MIAMI VALLEY CYCLING SUMMIT COMMUNITIES DIRECTORY

1.1. INTRODUCTION

This Cycling Directory provides a review and assessment of existing bicycle facilities in the Miami Valley Region and the organizations that help make the facilities possible. The directory defines various bicycle infrastructure types, including on- and off-street facilities. A discussion of the existing bikeway system follows with a review of facilities in each of the four counties in the Region. The directory takes a look at other bicycle infrastructure components, including signage, end-of-trip facilities, and multi-modal connections, and then briefly summarizes existing programmatic efforts to encourage bicycling.

1.2. EXISTING BIKEWAYS

The following sections describe existing bikeways in the Miami Valley region, discussing statewide and regional bikeways followed by an overview of bikeways within each of the Counties in the Region.

Shared use paths comprise the vast majority of the Region's existing bikeway network. The Miami Valley benefits from a comprehensive and generally well-connected trail system that has developed over time. In response to the devastating 1913 floods, the Miami Conservancy District (MCD) was formed and charged with developing a flood control system. The flood control channels along the Great Miami River and other waterway corridors now carry an extensive trail system. In 1978, the first eight-mile trail loop was developed in downtown Dayton, and today, the area boasts over 200 miles of trails.

1.2.1. NATIONAL AND STATEWIDE TRAILS IN THE MIAMI VALLEY

Portions of the Miami Valley's bikeway system serve as elements of designated national trails, described below.

NORTH COUNTRY NATIONAL SCENIC TRAIL

Officially designated in 1980, the North Country National Scenic Trail passes through seven states, including North Dakota, Minnesota, Wisconsin, Michigan, Ohio, Pennsylvania, and New York. Celebrating America's scenic qualities, the trail offers visitors a unique experience of the Great Plains, the shores of Lakes Superior and Michigan, the Ohio countryside, and the Adirondack Mountains. Within the Miami Valley Region, the designated North Country Trail route follows portions of the Great Miami River Recreation Trail and the Little Miami Scenic Trail. The North Country Trail would also follow several other proposed bikeways to form a continuous route through the Miami Valley region.



UNDERGROUND RAILROAD NATIONAL MILLENNIUM TRAIL

Traveling over 2,000 miles between Mobile, Alabama and Owen Sound, Ontario, the Underground Railroad National Millennium Trail includes a vast network of routes and interpretive sites explaining the story of slavery and the pursuit of freedom. Ohio's proximity between Kentucky and West

Virginia (then slave-owning states) and Canada (slaves' final destination) made the state a crucial pass-through area. Although not following a specific route, the Underground Railroad Trail highlights several historic sites in the Miami Valley, including:



- First free African-American school in Harveysburg
- Wright House Bed and Breakfast in Springboro
- Monroe House in Xenia
- National Afro-American Museum and Cultural Center in Wilberforce
- Martin Delany gravesite in Cedarville
- Antioch University in Yellow Springs
- 17 sites in Springboro

BUCKEYE TRAIL

Traversing over 1,440 miles throughout Ohio, the Buckeye Trail calls attention to the nation's rails-to-trails, historic trails, cultural itineraries, recreation paths, waterways, and other alternative transportation corridors. Initially envisioned as a trail linking Cincinnati and Cleveland, the trail has evolved into a large loop following old canals, abandoned railroads, rivers, trails, and rural roads. Within the Miami Valley, the Buckeye Trail follows portions of the Great Miami River Recreation Trail and Little Miami Scenic Trail, and overlaps with portions of the Ohio-to-Erie Trail, described below.

OHIO-TO-ERIE TRAIL

Envisioned in the 1990s as an interconnecting trail system linking the Ohio River with Lake Erie, the Ohio-to-Erie Trail follows abandoned railroad corridors and canals through urban and rural areas. When complete, the trail will connect Cincinnati, Columbus and Cleveland. Passing through the Miami Valley, the Ohio-to-Erie Trail overlaps with the Little Miami Scenic Trail south of Xenia in Greene County. North of Xenia, the trail follows the Cedarville and Prairie Grass trails.

1.2.2. GREENE COUNTY BIKEWAYS

Greene County enjoys an extensive north-south and east-west bikeway system as with generally good connections within and between neighboring communities. The following sections describe the County's off- and on-street bikeways in greater detail.

OFF-STREET BIKEWAYS

Shared use paths travel across Greene County, offering bicyclists north-south and east-west connections between communities and neighboring counties. The extensive trail network has resulted from the efforts of county commissioners, the Greene County Park District, local agencies, and other organizations and advocates.

Connecting downtown Fairborn with the Wright Brothers Memorial, the Wright Brothers (Huffman Prairie) Bikeway generally follows Wright Patterson Air Force Base's southern boundary. Also known as the Kauffman Avenue Bikeway, this corridor also provides a connection to Wright State University, and will eventually connect with a planned extension of the Mad River Recreation Trail in Montgomery County.

Roughly paralleling Shawnee Creek, Little Beaver Creek and U.S. 35, the Creekside Recreation Trail connects Xenia, Beavercreek and communities in Montgomery County. The trail passes through urban and suburban areas, as well as wetland areas. This trail provides connections to several regional off-street bikeways, including the Mad River Recreation Trail, Iron Horse Trail, and Little Miami Scenic Trail, among others.



