



# Bath Charter Township Non- Motorized Plan

---

*2017*

## 2017 Bath Charter Township Non-Motorized Plan

---

### *BATH TOWNSHIP BOARD OF TRUSTEES*

Jack Phillips, Supervisor  
Kathleen McQueen, Clerk  
Steve Wiswasser, Treasurer  
Cindy Cronk, Trustee  
Denise McCrimmon, Trustee  
Al Rosekrans, Trustee  
Dan Stockwell, Trustee

### *BATH TOWNSHIP PLANNING COMMISSION MEMBERS*

Dan Kramer, Chairman  
Joe Benzie, Vice-Chairman  
Cindy Cronk, Board Liaison  
Ray Severy  
Jason Almerigi  
John Reich  
Michael Sullivan

### *BATH TOWNSHIP PLANNING STAFF*

Dan Wietecha – Superintendent  
Brian J. Shorkey, AICP – Planning Director  
Hunter Whitehill – Planning Assistant  
Maggie Barringer – Planning Assistant (former)  
Ellery Johnson – Planning Assistant (former)

# **BATH CHARTER TOWNSHIP NON-MOTORIZED STUDY**

## **Table of Contents**

<b>1. Introduction</b>	<b>Page 4</b>
a. Study Purpose	Page 4
b. Background/History	Page 4
c. Study Update Process	Page 5
d. Trail Characteristics and Options	Page 5
<b>2. Existing Conditions</b>	<b>Page 6</b>
a. Subarea One – Hawk Hollow	Page 6
b. Subarea Two – TBD	Page 6
c. Subarea Three – Downtown	Page 7
d. Subarea Four – Rose Lake	Page 8
e. Subarea Five – Haslett	Page 8
f. Subarea Six – Park Lake	Page 9
g. Subarea Seven – Chandler	Page 10
<b>3. Recommendations</b>	<b>Page 11</b>
a. Known Future Improvements	Page 11
b. Future Non-Motorized Improvement Map	Page 13
c. Future Needs	Page 14
d. Goals and Objectives	Page 14
<b>Appendix One – Survey Results</b>	<b>Page 15</b>

## **Chapter One – Introduction**

### **Study Purpose**

Bath Charter Township (Township) realizes the importance of providing safe pedestrian and bicycle movements in the community. These non-motorized trips vary in length and purpose and may be as short as a walk to a store or as long as a bike ride from one side of the Township to the other.

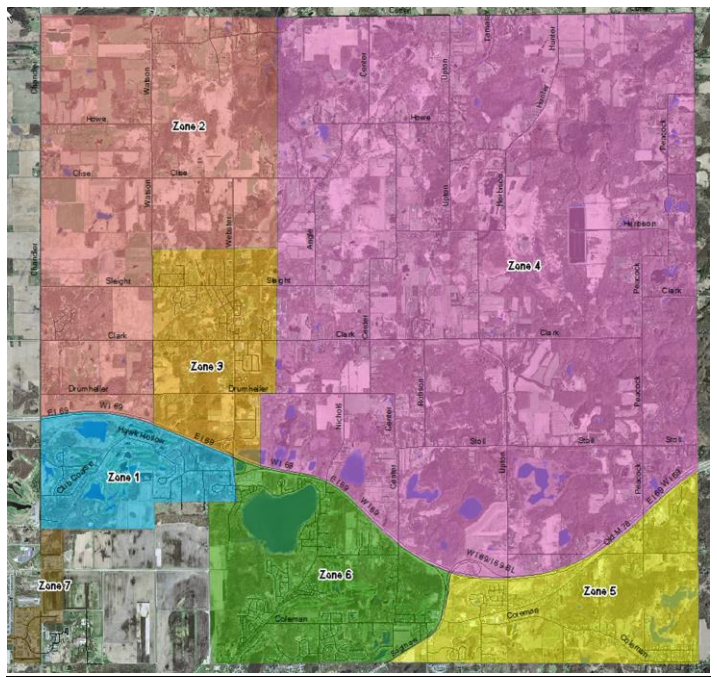
A walkable and bikeable community provides facilities and amenities to encourage safe non-motorized trips. These amenities range from the most basic sidewalk to redesigning corridors for multi-modal transportation.

As a result, developing and maintaining a walkable and bikeable community required integration of land use planning and non-motorized policies. The benefits of providing safe, viable, and enjoyable non-motorized facilities are important to the Township's quality of life and can positively impact mobility, travel, safety, and recreation opportunities.

### **Background/History**

The Bath Charter Township Non-Motorized Study (Study) was last completed in 2010. That project began as a response to the Township's growing need for non-motorized transportation alternatives and increasing concern for children walking to and from school.

Growth has continued in the Township since 2010 and many of the concerns then remain concerns today. The Planning Commission recognized the need to update the vision for non-motorized transportation in the Township and so approved this Study. It is the goal of this study to gauge the non-motorized opinions of the community as accurately as possible and to reflect those opinions through specific recommendations for non-motorized facilities.



**Bath Charter Township Subareas**



**Figure 1.2**

### **Study Update Process**

The Study was officially kicked off with a survey. The survey was launched both online and in hard copy forms on June 20, 2017. The results of the survey are found in Appendix One. Two community engagement workshops were held at the Township offices on October 25, 2017 (Figure 1.2). Residents were able to give comments to staff and write on maps to show where they would like to see new non-motorized ways.

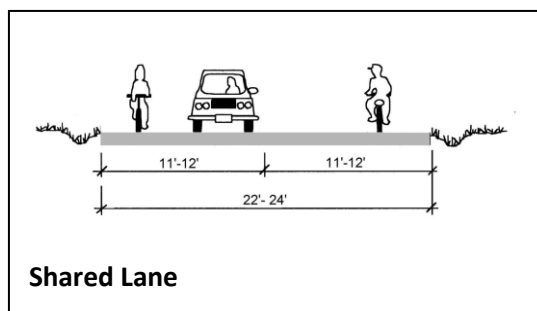
### **Trail Characteristics and Options**

There are many tools and techniques available for creating and/or enhancing a non-motorized system. Success of these tools relies on proper application. Careful consideration must be given to the impacts of a particular non-motorized technique and also to the needs and desires of the population most affected by the facility. It is important to realize that no one tool or technique works in every situation, even if scenarios appear similar. Creating or improving the safety, continuity, and connectivity for motorists and non-motorized uses is key.

