

# Drive Your Bike

Using Your  
Bicycle for  
Transportation



## Getting Around By Bike

*Bikes are great vehicles for basic transportation. Inexpensive, Fun, Healthy, Non-Polluting and Practical, riding your bike can be a great way to get to work, or run some errands. Did you know that 40% of all trips are less than two miles, and 82% of short trips are taken in a car?*

*Have you thought about biking to work? What routes you could take? What gear you might need? How much great exercise you'll get? How much gas you'll save?*

*Maybe you live too far from work, but you probably live within two miles of a lot of places you go. Look on a map. How far is it to the pharmacy? The grocery? The library? The school? The bank? Could some of these trips be made on a bike?*

*Next time the weather is right and you have some time, leave the car keys at home.*

**Why not  
drive your bike?**

## Bicycling: A real means of transportation in the Miami Valley

### Multiuse Trails

The Miami Valley has over 235 miles of connected multiuse paths along rivers and abandoned railroad beds. Trail maps are available from [www.mvrpc.org/bikeways](http://www.mvrpc.org/bikeways).

### Great Streets and Roads

With the exception of interstate highways, bikes are legal vehicles on all roads in Ohio. You may find a comfortable ride on the Miami Valley's great network of neighborhood streets and back roads.

### Bike on Bus Programs

The Greater Dayton RTA has bike racks on all their buses. Racks hold two bikes each and are no extra cost to use with normal bus fare. For details call the GDRTA Rideline at (937) 226-1144.

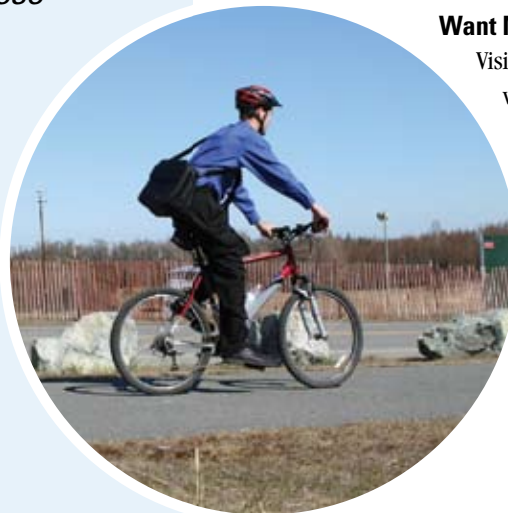
Greene CATS has similar bike racks on their flex service buses. Contact Greene CATS at (937) 562-6523 for complete information.

### Pedal Pals

This free service matches bicycle commuters who live and work in the same areas. The program also matches novice cyclists with experienced cyclists who can assist them with their commutes. Pedal Pals is sponsored by RIDESHARE. Call the RIDESHARE hotline at (937) 223-SAVE or 1-800-743-SAVE to register. You can also register online at [www.miamivalleyrideshare.org](http://www.miamivalleyrideshare.org)

### Want More Info?

Visit the interactive bikeways map at [www.mvrpc.org](http://www.mvrpc.org) and check out the videos of the trails if you want a good feel for the riding conditions. More resources can be found at [www.mvrpc.org/bikeportal](http://www.mvrpc.org/bikeportal).



# Answers to Your Bike Transportation Questions

Adapted from the League of American Bicyclists

## How can I drive my bike if...

**...I'm out of shape?** Choose an easy pace, and you'll find cycling no more strenuous than walking. Do a trial ride. Ease your way into better shape and maintain it once you've become a regular bicycle commuter.

**...my bike is a clunker?** If the bike is mechanically sound and fits correctly, you have a suitable bike. If you can't maintain it yourself, take it to a reliable bike shop. Remember that good maintenance is important when you rely on your bike to get you there on time.

**...there's no place to park?** Existing bike parking may be available in nearby buildings or garages. Stash your bike at work in a covered, secure place like a closet or storage room. If your employer doesn't provide parking, make a formal request with other employees. If you park outside, use a good U-lock.

