This update to the Comprehensive Local-Regional Bikeways Plan (2008) provides an overview of the development and current state of cycling and cycling infrastructure in the Miami Valley Region in southwest Ohio. The 2015 Update documents past accomplishments, highlights critical features of the present state of cycling in the Region, and points to a future where more people choose to bike more often for more reasons.

The Miami Valley Regional Planning Commission invites you to read this update with an eye to three key themes which underpin the approach suggested for the Region.

1. **Broadening focus from trails to on-street infrastructure and complete streets.** The Miami Valley is home to the nation’s largest paved trail network, and MVRPC has been proud to partner with the numerous agencies that have made the Miami Valley Trails network the asset it has become. Key connections on this trail network remain to be completed and they remain a priority of this plan. But the opportunities to create community connections via shared-use path are limited. The majority (in miles) of the proposed regional bikeways connections in this plan are along roadway corridors. In addition, on-street connections leading to the Miami Valley Trails will make the trails more accessible and improve the return on our four-decade investment in the trails. In short, a regional commitment to building safe, convenient, attractive cycling infrastructure along the Miami Valley’s transportation corridors will be critical to the success of this plan.

2. **User comfort and safety are critical to increasing bicycle mode share.** This update examines national and regional survey data, and the latest innovations in cycling infrastructure design. Surveys indicate that a majority of the regional population are interested in cycling more, but their concerns about their safety are preventing them from doing so; only a small slice of the general public is willing to ride a bicycle fully mixed in with motor traffic. Level of Traffic Stress analysis, and designs inspired by Dutch and Danish approaches that provide better separation from higher speed traffic, are emphasized in the current thinking across the U.S. and in this 2015 Update.

3. **A comprehensive approach will enhance the implementation of this 2015 Update.** In the end, it is not enough to build infrastructure, even the most advanced infrastructure. An effective program to build and improve our Region’s cycling culture must take into account all of the “other Es.” Encouragement, education and equity programs will increase awareness and interest in using bikes for transportation from a wide spectrum of the population. Enforcement efforts support the safety and comfort of all the users of the system. Evaluation tools will measure progress and identify gaps. The goal is more than building facilities. How bikeways are programmed and operated is essential to their success. It is very important that advocates reach out into the community and raise awareness and education levels about cycling. And because cycling culture is all of these factors, it is about more than the Miami Valley Regional Planning Commission; it is about the current and future partnerships that will build and support the cycling ecosystem needed to get more people on their bicycles more often.

This 2015 Update draws upon several different kinds of analyses to evaluate and present the current state of cycling in the Miami Valley. Each of these approaches provides a unique and valuable insight into our Region, and contributes to the recommended projects, programs, and polices presented in the final section of the report.
Public Input and Survey Data. Through a series of four public meetings attended by over 140 people and an online survey completed by more than 700 people, MVRPC staff was able to glean a critical understanding of the public’s interest in the development of the cycling culture in our Region. Hundreds of project and program recommendations came from these meetings and survey. Complete lists of the questions and suggestions are provided in the Appendices.

Regional Crash Data. MVRPC reviewed thousands of motor vehicle and bike/pedestrian crashes with a particular focus on the 695 bike or pedestrian crashes that occurred between 2011 and 2013. This analysis discovered the highest crash intersections and roadway segments for pedestrian- and bike-related crashes. These locations feed directly into the top recommended projects as safety priorities.

Level of Traffic Stress Analysis. MVRPC undertook a modified LTS analysis to look at our regional cycling network from the point of view of the cyclist. Assuming the Miami Valley Trails and most of our residential local streets are low-stress cycling environments, and that most if not all cyclists will be comfortable cycling in those locations, the analysis seeks to understand where that low-stress network can and cannot take a cyclist. The analysis also looks at simple connections that can join low-stress “islands” and better link our regional network. These connections would be low-cost, high impact projects allowing local jurisdictions to increase cycling opportunities for their residents.

Demographic Review. Relying primarily on census and American Community Survey data, this report looks at a macro level at the rates of cycling demand in our Region. Other data shine a different light on the overall picture of cycling in the Miami Valley. Health data from the Centers for Disease Control and local public health surveys produced by Public Health Dayton-Montgomery County allow us to see equity issues in terms of access to cycling and physical activity.

Recommended policies

The Miami Valley Regional Planning Commission is a critical agency for funding transportation projects of all kinds in the Dayton Region. The agency’s role in guiding the discussion of regional policy can be just as important as the federal funds being programmed for projects. This 2015 Update recommends several policies to guide agency, member jurisdiction and partner approaches to building the cycling network and culture in the Miami Valley in the future. The top policy recommendations include:

1. **Support balanced federal funding for non-motorized transportation.** This includes advocacy for the inclusion of these programs in federal funding, and ensuring that such funds that are programmed through the Miami Valley Regional Planning Commission are used to enhance active transportation across the Region.

2. **Fill the gaps and complete the streets.** The 2015 Update continues the agency’s primary focus on the regional bikeways network, while leveraging the power of the regional complete streets policy and a growing number of local policies to enhance the on-street connections to the regional network.