Wright Brothers (Huffman Prairie) Bikeway in Fairborn



Little Miami Scenic Trail in Yellow Springs

Extending roughly 70 miles between Milford and Springfield, the Little Miami Scenic Trail follows the former Little Miami Railroad through Greene County (see Figure 10). Connecting Xenia with Spring Valley and Yellow Springs, segments of this trail follow the Little Miami Scenic River as it passes through rural countryside. This trail connects with several other Greene County trails, including the Creekside Recreation Trail, Ohio-to-Erie Trail, and a proposed extension of the Xenia-Jamestown Connector Trail.

The Xenia-Jamestown Connector Trail will ultimately link Xenia with Jamestown and other communities east of Greene County. The existing trail currently terminates near Jasper Road east of Xenia. Extending northeast from Xenia, the Cedarville and Prairie Grass trails connect the communities of Xenia, Cedarville and South Charleston. This trail also serves as part of the Ohio-to-Erie Trail.

Several shared use paths converge at Xenia Station, a replica of a 19th Century telegraph office occupying the site where active railroads converged in town. The station serves as a popular trail user gathering point, and includes bike racks, bike lockers, railroad exhibits



Xenia Station

and local information. Operated by the City of Xenia, the station is an easily-recognizable local asset. In Yellow Springs, a replicated train depot provides similar amenities to the Xenia Station.

Bicyclists on Greene County's bikeway system enjoy grade separated crossings of streets in several locations. In Yellow Springs for instance, the Little Miami Scenic Trail utilizes former railroad trestle bridges to cross major streets. Local agencies and other system users have expressed interest in developing bicycle/pedestrian overcrossings/undercrossings to overcome other major barriers such as Interstate 675.

ON-STREET BIKEWAYS

Greene County has several low-volume streets serving as shared roadways. Local streets in Beavercreek, Bellbrook, Fairborn and other communities offer excellent bicycling opportunities for riders of varying ages and skills. Xenia's Comprehensive Recreation Plan (a joint project between the City and Greene County) also includes a shared roadway network complementing the community's shared use path system.

Bike lanes and shoulder bikeways exist in limited locations. In Cedarville, bike lanes serve as an onstreet segment of the Cedarville/Prairie Grass Trail. Some rural roads provide shoulders to accommodate bicyclists (e.g., portions of Yellow Springs-Fairfield Road). Most shoulders however are only one- to



Bike lane serving as part of Ohio-to-Erie Trail in Cedarville

three-feet wide, creating uncomfortable and potentially unsafe riding conditions.

BIKE FRIENDLY COMMUNITIES CONTACTS

The following cities and townships already have bikeway plans and efforts underway. If your city is not on this list, please encourage them to start a bike friendly community effort. You can be the catalyst! We can help.

City of Beavercreek
Beavercreek City Hall
(8 a.m. – 5 p.m.)
1368 Research Park Drive
Beavercreek, OH 45432
Randy Burkett, City Planner
http://ci.beavercreek.oh.us/boards-commissions/bikeway-advisory/
Beavercreek Bikeway Advisory Committee
bbac@ci.beavercreek.oh.us

City of Bellbrook 15 E Franklin St 2nd Floor Bellbrook OH 45305 Phone: (937) 848-4666 Fax: (937) 848-5190 Don Buczek, Planning Director don.buczek@cityofbellbrook.org

Miami Township, Greene County 225 Corry Street Yellow Springs, OH 45387 (937) 767-7842 Colin Altman, Fire Chief caltman@mtfr.org Sugarcreek Township
2090 Ferry Road
Bellbrook, Ohio 45305
(937) 848-2330
Cara Killkelley, Zoning Compliance Officer
ckillkelley@sugarcreektownship.com

City of Xenia 101 N. Detroit Street Xenia, OH 45385 (937) 376-7285 Nimfa Simpson, City Planner nsimpson@ci.xenia.oh.us

Village of Yellow Springs 100 Dayton Street Yellow Springs, Ohio 45387 (937) 767-3702 Ed Amrhein, Village Planner eamrhein@yso.com

Greene County Park District
651 Dayton-Xenia Road
Xenia, OH 45385
(937) 562-7440
http://www.co.greene.oh.us/parks/
Chrisbell Bednar, Director
cbednar@co.greene.oh.us

1.2.3. MIAMI COUNTY BIKEWAYS

A coalition of citizens, public agencies and private organizations has worked over the years with the vision of creating a comprehensive bikeway system in Miami County. Created in 2000, the Miami County Bike Task Force includes representatives from each of the County's jurisdictions. The Task Force has worked with the Miami County Park District to develop trails along the Great Miami River, and is also planning internal connections within County parks and smaller villages. Several bikeway elements are currently in place, most notably segments of the Great Miami River Recreation Trail. Miami County's bikeway system is described in greater detail below.

OFF-STREET BIKEWAYS

Supplementing other existing shared use paths, the Great Miami River Recreation Trail is the centerpiece of Miami County's bikeway system. Completed segments currently exist in Troy, Piqua, Tipp City and Concord Township. Several agencies are working to develop a continuous 22-mile long trail corridor through the County, following the Great Miami River and the Miami & Erie Canal. The completed trail would connect several Miami County communities including Huber Heights, Piqua, Tipp City, Troy and Vandalia, while also providing access to cultural attractions including the Eldean Covered Bridge and several local and regional parks. The Great Miami River Recreation Trail also extends south through Montgomery and Warren counties.



