

**CITY OF DELAWARE
PARKS AND RECREATION ADVISORY BOARD
CITY COUNCIL CHAMBERS
CITY HALL
1 S. SANDUSKY ST
7:00 P.M.**

AGENDA

APRIL 19, 2016

1. ROLL CALL
2. APPROVAL of Motion Summary for the meeting held March 15, 2016 as recorded and transcribed.
3. PUBLIC COMMENTS
4. UPDATE of YMCA Recreation Services
5. UPDATE of Parks Activities
6. UPDATE of Bike Master Plan
7. DISCUSSION of the Renaming of Eastside Park
8. FINALAZATION of Sub-Committee Assignments and Meeting Schedules
9. STAFF COMMENTS
10. MEMBERS COMMENTS
11. ADJOURNMENT

ITEM 2

PARKS AND RECREATION ADVISORY BOARD
MOTION SUMMARY
March 15, 2016

ITEM 1. Roll Call

Chairwoman Lash called the meeting to order at 7:00 p.m.

Members Present: Joshua Bricker, Cassie Cunningham, Dianna Hibinger, Nicole LaMar, Matt Polites, Lucas Ratliff, Celeste Smith, Councilmember Kyle Rohrer, and Chairwoman Allyson Lash

Members Absent: Julie German

City Staff Present: Linda Mathews, Customer Service City Liaison, Stacy Davenport, Parks Superintendent

YMCA Staff Present: Amy Mosser, Director of Active Older Adults, Claire McClain, Director of Member Impact

Motion to Excuse: Councilmember Rohrer moved to excuse Ms. German, seconded by Mr. Polites. Motion approved by a 9-0 vote.

ITEM 2. APPROVAL of the Motion Summary for the meeting held February 16, 2016 as recorded and transcribed.

Motion: Mr. Bricker moved to approve the Motion Summary for the meeting held February 16, 2016 as recorded and transcribed, seconded by Ms. Smith. Motion approved by a 9-0 vote.

ITEM 3. PUBLIC COMMENTS

ITEM 4. UPDATE of YMCA Recreation Services

Ms. McClain provided background information on her qualifications and interest.

Ms. Mosser provided an update on special events. Ms. Mosser informed the Advisory Board that the Father/Daughter Dance had 404 participants. Information was provided on the need for volunteers for the upcoming Mother/Son Super Hero party on Friday, March 18, 2016.

Ms. Mosser provided information on the Underwater Easter Egg Hunt on March 25, 2016 and the Easter Egg Hunt at Veteran's Park on March 26, 2016.

ITEM 5. DISCUSSION of Board Sub-Committees

Chairwoman Lash requested that Advisory Board Members email their preference on to be on the Parks Sub-Committee or the Recreation Sub-Committee. Discussion held on projected meeting times and schedule. Mr. Davenport requested that email preferences be submitted to Ms. Mathews by March 25, 2016.

ITEM 6. UPDATE of Park Activities

Mr. Davenport provided an update on the reopening of Hidden Valley Golf Course on March 25, 2016. Information was also provided to members on golf lessons that will be offered.

Mr. Davenport provided an update on opening and ribbon cutting events throughout the city in the upcoming months. Mr. Davenport informed the Board that Veterans Park ribbon cutting event will be held June 4, 2016 and Veterans Plaza ribbon cutting event will take place May 30, 2016. Potential dates for the opening of the Dog Park were discussed.

Mr. Davenport informed the Board that the basketball hoop was installed at Kensington Park. Mr. Polites informed staff that the net was missing from the hoop.

Mr. Davenport provided an update on the fertilization of the softball and baseball fields.

ITEM 7. STAFF COMMENTS

ITEM 8. MEMBERS COMMENTS

ITEM 9. ADJOURNMENT

Motion: Mr. Polites moved to adjourn the Parks and Recreation meeting, seconded by Chairwoman Lash. The meeting adjourned at 7:15 p.m.

Allyson Lash, Chairwoman

Elaine McCloskey, Clerk

ITEM 4



YMCA/Recreation Services

Recreation programs listed below are now coordinated through the YMCA

I. Youth Programs/Classes

- A. Youth Baseball/Softball began January 25th and will run through April 10th. Games will begin the week of May 23rd.
- B. Spring Soccer Registration is closed. Games will be played on Saturdays (barring severe inclement or dangerous weather) with first games played on April 16th and season ending games played on May 21.

II. Adult Programs/Classes

- A. Diabetes Prevention Program: Participants learn about healthy eating and increasing their physical activity, with the goal of reducing their body weight by 7% and increasing their physical activity to 150 minutes per week.
- B. The Livestrong Program is now accepting applications. This program focuses on helping survivors heal and reclaim their life.
- C. Delay the Disease, a program for people with Parkinson's is now up and running. Classes are offered Monday, Wednesday and Friday from 1-2 pm.
- D. We will have adult beginner swim lessons over at Mingo in June and Adult intermediate swim lessons at the YMCA in July.

III. Adult Sports Programs

- A. Adult Softball Registration began January 25th and is ongoing. Games will begin the week of April 25th .
- B. Open volleyball on Monday nights has started back up. Play starts at 7:30p in the main gym at the Y.
- C. Monday and Wednesday open basketball has picked up a significant amount. We have many participants playing between 8pm and 11pm.

IV. Special Events

- A. Underwater Easter Egg Hunt was a hit with 130 participants.
- B. Dave Staley Adult and Youth Triathlon will be Saturday, July 9th. Registration will kick off at the end of this month.
- C. The YMCA is Partnering with The American Red Cross to join two different Family events into one large Healthy Kids and Safe Families Day event to be held at the YMCA on April 30th from 8:30-11:30AM. Events include: 5K, Bike Rodeo, Touch-A-Truck, Bounce House, and tons of community partners.
- E. Our Youth Development Campaign- 'Building a Brighter Youth - with You(th) we can do more- will launch Saturday, April 16th with Pirates and Mermaids Treasure Hunt in the pool

area from 11:30-1:30PM. \$5 per child (ages 3+). On Saturday, April 23rd, we will have a Camp In for the Kids lock-in from 5:00-9:00PM, ages 6-11, \$25 per child (\$15 for additional child). Don't forget to come out and celebrate the end of our campaign with Healthy Kids Day on Saturday, April 30th from 8:30-11:30AM, free to all.

F. Saturday, June 18th from 11-3PM the Delaware YMCA will be having a Community and Corporate Field Day. This event will allow adults to create a corporate or community team of 10-12 individuals and participate in 5 major events. (volleyball, tug-o-war, relay race, kickball, and dodgeball) All proceeds from this event will help the Delaware YMCA's annual campaign, which in return creates a number of opportunities for health seekers. Registration and information forms can be found at the Delaware Y or online at ymcacolumbus.org/delaware.

V. Issues/Concerns

VI. Shelters/Reservations

VII. Staff

A. Stephanie Gac is our new Assistant Aquatics Director

ITEM 6

Copies of plan
in color will be
available at
meeting



BIKE PLAN 2025

June 2015



Prepared for:
City of Delaware, Ohio
1 S. Sandusky Street
Delaware, Ohio 43015



Authored by:
Stantec Consulting Services
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DRAFT

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1. Executive Summary

This document, Delaware's third bike network plan, has a 10 year planning horizon. The planning process included an assessment of existing conditions, a public engagement and visioning process, and recommendations to implement the vision.

This vision is that, by 2025, "Delaware [will be] a bike-friendly city, with a complete bike network which allows bicyclists of varying age, skill, and ability to safely travel across the city and beyond."

Existing Conditions

In communities across the country, bicycling for recreation, and increasingly for transportation, is desired. In Delaware, existing and prospective residents value the ability to bike across the city and to local destinations.

Most neighborhood streets in the City of Delaware are fairly bikeable for a range of users; however, many of these mostly residential areas are not connected to each other and area destinations. Barriers such as railroads, busy roadways and, often, disconnected and non-adjacent development impact connectivity.

The City and developers have made significant strides to construct multi-use paths to improve connectivity; however, the system is largely disconnected and more investment is needed. Most of the easy projects have been complete and now some significant investments are needed. At the same time, the City's existing paths are aging and maintenance of the existing system needs to become a priority.

Residents seem to value the path network, particularly for recreation; however, there are few if any events to encourage biking or a local bike culture sought by millennials and others.

Public Engagement

In general, residents say they want a safe network which allows trips across the city and to community amenities. While the existing network is mostly comprised of multi-use path, there is support for on-road bike facilities. There is support for large, system expansion projects; however, most believe the system has gaps and safety problems which also need to be addressed.

Recommendations

This plan outlines over \$14 million in projects to be implemented over the next 10 years. Projects to be implemented in the short and medium term are generally safety and gap-closing projects, or about \$4 million. These also include miles of on-road facilities such as bike boulevards, defining neighborhood streets as bikeways, and also road diet projects where wide or under-utilized travel lanes may be repurposed as bike lanes, a center turn lane, and/or on-street parking.

The remaining projects focus on better connections across the City such as along Delaware Run, the Springfield Branch rail spur, and along US-23, to be implemented as grants and roadway improvements allow.

Beyond infrastructure, the plan outlines program and policy changes to improve biking in the City of Delaware.

2. Introduction

Over the past decade, the creation of walkable and bikeable communities has become recognized as a key benchmark of community progress.

In the late 1990s, the City of Delaware saw this need and started requiring developers to construct multi-use paths in open space dedication areas. Further, the City successfully sought grants for several rails-to-trails projects, and included side paths along new and reconstructed roadways.

Today, the network is comprised of nearly 24 miles—mostly paths but also some low volume streets and drives. These investments have predominantly been made in four areas of the city: near downtown and along US-23, as well as on the far west, far east, and far south sides of town.

While these multi-use paths are valued by local residents, they are also disconnected. Combined with railroads, busy streets, highways and rivers, cross-city travel is difficult



Figure 3-1: Delaware's Springfield Branch rails to trails path, looking east toward the bridge over US-23

for most people who ride bicycles. Becoming a place where bicycling is easier for adults, families, and children is an aspiration of City leadership as well as many local residents. This planning document provides insight with respect to what has been accomplished and what still needs to be done to help Delaware become a more “bike friendly” community.

About this Plan

This plan follows a traditional planning process including an assessment of the existing condition, engagement of the public, development of a guiding vision, and the development of prioritized recommendations. Chapters of this plan follow this organization.

This document builds on and supersedes recommendations from previous planning efforts. These include: the City’s most recent comprehensive plan (2003), which defined a vision for a more connected city; the City’s first Bike Plan, published in 2006; a condition inventory and implementation report published in 2008; and the City’s most recent bike plan, published in 2010.

Planning Perspective

While active transportation plans may follow a traditional planning process, those reading the plan should be aware of several nuances.

While such plans have traditionally focused exclusively on infrastructure – paths and safer crossings, non-infrastructure factors have been increasingly recognized for their importance and influence. This plan incorporates a *Five E perspective*, considering infrastructure, generally Engineering matters, as well as non-infrastructure matters, specifically Education, Encouragement, Enforcement and Evaluation.

This more holistic approach places additional emphasis on the influence of policies and programming on improving mobility, such as educating bicyclists and motorists to safety share the road, encouraging more people to ride for recreation and transportation trips, enforcing safe riding through rules and law enforcement, as well as evaluating the effectiveness of policies and planning efforts.

Second, plan authors have been cognizant of the range of anticipated users, answering the question “*who are we planning for?*” This is a difficult question because those who ride bicycles range in skill, experience, and fitness. As such, what is sufficient for some users may not be for others. Also, people have different reasons for riding: some for recreation without concern for their destination, while others ride for transportation to specific destinations such as work or school. Finally, while many people ride their bikes alone, some ride with friends or family. The range of users helps to define the range of needs required to accommodate them.

Plan Lifespan and Updates

This plan sets a vision and provides recommendations to guide decision makers over the next 10 years of implementation. While the planning horizon is the year 2025, the plan should be updated if priorities or conditions significantly change, or by the year 2020.

3. Existing Conditions

The existing conditions chapter provides insights into “how things are,” providing an understanding of what is working well and where more progress is needed. The chapter is broken into two sections: *The Built Environment* addressing the city’s geography and infrastructure, and *Standards, Policies, and Programs*, addressing the non-infrastructure, “soft” factors which affect those who bike.

The Built Environment

While the City has nearly 24 miles of multi-use path, its most important type of infrastructure for bicycling is its *city streets* as most bike trips will start and stop on streets, not paths.

