JONATHAN ESHENOUR BICYCLE AND PEDESTRIAN TRAIL

Shared Use Trail Audit

FEBRUARY 1, 2020 TOWNSHIP OF DERRY Department of Parks and Recreation



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JONATHAN ESHENOUR BIKE & PEDESTRIAN TRAIL SHARED USE TRAIL AUDIT

Introduction

The Jonathan Eshenour Bicycle and Pedestrian Trail has a rich history of providing recreational and mobility benefits to our community. This shared use trail has been planned and developed over the past thirty-two years with the majority of development occurring in the late 1990's and early to mid-2000's.

In 1987, a committee was formed to begin the process of developing a plan to establish a trail system within the township. In reviewing the limited information available from that time, it appears that the committee's main goal was to provide a facility that would allow for an alternate means of travel around the township. The largest development of trail prior to the mid-1990's happened around this time with the development of the section of trail located along Cocoa Avenue in front of the Recreation Center and the Hershey Public Library, crossing S.R. 322 and terminating at the intersection of Fishburn Road and Hartley Road. In addition to this section, the portion of trail located in Palmdale was also established at this time.

On July 16, 1997, a tragic accident occurred involving 12-year-old Jonathan Eshenour. While riding his bicycle with his brother, he lost control and sustained a head injury from which he did not recover. Jonathan was wearing a helmet and obeying the rules of the road, but nevertheless, he succumbed to his injuries.

Later that year, the Eshenour family approached the township to discuss the possibility of creating an annual event that would raise funds for the future development of the trail system within the community. An event committee was established, and ten annual events were conducted raising funds that assisted in the development of over nine miles of additional trail. These sections include: Middletown Road to Bullfrog Valley Road, the section around the Hershey Medical Center through Bullfrog Valley that extends through Shank Park and ends at Waltonville Road.

At the ribbon cutting ceremony officially opening these sections, the Board of Supervisors officially named the Shared use facility "The Jonathan Eshenour Memorial Trail".

Audit Background / Purpose

Over the past few years, it has become evident that some of the signage and other important aspects of the trail have begun to show some wear from the elements and usage. As a result, the Department of Parks and Recreation has undertaken this review and has compiled information that will provide a roadmap that will assist in upgrading the trail system. The information contained within this report includes four approaches to organizing the needed improvements and future development of the system.

- I) Signage Replacement and Physical Trail Improvements
- 2) Off- Road Trail Improvements
- 3) Road Designation Recommendations
- 4) Future Trail Development Priorities

The report is broken down into sections for ease of identifying needed improvements to specific sections of trail. All or just some of the improvement areas may be mentioned within each trail section evaluation. The report is broken down this way to assist our work crews in concentrating and completing all required improvements on a specific trail section.

Each of these improvement areas are described below.

I) Signage Replacement and Physical Trail Improvements

All 13.5 miles of trail were either walked, rode or driven to evaluate the existing signage conditions along the trail. This process included not only identifying signage deterioration, but also sign deficiencies that could be improved upon.

2) Off- Road Trail Improvements

Over time, certain areas of the trail have begun to show deterioration from the elements, flooding, tree roots, edge washout and general macadam breakdown. These areas have been identified where applicable and will be addressed when that specific trail section is improved.

This section identifies deficiencies on off road sections of trail and are grouped together in a list format. Close collaboration will occur with the Public Works Department to assist in site and work need identification.

3) Road Designation Recommendations

When large sections of trail system were established in the late 1990's and early 2000's, traffic volume and patterns were not the same as they are experienced today. As a result, recommendations for altering designated roadways have been made to improve safety and usability in certain areas.

4) Future Trail Development Priorities

This section outlines several areas of trail development that would further add to overall trail connectivity and provides for connections to heavily utilized or populated sectors of the community.