Great Miami River Recreation Trail in Troy

Piqua, Troy, and Tipp City also enjoy several local paths. The Piqua Activities Trail for Health (PATH) provides an east-west bicycle route across Piqua, and will eventually continue in both directions toward Fletcher and Covington. Other trails in Piqua include the Canal Run and River's Edge trails providing access to Linear Park and other bicyclist destinations. A small network of local trails in Tipp City and Troy provide non-motorized connections to city parks and other destinations.

ON-STREET BIKEWAYS

Many streets in Miami County, particularly low-volume residential streets in urbanized areas, are suitable for bicycle travel. An existing on-street bikeway network exists in several communities, including Troy, Piqua, and some communities along SR 48. Signed shared roadways comprise most on-street bikeways in these communities, while shoulder bikeways exist on some rural roads.

BIKE FRIENDLY COMMUNITIES CONTACTS

The following cities and townships already have bikeway plans and efforts underway. If your city is not on this list, please encourage them to start a bike friendly community effort. You can be the catalyst! We can help.

Miami County Trails Task Force Robert Shook, Chairman (937) 339-1492 robertjshook@yahoo.com

City of Piqua
201 West Water Street
Piqua, OH 45356
(937) 778-2085
Fax: (937) 778-5165
http://www.piquaoh.org
Rob Stanford, Recreation Coordinator
rstanford@piquaoh.org
Amy Havenar, City Engineer
ahavenar@piquaoh.org

City of Troy 100 South Market Street, P.O. Box 3003 Troy, OH 45373-7303 (937) 339-2641, Fax: (937) 339-8601 http://www.troyohio.gov Stan Kegley II, Asst. City Engineer stan.kegley@troyohio.gov

City of Tipp City
260 S. Garber Drive
Tipp City, OH 45371
937.667.8425
http://www.tippcityohio.gov/
Scott Vagedes, City Engineer
vagedess@tippcity.net

Miami County Park District 2645 E. State Route 41 Troy, Ohio 45373 (937) 335-6273 http://www.miamicountyparks.com/ Scott Myers, Deputy Director smyers@miamicountyparks.com

1.2.4. MONTGOMERY AND NORTHERN WARREN COUNTY BIKEWAYS

Although a limited on-street bikeway system exists in Montgomery and Northern Warren counties, the areas enjoy an extensive shared use path system. Compared with Greene and Miami counties, Montgomery and Northern Warren counties are generally more urban in character. As a result, bicyclists often find themselves riding in areas with higher congestion and potential conflicts with motorists.

OFF-STREET BIKEWAYS

Montgomery and Northern Warren counties are home to a growing shared use path system over 60 miles long. Radiating from central Dayton, several trails provide bicyclist connections to nearby neighborhoods and surrounding communities. Various agencies, including Five Rivers MetroParks, MCD, and local agencies own and maintain the vast trail network.

Serving as the primary north-south trail corridor, the Great Miami River Recreation Trail passes through Dayton, Moraine, West Carrollton, Miamisburg and Franklin. The trail's first segment consisted of an eight-mile loop passing through downtown Dayton originally known as the Horace. M. Huffman, Jr., River Corridor Bikeway. The trail connects several bicyclist destinations, including Sinclair Community College, RiverScape MetroPark, Island MetroPark, and several other regional trails. The most recently-completed Great Miami River Recreation Trail segment is a 2006 extension from Crain's Run to Franklin. A northern extension to Miami County is also underway.

Extending northwest from the Great Miami River Recreation Trail near downtown Dayton, the Wolf Creek Recreation Trail passes by the historic Wright-Dunbar and Aviation Heritage sites. The Wolf Creek Recreation Trail segment between downtown Dayton and Wesleyan MetroPark is also known as the Paul Laurence Dunbar Connector. Although the trail is



Recently-completed section of the Great Miami River Recreation Trail in Franklin



Gayle B. Price, Jr. Bridge

fragmented in some locations, Five Rivers MetroParks will oversee completion of the final

Montgomery County segment. When complete, the Wolf Creek Recreation Trail will provide an uninterrupted bicycle route connecting Dayton, Trotwood, Brookville, and Verona in western Montgomery County.

Segments of the Stillwater Recreation Trail currently exist near Triangle Park, Wegerzyn Gardens MetroPark, and Sinclair Park in Dayton. Farther north in Englewood, a completed segment follows the Stillwater River's western edge near Englewood MetroPark.

Following the Mad River floodplain, the Mad River Recreation Trail extends 2.8 miles east from RiverScape MetroPark (in downtown Dayton) to Eastwood MetroPark. An interim on-street segment follows Springfield Pike toward a planned shared use path extension to the Wright Brothers Memorial and the Wright Brothers (Huffman Prairie) Bikeway. Bicyclists on the Mad River Recreation Trail can also connect to the Creekside Recreation Trail passing through eastern Montgomery County and Greene County.

Completed segments of the Iron Horse Trail exist in Beavercreek, Riverside, Kettering, and Centerville. This trail currently extends south from the Creekside Recreation Trail near U.S. 35 in Riverside before passing through northeast Kettering. A planned extension will connect the trail south into Centerville, where another segment was recently completed.