Bicycling is easiest in the historic core of the city, where its streets are laid out on a very walkable and bikeable grid. Its neighborhood streets are mostly quiet with less than 2,000 vehicles per day and a speed limit of 25 mph (Figure 3-2). Similarly, most of Delaware’s local, neighborhood streets are conducive to bicycling. As such, trips within and to adjacent

neighborhoods are relatively easy so long as those neighborhoods are connected to each other. Trips outside of one’s neighborhood may require bicyclists to cross *barriers* such as railroads, limited-access highways, streams and rivers, and large developments without cross-access. Since these barriers often block automobile traffic, the few crossing points that exist are likely on arterial roadways which may be difficult to cross, let alone travel along for any length of time. Figure 3-4 illustrates such barriers in Delaware and the vicinity.

Arterial and Collector Streets

Delaware’s arterial roadways are much less friendly to bicyclists, specifically William Street (US-36), Central Avenue (SR-37), and, to a lesser degree Sandusky Street and London Road. These roads have higher traffic volumes and/or speeds, lack dedicated space for bicyclists, and some have a significant volume of trucks. Some trips are simply not possible, or at least direct, without riding on William Street or Central Avenue as was seen on Figure 3-4.



Figure 3-2: W Winter Street, typical of a very bikeable neighborhood street.

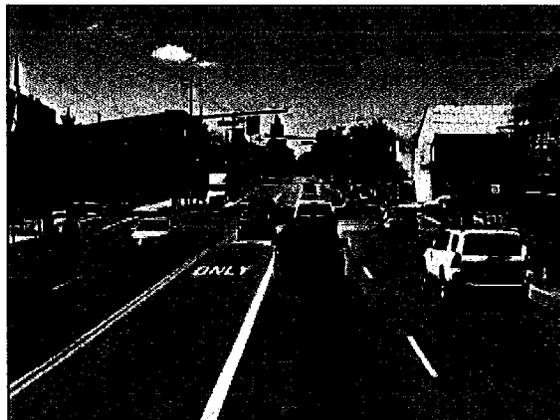


Figure 3-3: William Street, typical of a busy and less bikeable arterial street.

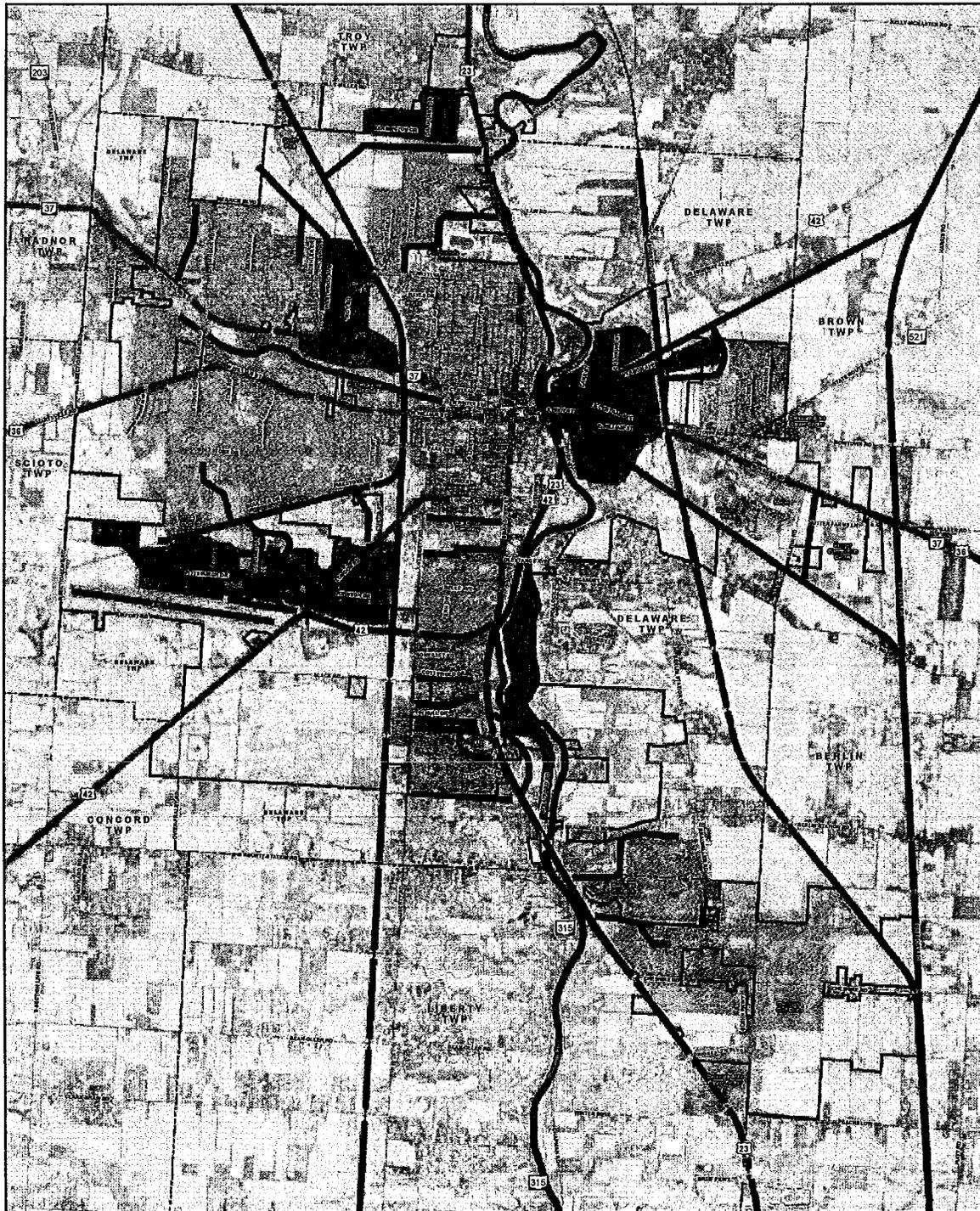


Figure 3-4: Barriers shown with dark red lines, such as railroads, limited-access highways, streams and rivers, and large developments/subdivisions without cross-access, force people to ride out of their way to travel around the barrier. Busier arterial roadways, shown with orange lines, are easier to cross; trips along them are difficult and required to navigate around other barriers. Shaded areas, generally bound by barriers, are places where it is generally easy to bicycle.

Other collector roads such as Troy Road and Pittsburgh Drive are not comfortable to use for their own reasons. While total traffic volumes are lower, they still have high speed limits (35 mph) and very narrow shoulders. As such, bicyclists must ride in vehicular travel lanes, contending with faster-moving vehicles and, on Pittsburgh Drive, delivery and semi-trucks.

Bike-Specific Improvements

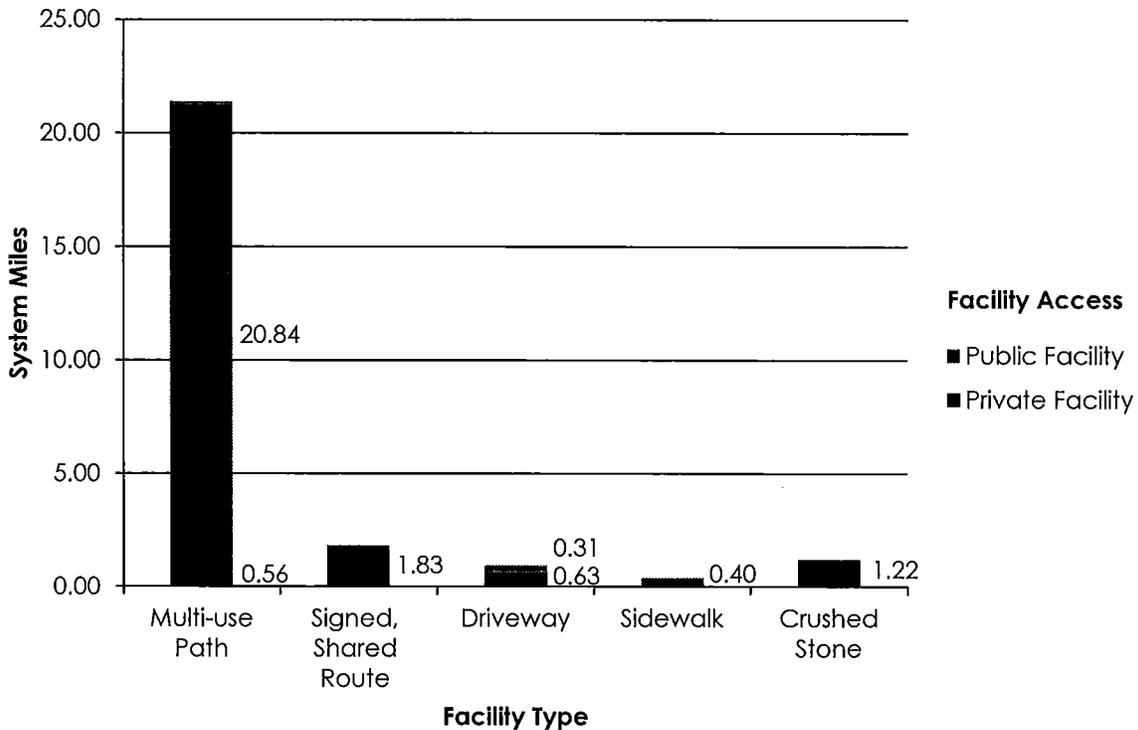
Delaware’s bike network is roughly 24 miles in length, 21 miles of which are multi-use paths and the remainder comprised of low volume, low speed driveways and streets which link segments of path. The vast majority of the network is public and available for use 24-hours a day. Some portions are private, either signed “no trespassing” or gated and, therefore, restricting use 24-hours a day. Table 3-1 provides a breakdown of the network by type of facility and type of access.

Multi-use Paths

The majority of multi-use paths were built and contributed since 2001 by housing developers, predominantly on the west side near Houk Road, on the east side near Kilbourne Road and Mill Run Crossing, and on the far south side near Glenn Parkway and Cheshire Road. The City and various project partners have contributed paths along US-23 and the Olentangy River, as well as along the abandoned Springfield Branch rail spur.

A condition inventory of the city’s multi-use paths was completed in 2008, and then again in 2015 as part of this planning effort. The condition inventories provide a broad representation of the condition of individual paths. Paths in “good” condition are generally accessible and in new to good condition. Paths in “fair” condition are deteriorating and have some pavement defects which impact path accessibility. Paths

Table 3-1: Existing Bicycle Network by facility type, access



in “poor” condition have significant pavement defects and/ or accessibility problems and need significant maintenance activities such as an asphalt overlay or full-depth reconstruction.

Table 3-2 shows the change in condition for paths in 2008 and 2015. During this time period, 7.6 miles of path was added to the network. Paths rated as “fair” jumped from 1.77 miles (11%) in 2008 to 4.70 miles (20%) in 2015. Similarly, paths rated at “poor” jumped from 0.12 miles (1%) to 1.09 miles (5%). Exhibits 3-3 and 3-4, provided in the appendix, symbolize the condition of paths throughout the city in 2008 and 2015 respectively.

This represents a significant backlog in maintenance as “poor” paths will need to be resurfacing within the next few years (if not sooner), and “fair” paths will likely need to be resurfaced in five to eight years. While most of the “poor” paths are City maintained, some are maintained by Homeowners’ Associations across the city.

For the first time, the condition inventory also included a detailed list of locations where spot maintenance activities are needed. Exhibit 3-5, provided in the appendix, illustrates the locations of various deficiencies requiring maintenance. Specific examples include: places where vegetation needs to be trimmed to improve visibility around curves and at intersections, and pavement joints and cracks which may present a fall hazard (Figure 3-5).

The condition inventory showed that preventative maintenance activities, such as seal coating, are being performed along some paths but not all. Seal coating is an activity which, if performed consistently and early in a path’s lifespan, can extend the life of the surface course of asphalt from about 15 years to about 20 years.