**...traffic's just not safe?** If you obey traffic laws and ride visibly and predictably you are at no greater risk than driving a car. One basic rule: wear a bicycle helmet every time you ride. To build more confidence, take a class about cycling safely on streets.

**...it rains?** It's easiest to start as a fair-weather bike commuter. Later, you might want to experiment with different types of rain gear.

**...it takes too long?** The average bike commuter travels 10 mph in traffic. In urban areas, cycling generally takes less time than driving for trips of three miles or less. Or compare the time you spend exercising and commuting; when you bike to work, you do both at the same time. Remember also that Greater Dayton RTA and Greene CATS buses are equipped with bike racks. If you're pressed for time or if you would like to commute by bike one-way, use the bus bike racks for the other portion of your trip.

**...it's too far?** If you live too far from work for a practical bicycle commute, consider driving part way and cycling the rest or take advantage of the bike racks on buses. Also, look for short-distance errands you can run from home.



**...there's no place to shower?** Most bike commuters don't shower at work. Commuting is different than fitness cycling and generally is not a sweaty undertaking. If you like to ride hard and get a good workout but can't find a shower where you work, try a nearby health club. Commuters to downtown Dayton can use the Riverscape Bike Hub. Contact Five Rivers MetroParks for details.

**...my job requires professional attire?** Some bike commuters ride in their business attire and still look good when they get to work. Most simply ride in casual or cycling clothes and change when they arrive. You can prevent wrinkles by rolling (instead of folding) clothes in a backpack or pannier (bike bag that mounts on a rear rack). Some commuters keep several outfits at work, rotating outfits on days they don't ride or they take their clothes to a dry cleaner near work.



# Biking Benefits!

## To You:

- **Improve your health and fitness!** Some benefits of an active lifestyle include avoidance of chronic diseases, elevation of mood, extension of lifespan and enhancement of personal appearance and self-image.
- **Save money!** Each time you switch from car to bike you'll save on gas. All those short trips really add up. If you scatter just 20 bike commutes over a year, that's like parking your car for a month!
- **Save time!** No need to drive to the gym – active transportation can be your fitness routine.

## To Your Community:

- **Improved health.** When you ride your bike, you are not only improving your health, you are also improving the health of others by improving local air quality.
- **Improved air quality.** According to the Regional Air Pollution Control Agency (RAPCA), vehicle emissions in the Miami Valley contribute about 45% of ground-level ozone, more commonly known as smog. Short car trips - those that are most bikeable - are up to three times more polluting per mile than long trips.
- **Improved quality of life.** Local economies are diversified and rejuvenated by cycling business and tourism. Quality of life improvements attract employees, new residents and employers to the community. A study of home sales in Indianapolis found that homes along greenways sold for as much as 10% more and are easier to sell.

## To Your Employer:

- **Employees work more efficiently.** Studies have shown that fitness programs help develop more alert workers who miss fewer days because of sickness and have fewer job-related injuries.
- **Parking costs are reduced.** The cost of providing a car parking space is approximately 10 times that of a secure bicycle locker. Bicycle racks require less space and less money and can help alleviate time lost finding a parking space.
- **Bicycle parking is attractive to customers.** More and more people are discovering the ease of shopping by bike. Thus, by providing secure bicycle parking, employers do a service both for employees and customers.

# Tips for Your Employer

Two of the most important steps employers can take to support/encourage bicycle commuting are to offer:

## 1. Bike Parking:

- Make provisions in a closet or storage room.
- Fence off and cover a section of the parking lot and allow only commuting cyclists access.
- Allow cyclists to bring their bikes into the office.
- Provide bicycle lockers.
- If racks are provided, they should be racks that allow both bicycle wheels and the frame to be secured to it (with a lock the cyclist provides).



## 2. Flexible Work Hours:

- Flexible work hours or permission for bicycle commuters to leave work ten minutes early to miss heavy commuter traffic can provide a welcome margin of safety and comfort for cyclists.