SIGNAGE REPLACEMENT AND PHYSICAL TRAIL REPAIRS

Trail Section from Spring Creek Church to Palmdale Park

- 10 Bike Route Signs w/ 10 arrows
- Inquire if Spring Creek Church would allow trail markings on pavement
- Scrape Bike Path through Palmdale Park (Possibly look to relocate to avoid high water)
- Minor surface repairs between Palmdale Park and Spring Creek Golf Course
- Widen trail between alley and Spring Creek Golf Course
- Fix apron connecting golf course to trail & remove posts
- Trim branches on trail from golf course to church.
- Topcoat section of trail after Spring Creek Bridge heading east.

Palmdale Alley/Washington

- Take all bike route signs out of Palmdale Alley
- 1 Bike Route Sign with 1 Right Arrow
- 1 Bike Route Sign with 1 Left Arrow

Washington/E. Caracas

- 1 Bike Route Sign with 1 Right Arrow
- 1 Bike Route Sign with 1 Left Arrow

Para/E. Areba Avenue

- 2 Bike Route Signs with 2 Arrows

Para/Meadow

- 1 Bike Route Sign with 1 Arrow

Trail Intersection/Meadow

- 2 Bike Route Signs with 2 Arrows



East Caracas Avenue

- 2 Bike Route Signs with 2 Arrows (By Mobile Homes)
- 2 Bike Route Signs with 2 Arrows (E. Caracas/Skyview)
- 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow (Caracas/Baum)
- 2 Bike Route Signs with 2 Arrows (Caracas/Baum)

E. Granada/E. Caracas (Township Line)

- 1 End Trail Sign/ 1 Trail Begin Sign

Alley by DTSD Tennis Courts

- 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow

Alley/Intersection by Memorial Field

- 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow

Recreation Center Driveway

- 2 Trail Crossing Signs with 2 Arrows (1 on each side of driveway)

Library Driveway

- 2 Trail Crossing Signs with 2 Arrows (1 on each side of driveway)

322/Cocoa Avenue

- 2 Trail Crossing Signs with 2 Arrows (1 on each side of driveway)

Hartley/Carlton

Add left arrow

Carlton/Brookside

- Replace Bike Route Sign

<u>Church/Hilltop</u>

- Install Piano Crossing across Hilltop
- 2 Trail Crossing sign with 2 Arrows on Hilltop

Church/Lexington

- Install Blacktop ramp on other side of bridge
- Install Piano Crossing across Church.
- 2 Trail Crossing Signs on Church with 2 Arrows
- 1 Bike Route Sign on Lexington (Replace existing sign)
- Possibly install trail crossing warning signs in each direction.





Sandhill Road / Clark Road

- Repaint crosswalks and replace all approaching signs at Sandhill and Clark Road.

Grove Street

- Repair the trail cut (others) (Currently stone from utility cut)
- Provide Macadam connection from cul-de-sac to trail.

Cul-de-sac at Candlewyck Lane

- Add Bike Route Sign and Arrow
- Add "Dismount Bike and Walk" Sign

Bullfrog/Wood

- 2 Trail Crossing signs with 2 arrows for motorists
- Pedestrian crossing sign on Wood Rd. for motorists

Joanne/Pullman

- 2 Trail Crossing ahead signs for motorists

Para/Areba Avenue

- Install 2 Piano crossings across Para
- 1 Bike Route Sign (Replace existing sign)

Fishburn/Hartley

- Make crosswalk more visible (Raised crosswalk or intersection)
- 2 Flashing Trail Crossing Signs with 2 Arrows (Budget Item range of \$9,000 - \$16,000)

Springhouse/Deer Run

-Replace Bike Route Sign



ROAD DESIGNATION RECOMMENDATIONS

1) Southpoint Meadows

Flintlock, left on Powderhorn, right on Locust, left on Raleigh & Connect into Gelder Park.