Table 3-2: Multi-use Path Condition by Year of Condition Inventory

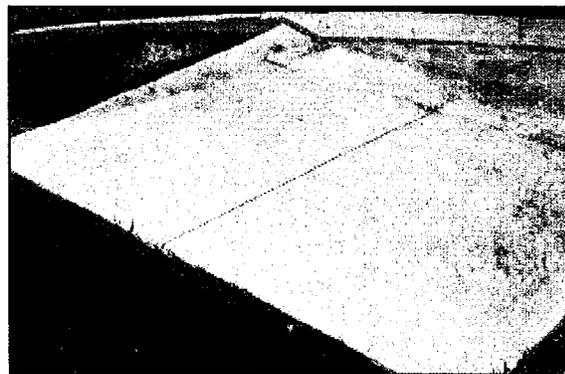
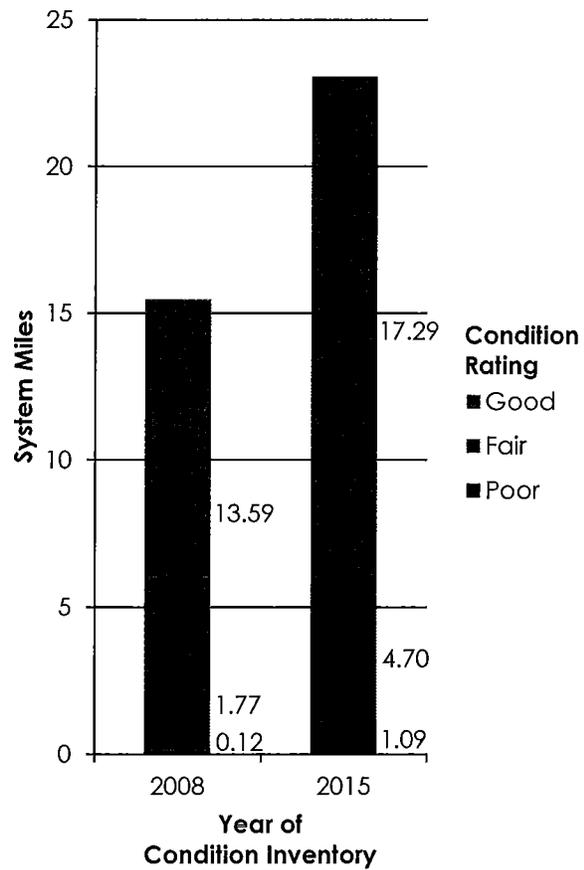


Figure 3-5: Here, the asphalt trail and curb ramp no longer meet, creating a trip hazard and making the path inaccessible. Vertical and horizontal separation of curb ramps from paths and curbs a common problem observed during the inventory.

The City does not have a defined preventative maintenance plan for the pathway network, and allocates \$5,000 per year for maintenance.

Crossing Locations

During the path condition inventory, numerous multi-use path crossings were identified such as where the Mingo path crosses E Central Avenue (SR-37), Old Cheshire path crosses Cheshire Road, and the Springfield Branch path crosses Sandusky Street.

Most, but not all path crossings of streets have a direct and accessible route, a striped crosswalk, and advanced warning signage—typically a bicyclist in the vicinity warning sign (W11-1). Some crossings also have median islands, continuously flashing beacons with same signs. A few have significant sight-distance problems, or are particularly difficult for users to safely cross.

During the inventory, a number of crossings have been identified as locations where enhancements should be evaluated. These may include additional signage showing the location of the crossing (W11-15 with W16-7P) on the right side if the road or both sides of

the road for added emphasis; standardizing the application of path yield and stop signs at drive/street intersections (and removing errant signs); installing new (or improving existing) median islands; installing pedestrian-activated rapid-flash beacons and removing/repurposing continuously-flashing beacons (which are not as effective); and improving sight-distance at some crossings by removing vegetation. These locations include Mingo Path at SR-37 (Figure 3-6), Springfield Branch Path at Sandusky Street, and several locations in the vicinity of Cheshire and Braumiller roads.

Beyond roadway crossings, there are many locations where side paths cross driveways and intersecting streets. Plan authors noted that during the condition inventory, most crossings had no signage and other crossings had either yield or stop signage. Unless stated otherwise, side path users have the same right-of-way as those traveling on a roadway and turning/approaching vehicles must yield to path users. Stop signs and flexible delineators with the word “stop” should be removed from the system.



Figure 3-6: Mingo Multi-use Path at its crossing of SR-37 looking south. While the crossing has continuously-flashing beacons and is striped, a median island, pedestrian-activated push button, and a wider and more direct north approach would improve accessibility and safety for all users.

Where paths follow independent alignments, path users should be instructed to stop (or preferably yield) based on anticipated volumes on the trail and intersecting road, consistent with the warranting criteria for assigning the right-of-way with stop-controlled intersections.

Finally, plan authors found numerous locations where wood, metal, or plastic bollards or delineators were used to discourage motorists from driving on paths. While there is a risk of motorists riding on paths, these vertical obstructions are a serious injury hazard to bicy-



Figure 3-7: At this location off Timbersmith Drive, bollards nearly prevent bikes from entering/leaving the roadway, forcing bicyclists (and those using a wheelchair or stroller) to leave the path.

clists, or outright prevent access without leaving the trail (Figure 3-7). All bollards should be removed from the system; and “No Motor Vehicle” signs (R5-3) can be erected if and where there may be confusion. Where access must be restricted for, say, non-vehicle loading bridges, path geometry can be designed to prevent motor vehicle access, or bollards can be placed in a landscaped median where they’re less likely to be struck. If bollards are used, illumination is recommended, as well as using a bright color of paint and reflective tape on the bollard to ensure they are visible day and night.

Bike Parking

Knowing there will be a secure and safe place to park one’s bike is an important consideration for those who travel for transportation. A brief inventory of major destinations such as the downtown (Sandusky Street: Spring Street to Central Avenue) and some area retail centers showed that most locations lacked bike parking in visible and prominent locations – important for theft deterrence and to help bicyclists easily find the parking area.

While the City has a program to install bike parking downtown, there are just 10 parking spaces on Sandusky Street between Spring Street and Central Avenue: three “U” racks, and one “wave” rack – a type of rack more likely to allow bikes to be damaged if used as designed¹. While it’s unclear how frequently these are used, they are not conveniently located throughout the downtown area.

If a family of four wanted to ride to Whit’s Ice Cream on the west side of Sandusky Street, the closest racks are on the east side of the street. After parking them at these racks, they would need to walk a half block to the nearest crosswalk and then back a half block to reach their destination. Their bikes would occupy all of the spaces on the block, and 40 percent of what’s available on Sandusky Street downtown. More likely, the family would park them in front of the business, locking them up to trees, sign posts, or benches – or choose to drive an automobile.

¹: *The Association of Pedestrian and Bike Professionals (APBP) has produced guidelines for bike racks to reduce the risk of damage to parked bikes. Racks should provide at least two points of contact with a bike’s frame and have the ability too attach a cable or U-lock through part of the rack to secure the bike. “Wave” racks, as well as “ladder” and “wheel-slot” racks do not meet these guidelines and bikes parked at these racks are more prone to being damaged from tipping over and/or sliding down the rack.*

Standards, Policies, and Programs

The following categories address the “soft” factors which affect bicycling in Delaware such as standards, policies, and programming.

Engineering

1. *Complete Streets Policy* – The City does not have a policy or ordinance; however, accommodation is addressed in nearly every project.
2. *Engineering Training or Resources* – The City does not have its own bike-specific design manual, or copies of the most recent AASHTO or NACTO design manuals. No staff members have participated in continuing education specific to on- or off-road bike facilities.
3. *Bike Parking Requirements* – City Code does not require bike parking. The City’s standard drawings do not include standards for bike parking.
4. *Bike Parking Standards* – The City does not have specific standards as to what type of bike parking facilities are provided to the public.
5. *High-capacity Bike Parking at Community Destinations and Facilities* – Downtown and large retail destinations lack high-capacity bike racks needed to accommodate groups of bicyclists.
6. *Path Maintenance Plan or Program* – The City sets aside \$5,000 per year for the Public Works Department to perform path maintenance, and there is no preventative maintenance plan in place. Requests for maintenance can be made with the “My Delaware” smartphone app, as well as re-

ports made via email, website, telephone, or to staff, including police dispatch.

Education

1. *Safe Biking Education Programming for Students* – The Delaware City School District has a Safe Routes to School plan, approved in January of 2015. This plan calls for bike rodeo events and some education events outside of the class, possibly aimed at family participation. It’s unclear if these countermeasures will be provided to all students, and if they will help students learn how to ride their bikes safely with an opportunity to learn the rules of the road.
2. *Safe Biking Education Programming for Young Children* – The City and YMCA sponsor an annual Safety Town program targeted to young children.
3. *Safe Biking Education Programming for Adults* – There is no specific program aimed at teaching skills to adult bicyclists.
4. *Share the Road Campaign* – A program aimed to help motorists and bicyclists learn how to safely share the road. While such a campaign occurred in Columbus, including media spots which would have been seen and heard in Delaware, no specific effort has been made to reach local residents.

Encouragement

1. *Bike Network Map* – There is no specific map of the City’s multi-use paths or bike network. Multi-use paths are shown on the City’s roadway map; however, the map is not easy to use.
2. *Bike Network Wayfinding Signage System* – Delaware’s bike network does not have a wayfinding signage system. Such a

system would be most beneficial in locations where out-of-town or visiting bicyclists are expected.

3. *National Bike Month Events*—The City does not sponsor events or publicize National Bike Month.
4. *Signature Bike Events*—The city does not host a signature bike event; however, some organizations sponsor rides or events with a cycling component such as the annual Mingo Man triathlon. Of note, the City hosts an annual, week-long “Bike Patrol School” for police officers across Ohio.
5. *Bike Accommodation at Festivals and Large Events*—The City (or partners) do not provide valet or monitored bike parking at events.
6. *Bike Tourism Promotion*—to date, bike riding in or near Delaware is not specifically promoted, other than by groups sponsoring events within the city.
7. *Bike Co-op and Maintenance Training*—Delaware does not have a bike co-op; however, retailer Breakaway Cycling hosts an annual Park Tool School training course on bike maintenance, offered at cost.

Enforcement

1. *City Ordinances*—Various ordinances in chapter 373 require bicyclists to have a license from the police department (373.13-14), as well as register their bicycles (373.15) and report changes in their appearance (373.19).
2. *Sidewalk Riding*—People are permitted to ride bikes on sidewalks, except in the

downtown area (373.12) even though bike racks are located on the sidewalk.

3. *Law Enforcement Training*—The City has several officers attend regularly-offered legal training and this information is disseminated to officers as needed.
4. *Helmet or Lights Give-a-way Programs*—Helmets are given away through the Safety Town and Bike Rodeo education programs.

Evaluation and Policy

1. *Bike Program Manager*—responsible for the bike network, programming and policy updates. There is no specific program manager.
2. *Bike Advisory Committee*—The City does not have a committee specific to bike issues and advancing the biking program. Tentatively, these issues are being addressed by the Park and Recreation Advisory Board.
3. *Dedicated Funding Source for Plan Implementation*—The City has not yet created a dedicated funding source for implementation of plan recommendations.
4. *Crash Reporting and Tracking*—The City does not independently track and review all reported bike crashes on a regular basis. The Mid-Ohio Regional Planning Commission tracks and analyzes all reported crashes on an aggregate level, reporting locations where safety funding may be applicable.

4. Public Engagement and Vision

Public engagement is an important component of any planning process for the purposes of increasing knowledge and understanding of the issues in question. Plan authors combine this input with research, professional judgment, and best practices to derive plan findings and recommendations. In short, public input helps to inform the planning process and the resulting plan document.

A multi-pronged approach was used to engage the public, including an internet-based survey, a public meeting, mobile input stations, and two public comment periods.

Input Methods

Survey

An internet-based survey was published and available for input for three and a half weeks in May of 2015. The 33 question survey was

completed by 171 respondents from across the city. A summary of survey responses is provided in an appendix to this plan.

Public Meeting

A public meeting was held on Tuesday, May 12th from 7 to 8pm in Council Chambers. Approximately 30 people attended the meeting, including City staff and leaders. Participants sat through a brief presentation followed by opportunities to provide input on Vision and Value Statements; Policy and Programming; Priority Corridors; and Locations for more bike racks, safer crossings, and destinations to connect to the network.

Mobile Input Stations

Priority Corridor Exhibits were placed at the YMCA and the Library. The exhibits consist of a map of highlighted, numbered corridors and a separate tally sheet where



Figure 4-1: Attendees of the public meeting review interactive exhibits before providing their input. Participants were provided stickers to append to exhibits and a tally sheet, indicating the projects they support.

participants could place stickers to vote for their favorite corridors (Figure 4-2). These stations also included a flyer providing information on how to submit public comment.

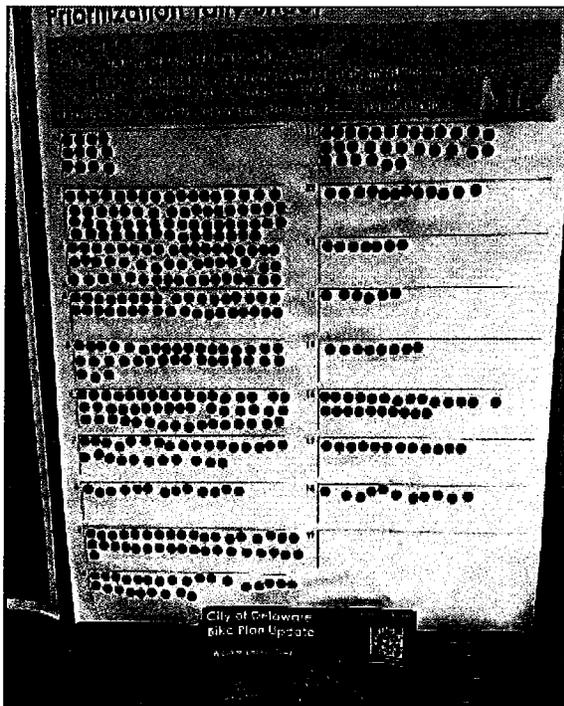


Figure 4-2: The Library Mobile Input Station, consisting of an exhibit of possible corridors (to the left, out of frame) and a tally sheet, where participants would apply stickers under the number(s) corresponding to the projects the most support.