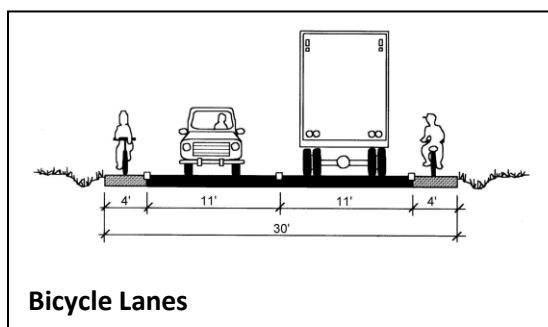
Non-motorized links generally come in two forms, on-road and off-road. On-road facilities provide accommodations for users within the roadway. On-road facilities are primarily geared toward bicycle use. Off-road facilities are trails and pathways that are separate from the roadway, used by bikes and pedestrians, although they may be in the road right-of-way.

### **On-Road Facilities**

1. The familiar Bike Route sign is not tied to any particular type of facility; rather, it is an aid to help bicyclists find their way through a confusing road network to a destination. As such, bicycle routes signs should be accompanied by destination information. Also, as the sign indicates that a route is preferable for a bicycle to use, therefore hazards to bicycling should be removed and a route should receive maintenance levels conducive to safe bicycling.
2. Signed shared roadways are typically low volume roads where bicycles and motor vehicles can share the roadway with minimal conflict. The sign helps delineate a route as an aid for bicycle navigation. Signed shared routes may also be used to highlight links between other more substantial bicycle facilities, such as bicycle lanes and shared use paths.
3. “Backroad Bike Routes” are proposed for rural gravel roads that provide key nonmotorized links. These routes may transition in the future to a different type of nonmotorized facility, if the roadway is improved.
4. “Share The Road” signs may be helpful along rural roads as a way to alert motorists to expect more bicycle traffic than typical. Signing a bicycle route lets the bicyclist know that there is a specific reason why this route may be



**Shared Lane**



**Bicycle Lanes**

preferred over alternative routes.

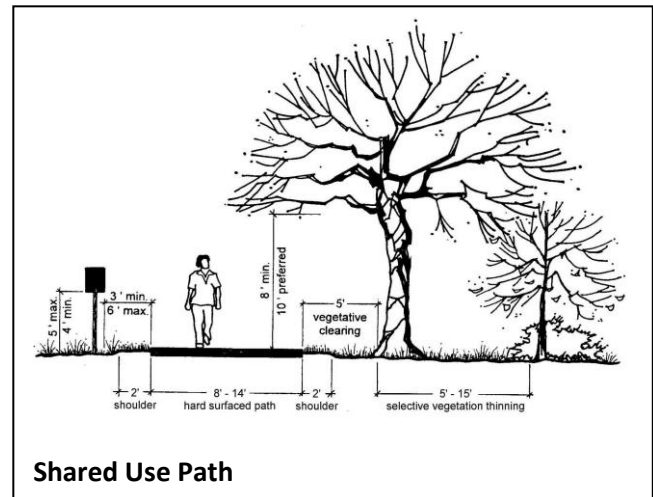
Signed bicycle routes usually occur along roads with low traffic volumes, such as in rural areas. Bicycle route signs can be used in conjunction with direction or wayfinding signs to include directions to common bicyclist destinations.

5. Bicycle Lanes are typically used on major roads with high traffic volumes. The minimum shoulder width of 4 feet should be increased with higher speeds and amounts of truck traffic. With Bicycle Lanes, striping, pavement markings and signage delineate a portion of the roadway specifically for bicycle use. This designation clarifies the use of the roadway for both motorists and bicyclists. The pavement markings, when they include directional arrows, help reinforce the fact that bicyclists should ride in the same direction as traffic. When a bicycle lane approaches an intersection, the lane marking should become dashed to accommodate bicyclists repositioning themselves for turning movements (such as in a left turn lane).

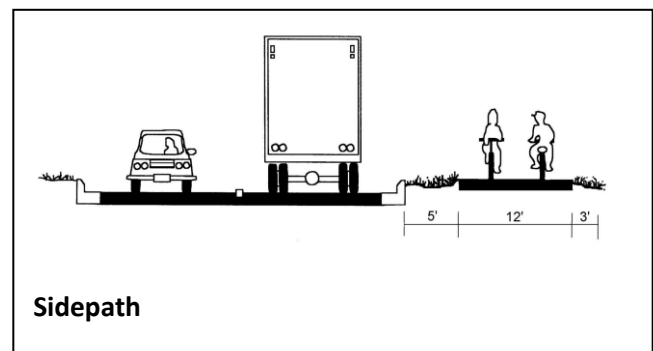
### **Off-Road Facilities**

1. Shared use paths accommodate multiple user groups, including bicycles, pedestrians, in-line skaters, those in wheel chairs, etc. These facilities are usually constructed to ADA standards outside of the road right-of-way. The multiple uses are accommodated by the pavement width, with 10 feet being the minimum recommended width based on American Association of State Highway and Transportation Officials (AASHTO) standards.

Shared use paths have the same types of planning and design considerations as roads: design speeds, horizontal alignment limitations, grade and cross slope limitations, and sight distance, clear zones, and drainage. The illustration on the right shows some basic considerations, and the following diagrams highlight issues specific to different types of shared use paths.



2. Sidepaths are shared use paths generally located within the road right-of-way along roads with infrequent driveway and road intersections. There is a high probability for serious motorized vehicle/bicycle and motorized vehicle/pedestrian crashes at intersections and numerous other design and use issues, therefore these facilities should be located with care and special attentions should be paid to intersection design. Sidepaths can be built by roads, streams, or rail lines as in rail-to-trails.





## **Chapter Two – Existing Conditions**

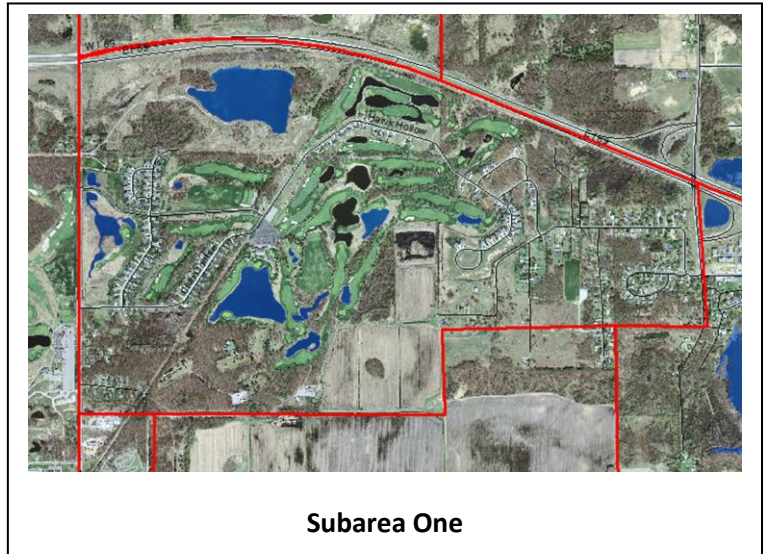
### **Subarea One**

#### **Boundaries**

Subarea One is characterized by the Hawk Hollow development, which includes single family homes and the Hawk Hollow golf course. It is bound on the north by I-69 and the south by the East Lansing 425 Area. It is bound to the east by Webster Road and to the west by Chandler Road, which is the westernmost boundary of the Township.

