



# Bicycle Friendly Community Action Plan

WEST CARROLLTON, OHIO

Draft: October, 2008

## Table of Contents

ACKNOWLEDGEMENTS: .....	1
1. OVERVIEW .....	2
2. ENGINEERING .....	5
3. EDUCATION .....	10
4. ENCOURAGEMENT .....	12
5. ENFORCEMENT .....	14
6. EVALUATION .....	16
7. NEXT STEPS .....	18

## Acknowledgements:

This document provides a Bicycle Friendly Community Action Plan for West Carrollton, Ohio. The process for developing this plan was based on the national Bicycle Friendly Communities (BFC) program of the League of American Bicyclists. The Miami Valley Regional Planning Commission (MVRPC) provided staff and funding support for this project. MVRPC's leadership allowed for the creation of 11 BFC Action Plans as part of the regional bikeways plan. The project consultants were Alta Planning + Design and Burgess & Niple. Special thanks are due to all of the community leaders who are helping to create bicycle friendly communities in the Miami Valley.



## 1. Overview

The Bicycle Friendly Community (BFC) campaign is an awards program that recognizes municipalities that actively support bicycling. The League of American Bicyclists (LAB) administers the Bicycle Friendly Community program. A Bicycle-Friendly Community provides safe accommodation for cycling and encourages its residents to bike for transportation and recreation. Communities that are bicycle-friendly are seen as places with a high quality of life. This often translates into increased property values, business growth and increased tourism. Bicycle-friendly communities are places where people feel safe and comfortable riding their bikes for fun, fitness, and transportation. With more people bicycling, communities experience reduced traffic demands, improved air quality and greater physical fitness.

There are two steps to applying for Bicycle Friendly Community status.

First, complete and submit Part 1 of the Application online. After a review of your general community profile, the League will inform you if you have met some of the basic criteria required.

Part 2 is a detailed audit of the engineering, education, encouragement, enforcement and evaluation efforts in your municipality. This comprehensive inquiry is designed to yield a holistic picture of a community's work to promote bicycling.

Source: <http://www.bicyclefriendlycommunity.org>

The core of the BFC program is a balanced approach to Engineering, Education, Encouragement, Enforcement and Evaluation, the Five Es. Each of these categories is scored in the application through a series of detailed questions. A community must demonstrate success in each of these areas in order to be considered eligible for an award. Communities with significant achievements in these areas receive awards which are given at Bronze, Silver, Gold and Platinum levels. There is also an honorable mention category for communities that do not qualify for a higher level award, but have demonstrated progress towards future success.

Urban, rural and suburban communities throughout the U.S. have participated in the BFC program. There is a growing interest in using the application process as a benchmarking tool for communities to enhance, develop and manage their local programs. Filling out the BFC application is an education in itself, as communities see their strengths and opportunities in each of these categories. The Five E's are described as follows:



League of American Bicyclists executive director Andy Clarke presented the BFC program to local communities at the MVRPC BFC workshop in May, 2008.

## **ENGINEERING**

Communities are asked about what is on the ground; what has been built to promote cycling in the community. For example, questions in this category inquire about the existence and content of a bicycle master plan, the accommodation of cyclists on public roads, and the existence of both well-designed bike lanes and multi-use paths in the community. Reviewers also look at the availability of secure bike parking and the condition and connectivity of both the off-road and on-road network.

## **EDUICATION**

The questions in this category are designed to determine the amount of education there is available for both cyclists and motorists. Education includes teaching cyclists of all ages how to ride safely in any area for multi-use paths to congested city streets as well as teaching motorists how to share the road safely with cyclists. Some things that reviewers look at are the availability of cycling education for adults and children, the number of League Cycling Instructors in the community, and other ways that safety information is distributed to both cyclists and motorists in the community including bike maps, tip sheets, and as a part of driver's education manuals and courses.

## **ENCOURAGEMENT**

This category concentrates on how the community promotes and encourages bicycling. This can be done through Bike Month and Bike to Work Week events as well as producing community bike maps, route finding signage, community bike rides, commuter incentive programs, and having a Safe Routes to School program. In addition, some questions focus on other things that have been built to promote cycling or a cycling culture such as off-road facilities, BMX parks, velodromes, and the existence of both road and mountain bicycling clubs.

## **ENFORCEMENT**

The enforcement category contains questions that measure the connections between the cycling and law enforcement communities. Questions address whether or not the law enforcement community has a liaison with the cycling community, if there are bicycle divisions of the law enforcement or public safety communities, if the community uses targeted enforcement to encourage cyclists and motorists to share the road safely, and the existence of bicycling related laws such as those requiring helmet or the use of sidepaths.

## **EVALUATION & PLANNING**

Here the community is judged on the systems that they have in place to evaluate current programs and plan for the future. Questions are focused on measuring the amount of cycling taking place in the community, the crash and fatality rates, and ways that the community works to improve these numbers. Communities are asked about whether or not they have a bike plan, how much of it has been implemented and what the next steps for improvement are.