Public Comment Periods

A general public comment period was advertised in May, resulting in eight comments emailed to City staff. A second public comment period was advertised in July, providing the public an opportunity to read the draft plan and provide input. Public Comments are provided verbatim in an appendix to this plan.

Five Key Findings

The multi-pronged public engagement approach produced a significant amount of feedback. Here are five key findings derived from public input:

1. About 83% of survey respondents use the path network. Nearly all who indicated they use the path network “agree” or “strongly agree” that the multi-use path network is a desirable amenity.
2. When asked about their vision of biking in Delaware in 2025, the following themes were heard over and over again: safe, cross-city bike routes; connectivity to all neighborhoods, community facilities, retail centers, and downtown; and connectivity to nearby cities and parks.
3. When asked about their top priorities, respondents indicated that expanding the path network across the city, and closing gaps in the network were the first and second most important priorities. Many stated they think the path network is disconnected, and that they lacked access to desired destinations.
4. There is support for on-road cycling if improvements are made. About 87 percent of respondents indicated they would feel comfortable if they had dedicated space for biking (e.g. bike lanes), versus 57 percent for sharing an automobile travel lane on streets where shared-lane signs and markings were installed.
5. The most popular path/project corridors, in order of popularity: Delaware Run/US-36/SR-37 Corridor, YMCA/Rail Trail Extension, Liberty Street Bike Boulevard, Winter Street Bike Boulevard, Bowtown Road/SR-37/Winter Street Connection, and Troy Road/Merrick Blvd/Smith Park Connector.

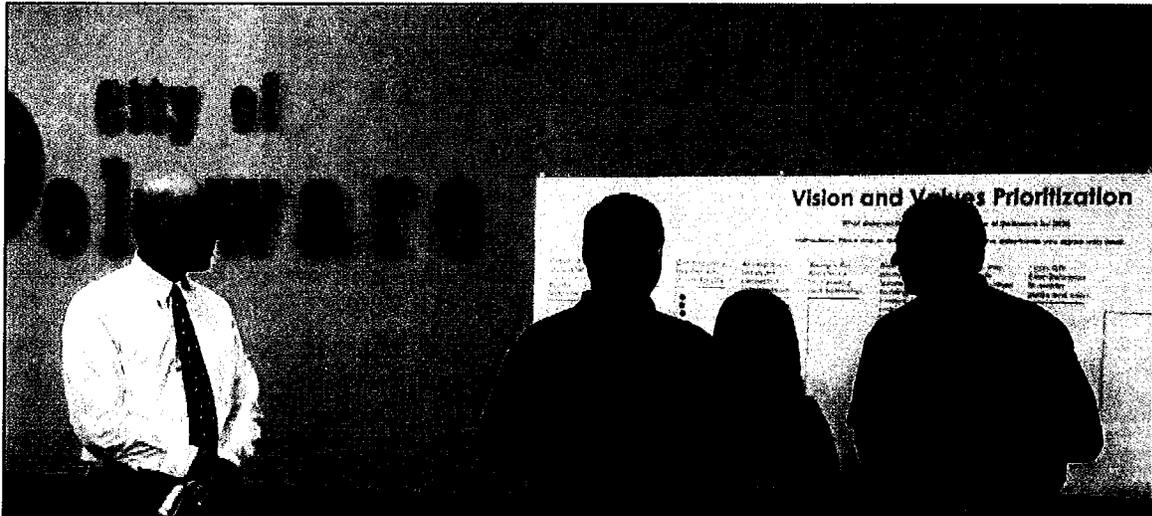


Figure 4-3: Meeting participants read vision and value statements, preparing to place stickers under the statements they most agree with.

Vision

A vision statement is a picture of what one wants to be true at some point in the future. Plan authors formulated a vision statement based on the following input, collected during the public engagement process.

Vision and Value Statements

With respect to vision, attendees at the public meeting were asked a simple question: *“what do you want to say is true about bicycling in Delaware in 2025?”* Some sample statements were provided and participants placed dots under the statements they agree with most (Figure 4-3). Statements receiving the most votes include:

1. *“One can safely ride their bike across the city.”*
2. *“I can ride from Delaware to nearby cities and parks.”*
3. *“All neighborhoods are connected to the network.”*

In other words, participants valued *cross-city access/mobility* and, to a lesser extent, *equity of access*.

Priorities

While the internet-based survey did not specifically address the “vision,” participants were asked about priorities. At least 150 respondents (of 171) indicated the following priorities were “important” or “very important,” in descending order of priority:

1. *Expanding the system across the city,*
2. *Closing short gaps in the system,*
3. *Connecting the system to downtown,*
4. *(Increasing) path maintenance, and*
5. *Connecting neighborhoods to the network.*

When respondents were asked to provide their top three priorities, two priorities stood out overwhelmingly: *“Expanding the system across the City,”* and *“Closing short gaps in the system.”*

From these priorities, the predominant themes are *cross-city access/mobility*, and to a lesser extent *destinations, level of service, and equity of access*.

Vision Statement

The following vision statement is a summary of the sentiment and themes heard during the planning process:

“Delaware is a bike-friendly city, with a complete bike network which allows bicyclists of varying age, skill, and ability to safely travel across the city and beyond.”

1. *A Bike-Friendly City*
A place where bike riding is easy and people enjoy riding bikes.
2. *A Complete Bike Network*
A network of paths and streets which are bikeable . . .
3. *Varying Age, Skill, and Ability*
. . . for a range of users, 8 to 80; cyclists both new and experienced; and those with a range of physical abilities.
4. *Safely Travel . . .*
Facilities, programming, and policies with a clear emphasis of maximizing the safety of vulnerable users.
5. *. . . Across the City and Beyond*
Early efforts should focus on connecting the existing, fragmented system; and neighborhoods and key destinations. Later efforts should focus on long-term aspirations to connect Delaware to nearby places such as cities and parks.

5. Recommendations and Implementation

This chapter provides an implementation strategy to guide the City in implementing the plan. Following the strategy, recommendations are organized into *infrastructure* and *non-infrastructure* items.

Implementation Strategy

The City of Delaware has significant infrastructure needs and the first and foremost priority of this plan is to provide a connected network. This being said, other elements of this plan are critical for increasing system usage, and improving both community health and quality of life; helping to keep users safe; and even finding ways to leverage investments in terms of economic development. To this end, successful implementation will require the assistance of multiple City departments, as well as other partners in the public and private sectors.

Infrastructure

Recommendations to improve infrastructure are provided in Table 6-1 (pages 25-30) and shown on the Bike Network Plan, Exhibit 6-1 (page 31). In the interest of providing context for these recommendations, a review of *“who are we planning to accommodate”* and *“bike-infrastructure facilities”* is recommended by this planning effort.

“Who Are We Planning to Accommodate?”

The recommendations of this plan are offered assuming the “design user” is represented by the following characteristics:

- *Groups of 1 to 5 bicyclists*, which affects queuing space at curb ramps and median islands, as well as bike parking.
- *Users with limited physical ability*, who may travel at 5-15 mph and much slower when riding up hill. Significant grade changes may require an asymmetric, uphill bike lane on busier roadways. Also, all facilities must comply with applicable accessibility standards.
- *Users with limited skill riding with motorists*, who presumably can ride safely and comfortably with traffic where the posted speed limit is 25 mph (or less), and vehicular volumes are less than approximately 4,000 vehicles per day. Beyond route wayfinding signs, “Share the Road” signage and “sharrow” markings, placed at regular intervals, are helpful for streets with more than 2,000 vehicles per day.
- *Users who know the rules of the road*— People who bicycle on streets are assumed to know the *rules of the road* as taught by parents or learned at school or in a driver’s education course. *Note: Bicyclists who do not drive, have not participated in Safety Town, or have not otherwise been taught how to safely ride a bicycle may lack this knowledge.*

The design user is not an advanced and athletic cyclist, adept at riding with traffic in challenging conditions and, therefore, needs more accommodation.



Figure 5-1: Photo example images of the "design user." Varying in number, purpose of trip, as well as age, skill, and ability.

Bike Infrastructure Toolbox of Treatments

The following pages, 20-23, provide a "toolbox" of infrastructure solutions for the City of Delaware, including: multi-use paths, bicycle boulevards, signed-shared roadways (with and without pavement markings), and bike lanes (resulting from road diets, as well as shoulder widening). Further, three types of crossings are highlighted, as well as recommended practices for bike parking.

Previous plans have also included sidewalks as an acceptable accommodation; however, this plan does not. Studies have now shown that those who ride on the sidewalk have a greater risk for crashes than those who ride in the

street. There are several reasons: crossing motorists, by in large, do not expect fast-moving bicyclists on the sidewalk; and bicyclists, often traveling at a fast pace, sometimes fail to avoid pedestrians and other unexpected hazards while riding on a sidewalk. Even so, sidewalk riding may still be appropriate for slow-moving children or adults and, therefore, it is not recommended to make sidewalk riding illegal.

Given this understanding, the City should strive to provide accommodation to bicyclists within the street where eight- to 10-foot wide sidepaths are not feasible, as well as where

This section continues on page 24 . . .

Bike Infrastructure Toolbox of Treatments

Multi-use Paths

Multi-use Paths are typically 10-foot wide paths, with an asphalt or concrete surface, to accommodate bicyclists as well as those walking, running, or rolling. Paths may be as narrow as eight feet where few users are anticipated, and may be upwards of 16 to 20 feet wide in areas with lots of users. Paths should be designed to meet a minimum design speed, e.g. 12 mph, and include a centerline skip-dash stripe where user volumes or path geometry (e.g. width and curvature) warrant. Cost per mile for independent alignments: varies from \$800,000 a mile to over \$3M+ per mile where bridges and right-of-way may be required. Sidepaths built adjacent to and with new roadways may be substantially less expensive due to economies of scale.



Bicycle Boulevards

Streets or driveways with low volumes of traffic, less than approximately 4,000 vehicles per day, and posted speed limits of 25 mph or less. Specialized signage and pavement markings are used to define the bike boulevard for bicyclists as well as motorists. These routes may connect multi-use paths, or parallel busy arterial streets. In other communities, these facilities sometimes include additional components, including changes to intersection control to favor through bicyclist movements, traffic calming (to slow or discourage auto movements), and traffic diversion (restricting through auto traffic while accommodating through bike traffic). Cost: varies, \$35,000 per mile (basic) to \$80,000 per mile.



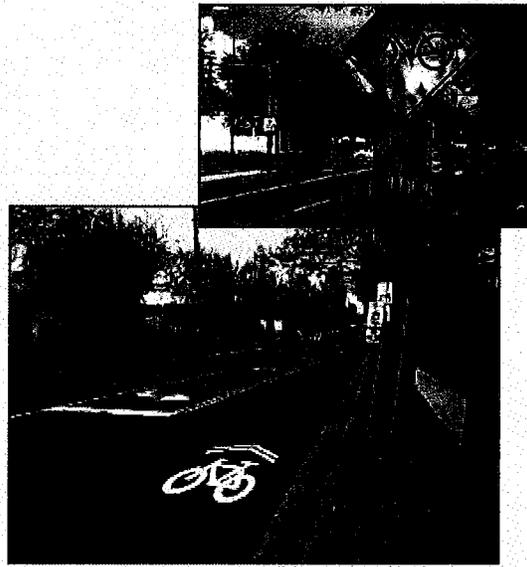
Bike Infrastructure Toolbox of Treatments

Signed-Shared Roadways

Similar to bicycle boulevards, signed-shared routes are streets where bicyclists share a travel lane with motorists. Signage, such as a W11-1 with a W16-1P "Share the Road" plaque, is used to remind motorists and bicyclists of the shared-lane condition. "Sharrows" pavement markings should (but may not) supplement the signage, recommending where bicyclists should ride within the travel lane. These facilities are an improvement helping some users on urban streets where bike lanes are infeasible. They are appropriate on streets with posted speeds of 35 mph or less, and traffic volumes of 5,000 vehicles per day per travel lane. Cost: Approximately \$35,000 to \$50,000 per mile depending upon the complexity of the project and the density of markings and signs, and other features.