Extending south from Greene County, the Little Miami Scenic Trail follows the Little Miami Scenic River through Corwin in Warren County. The trail continues farther south toward Newtown.

Other shared use path segments exist throughout Montgomery and Northern Warren counties, including the Twin Creek Trail in Germantown, as well as other paths in Centerville, Englewood, Huber Heights, Miamisburg, and Moraine.

Several bicycle/pedestrian overcrossings serve non-motorized users on the Montgomery and Northern Warren County trail system. Examples include the Gayle B. Price, Jr. Bridge on the Mad River Recreation Trail, and a bridge over U.S. 35 linking downtown Dayton with the South Park neighborhood.

ON-STREET BIKEWAYS

Many communities throughout Montgomery and Northern Warren counties benefit from streets that are suitable for bicycling. Although most major streets lack dedicated bicycle facilities, relatively well-connected lower-order streets could sufficiently accommodate riders in some areas. For instance, well-connected low-volume streets in Dayton's South Park neighborhood provide generally good bicycle access to nearby destinations such as the University of Dayton. Bicyclists experience challenges in other areas where major urban and rural streets lacking bicycle facilities provide the only means for accessing destinations. Several communities (e.g., Centerville) have identified street corridors for future on-street bikeway treatments.



Low-volume residential street south of downtown Dayton

BIKE FRIENDLY COMMUNITIES CONTACTS

The following cities and townships already have bikeway plans and efforts underway. If your city is not on this list, please encourage them to start a bike friendly community effort. You can be the catalyst! We can help.

City of Brookville 301 Sycamore Street, P.O. Box 10 Brookville, Ohio 45309 Phone (937) 833-2135 Fax (937) 833-3347 Jim Snedeker, Zoning Administrator snedeker@brookvilleohio.com

City of Centerville
Centerville-Washington Park District
221 N. Main Street,
Centerville, OH 45459
(937) 433-5155
http://www.cwpd.org/
Martha Lanese, Parks Administrator
mail@cwpd.org
Doug Spitler, City Engineer
dspitler@ci.centerville.oh.us

City of Dayton
101 W. Third Street,
Dayton, Ohio 45402
937-333-3333
http://www.cityofdayton.org/
Kate Ervin, Planner
Kate.ervin@cityofdayton.org
Joe Weinel, City Engineer
joe.weinel@cityofdayton.org

City of Huber Heights
6131 Taylorsville Road
Huber Heights, Ohio 45424
(937) 233-1423/fax: (937) 233-1272
http://www.ci.huber-heights.oh.us/
Roger Custer, Planning Director
roger.custer@ci.huber-heights.oh.us
Emily Haney, Special Projects Manager
emily.haney@ci.huber-heights.oh.us

City of Kettering
3600 Shroyer Road
Kettering, Ohio 45429
ph: 937-296-2400 fax: 937-296-3242
http://www.ketteringoh.org/
Marc Rasor, Safety Supervisor
marc.rasor@ketteringoh.org
Steven E. Bergstresser, PE

steven.bergstresser@ketteringoh.org

City of Miamisburg
10 North First Street,
Miamisburg OH 45342
phone: 937.866.3303 | fax: 937.866.0891
http://www.ci.miamisburg.oh.us/
Chris Fine - City Planner
chris.fine@cityofmiamisburg.org
Debbie McLaughlin - Parks and Recreation
Director
debbie.mclaughlin@cityofmiamisburg.org

Miami Township, Montgomery County 2700 Lyons Road,
Miamisburg, Ohio 45342
P: 937.433.9969
http://www.miamitownship.com
Chris Snyder, Asst. Planning Director csnyder@miamitownship.com

City of Oakwood
30 Park Avenue
Dayton, Ohio 45419
937-298-0411, fax 297-2940
www.mvcc.net/oakwood
Jay Weiskircher, Deputy City Manager
weiskircher@oakwood.oh.us

City of Riverside
1791 Harshman Road
Riverside, OH 45424
(937) 233-1801
Fax: (937) 237-5965
http://www.riverside.oh.us/
Bob Murray, Economic Development
Director
rmurray@riverside.oh.us

City of Springboro
320 West Central Avenue
Springboro, Ohio 45066
P: 937.748.4343 F: 937.748.0815
http://www.ci.springboro.oh.us/
Christine Thompson, City Manager
chris@cityofspringboro.com

Dan Boron, City Planner danb@cityofspringboro.com

City of Vandalia
333 J.E. Bohanan Drive
Vandalia, Ohio 45377
937-898-5891
http://www.ci.vandalia.oh.us/
Erika Vogel, City Planner
evogel@vandaliaohio.org

City of West Carrollton 300 E. Central Ave.