- <u>Cul-de-sac at Flintlock</u>
 - 2 Bike Route Signs with 2 Arrows
- <u>Powderhorn/Flintlock</u>
 - 2 Bike Route Signs with 2 Arrows
- Flintlock/Powderhorn
 - 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow
- Powderhorn/Locust
 - 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow
- Raleigh/Locust
 - 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow
- Raleigh into Trail at Gelder Park
 - 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow

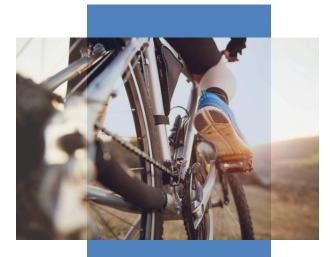
2) Stonecreek

Zell Ct., left on Stonecreek Drive & Connect into Stonecreek Open Space.

- <u>Cul-de-sac at Zell Court</u>
 - 2 Bike Route Signs with 2 Arrows
 - Remove "Walk Across the Road" Sign
- Zell Court/Stonecreek
 - 2 Bike Route Signs with 1 Right Arrow & 1 Left Arrow
- Stonecreek Park
 - 1 Bike Route Sign with 1 Arrow
 - o 1 Trail End Sign

3) Palmdale

- Remove Trail from existing alley designation.
- Designate Washington Avenue from Alley heading south to E. Caracas Avenue.
- Designate E. Caracas Avenue heading east to township line.





OFF- ROAD TRAIL IMPROVEMENTS

- Repaint "STOP" on path at Waltonville Road
- Place large rocks in trail section from Shank Park where stream is attempting to reroute
- Remove Black Walnut tree and repair trail between Stoney Run and Derry Woods
- Repair 8 ft. section of trail between Stoney Run and Derry Woods
- Fill in along the trail edge and repair edges in various locations North of Derry Woods.
- Stabilize bank at trail locations with white dashes / Install safety fencing as needed.
- Repaint "STOP AHEAD" and "STOP" in both directions leading up to Bullfrog/Wood
- Repaint "STOP AHEAD" and replace Stop Sign and "Walk Bike Across" sign at Research BLVD.
- Repaint "STOP AHEAD" at Life Lion Drive.
- Repair trail from construction across from Gulf Station on 322.
- Repaint "STOP AHEAD" at University/322
- Repaint "STOP" in both directions at Eastmore Building
- Pain "STOP" on pavement both directions at Centerview/322.
 Also add stop signs and "Walk Bike Across Signs" in both directions.
- Repair trail from sinkhole settlement across from the Blue Barn on 322.
- Add "STOP" on pavement at Cherry/Hope Drive. Also add a stop sign and "Walk Bike Across" sign (missing in one direction)



FUTURE TRAIL DEVELOPMENT INITIATIVES

Provided below are several areas that have been identified as potential future trail expansions and extensions. These items have been identified through user feedback, the Derry Township Bike and Ped Survey and ongoing planning efforts for trail development.

The locations and improvements identified are not listed in priority form, rather, are listed per improvement type.

1) Middletown Road Crossing

A crossing of Middletown Road has been a desire of the township for nearly 20 years. Many attempts have been made to discuss this concept with the property owner of the 52 acres of land east of Middletown Road between Grove Street and Wood Road. The property owner has not provided the necessary easement in order to make this connection possible. The property continues to be on the market and the township is prepared to act when the easement possibility of an easement arises. It is recommended that discussions with the property owner should be initiated once again to see if an agreement can be established for the necessary easements.

In preparation for the crossing, which would be located at the Intersection of Middletown Road and Gramercy Place, an easement has been executed between the Township and the Hershey Heights (Formerly Madison Heights) Development. This easement provides the right of way to make the connection to the existing bike path located off of Meadowridge Drive in the Deer Run Development.

This crossing would necessitate a vehicular signal with all of the appropriate pedestrian crossing features and must also meet all PennDOT criteria as Middletown Road is a State roadway.