Bike Lanes

Bike lanes are preferential travel lanes, typically five feet wide, which provide dedicated space for bicyclists allowing them to move at their own speed independent of adjacent traffic. Bike lanes are often created by *road diet* projects, where travel lanes are narrowed to their minimum width, and under-utilized parking or travel lanes may be eliminated. The space created can be used for bike lanes, a center turn lane, and even on-street parking. Projects which remove travel lanes can reduce average vehicle speeds, and provide space for median refuge islands. Bike lanes can also be provided on uncurbed roads by paving a four-foot paved shoulder, which will also improve pavement life. Even where two bike lanes are not feasible, an asymmetric configuration providing an uphill bike lane can benefit users. Bike lanes are most appropriate on roads up to 35 mph. Road diet and bike lane projects may cost up to \$200,000 per mile, but significantly less if implemented with a resurfacing projects.



www.pedbikeimages.org / Lyubov Zuyeva



www.pedbikeimages.org / Dan Burden



Divisadero Street, www.fresno.gov

Bike Infrastructure Toolbox of Treatments

Basic Crossing

Basic marked crosswalks consist of pavement markings or striping, as well as signage. Markings can consist of two bars, or more intense treatments such as the ladder whose “rungs” make the crossing more visible to motorists. Signage should be placed at the crosswalk, consisting of (W11-15) and a downward pointing arrow (W16-7P) at minimum, showing drivers where the crossing is. Advanced crossing signage, and advanced yield signage (R1-5, and yield bar markings) may also be used, particularly if the crosswalk signage is obscured from approaching motorists. Costs range from \$5,000 to \$15,000.



Median Refuge Island

Traditional crossings require pedestrians and bicyclists to wait for motorists to yield or a gap in traffic sufficient to cross both directions of traffic. Alternatively, median refuge islands shorten crossing distances and require users to cross just one direction of traffic at a time; allowing users to take advantage of smaller gaps. As such, crossing delay is reduced and safety is increased because users can focus on threats approaching from one direction instead of two. Costs, including the crosswalk, may range from \$30,000 to \$50,000 on a road with a center turn lane, to upwards of \$200,000 when roadway widening is required to implement.



Rectangular Rapid Flashing Beacons

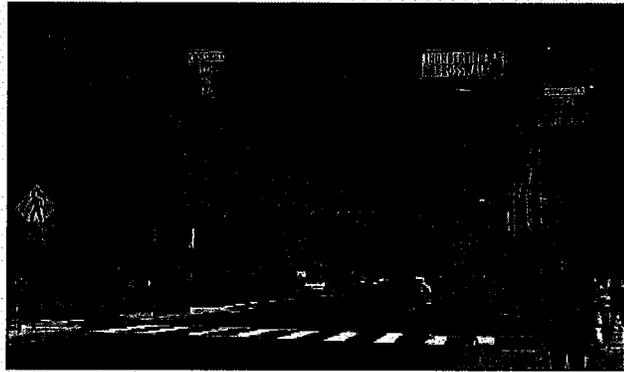
In cases where medians are not feasible, or an existing median is not sufficient, rectangular rapid-flashing beacons, or RRFBs, may be used as a low-cost countermeasure to supplement crosswalk signage, further encourage motorists to yield to pedestrians and bicyclists at crosswalks. The beacons are activated by push buttons or passive detection and are most effective over short crossing distances (e.g. two to three lane roads, or up to two-lane approaches). Signs and beacons should be placed on both sides of each approach; left side signs should be mounted in a median if present or constructible. Costs to add a beacon to an existing or new crosswalk may cost \$25,000 to \$35,000.



Bike Infrastructure Toolbox of Treatments

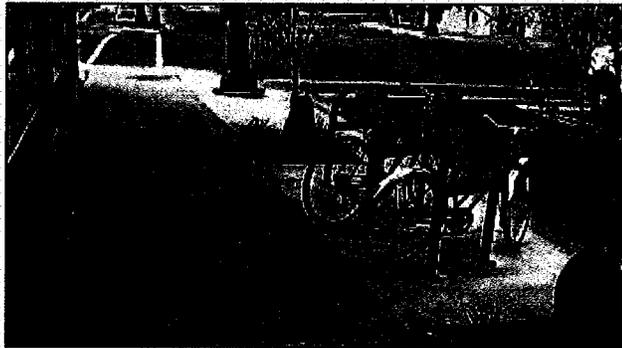
Pedestrian Hybrid and Signalized Crossings

Where there are higher volumes of motorists or pedestrians, or where motorists travel at a high rate of speed, a Pedestrian Hybrid Beacons (or HAWK beacon) or Signalized Pedestrian Crossing intersection may be more appropriate. Both treatments legally control the movements of motorists and pedestrians to reduce delay to improve safety and minimize delay for both users. Both treatments also have specific warrant criteria based on significant vehicular and pedestrian volumes, as well as crossing distances and vehicle speeds. Costs will range from \$75,000 to \$125,000.



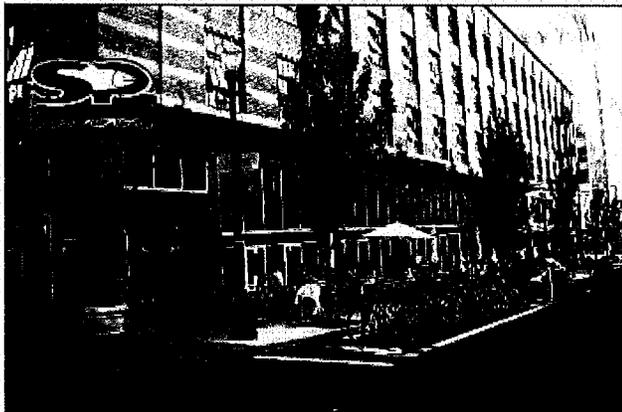
Bike Parking

Encouraging people to bike to destinations requires the provision of secure and attractive parking options. In terms of security, bike parking should be theft deterrent, allowing bikes to be locked up. Secondly, proper racks will support the frame of a bike in two places – reducing the risk of the bike wheel being bent when falling over, or sliding down the rack and being stepped on. The Association of Pedestrian and Bike Professionals (APBP) has guidelines which may be helpful in this regard. Racks provided to the public should meet these standards, reducing the likelihood of damage to Delaware residents.



Bike Corrals

Large capacity bike parking can be provided by constructing bike corrals – the placement of large bike racks on curb extensions or on the street in a parking spot or in areas where sight-distance restrictions prevent automobile parking. Bike corrals can accommodate upwards of 12 bikes in the space of just one automobile parking spot!



Infrastructure (continued)

the number of intersecting driveways would make such sidepaths difficult to safely use.

Bike Network Plan

Given the amount of infrastructure needed in Delaware, projects listed in Table 6-1 (Pages 25-30) are organized into three categories:

- *Safety and Gap Projects*, addressing unsafe crossings and closing gaps within the existing system.
- *On-road Facilities* such as road diets, bike lanes, and bike boulevards which may be implemented as stand-alone projects, with repaving projects, or in advance of repaving projects so the City can “try before they buy” the improvements.
- *Larger, System Expansion Projects* which provide cross-city connectivity, and creating new and exceptional recreational amenities, as well as opportunities for economic development.

Projects listed in Table 6-1 are shown on the Bike Network Plan (Exhibit 6-1, Page 31. Each project has an ID number which matches Exhibit 6-1, as well as a title, description, an indication of the project’s priority and the implementation time period, approximate cost, responsible party, and a list of potential funding partners or grant programs, if applicable. Short-term projects should be completed by 2019, medium-term projects by 2022, and long-term by 2025. These projects comprise investments of approximately \$300,000 by 2019, \$6.9M by 2022, and \$6.9M by 2025, all in 2015 dollars.

While all projects in Table 6-1 are on the Bike Network Plan, some projects shown on the

plan do not appear in the table. Those projects are either beyond 2025, the planning horizon of this planning effort, or are anticipated to be constructed as development occurs; be it private development or the construction of thoroughfares such as Sawmill Parkway, Glenn Parkway, and Veterans Parkway.

Non Infrastructure

Non-infrastructure recommendations, addressing the City’s standards, policies, and programs, are provided in Table 6-2, on pages 33 through 37. These are organized by their respective Five E categories, including: Engineering, Education, Encouragement, Enforcement, and Evaluation.

Similar to the infrastructure recommendations in Table 6-1, recommendations include an ID number, title, description, priority, implementation time frame, responsible party, approximate cost, and potential funding partners or grants.

Table 6-1: Infrastructure Improvements

Proj. No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Grant Funding
Safety and Gap Projects							
S1	Mingo Path/SR-37 Crossing	Designate the inside east-bound lane as a left-only turn lane onto US-23 north. Construct a median island with rectangular rapid-flashing beacon immediately east of the US-23 NB Ramp/SR-37 intersection. Adjust northeast corner to remove the switchback and provide an 8-foot wide north approach while providing barrier protection from the river hazard. This may require adjusting the alignment of the entrance ramp or other likely costly or significant changes.	High	Short term	CIP, ODOT	\$50,000 to \$100,000	
S2	Henry-Sandusky-US-23 Gap	Complete 1,700-foot gap of multi-use path between Sandusky Street/Belle Avenue intersection and the Olentangy Avenue/Henry Street intersection. The alignment may run along US-23, largely within right-of-way, or be completed by replacing and widening the walk along Sandusky Street and Olentangy Avenue.	High	Medium term	CIP, ODOT	\$250,000	
S3	Winter Street-Bowtown Road Connector	Remove the sidewalk on the north side of SR-37 and construct a 2,000-foot long path comprised of eight foot concrete walk with saw-cut joints, connecting the end of E Winter Street to the end of Bowtown Road. Consider options to improve alignment visibility on the west side of the railroad underpass to reduce risk of collisions, such as widening the path into SR-37 (curb extension) or consider installing a beacon with passive detection to warn approaching users to the presence of pedestrians or bicyclists under the overpass. Evaluate the need for a median island crossing and/or RRFB at the end of the path, where the route crosses SR-37 at E. Winter Street. Right-of-way will likely be required on portions of this project unless SR-37 is narrowed to accommodate the path within right-of-way. Bike Boulevard treatments should be installed on Bowtown Road from US-36/SR-37 to SR 521.	High	Medium term	CIP, ODOT	\$430,000	
S4	Bowtown Rd/ SR 521 Gap	Connect the 10-foot concrete multi-use path on the southeast corner of SR-521 and Biltmore Drive to the eight-foot multi-use path on the northwest corner of Bowtown Road and SR-521. A median-refuge island may be constructible in the striped out median approximately 175 feet northeast of the Biltmore/SR-521 intersection. A path may be extended north and east, crossing Bowtown Road west of SR-521. A median island may also be feasible at the intersection if left-turn volumes are sufficiently low to place an island northeast of the intersection. Volumes and speeds may be sufficiently low enough to use an RRFB without a crossing island, reducing overall project cost.	High	Medium term	CIP, ODOT	\$150,000	

Table 6-1: Infrastructure Improvements (Continued)

Proj. No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Grant Funding
S5	US-36 Multi-use Path, Bowtown Rd to SR-521	Construct a 2,200-foot multi-use path along US-36/SR-37 between Bowtown Road and SR-521, connecting the Winter Street-Bowtown Road Connector to Mill Run Crossing and associated retail/employment in the vicinity. Widen or replace 400 feet of sidewalk along the west side of Mill Run Crossing from US-36/SR-37 south through the first commercial drive. Add pedestrian signalization to the west leg of the US-36/SR-37 and SR-521 signal.	High	Medium term	City	\$250,000	
S6	US-23 Multi-use Path Extension to Walmart and Kroger	Construct 2,100 feet of multi-use path along US-23 from 400 feet north of W Hull Drive to the existing path south of Wendy's, and resurface 600 feet of existing path from Wendy's to Hawthorn Boulevard. Path crossings at signalized intersections should include pedestrian signalization of the path crossing. Path connections to adjacent development should be evaluated as part of this project.	Medium	Medium term	City	\$350,000	
S9	Cheshire Road and Glenn Parkway Area Gaps and Crossings	This project includes a collection of gap projects. Project 1: providing a enhanced crossing across (Old) Cheshire Road on the east leg of its intersection with Cheshire Crossing Drive. Project 2: Road diet (New) Cheshire Road near Indigo Blue Street and construct a median island crossing and add an RRPB if Cheshire Road is extended to US-23. If the intersection of Braumiller and (New) Cheshire roads is not signalized, add a basic crossing on the north leg and add a median island crossing on the east leg. Connect this to the path along Cheshire and complete the gap between Braumiller and Glenn Parkway. Also, complete path along Braumiller Road north 1,050 feet, and along (Old) Cheshire Road, 650 feet west. Project 3: Provide crosswalks on the west and north legs of the Cheshire Road/Glenn Parkway roundabout, and north and east legs of the Glenn Parkway/Sycamore Lane roundabout.	Medium	Medium term	CIP, Impact Fees	\$475,000	
S10	Marvin Lane Park Multi-use Path	Construct a multi-use path between Penick Avenue and Cobblestone Drive to promote bicycling between these two collector streets. The path should include a design to discourage through traffic such as geometry that prevents through traffic, or bollards placed inside of landscaped areas, reducing the risk of bicyclist hitting the bollard.	Medium	Medium term	CIP	\$80,000	
S11	Mill Run to Kroger Distribution Center Path	Build a 1,100-foot multi-use path linking the existing path on Mill Run Crossing to Nutter Farms Lane and the Kroger Distribution Center, providing pedestrian and bicycle access to this major local employer. To be implemented with a roadway improvement if it occurs first. With this project, a curb ramp should be built connecting the Mill Run Crossing path to the rear-access entry to Meijer so bicyclists can use the path to access this major retailer.	Low	Medium to Long term	City (CIP, TIF, Impact Fees)	\$140,000	

