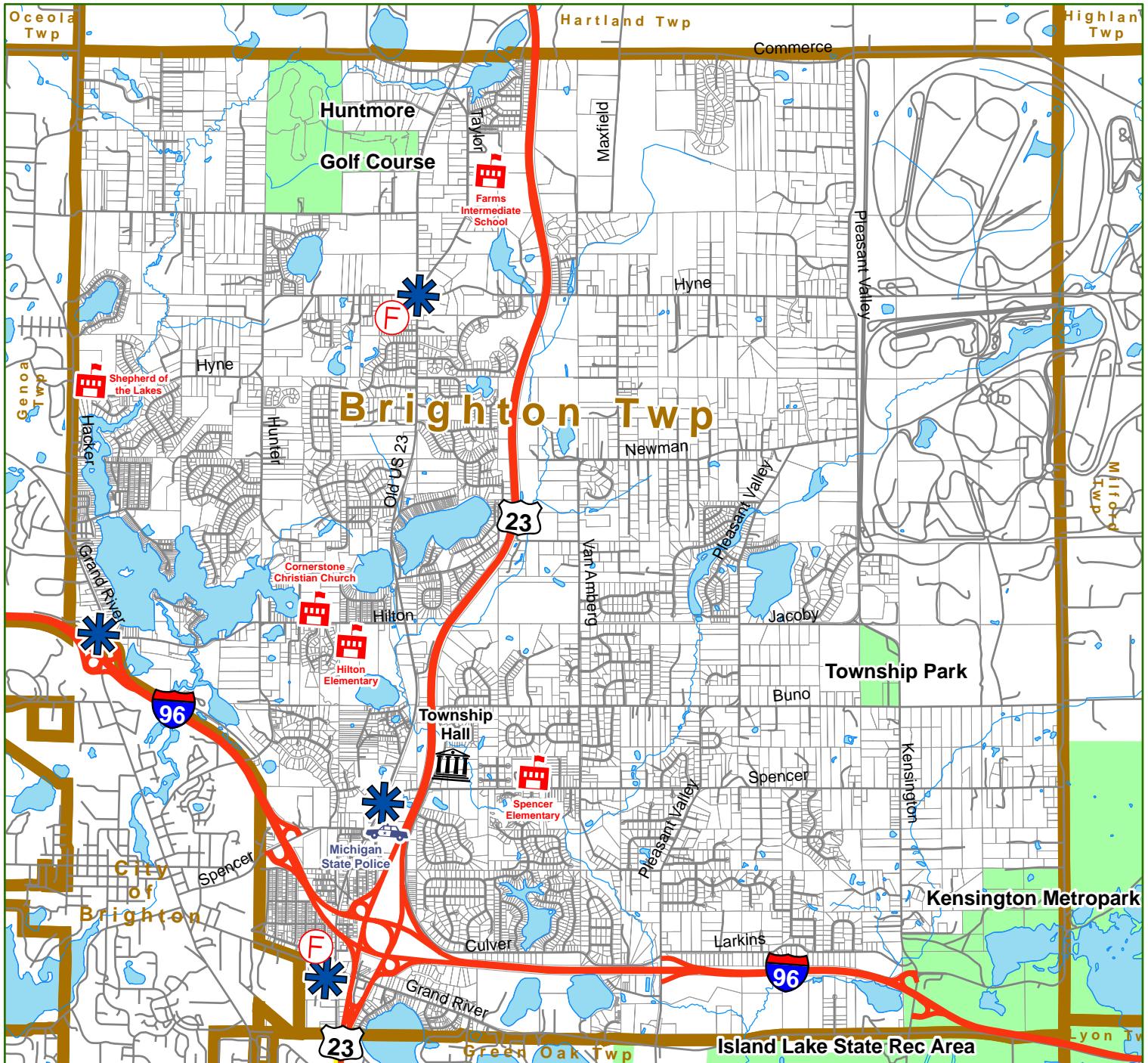


Adopted September 2006

Data Sources:
Base Map - MCGI, 1995 SEMCOG, 2001 Tetra Tech

0 0.25 0.5 1 1.5 2 Miles





Map Two

Land Use Destinations

Brighton Township, Michigan

-  Activity Node
-  Township Hall
-  School
-  Fire
-  Police
-  Parks



Adopted September 2006

Data Sources:
Base Map - MCGI, Brighton Twp. Master Plan

0 0.25 0.5 1 1.5 2 Miles



LSL Planning, Inc.



Section Three Goals

The overall purpose of the Pathways Plan is to plan for the organized development of a comprehensive pathways system. The previous Section describes the existing conditions in Brighton Township. This data, combined with input from the Pathways Committee, public, and Township staff and expertise from the Township's consultants are the basis for the goals, objectives and recommendations in this Plan.

The following goals, objectives and recommendations provide a basis for future pathway planning decisions. The goals are broad policy statements with more specific objectives, which provide a more targeted approach to accomplishing the goals. Each goal and objective also provides detailed action-oriented recommendations to achieve the overall purpose of the Plan.

Goal One

Improve recreational and transportation opportunities within the Township through a Township-wide pathways system.

Objective One

Develop a non-motorized transportation network.

Recommendations

1. Create a network of non-motorized paths that connect to local destinations and connect to regional paths.
2. Encourage relevant bicycle and pedestrian elements in all future transportation projects.
3. Promote a pathway system to attract and increase community usage.
4. Include accessibility provisions within the planning and development of pathways.
5. Develop a commuter system for employees and students within the Brighton, Hartland Consolidated, Howell, and Huron Valley school districts that will encourage non-motorized travel by connecting residential areas with public facilities and activity nodes.
6. Identify areas where additional safety considerations (retaining walls, guardrails, signage, crossing signals) are necessary.
7. Provide and maintain pathway markings, clear shoulder widths, and pathway surface (pavement, compacted granite).

Objective Two

Develop pathways for multiple uses and to multiple destinations.

Recommendations

1. Identify types of pathway uses and users through the planning process.
2. Provide pathway connections to historic and cultural facilities.
3. Provide connections to local and regional parks.

Objective Three

Promote health and environmental benefits.

Recommendations

1. Provide fliers at public facilities and commercial recreation businesses that promote the use of paths as a healthy exercise option for all ages and abilities.

2. Identify possible environmental benefits including wildlife preservation, water quality protection, storm water management, preservation of vegetation, and reduction of noise and visual pollution.

Objective Four

Provide amenities for non-motorized users.

Recommendations

1. Provide facilities such as maps, restrooms, parking, trash facilities, and water fountains at key locations.
2. Require developers to include bike racks, sidewalks, and safe pedestrian connections through ordinance provisions.
3. Provide educational kiosks/interpretive stations to promote the area's heritage and natural features.

Goal Two

Provide connections to enhance regional connectivity.

Objective One

Connect regional communities through an uninterrupted pathway system.

Recommendations

1. Partner with local governments within the region to facilitate the development of a regional non-motorized network.
2. Connect to the planned pathway along East Grand River, planned pathways within Green Oak, Genoa, and Hartland Township, and existing sidewalks within the Township and City of Brighton.
3. Connect to local and regional park and recreation areas.
4. Identify difficult crossing areas, including bridge crossings, steep grades, and other natural and man-made features and develop cost-efficient and environmentally sensitive options to extend pathway.

Goal Three

Implement a pathway network.

Objective One

Identify funding opportunities.

Recommendations

1. Coordinate with State and County agencies to apply for relevant transportation grants and state recreation and land acquisition grants through the Department of Natural Resources.
2. Develop public-private partnerships to generate funds toward pathway development.
3. Establish an escrow fund to dedicate development fees toward pathways.

Objective Two

Prioritize path segments.

Recommendations

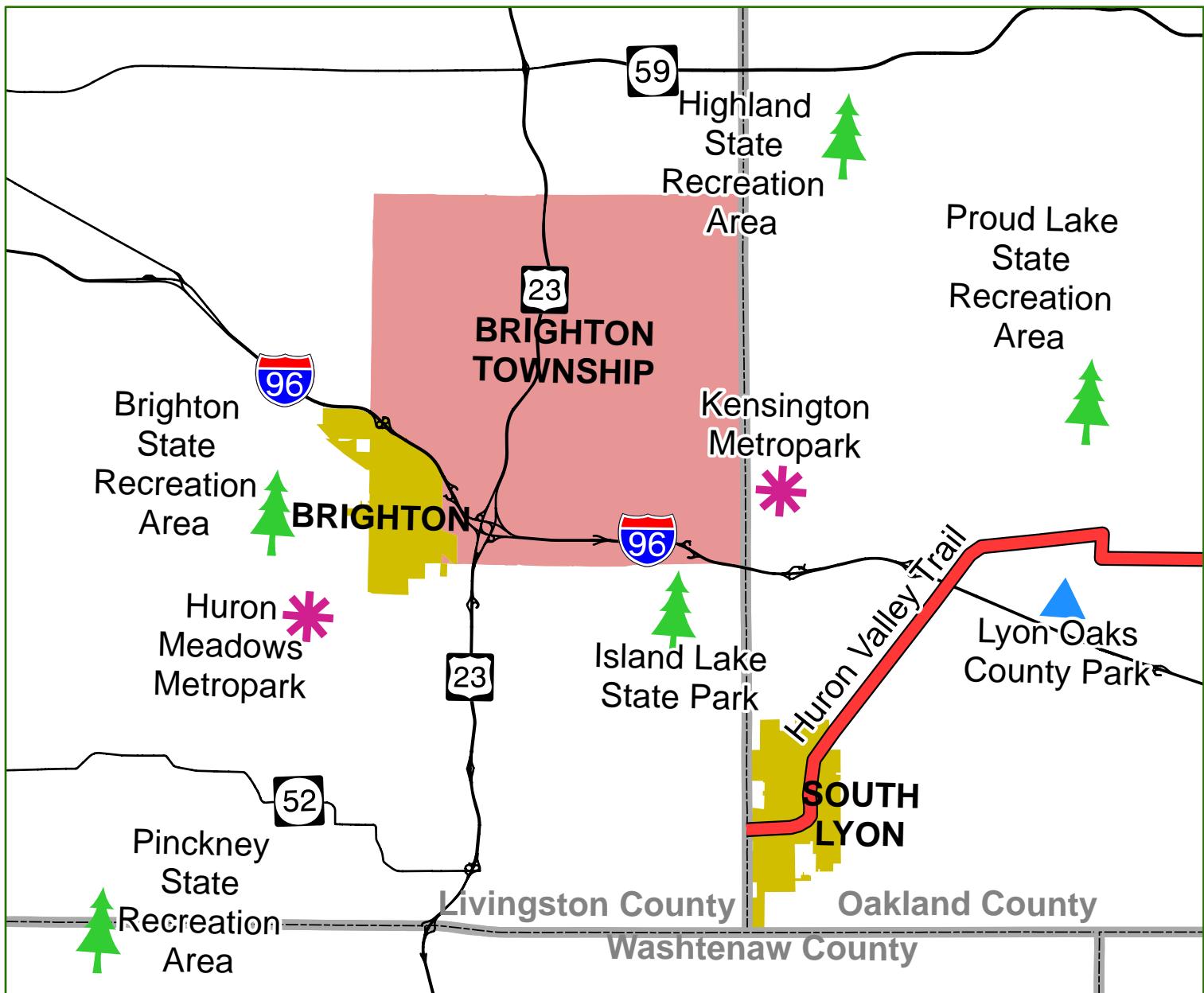
1. Involve local officials and the public in prioritizing pathway projects based on the availability of grants, timing of development plans, and extent of needed improvements.
2. Develop a sidewalk gap program that lists the locations of sidewalk/pathway connections.
3. Identify those areas within the Township where paths can be constructed with road improvement projects and development.