2) Country Meadows Campus Connection

A connection between the Country Meadows Retirement Community and the existing off-road trail system is another link that has been discussed. Appropriate signage and painted crosswalks at the intersection of Cherry Drive and Sandhill Road would be provided. A macadam connection across Penn State Hershey Medical Center property would be needed for the final off-road connection location.

3) Downtown / Hershey Attractions Connection

With the ongoing development of downtown Hershey and HE&R attractions, a natural connectivity need has been created. Efforts have begun to look at existing corridors, as well as, planned connections as this development continues. Some existing corridors already exist in the area of the recently removed sewer authority plant on North Hockersville Road that could provide a potential natural connection from the downtown center to the Hershey Attractions. Another potential connection could lead from Homestead Road, following Para Avenue as a road designation, crossing S.R. 422 and utilizing Old Mansion Road and to proceed in the direction of the Historical Society and the Hershey Outlets.

4) Alpine Drive and Bullfrog Valley Road

In an effort to link the many residents on the east side of Bullfrog Valley Road, appropriate signage and crosswalk painting could potentially be provided at this location. Sight distance and vehicular speeds would need to be studied prior to this improvement.

5) S.R. 322 / Hockersville Road Intersection

As part of the development that is slated for this intersection, bicycle and pedestrian movement should be incorporated into the design of this intersection. This would be the start of establishing a safe connection between this intersection and the Library, Community Center and the Derry Township School District Campus via Bike Lanes and/or existing sidewalks.

6) S.R. 743 at the Giant Grocery Store

Create an access from the existing Trail that parallels S.R. 743 to Giant. Good sight distance exists, but there would be a need for all approaching signage.

7) Hershey Park Drive Shoulder Bike Lane Painting

Hershey Park Drive represents a major East to West corridor within the northern section of the township. With the Hershey Park Drive Extension, this corridor creates a means for travel connecting to Lingle Avenue to the east. This roadway has existing twelve- foot wide shoulders and is utilized by many bicyclists and pedestrians. A more defined painted bike lane designation should be evaluated as an enhancement and increased protection for non-vehicular users.



8) Community Center / Library / School District Campus

The other area of concentration should take place in establishing a safe connection between the Derry Township School District, the Hershey Public Library and the New Community Center Campus to the downtown. This is somewhat challenging due to the high density and vehicular traffic within this connection corridor. Potential exists with utilizing existing sidewalks and/or alleyways to create this "non-trail" connection, but an important connection, nonetheless.

9) Brookline Drive / Waltonville Road

A crossing currently exists at this location. Road designated bike trail signage on Brookline Drive would assist motorist in alerting them of bicycle and pedestrian users.



Derry Township Bike and Ped Survey Summary

In addition to the information provided earlier in this report, a recent survey was conducted related to Bike and pedestrian facilities, access, and suggested improvements. Information gathered from the survey reveals that the trail is mostly used for exercise, fitness, and leisure on a daily basis. People that bike use a paved multi-use path and occasionally bike on the road, with the majority of people traveling 1-3 miles on a walking trip and 1-5 miles on a bike trip.

Survey participants stated they would walk more frequently if there were more safe intersections and crossings, less automobile traffic, and sidewalk accessibility. Participants stated they would bike more frequently for fitness or exercise if there were bike lanes or enough shoulders, less automobile traffic, and more safe intersections. Overall people would walk or bike for exercise, fitness, shopping, dining, and errands if it were safer and there were more improved connections between neighborhoods, including sidewalks and multi-use paths for pedestrian and bike mobility.

Statistics relating to the survey participants show that thirty percent of people live more than 10 miles from their job or school. The top survey responders' range in age from 35-44 and 65 plus years of age. Sixty-one percent of survey participants were female, and sixty-four percent participate in a bike or running club. Ninety-four percent of survey participants never utilized the community's Zagster bike-share program.