3. **Go above and beyond minimum standards.** Development of safe and attractive bike infrastructure, the kind that will attract more cyclists out to use them, may require enhanced designs. Going the extra distance to provide the safety and separation features desired by the general public will increase usage of these facilities.

4. **Include bike and pedestrian infrastructure in local plans.** Jurisdictions in the Miami Valley will help build the better bicycling future if they make clear in
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comprehensive plans, thoroughfare plans and other local documents that cycling and pedestrian infrastructure are important and need to be included in future development.

5. **Promote the nation's largest paved trail network.** The Miami Valley Trails are an asset with great potential to be more than a recreation outlet to the Region, including a commuter facility, a tourist draw, and an economic development opportunity. MVRPC’s Trail User Surveys in 2009 and 2013 found that approximately one million people use the trail network spending up to $13 Million in the local economy each year. 16% of the trail users come from areas of the state outside the Miami Valley Region, and 2% come from outside Ohio. Raising awareness of the trails regionally and across the Midwest will support these efforts. Member jurisdictions that connect themselves to the network can benefit in many ways.

These policies, joined with the projects and programs detailed in this 2015 Update, are recommended as the path forward to enhance the cycling ecosystem here in the Miami Valley. They should all meaningfully contribute to meeting the original 2008 CLRBP vision:

The Miami Valley Regional Planning Commission’s Comprehensive Local-Regional Bikeways Plan is intended to enhance region-wide bikeway networks including regional and local bike paths, on street lanes and routes, and their connections through the MVRPC planning area. In conjunction with education, encouragement, enforcement and equity efforts, these improvements to the bikeways network will lead to more people biking more often to more places in the Miami Valley.
This chapter gives readers an introduction to the plan and recognizes Bikeway Partner organizations.

Miami Valley Regional Planning Commission

The Miami Valley Regional Planning Commission (MVRPC) is the federally designated Metropolitan Planning Organization (MPO) for the counties of Miami, Montgomery, and Greene in western Ohio, plus the cities of Carlisle, Franklin, and Springboro in northern Warren County. With Dayton as its largest city (2013 estimated pop. 143,355), approximately 830,000 people reside within the 82 jurisdictions that comprise the MPO Region. Hereafter, the MPO planning area will be referred to as the ‘Dayton Region’, or simply the ‘Region’. MVRPC allocates funding to road, bridge, transit, and bicycling infrastructure and produces encouragement and education materials including the Miami Valley Bikeways Guide Map.

The guide map includes trails in adjacent counties, outside of the MPO, including Butler, Clark, Darke, Hamilton, and Warren. That is one example of how MVRPC reaches beyond the strict planning boundaries to collaborate to promote cycling in Ohio. MVRPC coordinates with the Ohio Department of Transportation, Green Umbrella’s Trails Alliance, National Aviation Heritage Area, and the Ohio-to-Erie Trail to make sure investments in cycling show the maximum return for Miami Valley residents and businesses.

2008 Comprehensive Local-Regional Bikeway Plan

In 2008, the Miami Valley Regional Planning Commission produced the Comprehensive Local-Regional Bikeways Plan (CLRBP), the first MVRPC planning document focused primarily on bicycling since 1977. MVRPC set out, with the help of nationally-recognized bikeway planners Alta Planning + Design and the Columbus engineering firm Burgess & Niple, to develop a long range plan for our Region’s cycling development. The plan was adopted after one and a half years of community involvement, workshops, and discussion. The CLRBP was supported both financially and throughout the community involvement process by our agency partners, Five Rivers Metro Parks, the Miami Conservancy District, Greene County Parks & Trails, and the Miami County Park District. Many other park districts and community groups also supported the plan.

The 2008 plan developed a 30-year outlook for our Region. The plan highlighted the unique opportunity and resources in our Region to promote cycling as a key alternative to automobile travel and it set very aggressive goals for growing bicycle usage in the Region. The full 2008 CLRBP can be accessed at http://www.mvrpc.org/transportation/bikeways-pedestrians/comprehensive-local-regional-bikeway-plan.

2015 Bikeways Plan Update

Much has happened since the original 2008 Plan was written. More miles of trail have been added, whole new trails have opened, Link bike share has come to downtown Dayton, and a revitalized Bike Miami Valley is again advocating for cycling and cycling culture. MVRPC created and is implementing a Regional Complete Streets Policy, which requires that all roadway projects seeking MVRPC funding consider the needs of cyclists, pedestrians and transit users. Because of this policy, roadway projects regularly include bike elements, including bike lanes, sharrows, signage and parallel separated paths. Newer facility types, like protected bike lanes and bike boulevards, are also being discussed and added as elements of future roadway projects. Working with our member jurisdictions and other trail managing agencies, we are creating an increasingly bike-friendly Region.
The 2008 CLRBP guided these efforts. However, over these past seven years, certain sections of the CLRBP have become outdated. New programs, funding, and data emerged. Our Region is facing new challenges, cycling has new cultural impact opportunities, and MVRPC’s role in promoting and supporting cycling is more important than ever. This report is intended as an update and supplement to the 2008 CLRBP. It does not replace it.