West Carrollton, OH 45449 (937) 859-5783 Greg Gaines, Director of Planning gregory.gaines@westcarrollton.org

Five Rivers MetroParks
1375 E. Siebenthaler Avenue
Dayton, Ohio 45414
(937) 275-PARK
http://www.metroparks.org/
Greg Brummit, Outdoors Director
gbrumitt@metroparks.org

1.2.5. OTHER LOCAL RESOURCES

Dayton Children's Medical Center & Safe Kids Coalition Jessica Saunders, Injury Prevention/Health Coordinator (937) 641-3385 saundersj@childrensdayton.org www.childrensdayton.org

Dayton Outdoor Recreation Retailers Association go4theoutdoors.com

Darke County Park District, Roger Van Frank, Director (937) 548-0165 director@darkecountyparks.org

City of Versailles (937) 526-3294 Randy Gump, Village Administrator randygump@versaillesohio.cc Terry Johns, Cycling Committee Chair terry-johns@hotmail.com

Friends of the Little Miami State Park Scott Murphy, Vice President www.flmsp.org

Huffy Corporation 6551 Centerville Business Parkway Centerville, OH 45459 865-2800 main offices (800) 872-2453 customer service http://www.huffybikes.com/

Miami Valley Regional Planning Commission, Matt Lindsay and Kjirsten Frank MVRPC.org (937) 223-6323

Miami Conservancy District <u>Miamiconservancy.org</u> (937) 223-1271

Miami Valley RailTrails Miamivalleytrails.org

National Trails Parks & Recreation District (937) 328-PARK (7275) http://www.ntprd.org

Ohio Bike Federation Ohiobike.org

Ohio Kentucky Indiana (OKI) Regional Council of Governments, Don Burrell, Senior Planner (513) 621-6300 http://www.oki.org

Ohio Department of Transportation (ODOT)

 $\underline{http://www.dot.state.oh.us/Divisions/TransSysDev/ProgramMgt/Projects/bicycle/Pages/Default.} \\ \underline{aspx}$

Rails To Trails Conservancy (614) 837-6782 http://www.railstotrails.org

Simon Kenton Pathfinders
Nancy Lokai-Baldwin, President
http://www.simonkentonpathfinders.org/

Wright-Patterson Air Force Base (WPAFB) Jo Lynn Anderson, Community Planner (937) 656-3382 JoLynn.Anderson@wpafb.af.mil

1.3. BICYCLE INFRASTRUCTURE OVERVIEW

According to AASHTO's (American Association of State Highway and Transportation Officials) *Guide for the Development of Bicycle Facilities* (1999), there are several types of bikeways. Bikeways are distinguished as preferential roadways accommodating bicycle travel. Accommodation can take the form of bicycle route designation or bicycle lane striping. Shared use paths (also referred to as "multi-use paths" and "trails"), are separated from a roadway for use by cyclists, pedestrians, in-line skaters, runners, and other non-motorized users.

Because bicyclists are legally allowed on most roads in Ohio, the Miami Valley's entire roadway network is effectively the region's on-street bicycle network, regardless of whether or not signage or markings are present on a given street. The designation of certain roads as striped bike lanes or signed bike routes is not intended to imply that these are the only roadways intended for bicycle use, or that bicyclists should not be riding on other streets. Rather, the designation of a network of on-street bikeways recognizes that certain roadways are optimal bicycle routes, for reasons such as directness or access to important destinations, and allows MVRPC and local agencies to focus resources on building out this primary network. The following sections describe bikeway facilities in greater detail.

1.3.1. SHARED USE PATHS

or off of side streets and driveways.

Shared use paths (also referred to as "multi-use paths" and "trails") are used by various non-motorized users, including pedestrians, cyclists, in-skaters, and runners.

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The Little Miami Scenic Trail in Xenia is an example of a shared use path

In general, shared use paths are desirable for slower-speed recreational cycling, particularly by families and children. However, they are also used extensively by commuters for at least part of their commute in the Miami Valley. Given the mix of users, there is potential for conflicts on heavily-used paths, necessitating lower bicycle speeds in these areas. Shared use paths are preferred for corridors where few intersections or crossings exist, to reduce the potential for conflicts with motor vehicles. Paths located immediately adjacent to roadways, often referred to as "sidepaths" or "sidewalk bikeways," are less desirable due to the numerous potential conflicts with motor vehicles turning on

Shared use paths are typically paved (asphalt or concrete) but may also consist of an unpaved smooth

surface as long as it meets Americans with Disabilities Act (ADA) standards.

1.3.2. BICYCLE/PEDESTRIAN OVERCROSSINGS AND UNDERCROSSINGS

Bicycle/pedestrian overcrossings and undercrossings provide critical non-motorized system links by joining areas separated by any number of barriers.

Overcrossings and undercrossings address real or perceived safety issues by providing users a formalized means for traversing "problem areas" such as deep canyons, waterways or major transportation corridors. In most cases, these structures are built in response to user demand for safe crossings where they previously did not exist. For instance, an overcrossing or undercrossing may be appropriate where moderate to high pedestrian/bicycle demand exists to cross a freeway in a specific location. These facilities also overcome barriers posed by railroads; they are appropriate in areas where frequent or high-speed trains would create at-grade crossing safety issues and in areas where trains frequently stop and block a desired pedestrian or bicycle crossing point.



Pedestrian/bicycle bridge crossing Holes Creek along SR 741 in Montgomery County

Overcrossings and undercrossings also respond to user needs where existing at-grade crossing opportunities exist but are undesirable for any number of reasons. In some cases, high vehicle speeds and heavy traffic volumes might indicate a need for a grade-separated crossing. Hazardous pedestrian/bicycle crossing conditions (e.g., few or no gaps in the traffic stream, conflicts between

motorists and bicyclists/pedestrians at intersections, etc.) could also create the need for an overcrossing or undercrossing.