Table 6-1: Infrastructure Improvements (Continued)

Proj. No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Grant Funding
S12	Sandusky Street/ Springfield Branch Crossing Upgrades	The existing multi-use path crossing of Springfield Branch at S Sandusky Street is better than most; however, improvements are needed due to the complexity of the intersection and crossing traffic volumes. A pedestrian-activated rapid-flashing beacon is recommended at the crosswalk, combined with signage identifying the crossing location (W11-15, W16-7P). The existing advanced warning beacon should be removed. If possible, it is recommended to restrict some movements at the intersection in favor of allowing a larger median island and alignment of the crosswalk with the path (rather than forcing users out of their way to reach the crosswalk). If O3 is implemented, users would be served by increasing the width of the island to 12 to 14 feet, and the width of the opening and crosswalk to 14 feet, providing ample storage room for those dwelling in the median.	Medium	Medium term	City	\$30,000 to \$65,000	
S11	Mill Run to Kroger Distribution Center Path	Build a 1,100-foot multi-use path linking the existing path on Mill Run Crossing to Nutter Farms Lane and the Kroger Distribution Center, providing pedestrian and bicycle access to this major local employer. To be implemented with a roadway improvement if it occurs first. With this project, a curb ramp should be built connecting the Mill Run Crossing path to the rear-access entry to Meijer so bicyclists can use the path to access this major retailer.	Low	Medium to Long term	City (CIP, TIF, Impact Fees)	\$140,000	
S13	Vernon Avenue Connector Path	Build a 440-foot multi-use path between the east end of Vernon Avenue and its extension off of Brittany Drive. The path should be designed to prevent vehicular access through restrictive path geometry or bollards located within landscaped medians to reduce the risk of injury to bicyclists. This project may be omitted if a roadway connection is made in its place.	Low	Medium to Long term	City (CIP, TIF, Impact Fees)	\$60,000	
S14	W William Avenue Multi-use Path	Complete missing sections of multi-use paths along W William Avenue between Houk Road and Curtis Street.	Low	Long term	City	\$650,000	
S15	Warrensburg Road Path	Construct a 1,050-foot multi-use path along Warrensburg Road from SR-37 to west to Grand Circuit Boulevard, and then south along Grand Circuit Boulevard to Curly Smart Circle.	Low	Long term	City	\$120,000	
S16	SR-521: Kensington Place Park to Delaware Area Career Center facility on SR-521. Installation of a rapid-flashing beacon and bike parking should be evaluated with this project.	Construct a 700-foot multi-use path and basic crosswalk connecting paths within Kensington Place Park to the Delaware Area Career Center facility on SR-521. Installation of a rapid-flashing beacon and bike parking should be evaluated with this project.	Low	Long term	City, Delaware CSD	\$95,000	

Table 6-1: Infrastructure Improvements (Continued)

Proj. No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Grant Funding
On-Road Facilities							
O1	Winter Street Bicycle Boulevard	Sign and mark a bike boulevard treatment on Winter Street from Blue Limestone Park/Elizabeth Street to E Central Avenue. Evaluate the need for an uphill bike lane between Estelle and Lake streets.	High	Short term	City, OWU	\$50,000 to \$85,000	
O2	Liberty Street Bicycle Boulevard	Sign and mark a bike boulevard treatment on Liberty Street from London Road to Pennsylvania Avenue. Evaluate the need for an uphill bike lanes in places where significant grades exist, such as in the vicinity of Oak Hill Avenue/Spring Street.	High	Short term	City, OWU	\$85,000 to \$100,000	
O3	Sandusky Street Road Diet	Evaluate and implement a road diet to provide bike lanes from Oak Grove Cemetery to Pennsylvania Avenue and a signed-shared route from Oak Grove Cemetery south to Olentangy Avenue. Traffic counts and roadway widths suggest a three-lane section, plus two bike lanes, should be feasible from Oak Grove through Central Avenue, and a two lane section with bike lanes north through Pennsylvania. Existing on-street parking should not need to be impacted. The project may present opportunities to provide additional median refuge islands and mid-block crossings in the vicinity of OWU and downtown, as well as the removal of the OWU pedestrian signal if desired. Project cost will be less if completed as part of resurfacing project.	Medium	Medium term	City	\$145,000 to \$180,000	
O4	SR-37, US-36 Bike Lanes and Signed-shared Roadway	Stretches of SR-37 and US-36 appear to have sufficient width to allow an hourglass bike lane treatment – installing bike lanes between signals where left turns are provided but a continuous left turn lane isn't provided, as well as some paved-shoulder bike lanes. Other portions of the corridor could be a signed-shared route, possibly with some asymmetric, uphill bike lanes (where needed). These facilities will not accommodate all users but will make the corridor safer and more attractive for more advanced users.	Medium	Medium term	City, ODOT	\$200,000	
O5	Orchard Lane/Grandview Avenue/Hickory Lane Bicycle Boulevard	Construct a median refuge island with RRFB at SR-37 at Grandview Avenue (east leg, redirecting westbound left turning motorists to Park Lane) and designate Orchard Lane, Grandview Avenue, and Hickory Lane as bicycle boulevards. This project will connect the Hillside Drive and it's connector to the Delaware Run path north to Dempsey Middle School, Pennsylvania Avenue, and future paths/roads leading up Troy Road to Smith Park.	Medium	Long term	City, ODOT	\$80,000	SRTS
O6	Curtis Street Signed-Shared Rte.	Apply Signed-Shared Route treatments along Curtis Street to provide a continuous route linking London Road, the Springfield Branch Rail-with-Trails Extension, US-36, and the Delaware Run path (Phase 1).	Medium	Long term	City	\$80,000	

Table 6-1: Infrastructure Improvements (Continued)

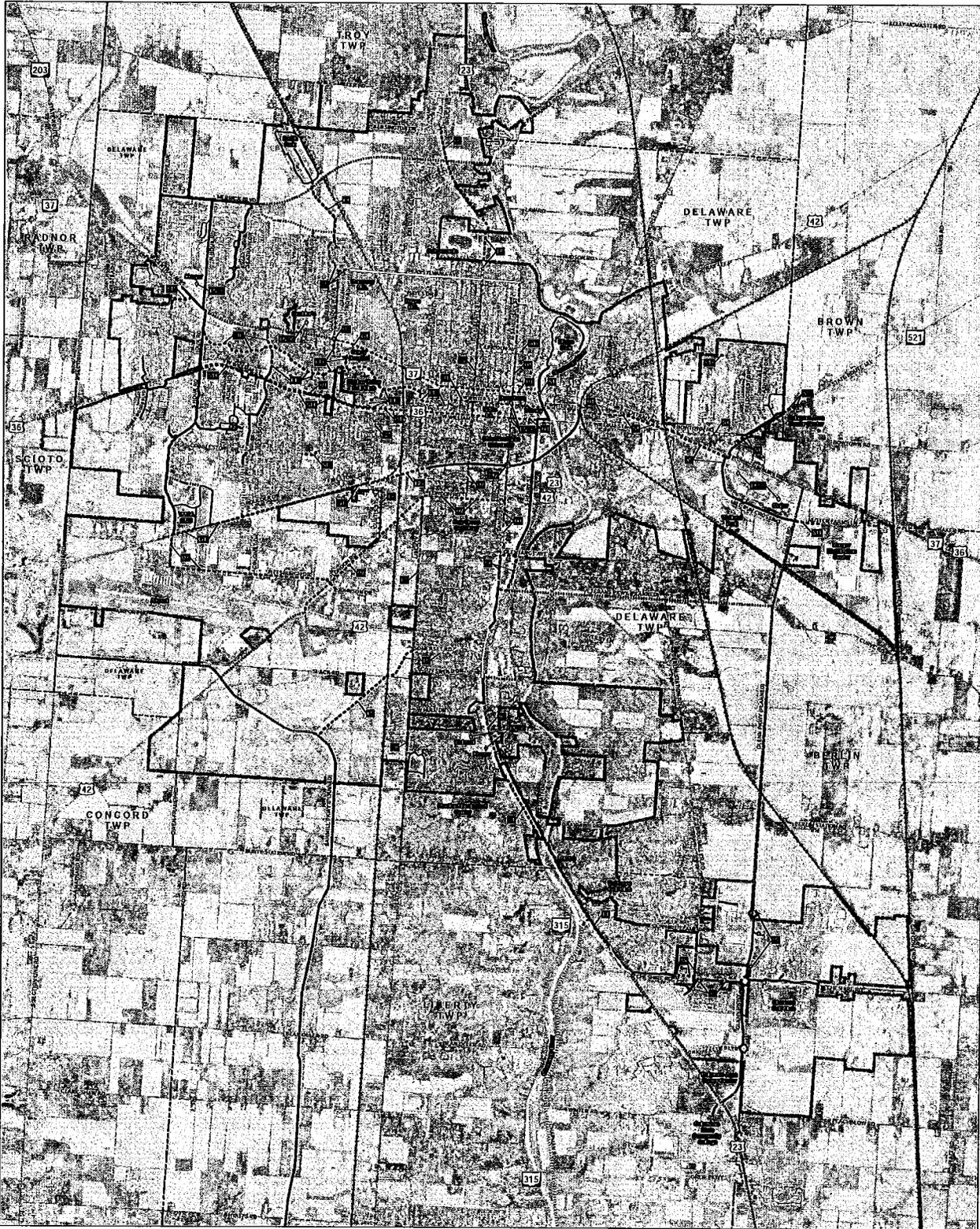
Proj. No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Grant Funding
O7	London Road: US-42 to Sandusky Avenue	Evaluate potential alternatives of providing bike lanes and, if not feasible, a signed-shared route along portions of this corridor. Where curb bike lane when the road is resurfaced next. Where curb is present, a shared lane or advisory bike lane may be necessary. If implemented as part of a resurfacing project, the costs may be minimized.	Low	Long term	City	\$80,000 to \$180,000	
O8	Pittsburgh Dr Shoulder Bike Lanes, Houk Rd. to London Rd.	Upon the next repaving cycle for Pittsburgh Drive, provide a four-foot paved shoulder bike lane and two 11-foot travel lanes, providing accommodation to bicyclists and improving pavement life. Similarly, this project should include a multi-use path or extension of the paved shoulders along Houk Road from Pittsburgh Drive north to the existing multi-use path near the Springfield Branch rails with trails project.	Low	Medium to Long term	City	\$250,000	
O9	Liberty Road Corridor	Bike accommodation should be provided along two miles of Liberty Road, from Hawthorne Boulevard to London Road. This may be feasible by providing a paved-shoulder bike lane or a signed-shared route treatment. The road currently is signed at 35 mph and has a relatively low volume of traffic. If volumes or speeds significantly increase, of if interest in a pedestrian accommodation increases, a separated, multi-use path facility should be evaluated.	Low	Long term	City	\$100,000 (SSR) to \$300,000 (lanes)	
O10	SR-521: Park to DACC Path	Construct a 700-foot multi-use path and basic crosswalk connecting paths within Kensington Place Park to the Delaware Area Career Center facility on SR-521. Installation of a rapid-flashing beacon and bike parking should be evaluated with this project.	Low	Long term	City, Delaware CSD	\$95,000	
O11	Mill Run to Kroger Distribution Center Path	Build a 1,100-foot multi-use path linking the existing path on Mill Run Crossing to Nutter Farms Lane and the Kroger Distribution Center, providing pedestrian and bicycle access to this major local employer. To be implemented with a roadway improvement if it occurs first. With this project, a curb ramp should be built connecting the Mill Run Crossing path to the rear-access entry to Meijer so bicyclists can use the path to access this major retailer.	Low	Medium to Long term	City (CIP, TIF, Impact Fees)	\$140,000	
O12	Vernon Avenue Connector Path	Build a 440-foot multi-use path between the east end of Vernon Avenue and its extension off of Brittany Drive. The path should be designed to prevent vehicular access through restrictive path geometry or bollards located within landscaped medians. This project may be omitted if a roadway connection is made in its place.	Low	Medium to Long term	City (CIP, TIF, Impact Fees)	\$60,000	
O13	Lincoln Avenue Bike Boulevard	Designate 2,700 feet of Lincoln Avenue as a bike boulevard, from Liberty Street to Mingo Park, using pavement markings and signage.	Low	Medium to Long term	City	\$35,000	