## Other Employer Suggestions:

- Include bike maps, bike parking information and cycling tips brochures in new employee orientation packets.
- Get a Bicycle Users Group (BUG) started. Have monthly brown bag lunches with bike-related speakers and discussions.
- Pay 50% of the cost of a first year's basic membership in a local bike club.

Since 2009, employers may offer pre-tax bicycle commuting benefits to their employees. These benefits are structured in the same manner as parking and transit benefits under the US Tax Code. Employers should consult their tax advisor for more details about utilizing this benefit.

## Bicycle Safety and the Law

In Ohio, a bicycle is considered a vehicle and a bicyclist is deemed a driver. Therefore, every bicyclist is required to follow the same traffic laws that drivers of motor vehicles are. Here are some tips for safe cycling:

### *Use Hand Signals To Indicate Turns, Lane Changes and Stops*



**#1 Right Turn**



**#2 Right Turn**



**Left Turn**



**Stop**

### *Where In The Lane Should You Ride?*

The simple answer to this question is ride as far to the right of the lane as is safe. But that doesn't mean you should always hug the curb. Here are some instances when a bicyclist may move out into the lane:

**Left turn.** You may move out near the center line when preparing to make a left turn.

**Hazard.** You may move away from the right side of the road to avoid potholes, drain grates, debris and other hazards.

**Same speed.** You may ride in the center of the lane when you are moving at the same speed as motorized traffic.

**Narrow Lane.** When the lane is too narrow for a bicycle and a motor vehicle to safely drive side-by-side, you may "take the lane." That is, you may ride far enough out in the lane to keep motorists from trying to pass you until the adjacent lane is free of oncoming traffic.

### *Negotiating With Motorists*

Before you move away from the right side of the lane to make a left turn or to avoid an obstacle, make sure motorists around you know what you intend to do. Signal well before you make your move. Glance over your shoulder. This glance does more than just let you see what's coming: the body language speaks more clearly than a hand signal alone and tells motorists you want to move over. When you see a gap in the traffic, or when a motorist slows to let you in, make your move.

### *Never Ride Against The Traffic!*

Wrong-way bicyclists are asking for trouble. Turning motorists don't look for traffic coming at them on the wrong side of the road.

### *Know Your Skill Level*

Skilled adult bicyclists glide down busy roads with ease. Novice bicyclists and children, though, may get overwhelmed in heavy traffic. So choose routes that fit your bicycling skill and comfort level.

Even for skilled bicyclists, some of the in-traffic riding techniques outlined in this brochure work best in light-to-medium traffic with speeds of 35 mph or less. Always use good judgment.

### *Passing Walkers and Other Bicyclists*

Be courteous and warn pedestrians and other bicyclists when you are about to pass. Ohio bicycles are recommended to use a bell or horn. Remember, pedestrians have the right-of-way.

### *Riding At Night*

Ohio law says you must have a good headlight on your bike when you ride at night. Also, you must have a rear red light, rear red reflector, colorless front reflector and either reflective rims or spoke reflectors when you ride at night.

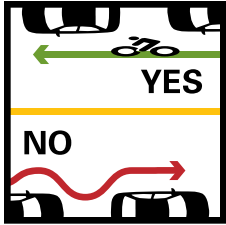
For more detailed information on Ohio traffic laws, for a copy of [Street Smarts](#), or a map and list of Ohio's bikeways please contact the ODOT Bicycle and Pedestrian Coordinator, [www.dot.state.oh.us/services/pages/bike.aspx](http://www.dot.state.oh.us/services/pages/bike.aspx)

Consider taking a class such as the League of American Cyclists – Traffic Skills 101 course. To find more information, visit <http://www.bikeleague.org/programs/education/>

# Be Visible and Be Predictable

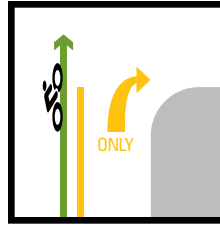


The best way to avoid collisions is to make sure motorists know where you are and where you are going. That means follow the rules of the road. Obey traffic lights and stop signs. Wear bright or reflective clothing.