#### **Existing Conditions**

Subarea One contains active recreation in the form of the Hawk Hollow, a 27 hole golf course with clubhouse and wedding chapel. Unfortunately, the non-motorized facilities in the subarea are limited to sidewalks constructed on the subdivision streets. The sidewalk has been constructed primarily on Hawk Hollow Drive.



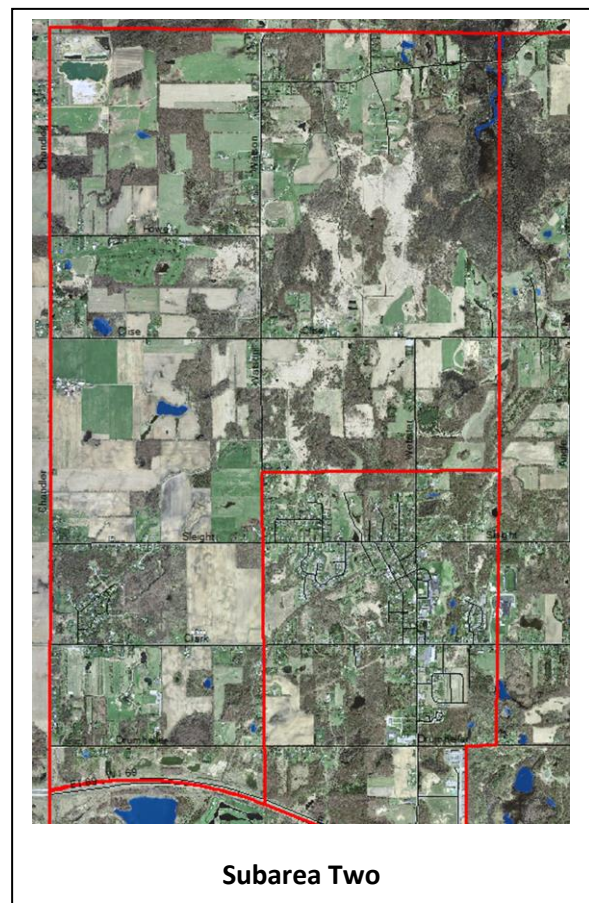
### **Subarea Two**

#### **Boundaries**

Subarea Two is one of the largest subareas and is dominated by rural land uses and low density residential. The boundaries of the subarea are well defined by the Township boundaries to the north and west and I-69 to the south. The east boundary of Subarea Two is a north-south line approximately 11,600 feet west of the northwest corner of the Township. The boundary of Subarea Two does not include the downtown Bath area and surrounding subdivisions, which are found in part of Subarea Three.

#### **Existing Conditions**

Subarea Two has no non-motorized facilities.



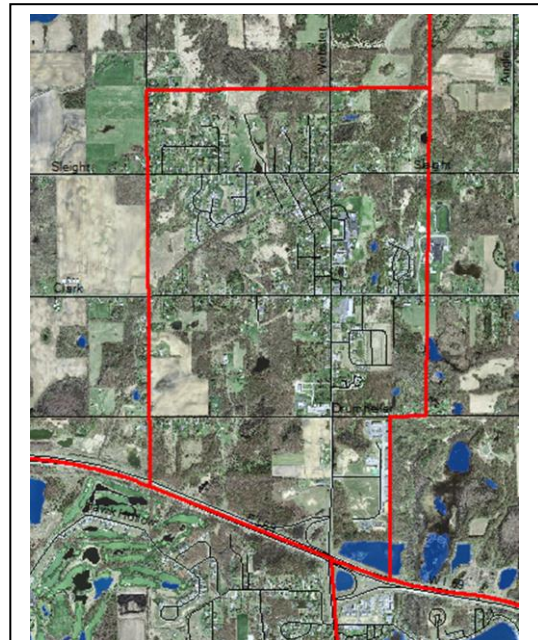
## **Subarea Three**

### **Boundaries**

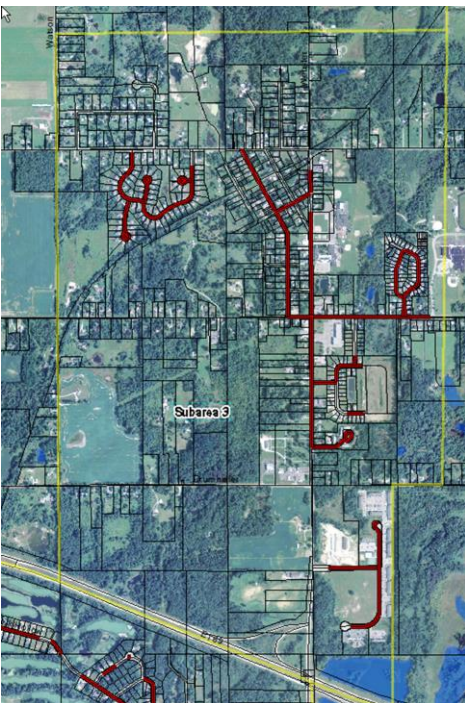
Subarea Three is clearly defined on the south by I-69. The west boundary is a line drawn from Watson Road to I-69. The subarea extends east to Bath High School, which is divided by Subareas Three and Four to the east. The north boundary of the subarea is a line that generally divides subdivision development on Sleight Road from the rural land uses to the north.

### **Existing Conditions**

Most of the non-motorized facilities in Subarea Three consist of sidewalks. The sidewalks are found within defined subdivisions, such as Hidden Valley, or on major streets, such as Webster Road. While disconnects in the sidewalks exist, the sidewalk network in Subarea Three makes up one of the two longest unbroken sidewalk systems in the Township (See figure).



**Subarea Three**



**Subarea Three Sidewalks**

Even though the sidewalk system is extensive, there are problems. There are neighborhoods on Sleight Road that are not connected, an issue that the Bath Township Downtown Development Authority has recognized in the past. As a result, the neighborhood sidewalks in Hunters Crossing subdivision are isolated. The situation in Somerset, located in the southern part of the subarea, is similar.