Survey feedback for locations where sidewalk maintenance or vegetation management negatively impacts pedestrian mobility suggests that many of the neighborhoods surrounding downtown need more attention to areas with sidewalks affected by tree and shrub growth which may limit accessibility or affect safety due to uneven terrain. The areas of concern regarding sidewalk maintenance include Elm and surrounding streets within the downtown neighborhoods in addition to Cherry Drive, Fishburn Road, and along Zoo America. Survey participants would like to see more consistency with maintenance enforcement along sidewalks.

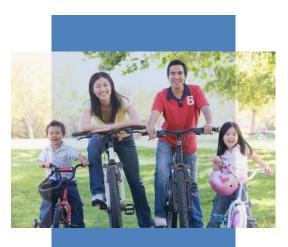
Survey feedback for streets and intersections that should be more bike friendly suggests that many of the major roadways need more attention to crossings in areas of the trail and frequently used areas that connect to neighborhoods. Survey participants would also like to see better connection from Hershey Park to Downtown Hershey, the Campground, and Hummelstown. Increased access from the Library to Governor Road and to Cherry Drive are also areas of concern.

The information gathered within the survey will continue to assist in developing strategies for bicycle and pedestrian movement throughout the township. Some of the common notations within the survey have been incorporated into the previous sections of this report. Provided below is a bullet listing of the survey responses received related to bicycle and pedestrian items. Some responses merely named a street or intersection which have also been included for accuracy of all responses received.



Pedestrian Related Locations of Concern Responses

- Access to Hershey Park/Giant Center
- Access to Shank Park from Stonegate Rd.
- Appenzell Dr. (Overgrown Bushes)
- Area by Post Office/Parking Garage
- Areba Ave. (Sidewalk concerns)
- Areba Ave. (Lack of Sidewalks)
- Bachmanville Rd.
- Beech Ave. (Sidewalk Concerns)
- Beech Ave./Orchard Rd.
- Boathouse Rd.
- Briar Crest (Between Areba and Beech) (Sidewalk Concerns)
- Bridge crossing 422 at Briarcrest Gardens
- Brookline Dr. (By the curve)
- Bullfrog Valley/ Sunnyside Rd.
- Caracas Ave.
- Cedar Ave. (Sidewalk Concerns)
- Chocolate Ave. (Palmdale Area)
- Chocolate Ave. (Sidewalk floods between Fenninci's and Info Center)
- Homestead Rd.
- Church/Fishburn Rd.
- Clark Rd.
- Clifton Height Rd.
- Cocoa Ave. (Sidewalks from Memorial Field to Theatre)
- Cocoa Ave. Bike Path (Surface Concerns)
- Cocoa Ave./ RT 743
- Connection from Rec Center to ECC
- Derry Rd. (Needs Sidewalk)
- East Areba (Sidewalk Concerns)
- East Glenn Rd.
- East Glenn/Carlton Rd.
- Edgewood Dr. (Low Hanging Trees)
- Elm Ave. (Curb cuts)
- Entrance/Exit from Glenn Acres from Fishburn Rd. (Sight Distance)
- Felty Mill Rd.
- Gelder Park
- Glen Rd. /Elm Ave.
- Glen/West Governor Rd. (Lack of Ramps)
- Governor Rd.
- Governor Rd./ Cocoa Ave.
- Granada Ave. (100 block)
- Hanover Rd. (Entering Hummelstown)
- Hartley Rd.
- Hersheypark Dr.
- Hillcrest Dr./Locust Ave. (Overgrown Bushes)
- Hockersville Rd. (Lack of sidewalks)