1.3.3. BIKE LANES

Designated exclusively for bicycle travel, bike lanes are separated from vehicle travel lanes with striping and also include pavement stencils. Bike lanes are most appropriate on Arterial and Collector streets where higher traffic volumes and speeds indicate a need for greater separation.

Bike lanes help to define the road space for bicyclists and motorists, reduce the chance that motorists will stray into the cyclist's path, discourage bicyclists from riding on the sidewalk (to avoid conflicts with



Example of a bike lane on a major street

pedestrians), and remind motorists that cyclists have a right use to the road. One key consideration in designing bike lanes in an urban setting is to ensure that a bike lane and adjacent parking lane are wide enough so that cyclists have enough room to avoid a suddenly opened vehicle door.

1.3.4. SHOULDER BIKEWAYS

Typically found in rural areas, shoulder bikeways are paved roadways with striped shoulders wide enough for bicycle travel. Shoulder bikeways often, but not always, include signage alerting motorists

to expect bicycle travel along the roadway. Shoulder bikeways also accommodate pedestrians in rural areas.

1.3.5. SHARED ROADWAYS

The most common type of bikeway, shared roadways accommodate vehicles and bicycles in the same travel lane. The most suitable roadways for shared vehicle/bicycle use are those with low posted speeds (25 MPH or less) or low traffic volumes (3,000 Avg. Daily Traffic or less). These facilities may include traffic-calming devices to reduce vehicle speeds while limiting conflicts between motorists and bicyclists. A common practice includes signing shared roadways with bicycle route signs, directional arrows, and other wayfinding information.

On streets with low traffic volumes and speeds, striped bike lanes may not be needed at all. This is based on the potential for serious conflicts being so low that the cost of installing bike lanes may not be



Shared roadway with signage

warranted. On these types of low-traffic neighborhood streets, signed shared roadways can serve as important connectors to schools and recreation areas such as parks. Shared roadways may also be desirable on certain commute routes where installing bike lanes is not possible, provided that appropriate signage is installed to alert motorists to the presence of bicycles on the roadway. Shared roadway signing may also include "Share the Road" signs at regular intervals along the route.

Most minor collector and local streets in the Miami Valley can be classified as shared roadways, as they can accommodate bicyclists of all ages and currently have little need for dedicated bicycle facilities (e.g., bike lanes). Curb-to-curb widths generally range between 40 and 50 feet, and the typical street cross-section includes two vehicle travel lanes with on-street parking.

1.4. OTHER BICYCLE FACILITIES

This section describes other physical elements important to the bikeway network, including bikeway signage, end-of-trip facilities (e.g., bike parking), and multi-modal connections.

1.4.1. BIKEWAY SIGNAGE

Implementing a well-designed, attractive, and functional system of network signage greatly enhances bikeway facilities by promoting their presence to both potential and existing users. The ability to navigate through a town or city is informed by landmarks, natural features, and other visual cues. A signage system is a key component of a navigable environment and informs pedestrians, bicyclists, and motorists, while also enhancing the Miami Valley's identity and the individual cities. An effective wayfinding system communicates information clearly and concisely. Placing signs throughout the bikeway system indicating to bicyclists and pedestrians their direction of travel, location of destinations, and the time/distance to those destinations will increase users' comfort and accessibility to the bicycle and pedestrian system. Wayfinding signs are a relatively cost-effective means for improving the walking and bicycling environment.



Bikeway numbering sign and supplemental wayfinding sign on the Little Miami Scenic Trail



Sign depicting the Ohio-to-Erie Trail logo

A variety of signs exist on the Miami Valley's local and regional bikeways. Some off-street bikeways utilize a numbering system originally intended to impart a uniform theme for bikeways across the state. The numbered plaques may or may not include additional wayfinding signs providing directional information for system users. Interpretive signs also exist along some trails highlighting cultural or historical features. Unique logos have been developed for some trails, which are commonly posted along the trail as a route reinforcement tool for users. The Miami Conservancy

Wright Brothers
Huffman Prairie
Bikeway

Wright
State
University 2.4 mi

University 2.5 mi

Trall controlled and maintained byGreen County Parks District.
In Case of Emergency, Call 911

MCD trail signage design

recently developed a signage concept for trails in Greene, Miami, and Montgomery Counties. Signs will include trail names and route numbers, supplemented with wayfinding information for nearby destinations and trail amenities.

1.4.2. END-OF-TRIP FACILITIES

BICYCLE PARKING

Bicycle parking is an important component in planning bicycle facilities and encouraging people to use their bicycles for everyday transportation. Bicycles are one of the top stolen items in most communities, with components often being stolen even when the bicycle frame is securely locked to a rack. Because many of today's bicycles are often high-cost and valuable items, many people will not use a bicycle unless they are sure that there is secure parking available at their destinations. Bear in mind that many cyclists may use (and even prefer) less "formal" bicycle parking methods, such as simply bringing their bicycle inside their building and storing it in their office. Cyclists with higher-end bicycles (perhaps costing several thousand dollars) are often reluctant to let a bicycle out of

their sight at all, and for them the ability to bring a bicycle inside a building is a paramount concern if they are considering whether or not to bicycle to work or to a store.