The Bath schools are connected to each other via sidewalks on Clark Road and Webster Road. However, the Webster Road sidewalk does not connect to Main Street sidewalks north of the Bath Middle School. This connection could be made by continuing the Webster Road sidewalk approximately 340 feet north to High Street or by constructing a connection through Couzens Park.

Subarea Three is also the location of a bicycle lane. The lane is on the west side of Webster Road between Drumheller and Park Lake Road. The lane itself lacks any markings but there is a sign on the southbound lane that indicates the presence of a bike lane. No such sign exists for northbound traffic.



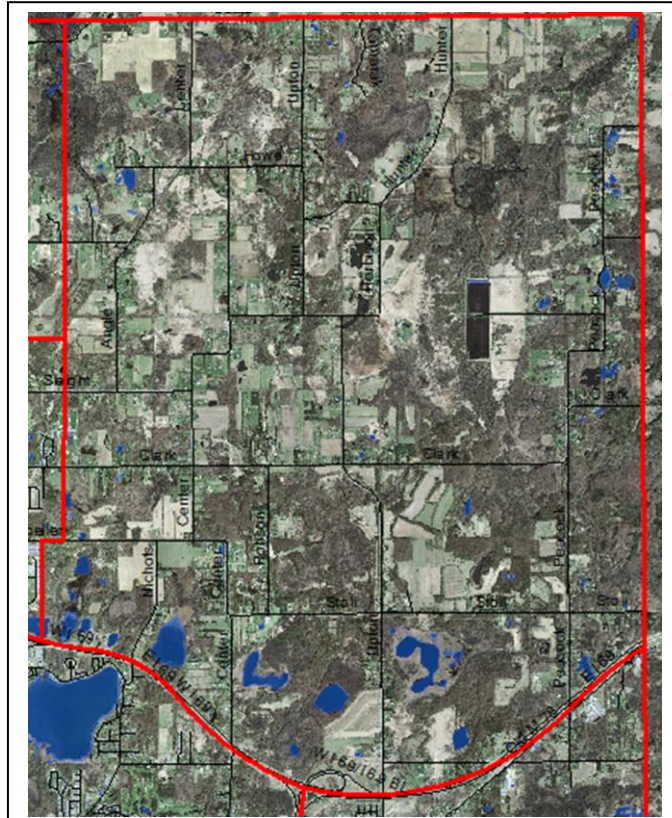
## **Subarea Four**

### **Boundaries**

Subarea Four is the largest subarea that is being evaluated and contains the 2,700 acre Rose Lake State Recreation Area. It is bound by the Township lines on the north and the east and I-69 to the south.

### **Existing Conditions**

Subarea Four has no known non-motorized facilities even though it contains the Rose Lake State Recreation Area. According to the Michigan Department of Natural Resources' (MDNR) description of Rose Lake, there are many recreational opportunities available but none of them are non-motorized facilities.



**Subarea Four**

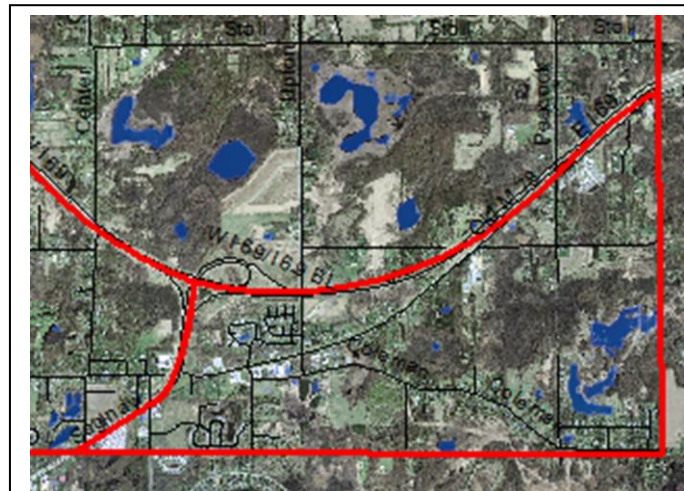
## **Subarea Five**

### **Boundaries**

Subarea Five is in the southeasternmost corner of the Township and is bound on the east and south by the Township boundaries. The north boundary of Subarea Five is I-69. The subarea is bound on the west by BL-69/Saginaw Highway.

### **Existing Conditions**

Subarea Five contains Marsh Road, which is one of the three main north/south connections with Meridian Township in Ingham County to the south. Marsh Road becomes a major corridor in Meridian Township but terminates at Coleman Road in Bath Township after crossing Saginaw Highway.



**Subarea Five**

Subarea Five has almost no non-motorized facilities. The exceptions are sidewalks in the western end of the subarea, as well as sidewalks on Marsh Road and in the Meadowbrook subdivision. The sidewalks on Marsh Road continue south into Meridian Township and represent one of only two locations where non-motorized facilities connect with surrounding communities. The sidewalks in Meadowbrook do not connect to the sidewalk on Marsh Road. In addition, there are isolated segments of sidewalks in Meadowbrook that do not connect to the overall Meadowbrook sidewalk system.



## **Subarea Six**

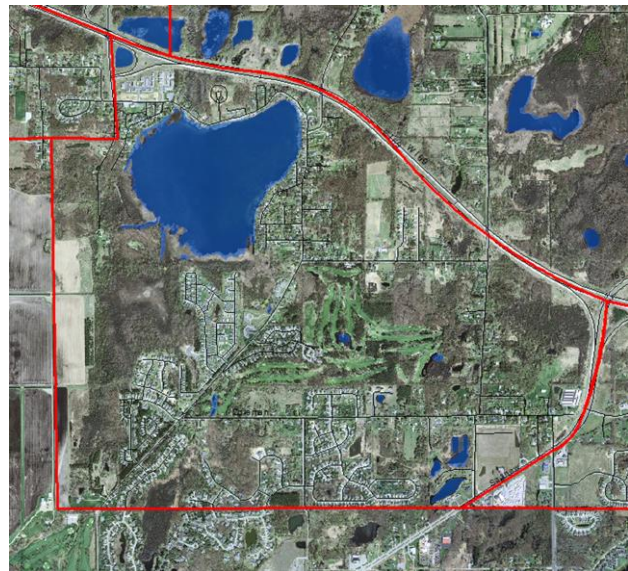
### **Boundaries**

Subarea Six is characterized by Park Lake and Park Lake Road. Park Lake Road is a major north/south connection with Meridian Township to the south, one of only three such connections in the Township. The subarea also contains Wiswasser Park, the Bath Township boat launch, and the Bath Township public beach, all of which are located on the north side of Park Lake. It is also the location of the Timber Ridge golf club, an 18-hole course on Park Lake Road, north of Coleman Road. Although not a recreational facility, Bath Township's largest store, Meijer, is also located in Subarea Six, on Saginaw Highway.