- Old West Chocolate Ave.
- Hotel Rd. (Overgrown)
- Java Ave.
- Joanne Ave.
- Laudermilch and East Derry to Carousel
- Linden Rd. (Sidewalk Concerns)
- Linden/Ridge Rd. (Between Chocolate and Cedar)
- Locust Ave.
- Maple Ave. towards Ridge Rd. (Uprooted sidewalks)
- Middletown Rd. (Crossing)
- Oak Ln./Valley Rd.
- Orchard St. (Overgrown Bushes)
- Park Ave. (Overgrown Bushes)
- Path behind PNC Bank
- Path Fishburn/Cherry Dr.
- Path to Deer Run (Overgrown)
- Railroad Ave. (Surface Concerns)
- Ridge Rd. (Near Areba)
- Ridge Rd./Chocolate Ave.
- Ridge Rd./Cocoa Ave. (Tree blocking view)
- Ridge Rd./Elm Ave.
- Ridge Rd./Granada Ave.
- RT 322 (between Cherry/Fishburn)
- RT 322 (Hockersville Intersection)
- RT 743 (Crossing Needed)
- RT 743 (Zoo America to Turkey Hill)
- Sand Hill Rd.
- Sandbeach Rd.
- Sandhill Rd. /Cherry Dr. (Crossing)
- Sipe Ave.
- South Lingle Ave./East Caracas Ave.
- Southpoint
- Stauffers Church Rd.
- Stony Run Rd. (Overgrowth)
- Valley Rd.
- Valley Rd./Cocoa Ave.
- Walton Springs (Hill)
- Waltonville Rd.
- Waltonville Rd./Brookline Dr.
- West Areba Ave. (Overgrown shrubs/low hanging trees)
- West Areba Ave./Orchard Rd.(Surface Concerns)
- Wood Rd.





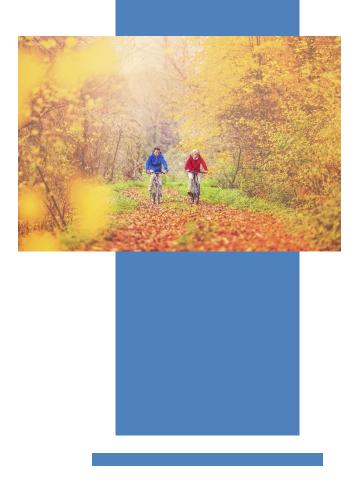
Bicycle Related Areas of Concern Responses

- Areba Ave.
- Bachmanville Rd. (Widen Shoulder)
- Boathouse Rd. (No Shoulder)
- Brookside/Carlton Rd.
- Bullfrog Valley Rd (Crossing at Life Lion)
- Bullfrog Valley Rd.
- Bullfrog Valley Rd. (From Stony Run to Roush Rd.)
- Bullfrog Valley to Lucy Ave.
- Bullfrog Valley/Sunnyside Rd.
- Cedar/Ridge Rd. (Install 4 way Stop)
- Centerview Dr./Governor Rd. (Needs "No Turn on Red" Sign)
- Chocolate Ave.
- Chocolate Ave. (Bike Lanes)
- Chocolate Ave./Orchard (Widen Shoulder)
- Church Rd.
- Clark Rd.
- Clifton Heights Rd.
- Clifton Heights Rd.
- Cocoa/ RT 322
- Derry Rd. to Lingle Ave.
- East Derry Rd. at 422
- Elm Ave. (Install Bike Lanes)
- Elm Ave. (Near Memorial Field)
- Elm/West Governor Rd.
- Felty Mill/Stauffers Church Rd.
- Fiddler's Elbow Rd.
- Fishburn and Cocoa (Access to Giant)
- Fishburn Rd.
- Fishburn Rd. (Approaching Governor)
- Fishburn/Hartley Rd.
- Governor Rd.(Bike Lanes)
- Governor Rd./ RT 322
- Governor/ Fishburn Rd.
- Governor/University Dr.
- Governor/West Areba (Needs Crosswalk and Caution Lights)
- Hershey Park Dr. (Add Bike Lanes)
- Hershey Park Dr./ Mae St.
- Hill Church Rd. (No Shoulder)
- Hockersville Rd. (Crossing Areba)
- Hockersville Rd.