As part of the MVRPC regional bikeways plan, 11 communities were identified to participate in an innovative pilot program to create Local Bikeway Action Plans based on the BFC process. It is important to note that the intent of this effort is not to immediately apply for the awards program, but rather to use the BFC application as a tool to identify local communities' progress in each of the 5 E's. A training session was held with the 11 communities. Following this session, a local coordinator was identified, and each community developed a preliminary version of the BFC application based on available information about local projects and programs. Based on this information, the consultant team reviewed the local community responses to the 5 E's, identified connections to regional efforts that are referenced in the MVRPC Regional Plan, and assisted in developing updated local bikeway maps. The result of those reviews is this Local BFC Action Plan. These reports have been prepared for each of the 11 MVRPC BFC pilot program communities and are intended to identify plans, policies and programs that can help local communities implement the MVRPC regional plan through cooperative local initiatives.

The local action plans contain the following information (where existing data are available) for the bikeway system and connecting segments in adjacent communities:

- a. Facility description (length, width, condition, etc.)
- b. AASHTO Classification (shared use path, bike lane, shared roadway, signed route, etc.)
- c. Safety Issues / Crash locations
- d. Constraint sections based on community input
- e. Transit system routes and stations
- f. Signage and Pavement Markings
- g. Traffic Signals and Signal Detectors
- h. Funding opportunities and resource guide
- i. Education, Encouragement and Enforcement Programs
- j. Bicycle Friendly Community Policy guidelines

Mapping of local bikeways was developed based on the proposed facilities in the MVRPC regional plan, and review of local proposed facilities provided by the community. Where local programs are not currently available, opportunities were identified to connect local efforts to regional programs that can compliment local efforts. Each of the 5 E's is presented as a section of this document, with specific recommendations for enhancing local efforts. These recommendations can be used to create balanced approaches to improving local communities. Over time, as these efforts are implemented, conditions for bicycling will improve. When sufficient progress has been made, individual communities, counties and the MVRPC region will be able to successfully apply for BFC awards.

The following sections provide specific suggestions and website links for the community to address each of the 5 E's included in the BFC application process.

## 2. Engineering

### Summary of Draft Application and Recommended Local Actions

Based on the responses to the questions in the Bicycle Friendly Community Application, there has been some investment in the development of bicycle facilities in West Carrollton, but there remains a large opportunity to continue to expand and connect the network. The current lack of bicycle lane mileage in the City would indicate that there is a need to examine locations which will benefit from the addition of on-road bicycling facilities. Depending on the road space available, bicycle lanes may be striped to safely delineate a dedicated space for bicyclists on the road.



#### Class II Bike Lane

For roads with limited space available for bike lane striping, Shared Lane Markings or “Sharrows” may be used to identify the presence of bicycles. The primary purpose of the Shared Lane Marking is to provide positional guidance to bicyclists on roadways that are too narrow to be striped with bicycle lanes and to alert motorists of the location a cyclist may occupy on the roadway. Shared Lane Markings are intended to reduce the chance of a cyclist colliding with an open car door of a vehicle parked on-street, parallel to the roadway. Shared Lane Markings are appropriate on bicycle network streets that are too narrow for standard striped bicycle lanes, areas that experience a high level of “wrong-way” riding, along with bicycle network streets that have moderate to high parking turnover, typically commercial areas. Shared Lane Markings are intended for use on roadways without striped bicycle lanes or shoulders.



The introduction of a “Complete Streets” policy would encourage the implementation of bicycle facilities around the city. Complete streets policies direct transportation planners and engineers to consistently design roadways with all users in mind (e.g., motorists, transit riders, pedestrians, bicyclists, older people, children, and people with disabilities). As part of a comprehensive Complete Streets policy, maintenance issues should be thoroughly addressed to insure that bicycle facilities are well maintained and kept free of debris. The policy is an important first step towards becoming a BFC.

Bicycle parking facilities will also need to be made available to accommodate increased bicycle use. Public facilities and municipal buildings are the best place to introduce the installation of bicycle racks. Schools, libraries, transit stations and governments buildings should be evaluated to determine the current bicycle parking available and future needs should be assessed. A bicycle parking policy which dictates a minimum number of spaces based on a percentage of existing car parking or land use and density is an effective way to insure that bike racks are included in all new development.

### **Specific Recommendations to Address Each BFC Application Question**

**Question 1 Written Policy:** Complete Streets policies are a strong measure to insure that bicyclists are accommodated in all roadway design and reconstruction. Similar policies have been introduced by municipalities across the country and examples are available from the Complete Streets website: [www.CompleteStreets.org](http://www.CompleteStreets.org). The Ohio Bicycle Federation, Dayton Cycling Club and other organizations monitor infrastructure projects and seek opportunities to include top-quality bicycle facilities.

**Question 2 Training:** Local officials and engineers should be well versed in the Complete Streets concept as well as the engineering tools available to create non-motorized facilities. Organizations such as the Thunderhead Alliance have trained staff that can provide training to local officials and engineers: [www.thunderheadalliance.org](http://www.thunderheadalliance.org).