Table 6-1: Infrastructure Improvements (Continued)

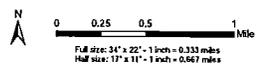
Proj. No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Grant Funding
Larger, System Expansion Projects							
L1a	Delaware Run, Phase 1	Construct a multi-use path from the west end of John Street, through Blue Limestone Park, under the CSX railroad track, retrofitting an existing culvert. The path continues west into Hidden Valley Golf Course, with connections northwest (Hillside Drive) and south (W William Street near Curtis Street). If a new culvert is needed, a path detour to one of the two adjacent railroad crossings should be evaluated.	High	Medium term	CIP, OWU, ODNR.	\$3M	
L1b	Delaware Run, Phase II	Pave the stone trail along Delaware Run near Delaware Crossing East, and then extend this path west to Houk Road. Connections to Carson Farms and Lexington boulevards should be considered, providing better access to the path.	Medium	Long term	CIP, ODNR	\$800,000	
L2a	Springfield Branch Ext. Phase I	Extend the Springfield Branch rail-trail multi-use path from its current terminus west to Curtis Street, constructing a bridge over the CSX mainline track and an at-grade crossing at or near the sideline (Springfield Branch) track crossing at Curtis Street.	Medium	Medium term	CIP	\$1.5M	
L2b	Springfield Branch Ext. Phase II	Extend the Springfield Branch rail-trail multi-use path 7,000 feet from Curtis Street west to the YMCA, placing the path on the north side of the existing siding track as a rails with trails project.	Medium	Long term	CIP	\$900,000	
L3	Troy Road: Smith Park Connector	Construct a 2,600-foot multi-use path and crossing improvement along Troy Road between Hickory Lane and Smith Park.	Medium	Long term	CIP, Impact Fees	\$350,000	
L4	US-23 Hawthorne Blvd to Crystal Drive	Extend the existing US-23 path 7,600 feet from Hawthorne Blvd to Crystal Petal Drive, linking the Cheshire Road area with central Delaware. The project will include several large culvert extensions and a crossing of the Oleniangy River on a sanitary sewer bridge. Cross-US-23 connections should be provided at SR-315 and Chapman Road.	Medium	Long term	City (CIP, Impact Fees), ODOT	\$1.2M	
L5	Sawmill Road Extension to US-23 Connector	This project will link the Sawmill Road Extension and multi-use path with Delaware and its US-23 path corridor. As development allows, a path should connect Sawmill with the Slack Road railroad crossing and then as an on-road facility using Somerset and Winston roads and short section of path to connect to US-23.	Medium	Long term	CIP, Development, Impact Fees	\$850,000	
L6	Penn. Ave to Bruce Road Multi-use Path	This project would create an approximately one mile multi-use path link between the end of N Liberty Street and Bruce Road, using an old railroad alignment through the fairgrounds and through and around part of the Fairgrounds and then the Shelbourne Forest subdivision.	Medium	Long term	CIP, Development, Impact Fees	\$1M	

Bike Network Plan

City of Delaware Bike Plan Update



Type of Facility		Functional Classification	Spot Improvements	Other Modes
Existing	Proposed	Route*	Basic Crossing	Roadways
-----	-----	Local**	Enhanced Crossing	Railroad
-----	-----	Private**	Median Crossing	
-----	-----	*Bike and local improvements vary in color and dash pattern based on type of facility.		
-----	-----	**Private paths are signed as no trespassing or are not open 24-hours a day.		
-----	-----	Project Identification	Parking Corral	Jurisdiction
-----	-----	Label		City of Delaware
-----	-----			Township Boundary



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Non-infrastructure

Table 6-2: Non-Infrastructure Recommendations

Item No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Funding Sources
Engineering							
ENG 1	Adopt a Complete Streets Policy	Such a policy would require accommodation of all users anticipated within the street corridor.	High	Short term	City	Staff Time (30 hrs)	N/A
ENG 2	Engineering Training or Resources	The City should purchase applicable design manuals, and have one or more engineering staff focus continuing education on bike infrastructure.	High	Short term	City	\$300, Staff time	N/A
ENG 3	Create a Bike Parking Standard	Bike parking, provided to the public, should comply with a City standard drawing ensuring racks provided to the public comply with APBP criteria, minimizing the risk of damage to parked bikes. Racks should support the frame of parked bikes at two points of contact, allow the bike to be securely attached to the rack, and be sufficiently spaced from other racks, walls, and obstructions to allow their use.	High	Short term	City	Staff Time (20 hrs)	N/A
ENG 4	Revise Bike Parking Requirements	Parking regulations should be revised to require high-capacity bike racks at all new and existing retail centers, as well as other areas and uses anticipated to generate demand for bicyclist trips. Efforts should be made to improve access at existing developments and destinations.	High	Short term	City	Staff Time (30 hrs)	N/A
ENG 5	Revise Standard Drawings for Multi-use Paths	Revise City standard drawings to increase the intermediate course of asphalt from 1-1/2 inches to 2-1/2 inches, and add a note to apply a herbicide before constructing the path build-up. Additional standard drawings should be provided to show concrete walk paths, detailing path thickness and the use of saw-cut joints (instead of tooled joints). Should existing sidewalks in good repair be widened, an additional detail may be provided for this activity, showing how the path is to be constructed.	High	Short term	City	Staff Time (20 hrs)	N/A
ENG 6	Place High-Capacity Bike Parking in Downtown and at Retail Centers	Work with retail center owners, key destinations, and various stakeholders downtown to allow for the installation of high-capacity bike racks at these locations. Racks at retail centers may be placed on concrete walk, or occupy one to two parking spaces. Racks downtown may be placed in the parking lane in areas where sight-distance prohibit automobile parking. Pylons and markings should be used to reduce the risk of racks being hit by motorists or snow plow operators.	High	Medium term	City	\$4,000 per location	N/A

Table 6-2: Non-Infrastructure Recommendations (Continued)

Item No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Funding Sources
ENG 7	Develop a Path Maintenance Plan and Program	The City should develop a Path Maintenance Plan, addressing preventative maintenance such as seal coating, mitigation of standing water on paths, spot repairs due to root intrusion; regular maintenance such as vegetation clearance, snow plowing; and larger maintenance activities such as resurfacing and path reconstruction.	High	Short term	City	Staff Time (120 hrs)	N/A
ENG 8	Establish a Path Maintenance Budget	A larger amount of funding should be set aside for path maintenance activities, and private path owners should be notified of path deficiencies and their responsibility to correct them. Annual maintenance needs estimated at \$80,000 per year to implement a preventative maintenance program (general fund), and address deferred maintenance needs (capital improvement plan). As a greater share of paths reach an age where resurfacing is needed, this budget may need to increase to \$100,000 to \$120,000 per year by 2020.	High	Short term	City, HOAs (where applicable)	\$80,000 to \$120,000 per year	CIP and/or General Fund
Education							
EDU 1	Safe Biking Education Program for Adults, Children, and Families	Work with the YMCA to offer 2 hour introductory bike skills and safe riding courses for adults, children, and families. The internet-based survey indicated there was some demand for such a program. Yay Bikes!, a Columbus-based organization, has experience leading similar events in the region and would be a good resource to learn more.	High	Medium term	City, YMCA	\$100 to \$200 per course	User Fees
EDU 2	Safe Biking Education Program for Students	Encourage Delaware City Schools to incorporate bike safety and skills curriculum into PE courses so all students learn how to ride a bike safely as well as the rules of the road. This may be most appropriate for students grade 5 through 12.	High	Medium term	City, Delaware City Schools	Staff Time	N/A
EDU 3	Share the Road Campaign	In conjunction with the metropolitan region, participate in the next "Share the Road" campaign. These programs typically consist of radio and TV spots, social media, and hand-outs aimed at encouraging motorists and bicyclists to safely share the road. Delaware may supplement this outreach with, for example, portable changeable message signs and distribution of informational materials at community events and facilities, as well as with utility bills. Contact MORPC for more information.	Medium	Medium term	City, MORPC	\$5,000 to \$8,000	N/A

Table 6-2: Non-Infrastructure Recommendations (Continued)

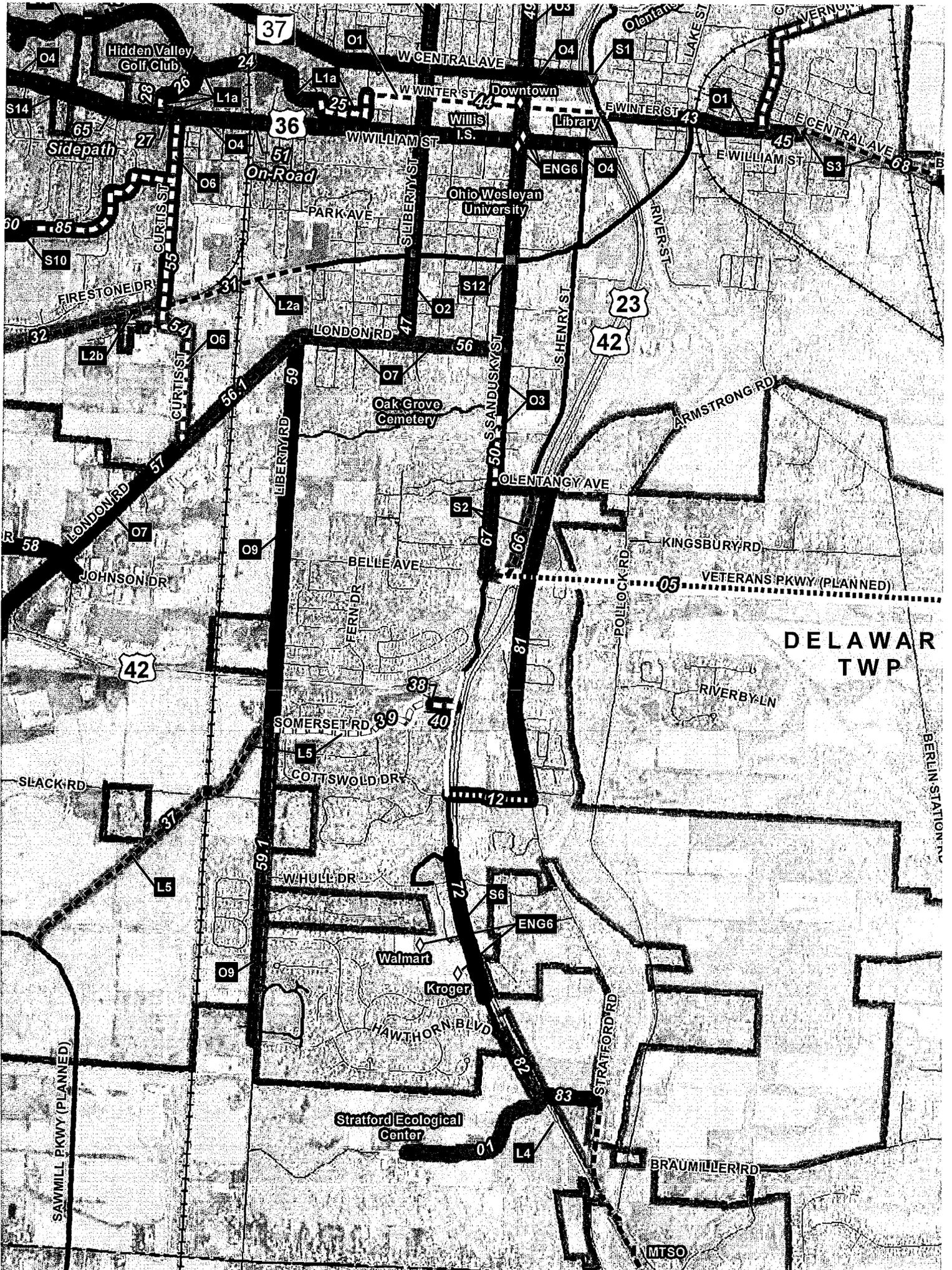
Item No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Funding Sources
Encouragement							
ENC 1	Bike Network map	Revise the City's street map to include bike facilities and make this available to the public via a PDF on the website, and through printing the map. If desired, work with businesses to place advertising on the maps to help offset the cost of printing them.	High	Medium term	City, Local Businesses	Staff Time, \$3,000 to \$5,000.	N/A
ENC 2	Bike Network Way-finding	Name key routes, and then post signage at cross streets and path intersections, as well as wayfinding signage help bicyclists get around the City.	High	Medium term	City	\$25,000	N/A
ENC 3	Celebrate Bike Month by Working with Partners to Host a Bike Event	In celebration of National Bike Month (May) or the City itself, host a bike-specific event on at least an annual basis. The City may seek to partner with organizations to host the event. Such events may be helpful from an economic development and branding perspective. Example events include: - An <i>Open Streets</i> event where a main street is blocked to traffic so bicyclists (and pedestrians) can have the street to themselves. Such events usually include street vendors or food trucks and are popular with both families and young adults. Downtown Delaware would be a good place for such an event. - A <i>bike race</i> , where individuals ride their bikes on a street course, competing against other cyclists. Such events are popular and draw cyclists from around the region. - A <i>group ride</i> , where individuals and families may ride together around town, to downtown, or to another city. Such events are popular and draw cyclists from around the region.	High	Short term and then annually	City, and possibly: Sustainable Delaware, Friends of the Trails, etc.	Staff Time, \$15,000 to \$25,000 per event.	N/A
ENC 4	Bike Accommodation at Festivals and Large Events	The City or private partners may provide a bike valet for large events. Several volunteers will take your bike and store it on portable racks in a monitored bike corral, reducing risk of theft or damage. Pedal Instead is a comparable service in Columbus and provides its service for a very modest charge (if not free), generating income with advertising banners around their bike corrals. Event permits may require sponsors to work with organizations to provide a valet, or at least portable racks.	High	Short term and then annually	City, Pedal Instead	Little to no cost	N/A
ENC 5	Bike Tourism and Promotion	The City should work with the Chamber of Commerce to think of ways investments in the bike network can leverage economic development in terms of tourism, a more attractive place to operate a business, and the like. Support from the chamber may help encourage area businesses to consider purchasing and constructing bike racks.	Medium	Medium to Long term	City, Chamber of Commerce	Staff Time	N/A