Subarea Six is bound to the south by the southern boundary of the Township. The north boundary is I-69. The east boundary is made up of BL-69/Saginaw Highway while the west boundary is the East Lansing 425 Area.

### **Existing Conditions**

There are several sidewalks in Subarea Six. The majority of these sidewalks are in the neighborhoods that access from Coleman Road, or Park Lake Road in the case of Thorngate Drive (See picture). The sidewalk



**Subarea Six**



**Subarea Six Sidewalks**



**Sidewalk in front of Meijer**

system is the longest continuous sidewalk system in the Township. However, as extensive as the system is, Coleman Road does not have any non-motorized facilities so the neighborhood sidewalks are inaccessible to the Township at large. On the other hand, the neighborhoods overlap the county line to the south, and the sidewalks follow suit. As a result, while the neighborhoods are not connected to the Township, they do represent non-motorized connections with Ingham County.

The other non-motorized facility in the subarea is in front of Meijer on Saginaw Highway. This is a sidewalk that runs along

the north side of Saginaw Highway in a generally east/west orientation. The western end of the sidewalk ends abruptly at the property line, as shown in the photo.

### **Subarea Seven**

#### **Boundaries**

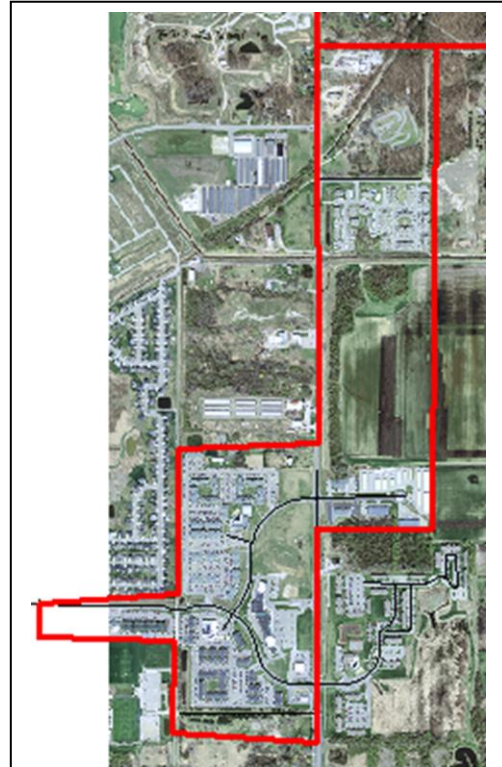
Subarea Seven includes the Bath Township 425 Area, known as Chandler Crossing. The subarea is strongly oriented north and south along Chandler Road and excludes the East Lansing 425 Area to the east. The south boundary of the subarea is the Township line while the north boundary is made up of a line drawn to the west from the East Lansing 425 Area.

#### **Existing Conditions**

The Chandler Crossing development is encircled by Chandler Road, Hunsaker Road, and Coleman Road. There are sidewalks on Hunsaker and Coleman Roads, as well as on Chandler Road to the south of Coleman Road. The Chandler Sidewalk continues south into Ingham County, giving access to the extensive East Lansing trail system.

The sidewalks continue to the west on Coleman Road and connect to the only trail that currently connects to Bath Township. It is a paved trail that is part of the East Lansing Northern Tier Trail and runs north and south across Coleman Road.

On April 25, 2017, the Bath Township Planning Commission held a public hearing for the next phase of development for Chandler Crossings. At that meeting, the developers agreed to construct an eight-foot paved trail along Chandler Road in the front of their development. This trail will connect to the existing sidewalk system, giving access to the East Lansing trail system to Bath Township residents. This trail is expected to be constructed in 2018.



**Subarea Seven**



## **Chapter Three – Recommendations**

### **Known Future Improvements**

It is anticipated that Bath Township will see its first two non-sidewalk non-motorized paths. The first one is located in Subarea 7 and was briefly discussed in Chapter Two. This trail, known as the Chandler Path, is being built in conjunction with Chandler Lofts, which is the latest development within Chandler Crossings.



**Figure 3.1 – Chandler Path**

Chandler Lofts is a mixed use student housing development with approximately 10,000 square feet of commercial that will front on Chandler Road. Chandler Lofts also includes 255 student loft apartments and 24 townhouses. The Chandler Path was approved as part of Chandler Lofts.

The path will run parallel with Chandler Road from existing sidewalk to the south to the north property line (Figure 3.1). This short segment of path, approximately 550 feet, will give access to East Lansing's non-motorized system to hundreds of students in the future.

The second anticipated non-sidewalk non-motorized path will come in 2019 as part of an MDOT intersection project at M-78 (Saginaw Highway) and Marsh Road. MDOT is redesigning the intersection to mitigate traffic safety concerns and constructing a J-turn intersection, the first of its kind in this region of Michigan. The Township and the Clinton County Road Commission are partnering with MDOT to construct a shared use path that will run north along