**Question 3 Bridges:** Bridges are long-term infrastructure projects and since they may not be rehabilitated or reconstructed for a number of decades, it is vitally important to insure that all bridges have access for bicyclists in the design and construction phase. Any Bridges over Interstate 75 or the Great Miami River should be designed to accommodate cyclists. Some smaller bridges and culverts may be provided at locations where paths and roads cross stream corridors and these should have safe access for cyclists as well.

**Question 4 Parking Ordinance:** Bicycle parking requirements should be incorporated into all land uses as part of the local zoning code. Sample bicycle parking guidelines are provided at: <http://www.bicyclinginfo.org/engineering/parking.cfm>

**Question 5 Bike Racks:** Bike racks should be made available at public locations and should be incorporated into any future developments. The BFC process indicates that bike racks at schools, libraries, transit stops, the city offices and commercial centers should be the first to receive bike racks in West Carrollton.

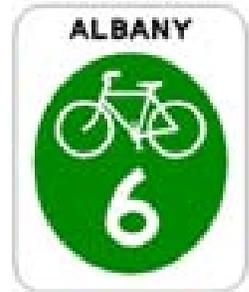
**Question 6 Transit Access:** Bike racks are provided on GDRTA buses have become an important tool for improving multi-modal connections.

**Question 7 Bike Lane Mileage:** There may be potential to stripe existing shoulders as bike lanes. The bicycle stencil adds a level of legitimacy to the presence of bicyclists on the road and also increases

motorist awareness of the bicyclists. Repaving and reconstruction projects offer the opportunity to stripe new bike lanes and “road diets” can create needed space for bike lanes.

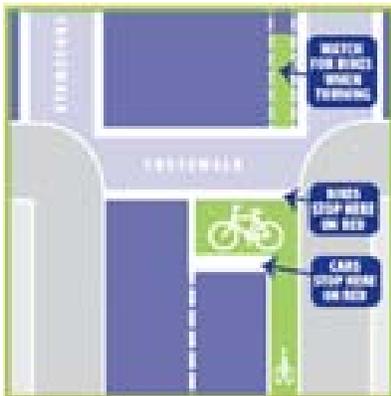
**Question 8 Arterial Access:** Although arterial roads may be not be the desired place for some cyclists to ride, they do provide connections to other routes and may be the only access to retail and commercial destinations. Arterials such as State Route 725 and Springboro Road should incorporate striped shoulders at a minimum and bike lanes if possible.

**Question 9 Bike Route Mileage:** Signing bike routes for both transportation and recreation purposes is a relatively cost effective way to designate desired routes for bicyclists. The existing signed routes in West Carrollton should include “Share the Road” signage and can also include MUTCD approved signs with local branding.



**M6-2**

**Question 10 Maintenance:** Bicycles are more susceptible to roadway imperfections and debris than most other road users. The City should adopt a clear policy for the sweeping of bike lanes, shared roadways and shoulders to insure safety and reduce the risk of punctures. Small potholes and cracks which would otherwise not affect motor vehicles can pose significant hazards to bicyclists and should be repaired. An ‘on request’ improvement program will help add points to the City’s BFC score.



**Question 11 Intersections:** Intersections are typically the most likely crash location for motorized and non-motorized users alike. There are a number of innovative treatments such as bicycle boxes and bicycle-specific traffic lights which can significantly improve the visibility and safety of cyclists at intersections. Cities such as Portland, Oregon are using color biked lanes to improve the visibility of cyclists in intersections.

**Question 12 Hard Surface Trails:** Hard surface trails such as multi-use paths provide an important link to on-road facilities and also offer less experience cyclists and children a safe environment to hone their skills. The Great Miami River Recreational Trail is a valuable resource for the community and opportunities should be explored to connect to the proposed Great Miami River Centerville Connector Trail. Safe access to the trails should be provided at all major road crossings to insure an integrated network of on-road and off-road facilities.

**Question 13 Soft Surface Trails:** Soft surface trails are also referred to as natural surface trails and can include rail trails, tow paths, singletrack and other similar facilities. There may be potential to create these kinds of natural paths in the Cox Arboretum Metro Park and Sycamore Trails Park.

**Question 14 Open Space:** Safe, user-friendly access to Wilson Park, Moraine Aire Park, and other smaller parks can include park entrance roads that include bicycle friendly designs, and bikeways within the parks. It is important to insure that such facilities are available to the public and open to recreational riders.

**Question 15 Trail Maintenance:** Trail maintenance is equally as important as maintenance of on-road facilities. To become a BFC, the City will need to confirm its maintenance policy, with a state of good

repair that includes removal of debris on at least a monthly basis, and more frequently if requested by trail users.

**Question 16 Employer Facilities:** Local codes and ordinances can specify that employers of a certain size must include bike parking and changing facilities at the place of work. The City can set an example with municipal buildings, the library and other worksites. The League of American Bicyclists has recently initiated a Bicycle Friendly Business program and more information is available from the website: <http://www.bikeleague.org/programs/bicyclefriendlybusiness/index.php>.

**Question 17 Recreational Cycling:** Low traffic rural roads and touring routes help support recreational and touring cyclists. Cultural and historical rides can be provided by the local municipalities through volunteer docents and offer families and other recreation riders a chance to learn while getting some exercise.