Objective Three

Establish construction and maintenance plan.

Recommendations

1. Create a steering committee to facilitate the design process and construction and maintenance plan.
2. Develop a public-private group that develops and shares the resources and technical assistance needed to construct and maintain local pathways.



Map Three

Regional Destinations

Brighton Township, Michigan

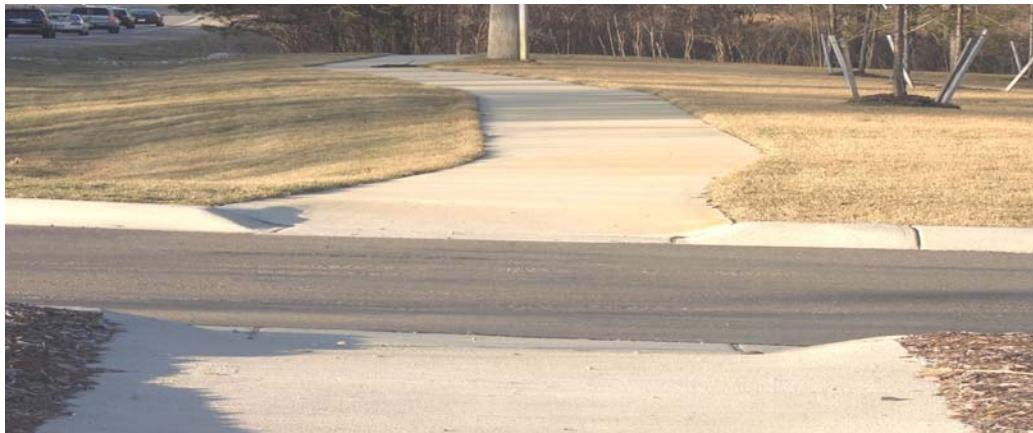
-  Michigan State Parks
-  Huron - Clinton Metro Parks
-  Oakland County Parks



Adopted September 2006

Data Sources:
Base Map - MCGI, Brighton Twp. Master Plan

0 0.5 1 2 3 4 Miles



Section Four Pathways Plan

The proposed network of pathways represents just over forty-one miles of pathways planned to connect residents to schools, parks, activity nodes and public facilities. This Section describes the specific locations, design and priority of segments for the proposed pathways.

All the proposed pathways in this Plan are designated for non-motorized use, which is defined to include use by pedestrians, bicycles, skates, scooters, skis, snowshoes, and any type of conveyance for persons with disabilities, but not mopeds, "push bikes," motorized bicycles, motorized scooters, or snowmobiles. No motor vehicles will be allowed on any of these pathways except as used by law enforcement officers and other authorized personnel in the course of their duties.

Locations

The locations of the proposed pathways collectively constitute a Township-wide network that reflects the results of the planning process. *Map Six Proposed Pathway System* depicts the ultimate location of recommended pathways. Pathways are proposed along major roadways, along roadways that connect to land use destinations, or segments that complete a continuous loop. Pathways are proposed only on one side of roads throughout the Township. This was done in part to reduce the amount of pavement and help protect the natural character of the area. The locations are conceptual, and exact locations will be determined only after landowner negotiations and site specific fieldwork are completed. As a general rule, the majority of the pathways are proposed along the northern and eastern sides of the road with a few exceptions as follows:

Brighton Township Pathways Plan

- Hilton: Hunter to Old U.S. 23 (South side)
- Larkins: Pleasant Valley to Kensington (South side)
- Old U.S. 23: Spencer to Green Oak Twp. (West side)
- Van Amberg: Newman to Spencer (West side)

Determination as to which side of the road pathways should be located was based on an inventory of each of the road segments. Site constraints were evaluated including the presence of steep slopes, wetlands, lakes, existing vegetation, drain crossings, incompatible uses, destinations, and presence of existing pathways.

Each proposed pathway should be located for public use on existing public right-of-way or public road easements. Where the existing right-of-way (ROW) or easements are insufficient, pathways should be placed on rights-of-way or easement corridors acquired from willing landowners, who may grant or sell a piece of property, an easement, or a license for use. No trails are proposed on private property without a landowner's consent. Where pathways are proposed within existing Road ROW or easements, all projects will require permitting through the Livingston County Road Commission.

Design

While the specific design of the pathways may vary, all of the paths are proposed to be off-street multi-use paths. This allows for maximum usage by a wide variety of user groups, ranging from birdwatchers to bicyclists and from young schoolchildren to senior citizens. Unfortunately trails are not always easy to construct, and pathway corridors are often very difficult to acquire. Therefore multiple-use pathways can often provide the greatest benefit to the most users. While no roads were designated specifically for on-street bike lanes, if the opportunity arises and demand for additional space for bicyclists becomes apparent in the future, the Township should consider separate bike lanes where appropriate. This would require close coordination with other road improvements conducted by the Livingston County Road Commission.

Designing and constructing non-motorized systems is often as complicated as building roads. There are a number of agencies that must be involved in the planning and design process and multiple issues need to be considered and resolved. The following design guidelines and other considerations provide guidance for proposed pathways within Brighton Township. These are intended as a guide only, although they are based on standards established by the American Association of State Highway and Transportation Officials (AASHTO), and other state agencies and non-motorized organizations. Regardless of the type or location of a pathway, users should expect a safe, user-friendly, and accessible system.

Design Guidelines. Nearly all accepted design guidelines have exceptions, as dictated by local conditions, community desire, changing trends, intensity of use, and many other factors. Similarly, these design guidelines allow for flexibility in dealing with site-specific issues. In general, pathways shall be placed one foot inside the future ROW line (see *Figure Seven Typical Pathway Cross Section*). Where necessary to avoid existing natural features, the pathway location can be altered.

- **Off-Street Multi-Use Paths/Sidewalks.** These pathways are physically separated from the adjacent roadway and are suitable for walkers, joggers, skaters, and others, as well as children and casual bicyclists. The multi-use paths should have an eight foot minimum width, and ten feet preferred, in order to safely accommodate travelers in each direction. They are to be paved with asphalt and must be separated from roadways by ten feet of open space or landscaping. If this separation is not feasible, the paths must be separated by a five foot horizontal separation or a physical barrier (concrete divider and railing minimum of three feet high) from motor vehicle traffic.

In more urban areas near the City of Brighton, such as the Old U.S 23 south of Hilton and Grand River, sidewalks are recommended. Sidewalks are typically five feet wide and constructed of Portland cement concrete on a sand base (See *Figure Seven Typical Pathway Cross Section*).



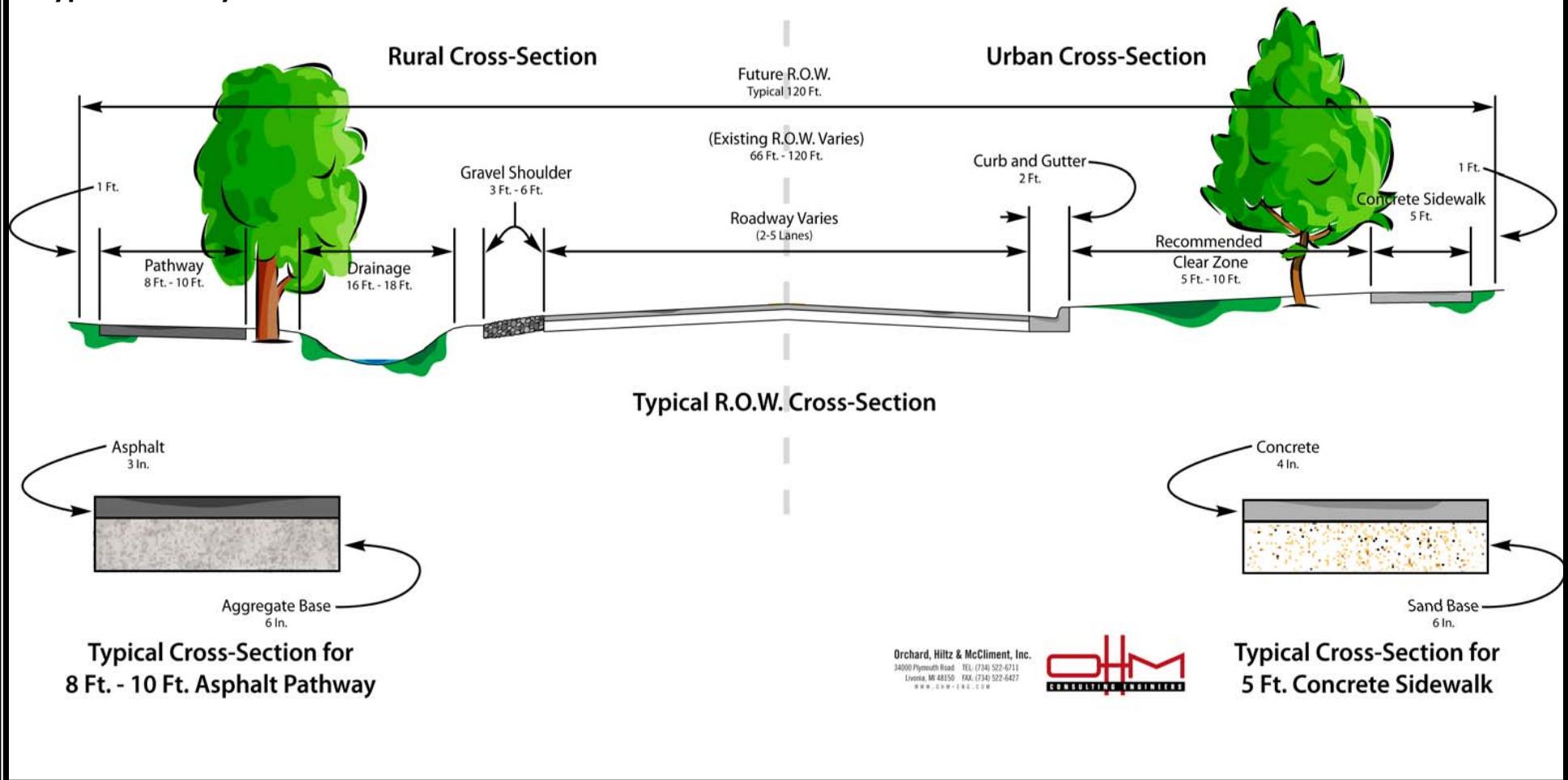
Certain trails as identified by the Township, along predominately residential or rural roads, may be unpaved trails at first, consisting of a compacted surface such as crushed stones or rock, with the expectation that they will later be upgraded if desired and as funds become available. This will serve to provide a route sooner than expected in areas where safety or lack of connections exists. The Township should be cognizant of maintenance and longevity of gravel paths, at the same time recognizing that these are not intended to be long-term paths.

The mix of user types on multi-use paths is not without problems and can result in conflicts between different users. However, when design treatments, such as the ones listed below, are

employed to address these potential conflicts, the majority of problems can generally be avoided.