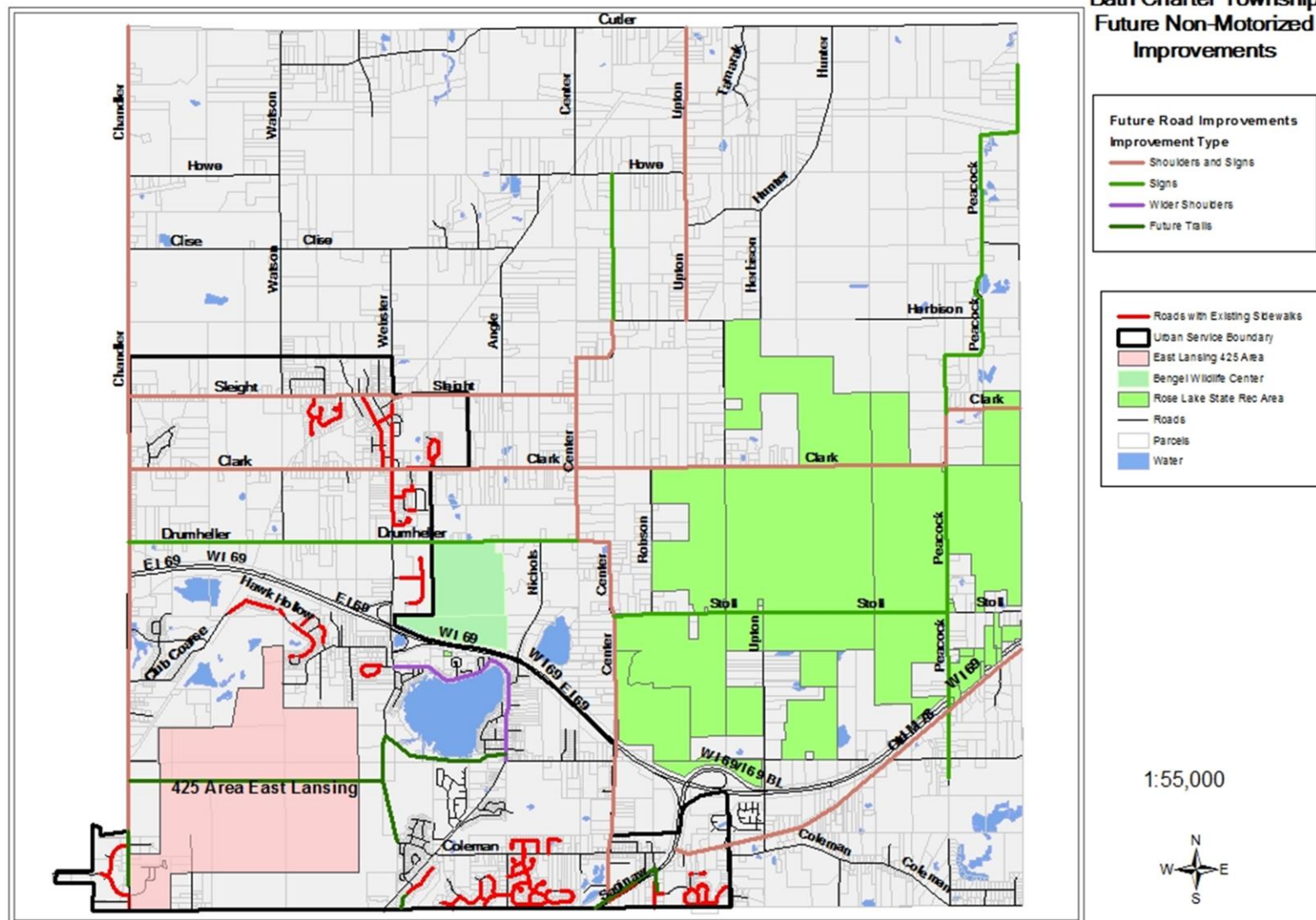
**Figure 3.2 – Saginaw Trail**



Marsh Road before turning southwest to the Ingham County line (Figure 3.2). It is anticipated that this will be the first phase of a longer multi-jurisdictional trail that will eventually extend through Meridian Township and eventually connect with the Lansing River Trail.

The Bath Township segment of the Saginaw Trail will allow non-motorized access for the residents in Meadowbrook to points on M-78, notably the Meijer store. This connection is accomplished through a 'Z' movement through the intersection to allow pedestrians to safely cross the J-turn. Saginaw Trail is planned to follow and expand on existing sidewalks in the area, which will require easement agreements with the Township where sidewalks are not in the MDOT right-of-way.

# Bath Charter Township Future Non-Motorized Improvements



### **Future Needs**

Thanks to the community feedback at the community engagements sessions on October 25, 2017, Township staff was able to update the future non-motorized needs (Future Non-Motorized Improvements Map). There are four different types of non-motorized facilities being asked for:

1. Signage on roads, mainly in conjunction with gravel roads.
2. Wider shoulders, shown on Park Lake Road from Webster Road to State Road.
3. Wider shoulders with signs.
4. Off-road facilities.

The following goals were put together based on comments and survey data.

### **Goals and Objectives**

**Goal 1:** Bath Township's non-motorized system should be welcoming and safe.

Objective 1: The Township should work with the Clinton County Road Commission to see that "Bike Route" signs are installed where called for on the future needs map.

Objective 2: The Township should continue investing in wider shoulders in cooperation with future Clinton County Road Commission projects, where wider shoulders are called for on the future needs map.

Objective 3: Continue required developers to construct non-motorized trails where the plan calls for them, including sidewalks within residential developments as required in the Bath Township Subdivision Regulations.

**Goal 2:** Bath Township's non-motorized system should connect to non-motorized systems outside its borders.

Objective 1: The Chandler Path should be extended north from Chandler Crossing to Drumheller Road.

Objective 2: The Township should encourage Meridian Township/Ingham County to connect to the Saginaw Trail.

**Goal 3:** Develop creative "outside the box", cost-effective solutions to meet the needs of multiple user groups, balanced against existing natural and/or man-made opportunities and constraints.

Objective 1: Work with the Clinton County Drain Commission and the City of East Lansing for the possibility of building a trail next to the Remy-Chandler Drain.

**Goal 4:** Develop solutions that are environmentally compatible and sustainable and enhance the natural resources and points of interest within the Township.

Objective 1: Continue to investigate potential recreational grants so that the Park Lake Trail can be built.

## **Appendix One – Survey Results**

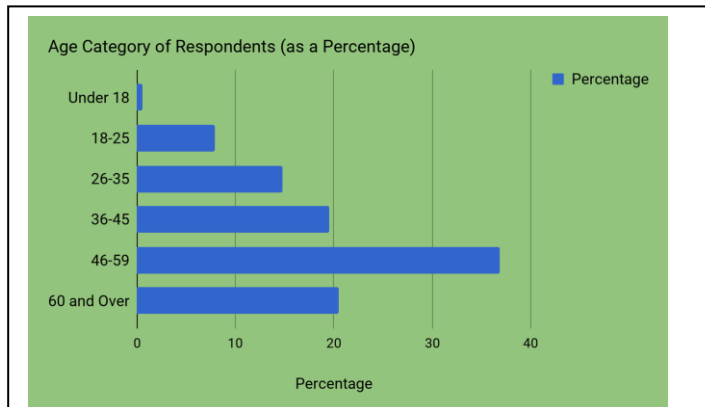
### **Survey**

The public comment initiative for the non-motorized study was launched with a survey. The survey was available through multiple outlets, including online and in hard copy. Overall, the survey had 190 responses, although not every respondent answered every question.

#### **1. What is your age category?**

The survey asked how old the respondent was within age categories (Table A.1). All 190 respondents answered this question.

The greatest number of the respondents, almost 37%, were in the 46-59 year old category. Only one respondent was under 18 years old.