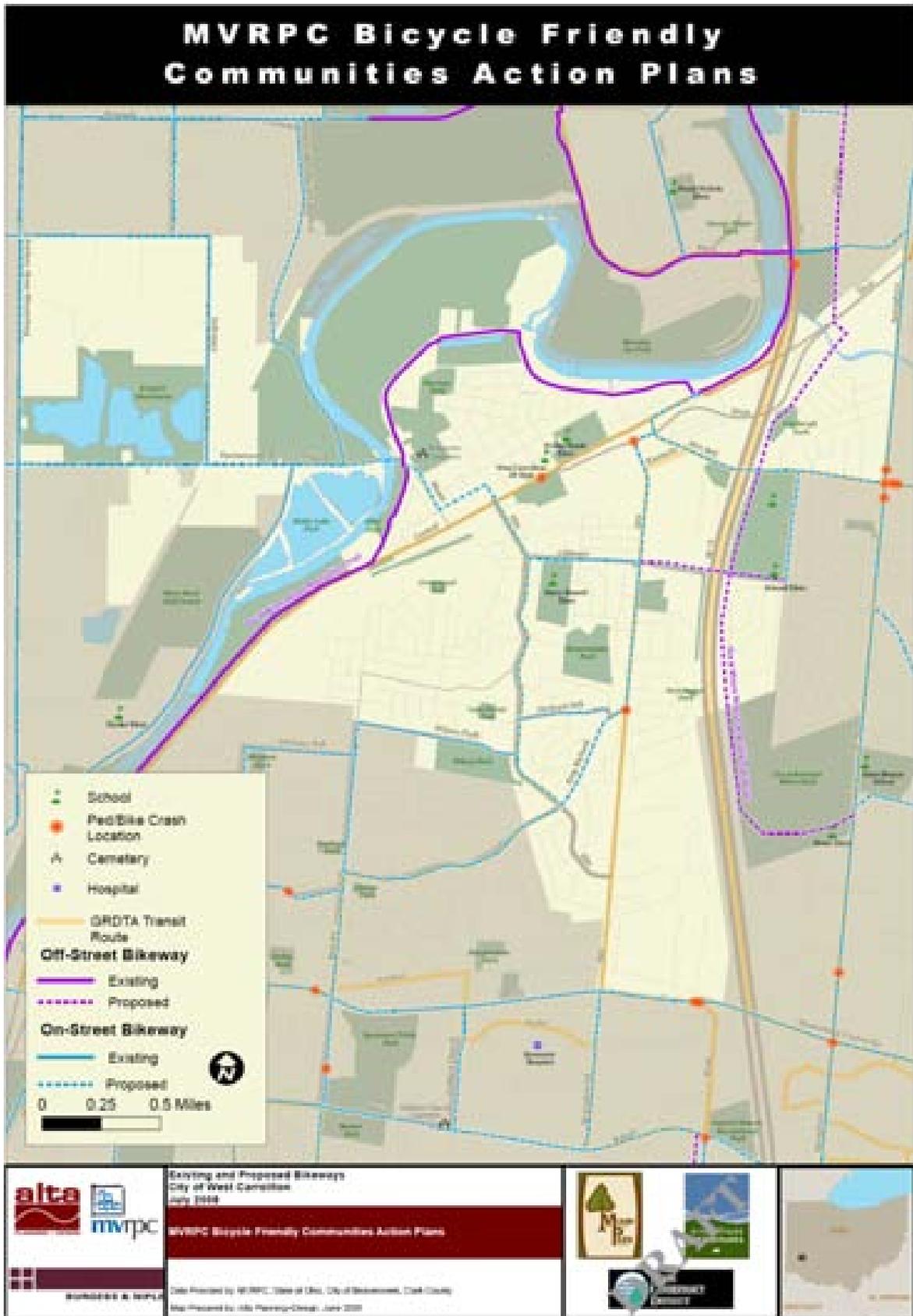
### Connections to Regional Programs

The following table shows local bikeway projects identified in the MVRPC Regional Bikeways Plan:

Regional	REG-1	Trail infrastructure improvements (lighting, trail markings, trail/roadway crossing treatments)	On/off-street
Regional	REG-2	Develop a regional on- and off-street bikeway signage and wayfinding plan	On/off-street
Regional	REG-3	Develop "complete streets" (e.g., sidewalks, bike lanes) on high-volume roadways	On-street
Regional	REG-4	Implement bicycle/pedestrian improvements at Top 5 crash locations	On-street
Regional	REG-5	Construct on-street bicycle facilities on roadways yielding on-street bicycle suitability analysis scores of "3" or better	On-street
Regional	REG-6	Evaluate greenway/bikeway connection needs	On/off-street

Mont-8 Construct on- and off- street bikeway connecting Moraine, West Carrollton, Washington Township, Centerville, and Bellbrook via Cox Arboretum, Yankee Park, Grant Park, Pleasant Hill Park, Forest Walk Park, Black Oak Park, Black Oak East Park, Sugarcreek MetroPark.