Table 6-2: Non-Infrastructure Recommendations (Continued)

Item No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Funding Sources
Enforcement							
ENF 1	Repeal Obsolete Bike Ordinances	The City should pass an ordinance to repeal the following ordinances requirements for bicyclists to be licensed by the police department (373.13-14), register their bicycles (373.15) and report changes in appearance of their bicycles (373.19). Bicyclists who are riding at night without head- or tail-lights may be provided a set of lights for their bicycle by the ticketing officer.	High	Short	City	Staff Time	N/A
ENF 2	Implement a Bicycle Ticket Diversion Program	Bicyclists who ride against traffic or ride erratically may be instructed to take a bike skills and safety training course. Motorists who give insufficient passing room or fail to yield at crossings may be required to take a similar course instead or in addition to paying a fine.	Medium	Medium to Long term	City	Staff Time, Up to \$2,000 annually	N/A
ENF 3	Sponsor Helmet and Lights Programs to Encourage Safe Riding	The City may choose to give bike helmets and head- and tail-lights to low-income bicyclists, and make similar equipment available at cost to higher income bicyclists. Police and others may help young and old bicyclists with helmet-fitting events, or in installing lights on bicycles. These events can also be sponsored or run by local bike shops or bike organizations. They may also occur during bike events or other community events.	Medium	Medium to Long term	City	Staff Time, Up to \$2,000 annually	N/A
ENF 4	Bike Crash Report Tracking and Reviews	Area law enforcement groups, including City police, State Highway Patrol, and Sheriff's Office are encouraged to submit crash reports for bike crashes occurring in the City to the Engineering Department. The engineering department should track these report locations, identifying high-crash locations and develop countermeasures aimed at improving safety for applicable crashes.	Medium	Medium to Long term	City	Staff Time	N/A
Evaluation and Program Management							
EVA 1	Establish a Bike Program Manager	Identify a City staff person who will serve as the City's Bike Program Manager. This individual will be responsible for coordinating the bike program, and potentially be responsible for maintenance requests, engineering design review, and advancing non-infrastructure elements of the plan.	High	Short	City	Staff Time	N/A

Table 6-2: Non-Infrastructure Recommendations (Continued)

Item No.	Project Name	Project Description	Priority	Time Frame	Sponsors, Partners	Cost	Funding Sources
EVA 2	Establish a bike subcommittee of the Parks and Recreation Advisory Board	The City should establish a subcommittee on biking issues as part of the Parks and Recreation Advisory Board. This group would help guide implementation of the plan and may meet quarterly or as needed.	High	Short	City	No Cost	N/A
EVA 3	Establish Dedicated Funding to Implement the Plan	The City is encouraged to identify a specific funding source for maintenance, programs, and capital improvements regarding the bike network. The capital improvement budget may not need to be targeted to specific projects, providing funding to be used as a local match on any awarded grant projects, or to be used as needs arise.	High	Short	City	Staff Time	N/A



DELAWARE
TWP

BERLIN STATION

MTSO

Ranking	Weighted Score	Project Number	Project Segment on Map	Segment Name	Type of Project	Cost	Public Involvement Score	Alignment with Vision	Community Support	Economic Development Potential	Pedestrian/Bike Benefit	Stage of Progress	Available Funding Sources	Right-of-Way Acquisition	Alternate Funding (Developer or ODOT)	Alternate Funding Notes	Continuity with Transportation Plan & Remaining	Staff Priority	Total	Weighted Score	
1	0.575	S14 / O4	65	West William (Carson to Curtis)	Road Diet w/ Bike Lanes & Parallel Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.75	developer (feasibility/built)		1.00	5,500	0.575	
2	0.571	S15 / O4	64	West William (Houk to Carson)	Road Diet w/ Bike Lanes & Parallel Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		1.00	5,083	0.571
3	0.563	L4	83	Mexico Way (w/ 315 Intersection relocate)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	ODOT		1.00	6,008	0.563	
4	0.532	O4	80	West Central (Croger to City Limits)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		1.00	4,750	0.532
5	0.521	S5	71	E Central (Point to Mill Run)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		0.75	5,333	0.521
6	0.504	L1a	25	West William (Blue Limestone to Withers)	Signed On Road / Sharrows		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		1.00	5,088	0.504
7	0.498	O1	43	Winner (Library to Channing)	Bike Boulevard / Bicycle Friendly Street		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		0.75	5,850	0.498
8	0.488	O4	51	West William (East to Downtown)	Road Diet w/ Bike Lanes		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		1.00	4,250	0.488
9	0.488	S3	68	West of Point (West of Point)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		0.25	5,500	0.488
10	0.486	L3	33	Toy Road Bikeway (Eastwood to Smith Park)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		1.00	4,650	0.486
11	0.485	O1	44	Winter (Downtown)	Bike Boulevard / Bicycle Friendly Street		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		0.50	5,600	0.485
12	0.460	O1	45	Central (Channing to P-68 above)	Bike Boulevard / Bicycle Friendly Street		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		1.00	5,100	0.460
13	0.455	S6	72	US 23 (Croger/Walmart)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		0.75	4,758	0.455
14	0.450	O9	59	Liberty Rd (London to Somerset)	Bike Lanes / Paved Shoulders		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.50	retransfer (County)		0.75	4,500	0.450	
15	0.443	O3	49	Sandusky Street	Road Diet w/ Bike Lanes		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		1.00	4,642	0.443
16	0.431	S2	66	Stratford (By Cherry St)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-		0.431	4,975	0.431
17	0.429	L1b	29	Delaware Run (Leads to RN)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.50	Developer (west end)			5,083	0.429	
18	0.413	L4	35	US 23 (Sandusky to Cheshire)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		4,008	0.413	
19	0.413	L4	82	US 23 (Hawthorn to Meeker)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		4,008	0.413	
20	0.404	L1a	24	Delaware Run (RR to Blue Limestone)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		4,583	0.404	
21	0.398	S2	67	US 23 (Sandusky (Olenzang to Cemetery))	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-		4,642	0.398	
22	0.388	O4	10	West Central (Houk to Grandview)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		0.50	5,300	0.388
23	0.385	S11	62	Nutter Farms Lane (Mill Run to Kroger)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.75	Developer			4,550	0.385	
24	0.364	L2a	31	Springfield Branch Extension (West end to Curtis)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		3,880	0.364	
25	0.363	O4	52	Central (Grandview to Downtown)	Road Diet w/ Bike Lanes		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		3,500	0.363	
26	0.346	S9	73	Cheshire Road (Near Water Tower)	Enhanced Road Crossing		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		3,417	0.346	
27	0.346	S4	69	SR 23 (Main Crossing)	Median Crossing		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		2,250	0.346	
28	0.346	S4	70	(Median Crossing)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		2,250	0.346	
29	0.342	L1a	26	Delaware Run (Access from Golf Parking Lot)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	-	-		3,667	0.342	
30	0.327	L2b	32	Springfield Branch Extension (Curtis to the DCC/YMCA)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.25	Developer (west end)			3,767	0.327	
31	0.321	L4	08	US 23 (23 to Chapman)	Multi Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		3,083	0.321	
32	0.317	L1a	23	Grandview Ave (South of Central)	Bike Boulevard / Bicycle Friendly Street		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		3,417	0.317	
33	0.308	S3	02	Borowtown Road	Bike Boulevard / Bicycle Friendly Street		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		5,583	0.308	
34	0.308	S9	74	Cheshire Road (Near Water Tower)	Median Crossing		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	-	-		3,167	0.308	

Ranking	Weighted Score	Table 6 Project Number	Project Segments on Map	Segment Name	Type of Project	Cost	Scheme Scores							City Staff Scores					
							Public Use Score	Alternative Use Score	Capex Score	Economic Impact Score	Recreation Benefit	Streetlights	Feasible Funding (Grants)	Right-of-Way Acquisition	Alternate Funding (Developer or ODOT)	Alternate Funding Noise	Continuity with Transportation Plans & Reimbursement	Staff Priority	Total
69	0.138	N/A	04	Glen Farway (Future Alignment)	Mult Use Path		0.00	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.50	0.00	0.00	1.750	0.138
70	0.138	N/A	05	Veterans Parkway (Future Alignment)	Mult Use Path		0.00	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.50	0.00	0.00	1.750	0.138
71	0.135	S10	60	Cobblestone Dr. (center section)	Mult Use Path		0.25	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.475	0.135
72	0.135	S10	85	Cobblestone Dr. (Curtis to Carson Farms Blvd)	Signed On Road / Sharrows		0.25	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.475	0.135
73	0.129	N/A	81	Sturford Road (Blenheim to Hill)	Mult Use Path		0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	1.417	0.129
74	0.129	S9	79	Praxmiller Rd (North of Hill)	Mult Use Path		0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	1.417	0.129
75	0.125	07	19	(42 to Swamill Parkway)	Mult Use Path		0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	1.750	0.125
76	0.125	06	54	Curtis Street (Firestone to London)	Signed On Road / Sharrows		0.00	0.50	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.500	0.125
77	0.125	06	55	Curtis Street (Firestone to William)	Signed On Road / Sharrows		0.00	0.50	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.500	0.125
78	0.113	013	46	Lincoln Ave (Library to Mingo)	Signed On Road / Sharrows		0.00	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.250	0.113
79	0.113	N/A	17	Carson Farms Park	Signed On Road / Sharrows		0.00	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.250	0.113
80	0.113	N/A	18	Bilepath extension in Carson Farms Subdivision (South End)	Signed On Road / Sharrows		0.00	0.25	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.250	0.113
81	0.075	N/A	08	Pedest. Rd	Mult Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.000	0.075
82	0.075	N/A	12	Hill Drive (Ballard to US 23)	Mult Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.000	0.075
83	0.050	N/A	01	Sturford Ecological Center to US 23 (US 23)	Mult Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.500	0.050
84	0.050	N/A	06	Warrenburg Road (North of town)	Mult Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.500	0.050
85	0.013	S15	15	Warrenburg Road (Grand Circuit to Central)	Mult Use Path		0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.250	0.013
86	0.005	S16 / D10	61	Delaware Area Career Center	Mult Use Path / Enhanced Crossing		0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.050	0.005
N/A	0.000	N/A	07	Smith Park to Galant Woods (along RR)	Mult Use Path		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000