- Hockersville/Chocolate Ave.
- Hockersville/Governor Rd.
- Homestead/Areba Ave.
- Homestead/Meadow Ln.
- Main/Hanover St.
- Mansion to Derry Rd.
- Maple/Glen Rd.
- Middletown Rd. (Crossing)
- Middletown Rd. (Eliminate Rumble Strips)
- Para Ave.
- Para/Chocolate Ave.
- Park Ave. (Connect to Hershey Park Drive)
- Ridge Rd.
- Ridge Rd. to Park Ave.
- Ridge/Chocolate Ave.
- RT 322 (Access to Hummelstown)
- RT 322 (Karns to DT School District)
- RT 322/ Fishburn
- RT 322/ Glenn (Crosswalk)
- RT 39
- RT 422 (Pinch Point between old chocolate factory and Hampton Inn)
- RT 422/Paxton Ave.
- RT 743 (Near Giant)
- RT 743 (Would like Bike Lanes)
- RT 743 at Harley/Bachmanville
- RT 743/ Church Rd.
- RT 743/Bachmanville Rd
- RT 743/Glenn Acres (Crossing)
- RT 743/Old Hershey Rd (Bike Lane)
- Sand Hill Rd.
- Sandhill Rd. (Add Share the Road Signs)
- Sandhill Rd. (Where Clark and Forrest connect)
- South Plum St.
- Valley Rd. (Install 4 way stop)
- Waltonville Rd.
- West Areba Ave.
- Wood Rd.
- All Intersections at Hershey Medical Center
- All intersections from MHS to Bullfrog Valley Rd.
- Clover Leaf Area (Old West Chocolate to Med Center)
- Improve Bike Trail Signage
- Access to Gelder Park from Jonathan Eshenour Trail



- Extend bike path from Cherry to Cocoa Ave.
- Old Forge Rd. to Giant
- Improvements in Southpoint Development
- Add more bike paths on North Side of Hershey
- Improve Regional Connections
- MHS Traffic Circles (Better Signage)
- Derry Woods Dr. (Install Speed Bumps)
- Northeast Dr. (Connection to Troegs)
- Improvements to Valley or Ridge for Downtown Access
- Improve Greenways along Swatara Creek
- Connection between Stone Creek and South Point Meadows



IMPLEMENTATION / FUNDING

The information in this report represents areas of the existing trail system that need repairs and/or upgrades. For this work to be accomplished, funding needs to be identified to begin addressing these needs. Provided below are some funding mechanisms that have been identified so this important work can commence.

The Bikes and Beers event held the past two years sponsored by Troegs and the Bikes and Beers organization have produced approximately \$6,000 for the express purpose of assisting with the upkeep and expansion of the trail system. These funds can provide the funding to purchase the needed signs that have been identified within this audit.

The Jonathan Eshenour Foundation, established in Jonathan's memory, raised funds through the ten events specifically for the maintenance and future upkeep of the trail system. The foundation still has some funding available for that purpose. We will be working closely with the foundation to discuss these needs and what items they may be interested in assisting with financially.

Approximately five years ago, the township received a very generous donation of \$20,000 from a resident and the company which they are employed. These funds were originally slated for a crossing of Middletown Road. The donor has also indicated that those funds may be utilized for other repairs needed along the trail.

Some funding has also been set aside within the 2020 General Operating budget to assist in completing some of the identified items. The department of Public Works has agreed to assist with identified trail macadam repairs that can be done during the paving season of 2020. Other funds will go toward some tree work that needs accomplished to address roots that have pushed up the trail surface. This work will be coordinated between the tree service and the Public Works Department for the proper sequencing of work.

Current signage needs identified in this Report will cost approximately \$2,500.

Current identified Flashing Beacon Crossing systems range between \$8,100 to \$16,900 each depending on model with or without wireless bollard authorization.

IMPROVEMENT MAP (*in design***)**