Figure Seven

Typical Pathway Cross Section



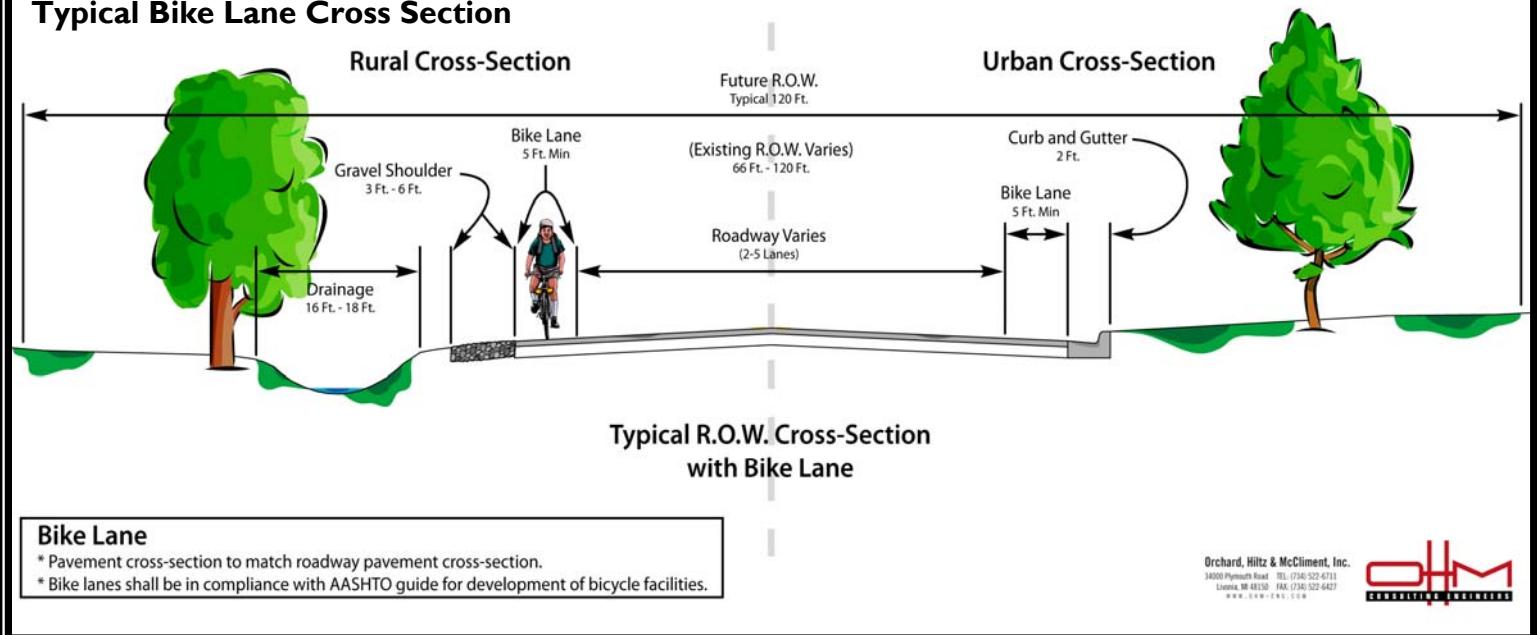


- Horizontal and vertical alignment to ensure clear sight lines.
- Avoid view obstructions at edges of the paths by placing signs, poles, utility boxes, and other elements away from the edge of the path and using low-growing shrubs and groundcovers or high-branching trees.
- Use bicycle speed limits.
- Use delineation and separation treatments such as colored paving, textured paving, pavement markings, and signing.
- Sign and mark a four-inch wide solid line at the center of the path as well as edge lines when curves with restricted sight distances are experienced.
- **On-Street Bike Lanes.** Several design features of roadways can be made more compatible to bicycle travel including bicycle-safe drainage grates, pavement textures, sight distances and signal timing and detector systems. All of these elements should be designed with the bicyclist in mind if the road corridor is to be shared safely and effectively. However, the most critical variable affecting the capability of a roadway to accommodate the bicycle is road width. Two ways to provide adequate road width for both vehicular and bicycle travel are as follows:
 - **Bike Lane Striping.** A striped bike lane is a cost-effective means to safely provide a designated area of the road for bicycles. Bike lanes should be one-way facilities and carry bicycle traffic in the same direction as adjacent motor vehicles. A bike lane width of five feet is recommended and should only occur on the right-hand side of the travel lane. A smooth riding surface is necessary as well as drainage that is bicycle friendly. Bike lane pavement marking can be designated at the edge of the travel lane with a four-inch solid white line. Bike lane pavement marking should never extend through the intersection and never cross pedestrian crosswalks (See Figure Eight Typical Bike Lane Cross Section).



Figure Eight

Typical Bike Lane Cross Section



- **Paved Shoulders.** Roads are often designed with a wide shoulder to enhance the life of the road, facilitate drainage and maintain adequate sight distances. Paving of these shoulders is an effective means to prevent edge deterioration of the road surface as well as accommodate bicycle travel.

Other Considerations. In addition to the design guidelines and cross-sections, a variety of other issues must be considered during the design and implementation of a pathways system.

- **Barrier Free Accessibility.** The Americans with Disabilities Act has established guidelines to provide barrier free accessibility at all public facilities. It is important to provide access to the pathway system according to these guidelines so that all residents can enjoy the paths in a safe manner. As each path is developed it should be designed to provide barrier free accessibility.
- **Materials.** Hard, all-weather asphalt or concrete surfaces are preferred over those of crushed aggregate, sand, or clay which provide a much lower level of service and require higher maintenance. Pavements should be machine laid and soil sterilants should be used where necessary to prevent vegetation from erupting

through the pavement. Asphalt pathways shall have a suitable aggregate base for longevity, and concrete sidewalks shall have a sand base.

Crushed stone or rock provides a smooth, firm surface that may be suitable for trails along rural residential corridors. Clay-gravel mixtures provide a trail surface that approaches asphalt in consistency and helps reduce the spreading seen on gravel only trails. Crushed limestone is similar to gravel surfaces and is generally rolled to provide a smooth surface suitable for most uses, but must be graded regularly to maintain an even tread.



- **Signage.** Standard and consistent signage is an essential element for a successful pathway system. Signage and way-finding can offer educational and/or interpretive information and provide directional, informational, awareness, or warning messages. All signs must conform to the "Manual on Uniform Traffic Control Devices" (MUTCD), the Brighton Township Sign Ordinance, and be coordinated with the Livingston County Road Commission and/or MDOT. All bikeway signing and striping plans should also be reviewed by a traffic engineer and coordinated and approved by the applicable road agency.



- **Roadway Crossings.** Roadway crossings should be made at roadway intersections to make use of traffic control devices such as signals or stop signs. Where crossings are proposed between road intersections, specific advanced warning signage shall be provided. In most cases, the crossing is accomplished by means of a signed and striped crosswalk. Zebra-style crosswalks are recommended as having the highest visibility to motorists, and are required at mid-block crossings. All roadways and driveway crossings requiring ramps shall be built in accordance with ADA requirements.



- **Pathway Amenities.** Pathway amenities, such as benches, bicycle racks, drinking fountains, waste receptacles, and trail information should be provided, as reasonable, along the pathways to enhance the pathway experience.

Priorities

As previously stated, this Plan represents a long-term vision that may not be fully implemented for over twenty years or more. The proposed pathways have been evaluated in order to determine their priority within the development of a cohesive pathways system. Evaluation criteria used to justify each segment's priority include:

- Connection to schools
- Connection to parks
- Connection to activity nodes
- Connection to public facilities
- Timing with planned road improvements
- Environmental impacts
- Availability of right-of-way
- Connections to existing sidewalks
- Concentration of population
- Proximity to the City of Brighton
- Existing road material: gravel or pavement
- Cost

As a result of the above evaluation, four priorities, or phases, were developed to help guide the order of pathway development. Again, the development of the pathway along East Grand River was not included in the priorities, and was classified as "planned" as installation of the sidewalk/pathway is expected in 2007. All of the priorities have an anticipated range of time that is recommended for installation of these segments; however, these are broad ranges. A number of variables could change the order of development including funding, feasibility, public involvement, and overall community priorities.

All of the pathways are proposed on public roads. The Township encourages the development of pathways on private roads to connect to the overall system. Specifically, High Pointe is the main road into Kensington within the Township. The Township should work with the Huron Clinton Metro Park to develop a trail from Kensington Road into the park. In addition, Spencer Road terminates at the edge of the park, and a non-motorized entrance at this location could link Township residents to the Kensington pathway system and consequently the Island Lake paths and the Huron Valley Trail.

Priority One. Pathways considered the most urgent to construct, these paths are concentrated around the southwest portion of the Township, near the City of Brighton. In addition, segments that provide connections to the planned East Grand River pathways were considered high priority to provide better access over I-96 for residents. It should be noted that MDOT has indicated their plans to reconstruct the Kensington bridge over I-96 in 2009 and has indicated that the bridge can be designed to accommodate additional space for non-motorized use if the pathways exist at both ends. Almost ten miles of pathways make up the Priority One pathways, consisting of:

- Grand River: Hilton to Hacker (East side)
- Hacker: Hyne to Grand River (East side)
- Hilton: Grand River to Hunter (South side)
- Hilton: Hunter to Old U.S. 23 (North side)
- Kensington: Larkins to East Grand River (East side)
- Kensington: Spencer to Larkins (East side)
- Kensington: Buno to Spencer (East side)
- Kensington: Jacoby to Buno (East side)
- Old U.S. 23: Hilton to Spencer (E) (East side)
- Old U.S. 23: Spencer (E) to Spencer (W) (West side)
- Old U.S. 23: Spencer to Grand River (West side)
- Pleasant Valley: Larkins to Grand River (East side)
- Spencer: City of Brighton to Old U.S. 23

Priority Two. Phase Two pathways are pathways that are considered important to connect residents to key land use destinations including schools, Township Park, and to the Grand River and Old U.S. 23 corridors. Nearly nine miles of Priority Two pathways are estimated to develop consisting of the following segments:

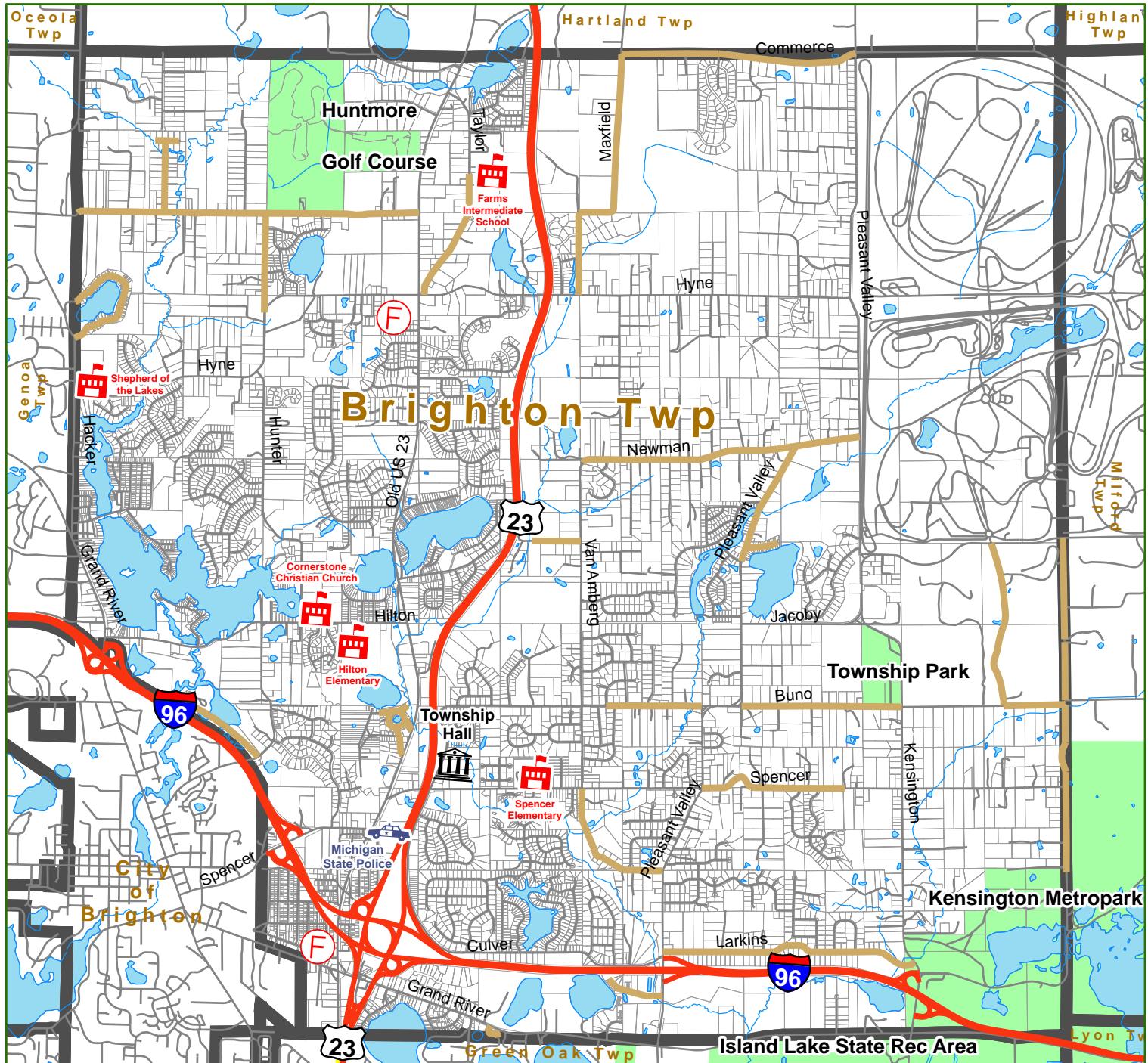
- Buno: Kensington to Township Park (North side)
- Buno: Spencer to Township Hall (East side)
- Old U.S. 23: Hartland Twp. to Hyne (West side)
- Old U.S. 23: Hyne to Hilton (East side)
- Old U.S. 23: Grand River to Green Oak Twp. (West side)
- Pleasant Valley: Spencer to Larkins (East side)
- Spencer: Old U.S. 23 to Buno (North side)
- Spencer: Buno to Van Amberg (North side)
- Spencer: Van Amberg to Pleasant Valley (North side)
- Spencer: Pleasant Valley to Kensington (North side)
- Taylor: Old U.S. 23 to schools (North/East sides)

Priority Three. Priority Three pathways are intended to make the pathways system more comprehensive by making it accessible to more residents. The Priority Three pathways, making up a little more than seven miles, consist of:

- Hyne: Hacker to Hunter (North side)
- Hyne: Hunter to Old U.S. 23 (North side)
- Hyne: Old U.S. 23 to Pleasant Valley (North side)
- Kensington: Pleasant Valley to Jacoby (East side)
- Pleasant Valley: Hyne to Kensington (East side)

Priority Four. The final segments to complete the comprehensive pathways system make up the fourth and final priority. The Priority Four pathways, if developed, make up just over twelve miles including:

- Buno: Pleasant Valley to Township Park (North side)
- Culver: Spencer to Pleasant Valley (East/North side)
- Hunter: Hyne to Hilton (East side)
- Larkins: Pleasant Valley to Kensington (South side)
- Newman: Van Amberg to Pleasant Valley (North side)
- Pleasant Valley: Commerce to Hyne (East side)
- Pleasant Valley: Kensington to Newman (North side)
- Pleasant Valley: Newman to Jacoby (East side)
- Pleasant Valley: Jacoby to Buno (East side)
- Pleasant Valley: Buno to Spencer (East side)
- Spencer: Kensington to Kensington Park (North side)
- Van Amberg: Newman to Buno (West side)
- Van Amberg: Buno to Spencer (West side)



Map Four

Road Conditions

Brighton Township, Michigan

- Unpaved Public Roads
- Paved Public Roads
- Township Hall
- School
- Fire
- Police
- Parks



Adopted September 2006

Data Sources: Roads - OHM
Base Map - MCGI, Brighton Twp. Master Plan

0 0.25 0.5 1 1.5 2 Miles



LSL Planning, Inc.



Section Five Implementation

The Brighton Township Pathways Plan is a long-term vision for a connected non-motorized network within Brighton Township and as part of the regional system. Implementation of this vision will require effort on the part of multiple agencies, departments, and organizations. Pathway systems are not implemented overnight and this Plan is intended to provide a foundation and vision to reference as Brighton Township continues to develop. The implementation strategies contained on the following pages are actions that will serve to move the creation of a connected, pathways system closer to reality.

Construction

The Proposed Pathways Map shows the network that is to be created, but it is not intended to define the exact route of every pathway. Further research and negotiations on property ownership and other issues will be needed to determine the final alignments, which should be established in accordance with this Plan. The pathway system should conform to national standards for safety while reflecting the unique character of Brighton Township. Pathways should be convenient, aesthetically pleasing, and beneficial to the general quality of life in Brighton Township and should complement the road system.

Utilities. Because various construction activities, especially the digging and filling of utility trenches, can affect pathways, the Township should require utility, construction, and excavation companies to repair any pathway torn up for utility work, restoring the pathway to its original condition or better. The installation of utilities in pathway

corridors is generally encouraged, except where it would cause undue environmental damage or permanently impair use of the path.

Environmentally Sensitive Areas. The presence of wildlife is part of the heritage and charm of the region, and the protection of wildlife habitat and environmentally sensitive areas is an important value for many area residents. The benefits to the community of well-designed pathways usually outweigh their impacts on wildlife, but in order to minimize any negative effect on critical habitat, the following recommendations should be implemented during pathway construction:

- The final location of the pathways should be situated to minimize tree removals.
- Any pathway near a water body shall be constructed so as not to adversely affect the water quality or riparian vegetation.
- Pathways shall not be routed through the middle of large undisturbed areas of natural vegetation, but shall be located on the edge of such areas or in places that have already been disturbed by human activities.
- Pathways should meander along the road side to preserve larger, quality trees and preserve the greatest amount of vegetation possible.
- When any pathway is planned for a designated wetland area, the Michigan Department of Environmental Quality (MDEQ) must be contacted to determine the best way to cross or mitigate the wetland.

Figure Nine
Estimated Cost per Mile for Pathways
(in 2006 Dollars)

Surface Material	Cost per Mile	Life Span
Granular Stone	\$175,000	10 years
Asphalt	\$275,000	15-20 years
Concrete	\$185,000	20+ years
Boardwalk	\$2,400,000	10-15 years
Wood Chips	\$95,000	Short-term

Source: OHM

Cost. Implementation of the Pathways Plan is envisioned to take many years, however the planning of the network is an ongoing effort. A major consideration influencing the implementation of the Pathways Plan is cost. Cost will influence the type of materials and construction, the phasing of the improvements and the potential funding sources. *Figure Nine* provides a general rule of thumb for construction costs for pathways and *Figure Ten* provides a summary of anticipated costs for implementation. A more detailed description of

the costs is included in *Appendix B*. The proposed costs are a starting point, more detailed engineering design, analyses and site-specific design data must be collected as part of a more detailed design phase and prior to funding requests being submitted. Segments within Priority One have been further prioritized to guide the order of development. Cost estimates are not included for Priority Four as these segments are

Brighton Township Pathways Plan

not anticipated to be developed for many years, if ever. Estimates are in 2006 dollars, therefore, future priorities will likely cost more due to inflation. It should be noted that Township funds allocated towards pathway development and maintenance should not exceed the funds allocated to road improvements or paving nor should the linear feet of pathway development exceed the linear feet of road improvements in any given year.

Figure Ten
Cost Estimates

Road	Segment	Cost
Priority One (9.85 Miles)		
1 Kensington	Larkins to Grand River	161,000
2 Kensington	Spencer to Larkins	395,000
3 Old US 23	Spencer to Grand River	310,000
4 Old US 23	Spencer (E) to Spencer (W)	57,000
5 Old US 23	Hilton to Spencer	426,000
6 Hilton	Hunter to Old U.S. 23	204,000
7 Hilton	Grand River to Hunter	752,000
8 Grand River	Hacker to Hilton	122,000
9 Hacker	Hyne to Grand River	292,000
10 Kensington	Buno to Spencer	211,000
11 Kensington	Jacoby to Buno	174,000
12 Spencer	City of Brighton to Old U.S. 23	138,000
13 Pleasant Valley	Larkins to Grand River	229,000
Priority One Total		3,471,000
Priority Two (8.74 Miles)		
Buno	Kensington to Township Park	67,000
	Spencer to Township Hall	52,000
Old U.S. 23	Hartland Twp. to Hyne	492,000
	Hyne to Hilton	277,000
	Grand River to Green Oak Twp.	208,000
Pleasant Valley	Spencer to Larkins	319,000
Spencer	Old U.S. 23 to Buno	53,000
	Buno to Van Amberg	382,000
	Van Amberg to Pleasant Valley	228,000
	Pleasant Valley to Kensington	375,000
Taylor	Old U.S. 23 to School	180,000

Figure Ten
Cost Estimates

Road	Segment	Cost
Priority Two Total		2,633,000
Priority Three (7.28 Miles)		
Hyne	Hacker to Hunter	360,000
	Hunter to Old U.S. 23	709,000
	Old U.S. 23 to Pleasant Valley	895,000
Kensington	Pleasant Valley to Jacoby	326,000
Pleasant Valley	Hyne to Kensington	237,000
Priority Three Total		2,527,000
Source: OHM (2006 dollars)		

Escrow Accounts. Brighton Township's Zoning Ordinance requires all new development along roadways identified in the Master Plan as Pathways Corridors to install pathways or sidewalks in front of the site. The downfall to this approach is that in the short term there will be short segments of pathways in front of individual sites with little or no connectivity to other areas in the Township. In the long term, segments will begin to be linked up, but there will be gaps in the system.

In order to increase the connectivity, and therefore the usage of pathways, the Township should permit applicants to contribute funds to an escrow account in lieu of development of a pathway in front of their property for developments located along roadways with pathways identified as Priorities Two, Three, or Four and for those located on roadways with pathways planned on the opposite side of the street. An applicant should be permitted the option to deposit with the Township a sum of money equivalent to the actual costs of construction of the path, including permitting, engineering, inspection costs, and inflation, as determined by the Township Engineer, which will be used to fund pathways that are located within higher priority areas or on the other side of the road.

For example, if a site on the south side of Hyne were to develop, the applicant would have the option to develop the segment of pathways in front of their site or put money into an escrow account to fund pathway development of a higher priority. If a site were to develop on the north side of Hyne, because pathways are not proposed on that side of the road, the applicant would contribute funds to the escrow account to fund the development of pathways where recommended by this Plan.