This Bike Plan Update 2015 follows a past-present-future format. The many accomplishments since the 2008 plan are shared in the Past section. Recent efforts to gather public priorities, report on current data, and evaluate the impacts of cycling on the Region are the subject of the Present section. The Future section contains updated planning and policy recommendations that will continue to improve bike friendliness.

MVRPC uses these recommendations in a variety of ways. The agency provides advice, guidance, and policy development assistance to our member jurisdictions where they chose to make bicycling a local priority. Eligible projects are funded through the MAP-21 funds allocated to our Region using a competitive selection process, and we support bicycling infrastructure and programming grant applications through other funding sources. MVRPC’s GIS mapping resources are put to particular use for the Miami Valley Bikeways Guide Map and the MiamiValleyTrails.org website, and are available to local jurisdictions and partner agencies. We convene groups to cooperate on bikeways projects and solve issues. Professional planning and engineering education programs, featuring best practices and up-to-date resources, are provided to our jurisdictions. And the agency makes resources available directly to the public, through the MVRPC website, public service announcements, and participation in community events. Each of these activities, guided by the Bike Plan, flow directly into the staff work-plan each year.

**Partners in the Bikeways**

Multiple agencies have envisioned specific bikeway projects, requested funding and built sections of the nation’s largest paved trail network, as well as on-street bike lanes and bike support facilities. This 40-year coordinated effort has positioned the Region to become a national leader in providing safe, low-stress bikeways and trails for residents and visitors alike.

**County and Local Parks Departments, and the Miami Conservancy District**

The Parks and the Conservancy are the main entities which apply for and match funding for trail projects. They also continue to build out and manage the Region’s multi-use trails network. By sharing and coordinating responsibility for patrolling and maintaining the trail network, they have created a truly unique cycling environment for residents and visitors which crosses multiple jurisdictional and county lines, creating one unified, safe, and enjoyable cycling experience.

**Cities, Villages, and Townships**

Individual jurisdictions in our Region have the ability to improve the bicycling experience for their residents. Our recommendations for using the Region’s streets to safely accommodate bicycling are meant to be carried out in the context of each local jurisdiction in cooperation with their local engineering experts, law enforcement, schools, and political leadership. Each community is fiscally responsible for their infrastructure investments and for their services to their residents. No recommendations in this plan or prioritization of projects will supersede the local decision about implementation. MVRPC’s role is to provide a broad vision and regional plan, offer planning support and advice for these locally-implemented projects that build the regional active transportation infrastructure and local programs that support active lifestyles. Some of these projects may be eligible for MVRPC-controlled federal funding.
Bike Miami Valley, the Ohio Bike Federation, Clubs, Teams, Friends, Advocates, and Businesses

As a government agency, MVRPC is charged with responsibility to the public interest. It is also up to the bike community to make this Region a center for bike activities, education, and programs. Friends groups, advocates, and clubs are the hearts and hands that promote bike interests in the Miami Valley. Residents who support cycling and become actively involved in planning and decision making about cycling will help determine the extent and type of investments in cycling infrastructure. Events, including organized rides, are a key part of creating a vibrant bike culture, encouraging and educating the public. Advocacy groups, clubs and non-profits are primary organizers of these kinds of activities. Private companies can have a role in supporting bicycling by encouraging employee commuting, providing bike parking, raising funds for local races or health challenges, and even building linking infrastructure on their property. There is an increased interest from health organizations and schools in healthy, active lifestyles. With all of these stakeholders, MVRPC is confident the 2015 Update will find many users.

Regional Bikeways Committee

The Regional Bikeways Committee is made up of agencies and jurisdictions that own or manage bikeways, and of allied groups that support bikeway infrastructure and programming. While not a standing committee of the Miami Valley Regional Planning Commission, MVRPC provides staff support for the committee and its meetings. The Regional Bikeways Committee meets on an as-needed basis; meetings are open to the public and are announced via the MVRPC agency calendar on mvrpc.org.
MVRPC would like to thank all the people, agencies, and communities represented on our Regional Bikeways Committee, the official steering and review committee for this update.

Bike Plan Update Process
Participating Organizations

Bike Miami Valley
Centerville-Washington Park District
City of Beavercreek
City of Centerville
City of Dayton
City of Fairborn
City of Franklin
City of Kettering
City of Miamisburg
City of Piqua
City of Riverside
City of Springboro
City of Tipp City
City of Trotwood
City of Troy
City of Xenia
Clark County Springfield Transportation Coordinating Committee
Darke County Park District
Five Rivers MetroParks
Friends of the Little Miami State Park
Friends of Xenia Station
Greater Dayton RTA
Greene County Mobility Manager
Greene County Parks & Trails
Miami Conservancy District
Miami County Park District
Montgomery County Engineer
National Park Service
National Trail Parks and Recreation District
Ohio Bicycle Federation
Simon Kenton Pathfinders
TrailWorks
Village of Yellow Springs
Washington Township
Wright State University