Lack of secure, convenient bicycle parking is a deterrent to bicycle travel. Bicyclists need parking options that provide security against theft, vandalism, and weather. Like automobile parking, bicycle parking is most effective when it is located close to trip destinations, is easy to access, and is easy to find. Where quality bicycle parking facilities are not provided, determined bicyclists lock their bicycles to street signs, parking meters, lampposts, benches, or trees. These alternatives are undesirable as they are usually not secure, may interfere with pedestrian movement, and can create liability issues or damage street furniture or trees.

Bicycle parking facilities that are conveniently located and adequate in both quantity and quality can help reduce bicycle theft and eliminate inappropriate parking, benefiting everyone. Bicycle parking is highly cost-effective compared to automobile parking, and if credits are given for auto parking, the building owner can benefit as well. Bicycle parking is classified as either short-term or long-term parking, depending on the type of facility.

1.4.3. MULTI-MODAL CONNECTIONS

Three agencies provide transit service in the Miami Valley region. Greene County's Coordinated Agency Transportation System (Green CATS) provides flexible routing transit service (with route deviations up to ¾ mile to accommodate passengers with disabilities), as well as demand-response service. Vans primarily serve Greene County, but travel to destinations outside the county on request. Bike racks were recently added to the agency's van fleet, thereby easing bicycle/transit integration for Greene County residents. In Miami County, demand-response van service is provided by Miami County Transit Service. The agency's fleet currently lacks bike racks.





Bike rack on GDRTA bus

The Greater Dayton Regional Transit Authority (GDRTA) is the Miami Valley Region's largest transit provider. Serving about 13 million passengers per year, the agency provides fixed-route bus service throughout Dayton and surrounding communities. All buses are equipped with a bicycle rack on the front of the bus with a capacity for two bicycles. GDRTA reports that approximately 200 passengers utilize the bike racks each day.

1.5. EDUCATION, ENCOURAGEMENT, AND ENFORCEMENT PROGRAMS

Equally important to the physical bikeway network are support programs. Programmatic elements addressing education, encouragement and enforcement contribute to a well-rounded bicycle

improvement plan. The following list provides a sample of current programmatic efforts in the Miami Valley, while Section 1.6 provides a more detailed discussion of existing programs.

- Five Rivers MetroParks offers a "Basic Bike Maintenance" class showing simple ways to keep your bike in shape.
- MVRPC, MCD, GDRTA, and Five Rivers MetroParks promote the "Drive Less.Live More." campaign, encouraging residents to seek alternative ways of getting around, including bicycling.
- Several websites provide interactive user-friendly maps of the Region's trail system.
- Five Rivers MetroParks sponsors and hosts "Bike for the Health of It" rides, and also promotes bike-to-work events.
- Organizations host annual organized bike rides, including Young's Ice Cream Charity Bike Tour, Greene Trails Cycling Classic, and the Covered Bridge Bicycling Tour.
- The Ohio Bicycle Federation, Miami Valley Regional Bicycle Council, Dayton Cycling Club
 and other organizations monitor infrastructure projects and seek opportunities to include
 top-quality bicycle facilities.
- Five Rivers MetroParks, the Greene County Park District, and Miami County Park District each have volunteer patrols that regularly patrol their respective trail systems.
- The local League of American Bicyclists chapter offers "StreetSmarts Cycling" classes, where
 participants can learn how to safely operate a bicycle under various conditions and learn
 about bicyclists' rights and responsibilities.
- The Greater Dayton Safe Kids Coalition coordinates organized bike rides and helmet giveaways in an eight-county region.

1.6. EXISTING EFFORTS

Described below, MVRPC and various community partners have produced a number of valuable educational materials and maps aimed at bicyclists.

Available Maps and Materials:

- Miami Valley Recreational Trails Map: (http://www.mvrpc.org/tr/bikeMap.php)
- Greene County Trails Map: (http://www.mvrpc.org/recTrails/greene.php)
- Miami County Trails Map: (http://www.mvrpc.org/recTrails/pdf/MiamiCo_Trails.pdf)
- Montgomery County Trails Map: (http://www.mvrpc.org/recTrails/pdf/MontgomeryCo_Trails.pdf)
- Five Rivers MetroParks Mountain Biking Area (MoMBA) Map: (http://www.metroparks.org/_fiveRiversOutdoors/images/MOMBA_BikeTrails11x17.pdf)
- Ohio Bicycling Street Smarts: (http://www.dot.state.oh.us/bike/StreetSmarts/html/index.htm)
- Bicycle Safety: What Every Parent Should Know (Booklet): (http://publicsafety.ohio.gov/odps_publications/HSY7753_BicycleSafety_11_07.pdf)

Online Bicycle Resources:

- Map and List of Ohio's Bikeways, Southwest Region: http://www.dot.state.oh.us/bike/Southwest.htm
- Miami Conservatory District, Recreation Trails: http://www.miamiconservancy.org/recreation/trail.asp
- Plan a Bike Trip: http://www.drivelesslivemore.org/6_plantrip.html
- Miami Valley RailTrails: http://www.miamivalleytrails.org/
- Five Rivers MetroParks Mountain Biking Area (MoMBA): http://www.metroparks.org/_fiveRiversOutdoors/MountainBike.aspx
- Miami Valley Alternative Modes of Transportation: http://www.mvrpc.org/tr/altTrans.php
- Ohio Bicycle Events Calendar: http://www.ohiocycling.info/

Facilities

• Dayton Indoor BMX : http://www.webspawner.com/users/ddbradley/maddenparkbmx.html

1.6.1. PROGRAMS AND ORGANIZATIONS

BIKE SHOPS

Some bicycle shops offer occasional clinics (such as flat fixing or gear shifting clinics) and/or group rides. Several shops host events and/or rides that are aimed at encouraging women cyclists. Shops that occasionally host events include Kettering Bike Shop, KG Bike Center, International Pro Bike Shop, Family Bike Shop, and Roll:.