The map on the following page shows existing and proposed facilities as the framework for West Carrollton's local bikeway network.



### 3. Education

#### Summary of Draft Application and Recommended Local Actions

Through the actions of the police bicycle patrol and the bike safety materials provided to the community, there is an existing effort to educate motor vehicle drivers as well as bicyclists to safely share the road. This message is vital to increasing actual and perceived safety as more bicyclists take to the road for utilitarian and recreational cycling.



Educating motorists that bicyclists have a right to the road and need a minimum amount of operating space is critical to improving road safety and reducing the number of car-bike collisions. Share the Road signs introduce the message at the road level but that message must be reinforced to effectively educate the motoring public. The “Share the Road” theme should be a mandatory component of all drivers’ education classes and the concept needs to be continually enforced on the road by law enforcement officers.

It is equally important to educate bicyclists on the vehicle and traffic laws to insure that they are riding as safely as possible. The League of American Bicyclists offers a comprehensive bicycle education class which can be geared to riders of all ages and abilities. Although there are no League Cycling Instructors (LCIs) in the City of West Carrollton, there are some in the Miami Valley Region that should be enlisted to offer the basic Road I class. Once cyclists have taken the Road I class they are eligible to attend the League Cycling Instructor program which will then allow them to teach classes on their own. The presence of multiple LCIs teaching classes in the area is an important tool to disseminating the basic concepts of safe cycling to the local population.

Safe Routes to School programs also present an opportunity to bring the safe walking and bicycling curriculum back into elementary and middle schools. The National Center for Safe Routes to School (<http://www.saferoutesinfo.org/>) and the Ohio Department of Transportation ([www.saferoutespartnership.org/state/5043/ohio](http://www.saferoutespartnership.org/state/5043/ohio)) offer resources to supplement bicycle rodeos and other education outreach programs.

#### Specific Recommendations to Address Each BFC Application Question

**Question 1 Educating Motorists:** Educating motorists on the “Share the Road” message is an important aspect of the education component with the ultimate goal of keeping bicyclists safe on the roadways. Programs such as the NY Bicycling Coalition’s “Sharing the Road Safely” focus on training the trainers by working with drivers’ education instructors: [www.nybc.net/site/index.php?page\\_id=15](http://www.nybc.net/site/index.php?page_id=15). Another excellent example is the “Share the Road” bus wrap media campaign in Des Moines, Iowa, where the local transit agency plays a lead role in getting the word out to the general public.

**Question 2 Other Adult Education:** In order to reinforce the “Share the Road” message, informative pamphlets can be distributed through public agencies and outreach can be accomplished through volunteers and other model programs. The local League of American Bicyclists chapter offers

“StreetSmarts Cycling” classes, (<http://www.daytoncyclingclub.org/>) where participants can learn how to safely operate a bicycle under various conditions, and learn about bicyclists’ rights and responsibilities. Five Rivers MetroParks offers a “Basic Bike Maintenance” class showing simple ways to keep your bike in shape. Safe Routes for Seniors programs have proven effective in educating older bicyclists and pedestrians, such as the following example:  
<http://www.transalt.org/campaigns/pedestrian/safeseniors>.

**Question 3 Training Children:** Due to time and budget constraints, traffic safety programs which used to be a part of the elementary school curriculum have been reduced. Safe Routes to School programming offers an opportunity to bring the curriculum back into the schools:  
<http://www.saferoutesinfo.org/>. West Carrollton has 7 schools, all of which have opportunities to be part of the process for encouraging youth to enjoy bicycling:

- Bauer Elementary
- Kinder Elementary
- Saint Henry’s School
- Schnell Elementary
- Harry Russell Elementary
- Walter Shade Elementary
- West Carrollton Junior High

**Question 4 Other Child Education:** Bicycle rodeos are the most common type of traffic safety training oriented towards children. AAA Miami Valley has a bike rodeo kit that can be shared with organizations, clubs, schools, and other groups. John Williams’ book on bike rodeos is highly recommended and available from the following website:  
<http://www.activelivingresources.org/simpleprojects.php>.

**Question 5 Public Distribution:** Distribution of safety materials to the public can be accomplished through license renewal mailings, water bureau bills and the like. Other communities have issued public service announcements (PSAs), created websites and initiated hotlines to make the education material available. The Greater Dayton Safe Kids Coalition coordinates organized bike rides and helmet giveaways in an eight-county region.



**Question 6 Bicycling Ambassadors:** Bicycling ambassador programs have become a popular method for encouraging bicycling while teaching safe and effective bicycling procedures. The City of Chicago has an effective and well established bicycle ambassador program: [www.bicyclingambassadors.org/](http://www.bicyclingambassadors.org/).

**Question 7 LCIs:** There are currently five League-certified instructors in the Miami Valley region. League Cycling Instructors are trained in the League of American Bicyclist’s bicycle education curriculum and are certified to teach bike education classes to participants of all ages. Most communities have one or two certified instructors and they should be engaged to help others learn the curriculum so that they too can become teachers: [www.bikeleague.org/programs/education/](http://www.bikeleague.org/programs/education/).