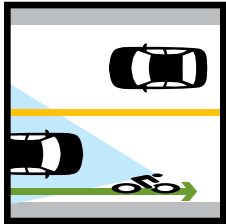
## Ride a straight course.

Don't swerve between parked cars; you'll disappear behind a car, and then suddenly pop out in traffic again. Don't surprise motorists. Ride straight as an arrow.



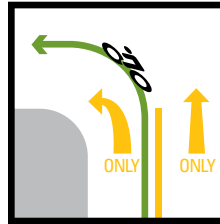
## Right turn only lanes.

Use right turn only lanes only when you want to turn right. Cross an intersection from the through lane, not from a right turn only lane.



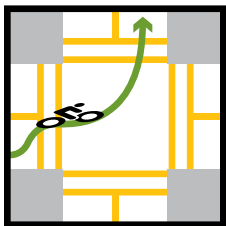
## Look behind you.

Learn to quickly scan the traffic behind you without swerving. Practice in an empty parking lot until it's easy.



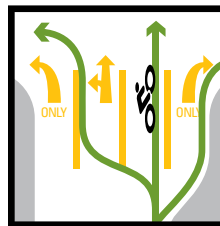
## Left turn only lanes.

If you have a left turn only lane, turn left from the right side of the left turn only lane.



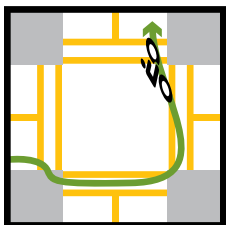
## "Vehicular" left turn.

Signal and look behind you. When there's an opening, merge left and turn from near the center line. (Also see instructions for a left turn only lane.)



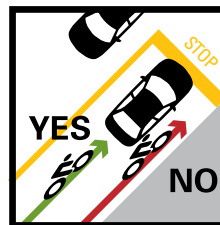
## Multiple lanes.

Generally, ride on the right side of the right-most lane that will get you to your destination. But turn left from the left side of a lane that is also a through lane.



## "Pedestrian" left turn.

When traffic is heavy and it feels unsafe to merge left, you may ride straight through the intersection, stop at the corner and walk your bike across the crosswalk.



## Don't sneak past cars.

Take your place in line behind cars stopped at a light or stop sign. Don't creep up on their blind side; they might cut you off. Think about it: if you make cars pass you twice, you double your risk.

## The Helmet Rap

*A guide to buying and using bicycling head gear.*

In the United States each year, bicycle-related head injuries are found in:

- 67,000 emergency room cases \*
- 66% of fatally injured bicyclists

Make sure your helmet has been CPSC (Consumer Product Safety Commission) or Snell approved.

### Make sure your helmet fits properly

A helmet that fits won't rock front-to-back or side-to-side. It should feel comfortable and not squeeze your head too tightly. Adjust the straps so they are snug and straight. Your chin strap should tug slightly when you open your mouth. The front edge of your helmet should be about an inch above your eyebrows.

### When to replace your helmet

Replace your helmet after a crash. Your helmet's foam lining gets crushed and can't protect your head very well a second time. Also, some experts recommend that you replace your helmet every five years because sun, weather and normal wear and tear diminish the foam's ability to absorb impact. Finally, keep close tabs on a child's helmet to make sure it maintains a safe and comfortable fit as the youngster grows.



\* Sources:  
Snell Memorial  
Foundation.  
Bicycle Helmet  
Safety Institute.  
[www.bhsi.org](http://www.bhsi.org)

## Bicycle Equipment Checklist

*By the League of American Bicyclists*

### Baskets or panniers

Make the bike carry your stuff. A bicycle without carrying capacity is not a convenient way to run errands or get to work. A sturdy rear rack is a great accessory. You can strap on your briefcase with a bungee cord or use a basket, panniers or a plastic crate.

### Fenders

Fenders will keep you clean and dry during all weather. Even if it's not raining, they will protect you from mud and moisture on the road.

### Lights

Just in case, commuters must be prepared to ride after dark. Both front and rear lights are recommended. Also, for additional visibility, wear retro-reflective clothing or attach reflective strips to your bike and/or helmet.