Bicycle Stop

1355 W. 1st St. Springfield, OH 45504 (937) 342-4780 bicyclestop.com

Big G Bike

5841 SR 121 Greenville, OH 45331

Chain Reaction

9 N. Main St. Englewood, OH 45322 (937) 832-2453

Don's Bike Shop

316 N. State Line St. Union City, OH 45390

Dave's Sales and Service

2265 Dryden Rd Moraine, OH 45439 (937) 294-2176

Huber Heights Cycling and Fitness

4782 Fishburg Rd Huber Heights, OH 45424 (937) 236-1515

Ingram Eldin Bicycles

8590 Dayton-Germantown Pk Germantown, OH 45327

International Pro Bike Shop

15 W. Franklin St. Bellbrook, OH 45305 (937) 848-8466 iprobikeshop.com

K & G Bike Centers 4090 Marshall Rd. Kettering, OH 45429 (937) 294-6895 kgbikes.com

116 W. Franklin St. **Centerville**, OH 45459 (937) 436-2222 kgbikes.com

594 N. Detroit St. **Xenia**, OH 45385 (937) 372-2555 kgbikes.com

Kettering Bike Shop

3120 Wilmington Pk. Kettering, OH 45429 (937) 293-3293 ketteringbikeshop.com

Links and Kinks

1128 N. Broad St. Fairborn, OH 45324 (937) 754-0929

Parkers Sport Shop

309 E. Ash St. Piqua, OH 45356

Performance Bicycle

4466 Indian Ripple Road Beavercreek, OH 45440 (937) 429-8589 performancebike.com

roll:

4480 Cedar Park Dr. Beavercreek, OH 45440 (937) 458-6000 roll-online.com

Smittys Bicycle Shop

1410 Edge St. Piqua, OH 45356

Tipp Cyclery

122 W. Main St. Tipp City, OH 45371 (937) 667-5009

Family Bike Shop Cycling & Fitness

945 W Main St Troy, OH 45373 (937) 339-1634

Medlin's Peddlin'

16 N Main St Pleasant Hill, OH 45359 937-676-2001

Weaver's Bikes and Hobbies

701 Wayne St. Greenville, OH 45331

Village Cyclery

110 Dayton St. Yellow Springs, OH 45387 (937) 767-9330

CLUBS, ORGANIZATIONS, AND RACING TEAMS

Several clubs have activities aimed at encouraging women riders and young racers. A few of these classes and rides are aimed at inexperienced cyclists, but most are designed for experienced riders.

- Dayton Cycling Club: http://www.daytoncyclingclub.org/
- Major Taylor Cycling Club: http://majortaylordayton.org/
- Team Dayton Southwest Ohio Cycling Team: http://teamdaytoncycling.com/index.php
- Team IPro: http://www.teamipro.com/Team IPRO/Home.html

- Dayton Ohio ABA BMX Racing: http://www.webspawner.com/users/ddbradley/
- Ohio Cycling Association: http://ohiocycling.org/

LEAGUE OF AMERICAN BICYCLISTS/LEAGUE CERTIFIED INSTRUCTOR PROGRAMS

The Dayton Cycling Club offers League of American Bicyclists-certified adult cycling skills training courses (http://www.daytoncyclingclub.org/). There are currently five League-certified instructors in the Miami Valley Region.

REGIONAL PARK SPONSORED PROGRAMS

- Beavercreek's Parks and Recreation Department and Five Rivers MetroParks offer adult basic bicycling maintenance classes.
- Beavercreek Parks and Recreation: http://www.ci.beavercreek.oh.us/services/parks-rec/index.htm
- Five Rivers MetroParks: http://www.metroparks.org/_home/eventResultsAll.aspx

CHILDREN'S HELMET PROGRAM

The Children's Medical Center of Dayton (as part of the Safe Kids program) provides free bicycle helmets to children throughout the Region with the help of community partners from law enforcement, retail outlets, and local organizations. At events such as the Darke County Bike Rodeo, Preble County Safe Communities Day, and the Beavercreek Bike Rodeo, children are able to learn and practice safe riding skills and receive a properly fitted helmet.

Children's Medical Center of Dayton:
 http://www.childrensdayton.org/Advocacy/Advocacy_pages/av_what_we_r_doing.html

1.6.2. ENFORCEMENT ACTIVITIES

The Miami Valley Sheriff's Office does not emphasize enforcement action against bicyclists, though if a crash involving a bicyclist occurs, the cyclist may be ticketed.

• Digest of Ohio Bicycle Traffic Laws: http://www.ohiobike.org/bicycle-law-digest.html