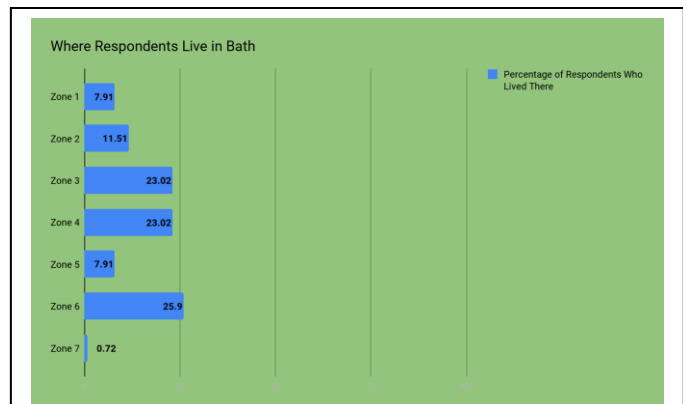


**Table A.1**

#### **2. How long have you lived in Bath Township?**

The survey asked how long the respondent lived in Bath Township. All 190 respondents answered this question.

The greatest number (26.8%) of the respondents have lived in Bath Township for over 20 years. 25 respondents (13.2%) reported that they did not reside in Bath Township.



**Table A.2**

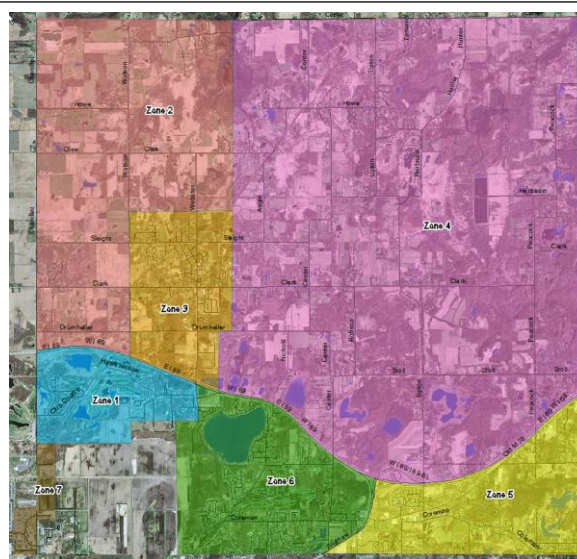


3. According to the map below of Bath Charter Township, where do you live in Bath?

The survey included a colorized map that showed the subareas and asked respondents to tell what subarea they lived in (Map A).

A total of 139 respondents answered this question. Many of the respondents that did not answer this question may have been non-residents from question 2 (Table A.2).

The greatest number of the respondents came from Subarea Six, the Park Lake subarea. Almost equal numbers came from Subareas Three and Four, the Downtown and Rose Lake subareas. These three subareas accounted for 72% of the total respondents. Only one respondent reported living in Subarea Seven, the Chandler subarea.

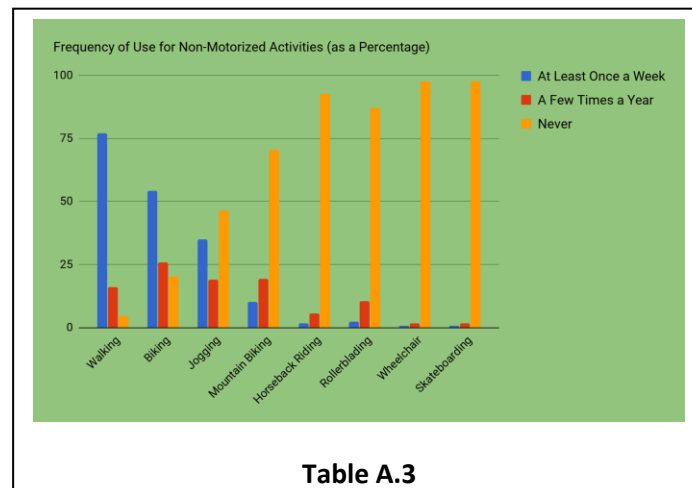


**Map A.1**

4. How did you access this survey?

Almost half (48.4%) of respondents to this question accessed the survey from the Bath Charter Township Facebook page. The two next most popular sources were the Tri-County Bicycle Association's website and Bath Charter Township's newsletter. It was worth noting that 19 respondents, 12.1%, accessed the survey from the Township's website, which was not an option on the survey.

5. How frequently do you use different forms of non-motorized transportation?

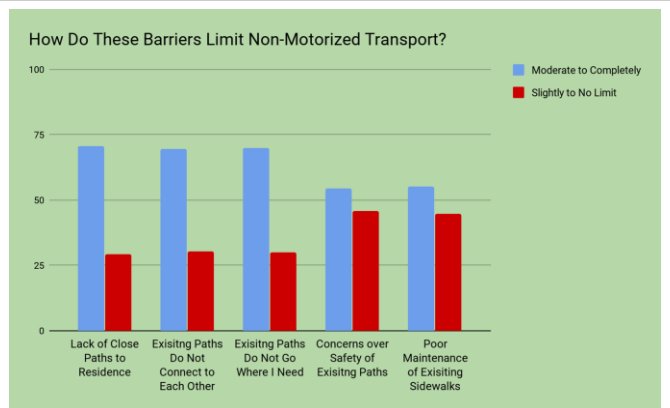


**Table A.3**

Over 75% of the respondents reported that they walk at least once a week (Table A.3). This was by far the most popular form of non-motorized transportation. Over half of the respondents also reported that they biked at least once a week. By contrast, almost none of the respondents ever ride a skateboard, use a wheelchair, or ride horses.

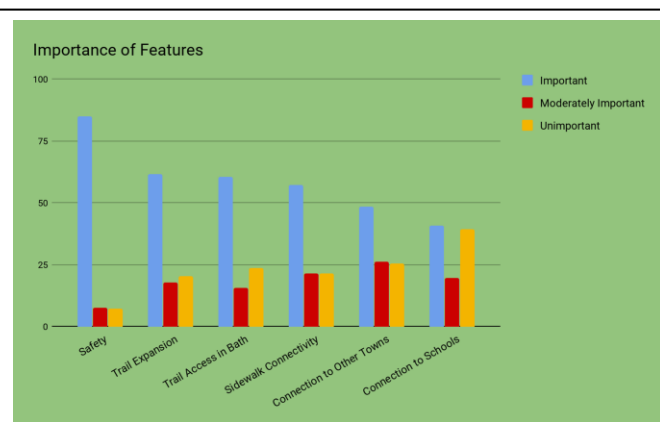
6. To what extent do the following barriers limit your current use of non-motorized transportation?

Respondents were asked to consider what barriers limit their use of non-motorized transportation (Table A.4). Of the respondents that answered this question, the most common barriers that limit respondents' use of non-motorized transportation are a lack of close trails, paths that do not connect to each other, and paths that do not lead to desired destinations.