### Helmet

Protect a very precious asset. Nobody expects to fall, but it happens to everyone. Helmets reduce bicyclists' risk of head injury by up to 85%!

### Bell or Horn

Bells and horns are permitted, but not required. Sirens and whistles are definitely not permitted.

### Lock

Avoid bicycle theft. Don't wait to get a bike stolen before you get a decent lock. Secure your bike to a solid object with a good U-lock, and in a conspicuous place. Quick-release components are easy to steal. Either remove them when you park or secure them with cables. If your bike is too valuable to leave outside, get a second, less expensive bike for transportation.

## Tools to Carry

**TIP** Keeping your tires fully inflated will prevent most flat tires!

### A typical bike flat kit includes:

- Tire irons
- New tube - make sure it's the right size.
- Patch kit - containing sandpaper, glue and patch. (Purchase at your local bike shop.)
- Pump - get a small, lightweight pump that's convenient to carry.

### Here are some other tools you may wish to carry with you for both routine and emergency maintenance:

- Allen wrenches
- Crescent wrench
- Needle nose pliers
- Screwdriver (with inserts)
- Spoke wrench



## Fixing a Flat

### Take off the tire:

1. Shift to the smallest chain ring and the smallest rear sprocket, release the brakes, and remove the wheel.
2. Using your tire irons, remove one side of the tire by working toward the valve from the opposite side of the wheel.
3. Remove the tube and be particularly careful of the stem.
4. Put some air in the tube to find the leak, and then check inside the tire to TRY to find what caused the leak. (You don't want to do this again!)

### Patch the tube:

1. Once you have found the leak, roughen the area with sandpaper (or something similar) for better adhesion.
2. Spread enough glue onto the tire so the patch's entire surface will bond.
3. Remove the patch's protective cover and press it against the now dried, but somewhat tacky, glue.
4. Maintain pressure on the patch for a couple of minutes and make sure that no edges curl up.

### Put it back together:

1. Use a new tube or your patched tube.
2. With enough air to just give the tube shape, insert the valve stem and work the tube into the tire.
3. Let out some of the air, and starting at the valve stem, work the tire back onto the rim. You should work the tire on with your hands, particularly your thumbs. The last few inches are tough and require particular care. Before you go very far, push the valve into the wheel to make sure the tire is seated. Be careful that the tube is completely inside the rim.
4. Re-inflate the tire, and reinstall the wheel on the bike. Reconnect the brakes. Ride on proudly.

### Maintenance

Flat prevention and reliability are key to happy bicycle riding. Keep your bike in good working order or take it to a bike shop for regular tune-ups. Good maintenance is critical to commuting because you rely on it to get you to work or school on time. Keep the chain and moving parts lubricated. Flats can be prevented by using Kevlar belted tires or tire liners, and by maintaining proper tire pressure.





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[www.mvrpc.org/bikeways](http://www.mvrpc.org/bikeways)



### **Additional Resources**

[www.mvrpc.org/bikeways](http://www.mvrpc.org/bikeways)

[www.mvrpc.org/bikeportal](http://www.mvrpc.org/bikeportal)

[www.miamivalleyrideshare.org](http://www.miamivalleyrideshare.org)

[www.greaterdaytonrta.org](http://www.greaterdaytonrta.org)

[www.co.greene.oh.us/greenecats](http://www.co.greene.oh.us/greenecats)

[www.bhsi.org](http://www.bhsi.org)

[www.dot.state.oh.us/services/pages/bike.aspx](http://www.dot.state.oh.us/services/pages/bike.aspx)

[www.bikeleague.org/programs/education](http://www.bikeleague.org/programs/education)

[www.biketoworkinfo.org](http://www.biketoworkinfo.org)

[www.bikemiamivalley.org](http://www.bikemiamivalley.org)

[www.metroparks.org/parks/riverscape/bikehub.aspx](http://www.metroparks.org/parks/riverscape/bikehub.aspx)