To start the implementation of escrow accounts, the Township will need to establish a separate fund to be used exclusively for pathway development. In addition, the Zoning Ordinance should be revised to include provisions for the escrow account.

Operation and Maintenance

Planning for the installation is just the beginning when planning for pathways. On-going maintenance is essential in assuring the safety and continued life of the pathways system. Repairs may be as minor as fixing a pothole in a path or as major as the complete renovation of an entire pathway section, however, it is important for the Township to have a plan for how the paths will be maintained and who is in charge of overseeing its maintenance.

Responsibility. Before construction of a pathway, the entity to be responsible for its maintenance should be established. Typically, that entity will be the owner of the pathway corridor or right-of-way, which is the Livingston County Road Commission. The County has indicated that they do not have the funds or man power to handle the day to day maintenance of pathways. Many communities, by ordinance, require that property owners are responsible for the maintenance of the pathways across their respective frontage. Since only one side of the road will be proposed, this could be a contentious requirement.

The Township does not have a Department of Public Works, Recreation Department, or another appropriate Department which can oversee pathway maintenance. The Township Manager and Planning and Zoning Department should be involved in the planning for pathways and preparation of grant applications, however, they do not have the equipment or man power to handle day-to-day maintenance.

The Southeast Livingston County Recreation Authority (SELCRA) serves the Brighton area, including Brighton Township and maintains many of the areas' parks and athletic fields. The Township is working with SELCRA in order to have SELCRA take over maintenance for the planned Township Park. The Township should work with SELCRA to develop an agreeable arrangement to have SELCRA handle many of the routine maintenance tasks as described below.

In addition to SELCRA, volunteers from trail-advocacy organizations should monitor the pathway system to report problems and necessary maintenance issues to the Township. In addition, volunteer efforts, by groups such as the Boy Scouts of America and various

trail users, may be used for simple maintenance tasks. An adopt-a-trail program can be instituted as one way to assist with litter cleanup.

Regardless of the group that will ultimately be responsible for the pathway maintenance, it is recommended that a reserve fund be established to cover costs of future maintenance. Since many of the pathways will be asphalt with typical life spans of ten to fifteen years, it would be recommended that the Township deposit reserve funds equivalent to approximately 3% of the value of the current pathway infrastructure annually.

Routine Maintenance Tasks. Routine maintenance tasks are all directed at extending the life expectancy of trails, providing a high quality product to trail users, and ensuring the safety of trail users. Routine maintenance and inspection of the trail system also minimizes repair and renovation costs.

- **Pathway Inspection.** Pathways must be inspected on a routine basis. User safety should always be the primary consideration of any inspection. Potential safety problems should always take precedence when scheduling maintenance. Vandalism left unattended encourages more of the same and should likewise be a high priority for maintenance.
- **Mowing and Pruning.** Pruning is performed for the safety of the trail user and to protect the trail and other assets located along the trail. Proper pruning includes periodic mowing of the areas along side of the paths.
- **Leaf and Debris Removal.** Keeping the trail surface clean is one of the most important aspects of trail maintenance. Mud and other sediment should be removed along with fallen leaves and branches to ensure the safety of users and to increase the life expectancy of the trail itself.
- **Snow and Ice Removal.** Decisions should be made early on as to whether trails will be cleared of snow and ice. The Township may opt to “close” the pathways during the winter with appropriate signage. If paths are to remain open during the winter, snow and ice should be removed, particularly from trails used by children going to and from school sites.
- **Repairs to Signs and Amenities.** These repairs may include signs, benches, waste receptacles, etc. These amenities need to be kept in safe and aesthetically pleasing condition in order to maintain the quality of the paths.

Landowner Relations. Respect for private property rights is an essential aspect of the Pathways Plan. Pathways are to be constructed or designated for public use. The Township should invite the cooperation of private property owners and the expression of their opinions and concerns. Furthermore, any pre-existing rights held by adjacent landowners concerning drainage, ditch maintenance, crossing and access, and other matters will continue to be honored.

Trespassing and liability are sometimes concerns of property owners adjacent to trails. While trespassing from pathways, just like trespassing from roadways, cannot absolutely be prevented, signs can be posted reminding users to “Please respect private property by staying on the trail.” Access will not be provided from a pathway onto private property. However, if landowners next to a pathway want to create their own access paths to connect to the pathway, they are encouraged to do so.

The question of liability cannot be solved by this or any other master plan; however, it should be emphasized that the potential liability incurred by property next to a pathway is no greater than that experienced next to a roadway. Placement in public ROW's should appease private property owners concerns regarding liability.

Funding

Potential funding sources for non-motorized planning, design and construction change and evolve on a regular basis. Understanding available funding programs requires continuous monitoring. The funding sources described below serve as a reference and resource, to assist the Township when identifying potential funding options.

General Fund. In an effort to accelerate the development of pathways, provide adequate local matches for grant applications, and to cover basic maintenance costs, the Township should annually set aside monies in the general fund to be used for pathways.

Developer Escrow Fund. As discussed above, developers should be allowed to deposit funds to an escrow account instead of constructing pathways across the frontage of their development. This fund will then be used for the construction of new pathways.

Planned Road Improvements. As evidenced by the planned Grand River pathway, coordinating the timing of the design and construction of pathways with planned road improvements reduce costs and may be provided for by Michigan Department of Transportation (MDOT) and/or the Livingston County Road Commission (LCRC). The

Brighton Township Pathways Plan

Township should maintain consistent communication with MDOT and LCRC to ensure that the planned pathways are accommodated into any road improvements.

Safe Routes to School Program (SRTS). The SRTS Program provides Federal-aid highway funds to State Department's of Transportation to enable and encourage children to walk and bicycle to school, to make bicycling and walking to school a safer and more appealing transportation alternative, and to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools

(<http://www.saferoutesmichigan.org/>)

Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA-LU). SAFETEA-LU provides funding for numerous types of projects that support the enhancement of transportation facilities and promote safe and efficient multi-modal transportation methods. This is a reimbursement program that originally comes from the federal level and is administered by the Michigan Department of Transportation (MDOT). Under this program, the Township is eligible to apply for funding to implement non-motorized pathway priorities. (<http://www.fhwa.dot.gov/safetealu/>)

Michigan Natural Resources Trust Fund (MNRTF). MNRTF provides funding assistance for the purchase of land (or interests in land) for recreation or protection of land because of its environmental importance or scenic beauty, and the development of recreation facilities. This assistance is directed at creating and improving outdoor recreational opportunities and providing protection to valuable natural resources. (http://www.michigan.gov/dnr/0,1607,7-153-10366_37984_37985-124961--,00.html)

Land and Water Conservation Fund (LWCF). LWCF provides funding assistance for communities to acquire and develop land for outdoor recreation. The minimum award is \$15,000 and the maximum of \$500,000 with a 50% local match. The eligibility criterion emphasizes preservation of natural resources. This grant is ideal for land acquisition. (<http://www.nps.gov/lwcf/>)

Community Foundation for Southeastern Michigan GreenWays Initiative. The Community Foundation for Southeastern Michigan solicits, receives and manages charitable contributions from individuals, families, corporations, other foundations and nonprofit organizations. These financial resources are used to make grants that benefit the quality of life in the region. The GreenWays Initiative is a comprehensive effort aimed at expanding and enhancing the region's natural landscape and helps local

governments and nonprofit organizations construct and implement greenways projects. Two types of grants are offered: (www.cfsem.org)

- **GreenWays Predevelopment Grants.** Predevelopment activities such as engineering studies, design, activities to increase collaboration, final planning work, etc.
- **GreenWays Land Grants.** For the physical creation of greenways, including in-ground construction, renewal of habitat, planting of native species, trail construction, waterfront restoration, etc.

The Trust for Public Land (TPL). The TPL is the only national nonprofit working exclusively to protect land for human enjoyment and well-being. TPL helps conserve land for recreation and spiritual nourishment and to improve the health and quality of life of communities. TPL's works with landowners, government agencies and community groups to develop greenways and conserve land for close-to-home recreation.

(<http://www.tpl.org/>)

DALMAC Fund. Promoting bicycling in Michigan, the DALMAC Fund is administered by the Tri-County Bicycle Association based in Lansing. The DALMAC Fund supports safety and education programs, bicycle trail development, state-wide bicycle organizations, and route mapping projects. (<http://www.biketcba.org/dfund/dfund.html>)

KODAK Grants Program. Kodak, The Conservation Fund, and the National Geographic Society, provide small grants to stimulate the planning and design of greenways in American communities. Grants may be used for activities such as: mapping, ecological assessments, surveying, conferences, design activities, developing brochures, interpretive displays, planning, hiring consultants, etc. Maximum grant is \$2,500, however, most grants range from \$500 to \$1,500. (www.conservationfund.org)

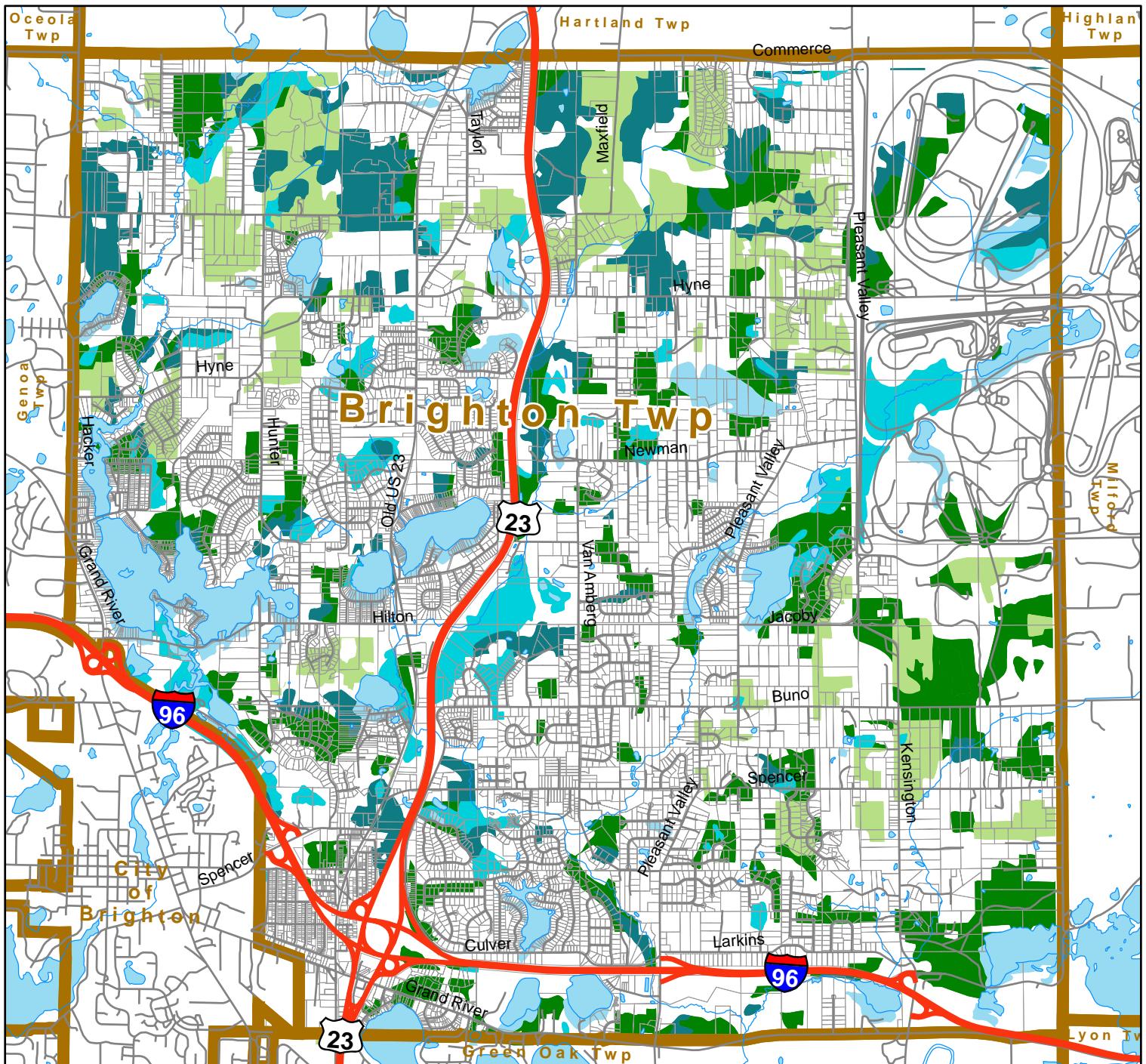
Non-Profit Groups. Organizations such as the Bikes Belong Coalition, which is funded and represented by the bicycle industry, awards grants of up to \$10,000 each to projects that seek SAFETEA-LU funding for bicycle facilities. Other non-profit organizations can provide support in terms of organizing fund drives to fund trail building. Fundraising efforts could range from sponsoring a "buy a bench" program for amenities, or a "yard sale" where people could purchase a symbolic "yard" of the pathway and have their name added to the donor list. A future permanent marker at each trailhead could list the name of the contributor, and the section to which they contributed. Once built, non-profit groups can support pathways through volunteer cleanup events and walk/ride events.