**Connections to Regional Programs** Several websites provide interactive user-friendly maps of the region’s trail system. West Carrollton could produce a local bike safety brochure with a local map on one side.

## 4. Encouragement

### Summary of Draft Application and Recommended Local Actions

Based on the completed BFC application, most of the encouragement projects happening locally are coming from the regional level. There is a greater Dayton Cycling Club (<http://www.daytoncyclingclub.org/>) and MVRPC publishes a recreational trails map for the Valley. That leaves the City with plenty of opportunities to develop events such as National Bike Month and Bike to Work Day in May. Safe Routes to School programming also presents a chance to get kids and their parents excited about walking and bicycling. October is International Walk to School Month and events should be scheduled on a local and regional level. Friendly competitions can be held between the different municipalities to determine who can log the most miles by bike or foot.

### Specific Recommendations to Address Each BFC Application Question

**Question 1 & 2 Bike Month (Numbers Reached):** May is National Bike Month and many municipalities and advocacy organizations celebrate by hosting a series of events to promote bicycling. A proclamation from the Mayor would be a good first step. Bike to Work Day, commuter contests and public service announcements are just a few of the ways that National Bike Month is promoted. The League of American Bicyclists has material available to help develop a series of events: [www.bikeleague.org/programs/bikemonth/](http://www.bikeleague.org/programs/bikemonth/). 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.



Free Bike Month promotional material is available from the League of American Bicyclists.

**Question 3 & 4 Bike to Work Day (Numbers Reached):** Bike to Work Day is traditionally held on the second Friday of May. Staging areas can be set up around the town with bagels, coffee and maintenance facilities to encourage would be commuters and prizes are offered to those who participate. Large employers can provide additional incentives and can compete with one another to see who has the most bike commuters for the day and the week. Five Rivers MetroParks also sponsors and hosts “Bike for the Health of It” rides, and also promotes bike-to-work events.

**Question 5 Bike Tour:** Bicycle tours have become popular fundraisers and are a good way to show off the local history and scenic natural resources. The Great Ohio Bicycle Adventure is a great model for this type of event: <http://www.goba.com/>

**Question 6 Clubs:** Bicycle clubs provide a social resource for riders and can also offer bicycle education classes to teach new riders how to safely interact with motor vehicle traffic and larger groups of bicyclists as well: [www.daytoncyclingclub.org/](http://www.daytoncyclingclub.org/) & [www.majortayloradayton.org](http://www.majortayloradayton.org). A new local club based in West Carrollton would help encourage more people to ride.

**Question 7 Retailers:** Independent bicycle shops are trusted retailers of quality built bicycles and also provide much needed knowledge and accessories to the local cycling population. They may host social rides or races of their own and often know the best routes in the local area. Retailers can also provide workshops on flat repairs, basic maintenance and commuting tips. Some shops have offered classes for

women only to create a comfortable environment for women to get more involved in the bicycling community.

**Question 8 BMX:** BMX (bicycle motor cross) is a popular activity with younger riders who may like to ride dirt tracks or hone their bicycle handling skills. The nearby BMX Park in Kettering is a popular gathering place; a smaller skills park for local BMX riders could be an important community resource in West Carrollton.

**Question 9 National Mountain Bike Patrol (NMBP):** 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 NMBP consists of dedicated volunteers partnering with land managers, land owners and emergency personnel, to assist, educate and inform all trail users in order to enhance their recreational experience ([www.imba.com/nmbp/](http://www.imba.com/nmbp/)). A regional chapter could be established through Metroparks, with a local unit in West Carrollton.

**Question 10 Bike Rentals:** Bike rentals are often provided through local bike retailers. In West Carrollton, a ‘bicycle lending library’ could be established at the local library as an alternative to a retail location.

**Question 11 Safe Routes to School:** The goal of the national Safe Routes to School program is to get more kids walking and biking to school more often. The program provides much needed funds to improve the infrastructure within a two mile radius around elementary and middle schools and also offers other means to educate and encourage school age children to safely walk and bike to school:



[www.SafeRoutesInfo.org](http://www.SafeRoutesInfo.org) and ODOT’s SR2S program are important resources: [www.dot.state.oh.us/Divisions/Local/Projects/SafeRoutes/Pages/default.aspx](http://www.dot.state.oh.us/Divisions/Local/Projects/SafeRoutes/Pages/default.aspx).

**Question 12 Youth Recreation:** Youth cycling opportunities can be provided by after school programs, cycling clubs and other local organizations. They offer young riders the chance to cycle with other riders and can also teach important safety and bike handling information: [www.recyclebicycle.org/](http://www.recyclebicycle.org/).

**Question 13 Street Map:** A good street map provides riders with an illustrated network of recommended routes and available facilities in the city. The maps should be updated on a regular basis as more facilities come online and can also be coded to indicate “level of service” data such as posted speed limits and average daily traffic. The City of Portland has done a particularly good job of not only creating a strong network and quality map but they have also designated a number of streets “bicycle boulevards” where the streets are traffic calmed and more amenable to bicyclists: <http://www.portlandonline.com/shared/cfm/image.cfm?id=181308>.