**Table A.4**

7. What elements of a non-motorized plan are most important to you?



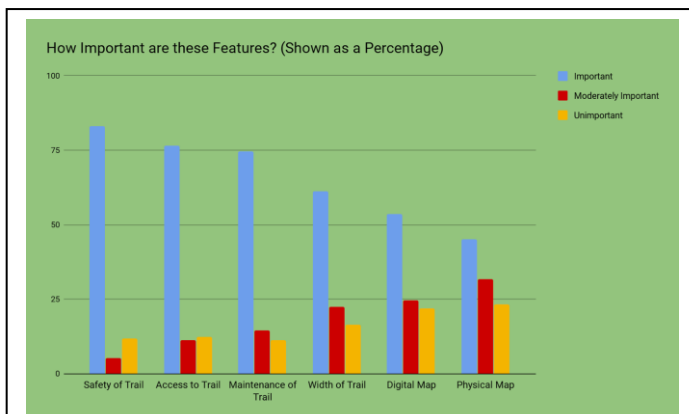
**Table A.5**

Respondents were asked what non-motorized plan elements are important (Table A.5). Respondents were able to select more than one option.

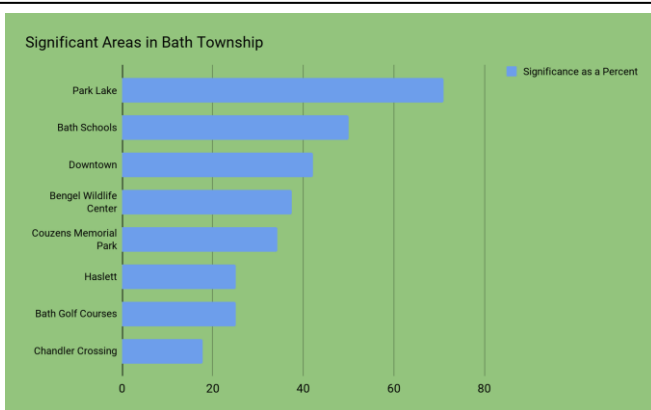
Pedestrian and bike safety is overwhelming the most important element of a non-motorized plan, it being mentioned by over 85% of the respondents. Over half of the respondents also said that trail expansion, trail access, and sidewalk connectivity were important. Connections to schools were deemed unimportant by almost 40% of the respondents.

8. How important are the following features to a non-motorized path?

Respondents were asked to rate the importance of non-motorized path features and were allowed to select more than one element (Table A.6). Safety was seen as the most important element, followed by trail access and trail maintenance. The least important feature was a physical copy of a trail map.



**Table A.6**



**Table A.7**

9. If improvements were made to a non-motorized trail system in Bath, how likely would you use this non-motorized path for the following activities?

Respondents were asked the likelihood of use for different potential non-motorized improvements and how they would use them. Over 70% of the respondents said that they would either walk or bike for recreation. Non-motorized facilities were not generally seen as viable for errands or commuting.

10. What do you believe are the most significant areas of interest to Bath Township? Please select all that apply.

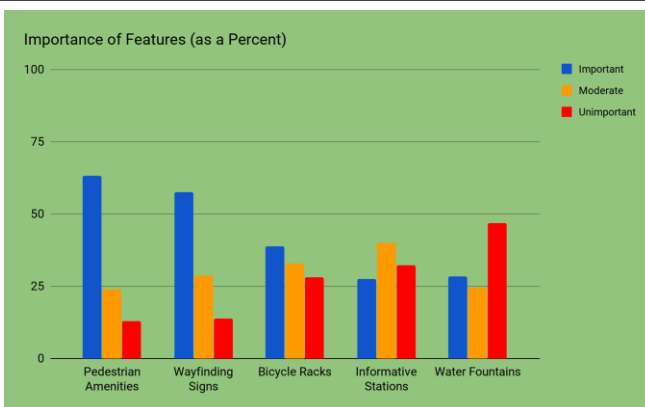
Respondents were asked to consider specific areas in Bath Township that might be interesting (Table A.7). Respondents were allowed to select more than one area and were allowed to write in an area that was not listed.

Among respondents, Park Lake was seen as the most significant area of interest. Other significant areas are Bath schools and downtown Bath. The lowest rated areas were the Bath golf courses and Chandler Crossing.

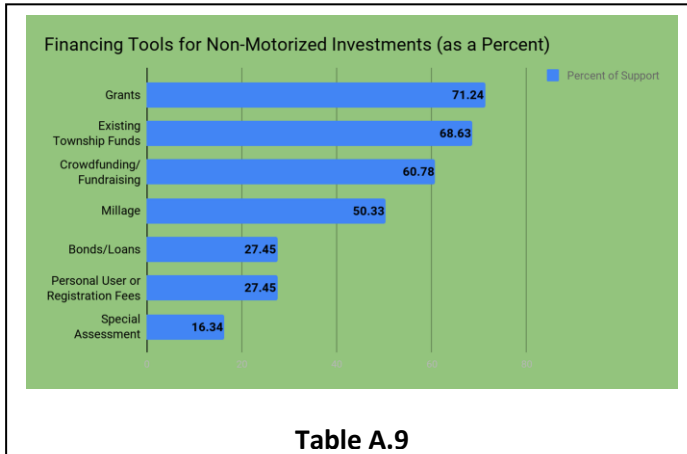
11. How important are these features to a non-motorized pathway system?

Respondents were asked about the importance of features on a pathway system (Table A.8). Respondents were able to select more than one feature.

Most of the respondents reported that they would like to see pedestrian amenities, such as benches or trash cans, along non-motorized trails. An almost equal number said that they would like to see wayfinding/directional signs. Water fountains and information stations were the most unimportant features.



**Table A.8**



12. What types of financing tools would you consider supporting for non-motorized investments? Please select all that apply.

Respondents were asked to consider what financing tools they would use to fund non-motorized improvements (Table 3.9). Respondents were able to select more than one financial tool.

The most popular financing tool was grants, with over 70% of respondents supporting this method. Over 60% of respondents also supported crowdfunding and using existing Township funds. The most unpopular

funding source was a special assessment, but loans and user fees also lacked support as well.

13. Do you have any other thoughts, suggestions, or ideas about a non-motorized pathway system in Bath Charter Township?

Fifty-Four respondents took the time to write in additional comments. Ten respondents said that more paths would be beneficial because of busy roads and increased safety. Eight respondents wanted more non-motorized connections to surrounding communities. Seven respondents asked for more connections to Park Lake while another seven asked for bike lanes on Park Lake Road. Ten respondents generally indicated that a non-motorized system would be a waste of money.