Special Assessment District. A Special Assessment District is a special district formed by a local government agency and includes property that will receive direct benefit from the construction of new public improvements, such as the installation of pathways.

Conservation Easements. A conservation easement is a method of preserving open space that is guaranteed through formal documentation. This technique can also be used to preserve open space if it is not feasible or practical for the Township to acquire the land. Rather than obtaining fee simple, or complete ownership, an organization or community can purchase or acquire by gift an 'easement' to the property.

Public-Private/Public-Public Partnerships. Reduced funding at the public and private sector has created a need for various partnerships between public and private entities as well as between two or more public entities to develop regional connections. Green Oak and Hartland Townships have both indicated interest in developing a comprehensive pathway along Old U.S. 23. The Township should maintain communication with these communities and pursue funding for this regional path.

Donations. Businesses, corporations, private clubs, community organizations, and individuals will often contribute to recreation and pathways to benefit the communities in which they are located. Private sector contributions may be in the form of monetary contributions, the donation of land, the provision of volunteer services, or the contribution of equipment or facilities.



Map Five

Natural Features

Brighton Township, Michigan

- Agricultural Land
- Non-Forested Wetlands
- Forested Wetlands
- Woodlands
- Water



Adopted September 2006

Data Sources:
Base Map - MCGI, 1995 SEMCOG, 2001 Tetra Tech

0 0.25 0.5 1 1.5 2 Miles



LSL Planning, Inc.

Map Six

Proposed Pathway System

Brighton Township, Michigan

Township Pathways

- Planned
- Priority A
- Priority B

Connections



Location



Path Located South/West of Road
(All other paths located North/
East of road)

Regional Pathways

- Existing
- Planned

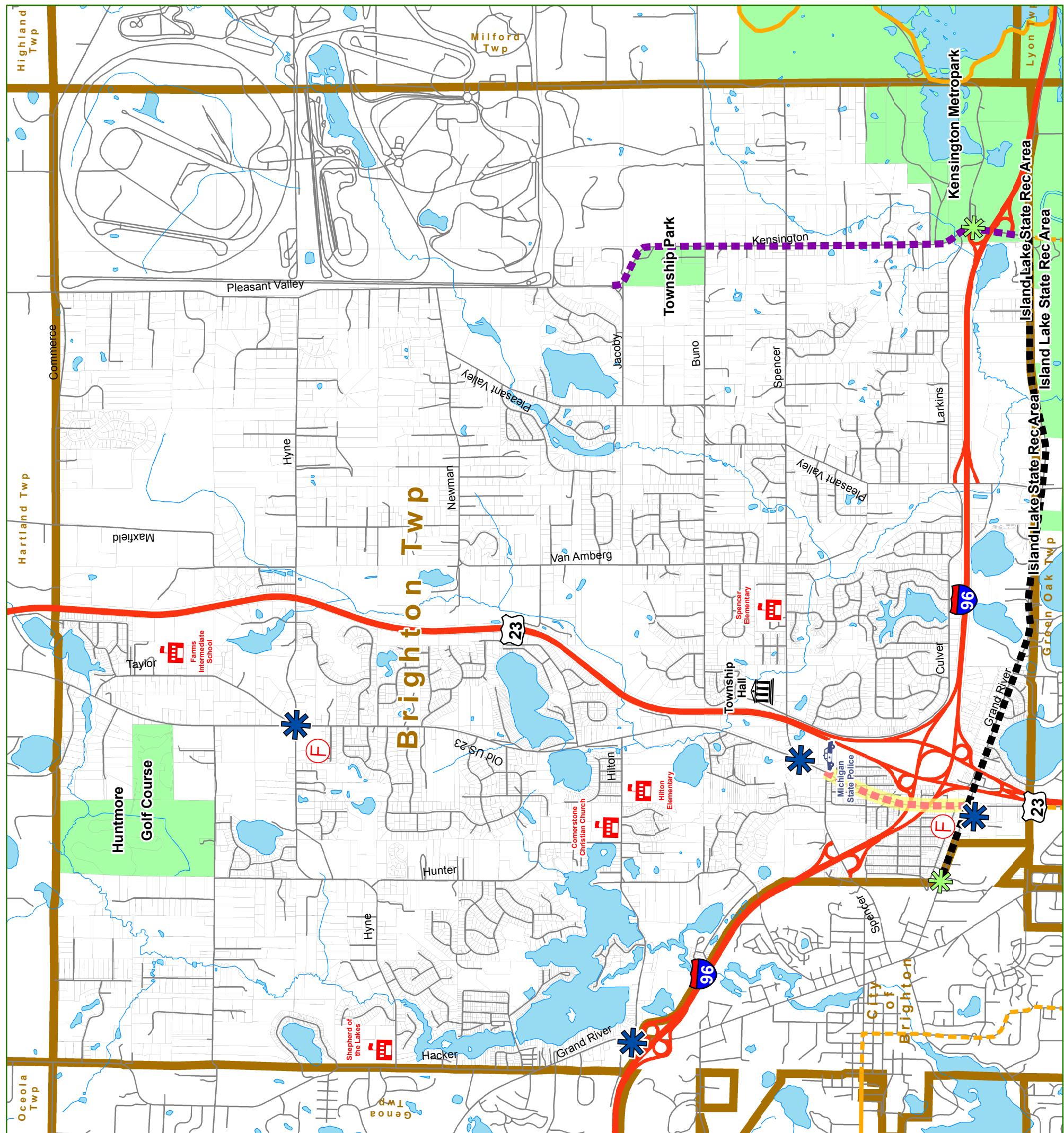
Destinations



Community Planning Consultants
Data Sources:
Base Map - MCGI,
Brighton Township
Pathways - Genoa Twp.
Southeast Livingston
Greenways Plan



Adopted September 2006
Revised November 2009





Acknowledgements

Pathways Committee

Kelly Mathews, Brighton Twp. Planner
David Murphy, Brighton Twp. Manager
Bud Prine, Brighton Twp. Supervisor
Tim Winship, Brighton Twp. Trustee
Julie Hall, SELCRA
Jill Scheuerle Thacher, Livingston Co.
Planning Dept.
Kim Hiller, Livingston Co. Road
Commission
Mike Goryl, Livingston Co. Road
Commission
Kari Andrews, MDOT
Lynne Kirby, MDOT
Steve Bower, MDOT

Planning Commission

Steve Holden, Chair
Gus Mitsopoulos, Vice Chair
Ron Doughty
Frank Grapentien
Gary Unruh
Tim Winship
Larry Herzinger

Township Board

Bud Prine, Brighton Township Supervisor
Ann Bollin, Brighton Township Clerk
Geri Harmon, Treasurer
Cathy Doughty
J. Michael Slaton
Tom Murphy
Tim Winship



LSL Planning, Inc.





Appendix A

Meeting Notes

**Brighton Township Pathways Plan
Kick Off Meeting
January 18, 2006
Pathway Committee Meeting Minutes**

In attendance:

Sara Schillinger, LSL Planning
Scott Weeks, LSL Planning
Julie Hall, SELCRA
Kelly Mathews, Brighton Township
Planner
Bud Prine, Brighton Township
Supervisor

Steve Bower, MDOT
Lynne Kirby, MDOT
David Murphy, Brighton Township Manager
Rhett Gronevelt, OHM
Jill Scheuerle Thacher, Livingston County
Planning Department

1. Introductions. Contact sheet is attached.

2. Scope of Project & Schedule

- a. Review of LSL & OHM work plan, goal is to have plan adopted by Township Board by June/July.
- b. MDOT plans to reconstruct Kensington & Pleasant Valley overpasses over I-96 in 2009. Kensington will be completely redone, whereas Pleasant Valley will just have resurfacing.

3. Master Plan Pathway Recommendations

- a. Review of pathways to be studied, as depicted in Map 10 of the Master Plan.
- b. Agreement to add segment of Kensington Road south of I-96 to connect to planned Grand River paths. Make this a high priority to connect the parks to Grand River.
- c. Remove Grand River from the study, as a plan has already been prepared for this corridor from the Brighton city limits to Kensington Road.
- d. Other corridors that should be considered: Larkins, Culver, Van Amberg and Newman.
- e. MDOT will not accommodate requests for paths unless they are already there/connect to somewhere. If the township has plans for it and has an identified funding source, MDOT more likely to include in construction. MDOT TSC can match 15-20%.
- f. The cost of construction of an overlay pathway on an existing bridge is roughly \$150 per sq. ft.

4. Focus Groups

- a. To be held at Town Hall, aiming for the afternoon of Wednesday, Feb. 22.
- b. Focus group #1: Neighboring communities and Livingston County Planning Department, possibly School Districts
- c. Focus group #2: User groups, bicycle enthusiasts, SELCRA, Lakes Committee, Neighborhood associations. Jill has an email list of people who may be interested, including Huron Trails group.
- d. Focus group #3: Technical group (to be led & planned by OHM) including MDOT, Livingston County Road Commission, Township Building Inspector

5. Public Meeting

- a. To be held at Fire Hall early March.
- b. Casual layout with information stations with brief informational presentation(s).
- c. In addition to notice in paper, should provide flyers at select locations, such as bicycle shops.

6. Other Items

- a. Look into DNR grants, \$ is available, connect Island Lake high point just south of Grand River to local destinations.
- b. Consideration of different users of paths, including horse riding.
- c. In order to qualify for MDOT funding, need to provide maintenance of paths, not sure if this includes snow removal or just repair.