**Question 14 Trail Map:** A local trail map shows the hard and soft surface trails for a given region. The maps can be geared primarily toward the every-day recreational user but should also show where the more technical mountain biking trails are available and what level of difficulty they entail.

## 5. Enforcement

### Summary of Draft Application and Recommended Local Actions

Enforcement is an essential part of the five “Es” but it is often the most overlooked. Education, Enforcement and Engineering really set the stage for successful bicycle programming but without the Enforcement piece to insure that the message is reinforced and that facilities are kept safe, the overall results will be diminished. There is an existing police bicycle patrol unit in the City of West Carrollton although training for the officers on bicycling law was discontinued a few years ago.

The Share the Road programs mentioned in the Education chapter can be geared to the law enforcement community and could be taught by the officers themselves once they become well versed in the Share the Road message. A comprehensive education campaign for law enforcement officers is something that could be implemented on a regional level with members from each bicycle unit around the Miami Valley participating in the training.

### Specific Recommendations to Address Each BFC Application Question

**Question 1 & 2 Police Awareness/Officer Training:** Law enforcement officers are responsible to know a wide range of laws and different information in order to successfully protect the public safety. There may be an opportunity to work with the local law enforcement community to ensure that they are well versed in the Share the Road concepts and can accurately convey that information the public and enforce the laws. MassBike has been working with law enforcement agencies in Massachusetts for the past few years to ensure that police officers are well educated: [www.MassBike.org/police/](http://www.MassBike.org/police/).

**Question 3 Targeted Enforcement:** Local law enforcement officials should actively engage both the motoring and bicycling public to ensure that the law is understood and followed. Motorists that threaten the safety of non-motorized users should be warned and possibly cited for dangerous behavior. The same method should be employed for bicyclists that break the law or are riding illegally.

**Question 4 Police on Bikes:** Most jurisdictions have a fleet of police bikes that are regularly used in place of walking or driving. Bike cops help to add visibility to the bicycle population and can also be an effective education tool for motorists and bicyclists alike on the rules of the road.

**Question 5 Mandatory Helmet:** Most municipalities have the freedom to pass local laws which dictate mandatory helmet usage. Most of the mandatory helmet laws around the country are geared to children 14 and under although there are some municipalities which include riders of all ages.

**Question 6 Mandatory Sidepath:** The mandatory sidepath law dictates that if there is a usable path adjacent to the roadway, that path must be used instead of the road. These types of law should be discouraged as they limit the options of the cycling public. Some destinations may not be available from the path and some cyclists, especially the faster ones, may prefer to ride with traffic.

### Connections to Regional Programs

- Digest of Ohio Bicycle Traffic Laws: <http://www.ohiobike.org/bicycle-law-digest.html>
- Centerville Police Bike Training: [www.ci.centerville.oh.us](http://www.ci.centerville.oh.us)

## 6. Evaluation

### Summary of Draft Application and Recommended Local Actions

Most of the information available about journey to work data is available at the regional level from the most recent census information. According to the BFC application, there have been no bicycle/motor vehicle crashes in the past five years but the data on the Action Plan map would seem to contradict this information. Although it is possible that the indicated collisions all involved pedestrians and not bicyclists there are definitely a few locations/intersections which warrant safety improvements.

One of the best actions that the City of West Carrollton could take to improve the Evaluation of bicycling is to implement an annual count of bicycle traffic at a few key locations. The National Bicycle and Pedestrian Documentation Project provides the method and resources to successfully implement bicycle counts.

### Specific Recommendations to Address Each BFC Application Question

**Question 1 Number of Trips by Bike:** At a minimum, US Census data can be used for journey to work trips, and on-line data can show trends from 1990-2000-2005 using American Communities Survey data. Accurate count data has been in place for motor vehicle traffic for years and years but very few cities are tracking the number of bicyclists and bicycle trips. Each municipality should be encouraged to track these numbers and to participate in the National Bicycle and Pedestrian Documentation Project: [www.fhwa.dot.gov/environment/bikeped/study/](http://www.fhwa.dot.gov/environment/bikeped/study/).

**Question 2 Fatalities:** Bicycling fatalities should be examined on a regular basis to determine if there are specific locations which are poorly designed and may result in an unnecessarily dangerous situation for cyclists. A top-level BFC will be able to document a reduction in fatalities over the most recent 5 year period.

**Question 3 Crashes:** Bicycle crash data should be tracked and cross-referenced between sources. Since many bicycle crashes go unreported, it is often difficult to accurately analyze crash data and the causes of the crashes. Hospital records should be checked against police records and the police should be encouraged to fill out collision reports even if the incident did not result in a serious injury or fatality.

**Question 4 Reduction Plan:** With accurate crash data, the community should develop a safety and collision reduction plan which targets the most dangerous intersections or locations and makes resources available to improve them. The Ohio Bicycle Federation monitors infrastructure projects and seeks opportunities to include top-quality bicycle facilities – this process could be enhanced in local with local public works officials.