7. Next Meeting. Aiming for the afternoon of Wednesday, Feb. 22, immediately following the focus groups.

Brighton Township Pathways Plan

February 22, 2006

Focus Group 1 & 2 Regional Paths & User Group Meeting Minutes

In attendance:

Sara Schillinger, LSL Planning
Scott Weeks, LSL Planning
Julie Hall, SELCRA
Evelyn Gallegos, Lakes Committee
Lesa Brookings, Green Oak

Jim Fackert, Friends of Green Oak Trails
Kelly Mathews, Brighton Township Planner
Mike Donnelly, Island Lake State Park
Joanne Stritmatter, Island Lake State Park

- Livingston Co. prepared a County regional map with a wish list of pathways 2 years ago, need to get copy.
- Off-road corridors are just as difficult to develop as roadside paths, example of railroad corridor in Green Oak, individually owned. Important to establish cooperative agreement up front.
- Need to investigate natural gas easement across Township, some thought one existed.
- Feeling that equestrian demands are fairly limited.
- Preference is for wide multi-use paths, separated from the road, generally 8-10 ft. in width.
- Use shoulder only when a separate path is not an option.
- Need to recognize opportunities to put paths in when roads are being improved or paved.
- Grand River pathway is a major first step.
- Pathway locations should take advantage of proximity to regional parks, connect to schools and parks first. Recommended to extend path west on Buno between Pleasant Valley and Kensington to provide route to the new Township park, and to extend the pathway from near the intersection of Hyne and Old US 23 north on Taylor Street to provide a route to the public school.
- Separate money is available for pathways to schools through the "Safe Routes to School" program.
- Pay attention to population density in choosing priority locations.
- In terms of connections to the south, Green Oak has not made Whitmore Road a priority, concentration is on west boundary, connection to City of Brighton through Ricket Road trail.
- Hamburg uses community groups to fundraise & provide light path maintenance, such as clean ups, "Friends of Lakeland Trails."
- Maintenance of paths will be crucial, SELCRA is concerned.
- Livingston County is just starting to develop parks.
- Need a regional authority to coordinate area-wide pathway planning efforts. SELCRA could possibly act as regional coordination body to apply for grants and administer funds.
- Livingston County Road Commission (LCRC) provides 3-4 feet paved shoulders on all new road reconstruction. Road Commission would not be agreeable to stripe on-street areas for bike lanes.
- Experience in Island Lake shows that on shoulder bike lanes are more hazardous than off-street paths.
- St. Clair County has guidelines, provide for both off-street paths and bike lanes.
- Need to analyze the types of users & nodes of parks, major employers, etc.
- Livingston Co. is open to bike lanes, but have never done it before.
- AASHTO requires 10 ft. paths for funding.

Brighton Township Pathways Plan
February 22, 2006
Focus Group 3 Technical Group Meeting Minutes

In attendance:

Rhett Gronevelt, OHM
Todd Scott, MMBA
Mike Goryl, LCRC
Nancy Krupiarz, MTOA

Lynne Kirby, MDOT
Jim Morse, Brighton Twp. Building Official
Kari Andrews, MDOT

- Most Pathways proposed in Livingston County Road Commission ROW (LCRC), might cross MDOT (Michigan Department of Transportation) ROW
- LCRC – no currently published design standards. AASHTO used as a guide.
- Most ROW along major roadways exists as 66'. Master Planned for 100 or 120. Should base pathway locations on Master Plan ROW. OHM has a copy of the ROW map.
- General Rule of thumb would be "The farther from the road, the better". General Plan is to place 1 foot inside ROW.
- LCRC ok with 8' or 10' wide pathways. 10' becomes hard to squeeze in ROW.
- It was questioned what LCRC does with their "1% for non-motorized Act 51 money". LCRC responded and confirmed it is spent on gravel roads.
- LCRC/MDOT confirmed no current plans for widening Pleasant Valley Road or I-96 Bridge.
- MDOT confirmed that the Kensington / I-96 Bridge is being reconstructed in 2009. If pathways exist at each end at the time of design (2007/2008), then MDOT will incorporate that into the design of the bridge. For this reason, this should be a priority area.
- No current MDOT plans for any bridgework over US-23
- Bike Lanes became a significant topic of discussion. LCRC confirmed that all new roadways are built with 3 – 4 foot paved shoulders. These often get used as bike-lanes. There was discussion regarding the use of the pathways for serious bikers, and the safety problems they present. Some discussion continued about the possibility of sidewalks and bike lanes as an option to a pathway.
- Discussed intentions to use 3" HMA (hot-mix asphalt) on 8" 21AA aggregate base for cross section on pathways, and 4" concrete on 6" Class II sand base for sidewalks.
- Pathways to be 8 or 10 feet in width, and preliminarily on one side of the road. Sidewalks to be 5 feet wide on both sides of the road.
- All ramps to be concrete with truncated domes.
- If wetlands or other natural features exist in ROW, LCRC will consider allowing use of Boardwalks.
- Maintenance was discussed. OHM to include recommendations for design life and capital maintenance estimates. Township must be responsible for maintenance for many funding opportunities. Consideration can be given to levy costs to frontage owners.
- Reference was made to St. Clair County's Pathways plan, and considering it for design information. <http://www.greenwaycollab.com/StClairNoMo.htm>
- Significant Discussion regarding funding opportunities:
 - ✓ DNR Trust Fund
 - ✓ CDBG (Community Development Block Grant)
 - ✓ Cool Cities Grants
 - ✓ RIFF RTP (???)
 - ✓ CMAQ
 - ✓ Safe Routes to Schools Grant

Brighton Township Pathways Plan
February 22, 2006
Pathway Committee Meeting Minutes

In attendance:

Sara Schillinger, LSL Planning
Scott Weeks, LSL Planning
Julie Hall, SELCRA
Kelly Mathews, Brighton Township
Planner

Lynne Kirby, MDOT
Kari Andrews, MDOT
David Murphy, Brighton Township Manager
Rhett Gronevelt, OHM

1. Focus Group Summary

- a. Due to the low turnout, the regional and user groups were combined into one focus group.
- b. At the end of the session the two focus groups combined to have a brief large group discussion, so clarifications and questions were answered at that time.
- c. Everyone present at the committee meeting was present at the focus group meetings.

2. Public Meeting

- a. Scheduled for March 15, 7-9pm at the Fire Hall.
- b. Casual layout with information stations with a brief informational presentation. Stations will include trail advocacy, types of paths, pathway location and prioritization.
- c. A notice in paper & flyer will be prepared, should locate at local bicycle shops.
- d. Need this meeting to educate as well as start forming “grass-roots” community support.
- e. A brief presentation will be prepared and should be shown to the Township Board prior to meeting to educate and build support.

3. Plan Contents and Format

- a. Distributed & reviewed the draft Table of Contents prepared by LSL
- b. Will be used as a base for the document
- c. OHM will provide costs associated with the pathways
- d. Funding options will be researched by LSL and provided in the document

4. Preliminary Goals

- a. Distributed & reviewed the draft goals and objectives prepared by LSL
- b. Will be used as a base for pathway recommendations
- c. Committee will review & get any comments to LSL

5. Next Meeting. Wednesday, April 26 at 3pm

6. Other Items. None

Brighton Township Pathways Plan
March 15, 2006
Survey Results

1. Do you agree that pathways will be beneficial to Brighton Township?

16 Yes

2 No, if no, why not?

- Too expensive, actual participation does not justify cost
- It doesn't improve the rural environment

2. What types of pathways would you most like to see in Brighton Township?

8 All off road multi-modal paths

8 Mixture of both off-road multi-modal paths and on-road lanes

1 All on- road bike lanes

3. Which one of the three do you think is the most important?

9 Provide Improvement Recreational and Transportation Opportunities within the Township through a Township-wide Pathways System

5 Implement a Pathway Network

2 Provide Connections to Enhance Regional Connectivity

4. Do you disagree with any of the goals, objectives, or strategies?

10 No, they generally cover it

5 Yes, I don't agree with:

- Violation of private property rights, also would ruin the rural atmosphere of this township
- The theory that everyone wants these pathways in their yard. They don't! 10' wide sidewalks are too wide. 3-5' would be sufficient
- 10' path too wide, major roads yes for pathway
- 10's too wide for this community. Share a smaller path and keep it "rural"
- Keep it limited
- Dirt paths and more of them
- Needs to be clearer
- Need to have limited pathways

Brighton Township Pathways Plan

5. Are there any locations that you think should to be added or removed from the DRAFT Proposed Pathway System Map?

These corridors should be *added* to the Map

- Add in routes that have adequate shoulders for road biking- enhance plan (e.g. Buno west of Van Amberg)
- Consider Corlett as a connection for Hyne and Newman
- Take path up Hacker to township line
- Should be limited

These corridors should be *removed* from the Map

- Spencer due to traffic
- Smaller Roads
- Keep Grand River and Pleasant Valley. Drop the rest due to expense to develop and maintenance issues.
- Hyne-Kensington, Pleasant Valley-Larkins

6. Which pathway segments are the most important to complete? (pick up to 5)

- 12** Those that lead to schools (Hilton, Spencer, Hyne, Hacker & Taylor)
- 12** Those that lead to parks (Kensington, Spencer, Old U.S. 23)
- 11** Grand River (north of City of Brighton)
- 8** Those that lead to activity nodes (Hilton, Spencer, Old U.S. 23 & Grand River)
- 8** Kensington
- 4** South U.S. 23 (South of Hilton)
- 4** Hyne (west of Old U.S. 23)
- 4** Pleasant Valley
- 3** Spencer
- 2** Middle U.S. 23 (Hilton to Hyne)
- 1** Hilton
- 1** Hyne (east of Old U.S. 23)
- 1** Others: **Hacker**

7. Are you willing to support a slight increase in taxes or millage in order to support the development of pathways?

- 10** Yes
- 3** Undecided
- 2** No

Brighton Township Pathways Plan

In the space provided below please offer any additional comments you may have.

- If we are family oriented community as we claim, we need to address the need for non-automotive transportation within the area immediately. It will foster families getting outside and increase fitness. This issue is mandated by the citizen's survey completed within the last 5 years.
- Provide accurate honest study of how many people actually use a pathway in a 24 hour period.
- Most of the residents who live along these roads do not want the extra traffic in their yards. Adding bike lanes on the main roads (the less busy ones, at least) could be beneficial. Anything a car could mistake for a road is too wide.
- We should promote volunteer efforts to start pathway work that removes obstacles to non-motorized traffic along proposed pathways. This would increase use and promote interest in a pathway system.
- Identify and consider locations throughout the Township that offer "spurs" into natural feature areas. Either paved or unpaved (hiking/mountain biking) or both. These offer additional features to the path and alternatives to riding all the way to major parks like Island Lake.
- Develop a north/south and east/west and leave everything else. Brighton Township doesn't seem like the place to plant more "huge" sidewalks.

Brighton Township Pathways Plan
April 26, 2006
Pathway Committee Meeting Minutes

In attendance:

Sara Schillinger, LSL Planning
Kelly Mathews, Brighton Township
Planner

David Murphy, Brighton Township Manager
Rhett Gronevelt, OHM
Dave Schroeder, OHM

1. Public Meeting Summary

- a. Summary of the exit survey responses-were a bit surprising to the group.
- b. Need for additional outreach due to low attendance.

2. DRAFT ONE Pathways Plan

- a. Reviewed DRAFT ONE of the Pathways Plan prepared by LSL
- b. OHM will provide costs associated with the pathways
- c. OHM will provide cross-sections of the different types of pathways and bike lanes proposed.
- d. LSL will make all necessary revisions and redistribute DRAFT TWO before the next meeting.
- e. Those who could not make today's meeting were asked to send comments in writing.

3. Public Hearing

- a. Due to the low turnout at the Public Meeting, the Public Hearing will be expanded to include a workshop beforehand.
- b. The Planning Commission will not be expected to act that night.
- c. Scheduled for the June 26 Planning Commission meeting.

4. Next Meeting: Wednesday, May 31 at 3pm

5. Other Items: None

Brighton Township Pathways Plan
May 31, 2006
Pathway Committee Meeting Minutes

In attendance:

Sara Schillinger, LSL Planning
Kelly Mathews, Brighton Township
Planner
Jill Scheuerle Thacher, Livingston
County Planning Department

David Murphy, Brighton Township Manager
Rhett Gronevelt, OHM
Dave Schroeder, OHM

I. DRAFT TWO Pathways Plan

- a. Reviewed DRAFT TWO of the Pathways Plan prepared by LSL, with added cost estimates and cross-sections by OHM.
- b. Need to look at MDNR Plan requirements to make sure plan is eligible for funding, including adding a section on barrier free accessibility.
- c. Get rid of cost estimates in Section Five, too far out to accurately estimate, but keep in appendix for frame of reference.
- d. Prioritized segments within Priority One.
- e. Clarify timeframes in each priority to be estimates.
- f. LSL will make all necessary revisions and redistribute PUBLIC HEARING DRAFT.
- g. Those who could not make today's meeting were asked to send comments in writing.
- h. Township attorney should review prior to public hearing to give his opinions.

2. Public Hearing

- a. Noticing depends on how plan will be adopted-if this is Master Plan amendment or a MDNR Parks Plan. Will notice both ways.
- b. June 26 Planning Commission meeting, 7 pm.
- c. Due to the low turnout at the Public Meeting, the Public Hearing will be expanded to include a casual "drop-in" workshop from 6-7pm, where there will be display boards & the public will be able to review recommendations & ask questions.
- d. Public hearing will have a brief presentation.
- e. The Planning Commission will not be expected to act that night.

3. Next Steps

- a. Edits based on public hearing.
- b. Planning Commission endorsement on July 10.
- c. Township Board adoption July 17 or first August meeting.

Brighton Township Pathways Plan

June 26, 2006

Planning Commission Public Hearing Meeting Minutes

In attendance:

Sara Schillinger, LSL Planning	Rita Croft
Carmine Avantini, LSL Planning	Sherman Snow
Kelly Mathews, Brighton Twp. Planner	Cherrie Snow
David Murphy, Brighton Twp. Manager	John Malek
Steve Holden, Brighton Twp. Planning Commission	Juile Amman
Gus Mitsopoulos, Brighton Twp. Planning Commission	Scott Amman
Ron Doughty, Brighton Twp. Planning Commission	Mike Richards
Frank Grapentien, Brighton Twp. Planning Commission	Chuck Rhein
Gary Unruh, Brighton Twp. Planning Commission	Richard Swan
Tim Winship, Brighton Twp. Planning Commission & Trustee	Doug Taylor
Cathy Doughty, Brighton Twp. Trustee	Carl Slindée
J. Michael Slaton, Brighton Twp. Trustee	Terry Pihalja
Julie Hall, SELCRA	Brian Parsons
Susan Esser	
John Esser	
Jeff Wirth	
Sharon Sutis	
Terry Croft	

1. Pathways Plan Presentation: Brief presentation on Pathways Plan by LSL Planning

2. Public Hearing

- a. The Planning Commission members read into the record, letters from residents. They were from the Scott Amman family of 4132 Merna Lane who are anxious to get going and enthusiastic about the proposed pathways.
- b. In addition, a letter from Sue & John Esser of 3465 Moraine Drive was read in favor of the township park and connecting pathways to get there and support for paths on existing paved roads.
- c. Also read, was a letter from the Livingston County principal planner, Jill Thacher, commending the Township on the proposed pathways plan.
- d. Carl Slindée, 1716 Clark Lake Road - commends the township for initiating this proposal. He would like to see Hacker Road included in Priority I since it's very dangerous. He also suggested putting gravel down as a temporary means to get going faster.
- e. Richard Swan, 4193 Chapelview Circle – any thoughts on widening or adding two foot paved shoulders and striping to Pleasant Valley Road?
- f. Doug Taylor, 3319 Oak Knoll Drive – was overwhelmed with the long term nature of the pathways proposal and had many concerns which included, but were not limited to,

safety, policing of what can be used on them, upkeep, who's responsibility it is for accidents that occur on the pathway, what do the walkers and bikers of the township want, how scenic the paths would be and how many intersections were part of the pathway?

- g. Terry Pihalja, 5109 Braddock Court – avid biker, in favor of more paths and trails. Offered to help set-up a committee.
- h. Jeff Wirth, 9325 Lexford Way – is supportive of the plan, especially for his children, paved shoulders are not safe for bikers or walkers.
- i. Brian Parsons, 9142 Orion Drive – in favor of pathways and the escrow accounts are a good idea.
- j. Discussion was brought back to the table. Steve Holden commented that they will not be taking any action tonight, this meeting is for public comment.
- k. F. Grapentien had several comments regarding the data in the plan on pages 6, 17, 18, 41 and 42 and rethinking priority 4 vs 1-3 based on cost.
- l. T. Winship supported escrow accounts.
- m. G. Unruh questioned liability (ask township attorney) and discussed grants.
- n. G. Mitsopoulos – the Master Plan supported the pathways.
- o. S. Holden – make it happen as quick as possible.
- p. S. Holden, there will be no future public meetings planned on the project. The vision is right and the residents want the pathways, we want to move forward with it as quickly as possible.
- q. Doug Taylor – encourages the Commission's sensitivity as to who will be using this off-road pathway where vehicles will be passing along side at 45 m.p.h or more.
- r. Chuck Rhein, 4529 Falcon Court – is supportive. Get going now, just add gravel for the time being.
- s. Julie Hall of SELCRA - found that pathways were highly supported in her surveys and she supported this plan.



Appendix B

Detailed Cost Estimates

Figure Eleven

Brighton Township Cost per Linear Foot

5 Foot Concrete Sidewalk

Clearing/Grading	\$6.00
4" of Concrete (\$3/sft)	\$10.00
4" of Sand (\$9/ton)	\$3.20
Restoration	\$3.00
Price per foot	\$22.20
20% Contingency	\$4.44
Total	\$26.64
Engineering and Construction	\$7.99
Cost per Foot	\$35.00

10 Foot Asphalt Pathway

Clearing/Grading	\$6.00
3" of Asphalt (\$60/ton)	\$11.00
8" 21AA (\$18/ton)	\$13.20
Restoration	\$3.00
Price per foot	\$33.20
20% Contingency	\$6.64
Total	\$39.84
Engineering and Construction	\$11.95
Cost per Foot	\$52.00

Figure Eleven

Brighton Township Cost per Linear Foot

Boardwalk

Boardwalk/Bridge	\$350.00
Price per foot	\$350.00
Total	\$350.00
Engineering and Construction	\$105.00
Cost per Foot	\$455.00

Retaining Wall

Retaining Wall	\$200.00
Price per foot	\$200.00
Total	\$200.00
Engineering and Construction	\$60.00
Cost per Foot	\$260.00

Source: OHM

Figure Twelve

Detailed Cost Estimates

Road	Segment	Concrete (linear ft.)	Asphalt (linear ft.)	Boardwalk (linear ft.)	Retaining Wall (linear ft.)	Cost	
Priority One (9.85 Miles)							
1	Kensington	Larkins to Grand River		3,090		\$160,680	
2	Kensington	Spencer to Larkins		5,600	40	330	\$395,200
3	Old US 23	Spencer to Grand River		5,950			\$309,400
4	Old US 23	Spencer (E) to Spencer (W)		1,080			\$56,160
5	Old US 23	Hilton to Spencer		5,750	200	140	\$426,400
6	Hilton	Hunter to Old U.S. 23		3,400	60		\$204,100
7	Hilton	Grand River to Hunter		6,070	560	700	\$752,440
8	Grand River	Hacker to Hilton	3,490				\$122,150
9	Hacker	Hyne to Grand River		4,620		200	\$292,240
10	Kensington	Buno to Spencer		2,810		250	\$211,120

Figure Twelve
Detailed Cost Estimates

Road		Segment	Concrete (linear ft.)	Asphalt (linear ft.)	Boardwalk (linear ft.)	Retaining Wall (linear ft.)	Cost	
I1	Kensington	Jacoby to Buno		3,340			\$173,680	
I2	Spencer	City of Brighton to Old U.S. 23	3,930				\$137,550	
I3	Pleasant Valley	Larkins to Grand River		2,000		480	\$228,800	
Priority One Total			7,420	43,710	860	2,100	\$3,469,920	
Priority Two (8.74 Miles)								
Buno		Kensington to Township Park		1,290			\$67,080	
		Spencer to Township Hall		1,000			\$52,000	
Old U.S. 23		Hartland Twp. to Hyne		7,980	170		\$492,310	
		Hyne to Hilton		3,830		300	\$277,160	
		Grand River to Green Oak Twp.	5,930				\$207,550	
Pleasant Valley		Spencer to Larkins		6,130			\$318,760	
Spencer		Old U.S. 23 to Buno	1,500				\$52,500	
		Buno to Van Amberg		6,440		180	\$381,680	
		Van Amberg to Pleasant Valley		3,860	60		\$228,020	
		Pleasant Valley to Kensington		5,270	250		\$374,790	
Taylor		Old U.S. 23 to School			2,710		\$179,920	
Priority Two Total			7,430	35,800	3,190	480	\$2,631,770	
Priority Three (7.28 Miles)								
Hyne		Hacker to Hunter		6,040	100		\$359,580	
		Hunter to Old U.S. 23		6,460	820		\$709,020	
		Old U.S. 23 to Pleasant Valley		13,790	390		\$894,530	

Figure Twelve

Detailed Cost Estimates

Road	Segment	Concrete (linear ft.)	Asphalt (linear ft.)	Boardwalk (linear ft.)	Retaining Wall (linear ft.)	Cost
Kensington	Pleasant Valley to Jacoby		6,270			\$326,040
Pleasant Valley	Hyne to Kensington		4,560			\$237,120
Priority Three Total		0	37,120	1,310	0	\$2,526,290
Priority Four (15.6 Miles)						
Buno	Pleasant Valley to Township Park		4,210	150		\$287,170
Culver	Spencer to Pleasant Valley		12,620	430	450	\$968,890
Hunter	Hyne to Hilton		9,050			\$470,600
Larkins	Pleasant Valley to Kensington		8,430	60	360	\$559,260
Newman	Van Amberg to Pleasant Valley		7,040			\$366,080
Pleasant Valley	Commerce to Hyne		8,020			\$417,040
	Kensington to Newman		2,100			\$109,200
	Newman to Jacoby		6,080	190		\$402,610
	Jacoby to Buno		3,340		390	\$275,080
	Buno to Spencer		2,680			\$139,360
Spencer	Kensington to Kensington Metropark		7,340			\$381,680
Van Amberg	Newman to Buno		7,960			\$413,920
	Buno to Spencer		2,690			\$139,880
Priority Four Total		0	81,560	830	1,200	\$4,930,770

Source: OHM