**Question 5 Public Comment:** A public safety hotline or comment cards should be made available so that the public can report dangerous locations.

**Question 6 Master Plan:** A West Carrollton bicycle master plan should be developed to ensure that recommended projects and programs are implemented in a timely manner. The master plan can set specific goals for all 5 E's.

**Question 7 Trail Plan:** A trail plan can be part of the overall bicycle master plan or can be a stand-alone entity. The trail plan prioritizes projects in the off-road network so that the network can be fully developed and easily accessed.

**Question 8 Integrated Network:** The overall goal of any well designed bicycle master plan or trail plan is to create an integrated network of on and off-road facilities. Bicyclists should be able to seamlessly transition from on and off-road facilities and all major destinations should be accessible by bike.

**Question 9 Priority Plan:** The priority plan establishes a hierarchy of projects and programs to insure the timely implementation of available facilities and the distribution of educational material to promote safety on those facilities.

**Question 10 Improvements:** A Spot Improvement Program should be created to fund small-scale projects which will improve the region's bicycle and pedestrian travel environments through "spot improvements" to the transportation system. The funds can be used to close gaps in the system or to address safety and maintenance concerns in specific areas: [www.cdtempo.org/spot/info08.pdf](http://www.cdtempo.org/spot/info08.pdf).

## 7. Next Steps

This document is the “bike map” for a bicycle friendly community. Organizing a sustainable non-profit organization or an active bicycle and pedestrian advisory committee, developing the community’s partnerships, adopting a complete streets policy, and creating a Bikeway Master Plan are important next steps. By focusing on achievable actions in the short term, it will be possible to create success as the longer-term vision develops. With the enthusiasm, creativity, and leadership that developed this Action Plan, there is a great future for bicycling in West Carrollton.

### **ACTIONS:**

- 1. Form a Bicycle and Pedestrian Advisory Committee:** The process of creating this action plan and holding public meetings will indicate interested and active members of the committee who can form the basis for the BPAC.
- 2. Adopt a citywide Complete Streets Policy:** A Complete Streets Policy will guide the community with its non-motorized development as new projects are initiated and old roadways are repaved and reconstructed.
- 3. Bicycle Summit:** Hold a local ‘bike summit’ with representatives of all 5 E’s to implement the West Carrollton BFC Action Plan – this could be an annual event hosted by the BPAC.
- 4. Funding Applications:** Transportation Enhancement programs and SR2S funding are a good place to begin to apply for funding. Bikes Belong offers smaller start-up grants for innovative bicycle projects.
- 5. Signage and Wayfinding Program:** Develop a consistent, high-quality trails and public-access signage and wayfinding system, in cooperation with MVRPC and other local partners.
- 6. Bike Map:** Produce a local bicycle map that identifies existing and proposed trails and on-road facilities.

### **ACTION PLAN TIMELINE:**

With the tasks identified in this document as a guideline, the following timeline was developed for implementing the West Carrollton Bicycle Friendly Community Action Plan:

November 2008:	Bicycle and Pedestrian Advisory Committee (BPAC) meeting
December 2008:	Adopt BFC Action Plan
May 2009:	Adopt Complete Streets Policy
July 2009:	Publish West Carrollton Bike Map
September 2009	Organize SR2S Program
May 2010:	Implement signage and wayfinding program

## Appendix:

### Connections to Regional Programs

#### Available Maps and Materials:

- Miami Valley Recreational Trails Map: ([http://www.mvrpc.org/recTrails/pdf/MV\\_Rec\\_Trails.pdf](http://www.mvrpc.org/recTrails/pdf/MV_Rec_Trails.pdf))
- Greene County Trails Map: (<http://www.mvrpc.org/recTrails/greene.php>)
- Miami County Trails Map: ([http://www.mvrpc.org/recTrails/pdf/MiamiCo\\_Trails.pdf](http://www.mvrpc.org/recTrails/pdf/MiamiCo_Trails.pdf))
- Montgomery County Trails Map: ([http://www.mvrpc.org/recTrails/pdf/MontgomeryCo\\_Trails.pdf](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](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](http://publicsafety.ohio.gov/odps_publications/HSY7753_BicycleSafety_11_07.pdf))
- Dayton Cycling Club: (<http://www.daytoncyclingclub.org/>)

#### 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](http://www.drivelesslivemore.org/6_plantrip.html)
- Miami Valley Rail Trails: <http://www.miamivalleytrails.org/>
- Five Rivers MetroParks Mountain Biking Area (MoMBA):[http://www.metroparks.org/\\_fiveRiversOutdoors/MountainBike.aspx](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/>
- Pedalopolis; trails updates and conversation: <http://www.pedalopolis.com/>

#### Clubs, Organizations, and Racing Teams:

- Dayton Cycling Club: <http://www.daytoncyclingclub.org/>
- Team Dayton Southwest Ohio Cycling Team: <http://teamdaytoncycling.com/index.php>
- Team IPro: [http://www.teamipro.com/Team\\_IPRO/Home.html](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/>
- Major Taylor Cycling Club: <http://majortaylordayton.org>