BICYCLING TO WORK
in the Washington Metropolitan Region

Employee Guide
About This Guide
This guide is designed to ease the transition to bicycle commuting for Washington metropolitan area employees and to help employers encourage this ‘smarter way to work.’ This section (with pages labeled Employee-1, Employee-2), etc. is geared toward employees, the flip side is focused on employers.

Why bicycle to work?
- Riding to work costs less than driving or taking transit, especially if you already own a bike.
- Cycling allows you to stay in shape while you commute.
- People who bike to work arrive invigorated and work off the day’s stress on the way home.
- Biking to work means less traffic congestion and pollution for the region.

How to get started
Here are some suggestions to help you ease into bicycle commuting:
- Try a practice run on a weekend to find a good route and see how long it takes.
- Find a co-worker or friend who bikes and commute with them.
- Start by trying just one day a week.
- Drive part of the way and bike the rest.
- Bike to the nearest transit location, and secure your bike for the day, or take it with you on bus or rail (see pages 9-11 for more details about bikes on transit)
- The Washington Area Bicyclist Association’s commuter mentor program can put you in touch with other people in your neighborhood who bike to work and help you find the most comfortable route. 202/518-0524. www.waba.org

When I initially started biking to work I was intimidated with distances but after starting I found that it is never too far.”
— Sterling Stone, Gearin’ Up Bicycles

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Riding in Traffic - Safely

Riding in traffic is not as hard as it looks if you follow the suggestions below. In Effective Cycling, John Forester writes, “Cyclists fare best when they act and are treated as drivers of vehicles.”

Be predictable
Ride so drivers can see you and predict your movements

Obey all regulatory signs and traffic lights
Bicyclists must follow the same rules of the road as drivers of other vehicles.

Never ride against traffic
Motorists aren’t looking for bicyclists riding on the wrong side of the road or on the sidewalk. Ride with traffic.

Use hand signals
Hand signals tell motorists what you intend to do. Signal as a matter of law, courtesy, and self protection.

Ride in a straight line
Whenever possible, ride in a straight line at least a car door width away from parked cars.

Don’t weave between parked cars
Don’t ride out to the curb between parked cars unless they are far apart. Motorists may not see you when you try to move back into traffic.

Take the lane in slow traffic
Ride in the middle of the lane whenever you are moving at the same speed as traffic.

Choose the best way to turn left
There are two ways to make a left turn: (1) Like an auto. Look behind, signal, move into the left lane and turn left. (2) Like a pedestrian. Ride straight to the far-side crosswalk. Walk your bike across.

Avoid or go slow on sidewalks
Pedestrians have the right of way on walkways. Bicyclists should always give pedestrians audible warnings when passing. In some cases local ordinances do not permit bicyclists on sidewalks. (see page Employee-4)

Bicycling with buses
Avoid blind spots and remain visible to the bus operator. Keep in mind that buses operate in a unique manner compared to other vehicles. Buses make frequent stops and pull in and out of traffic from the right lane. Cyclists should not pass a bus on the right as passengers board and de-board from the curb.

Be Lawful
Obey traffic laws whether in a car, on a bike, or on foot.
Be alert
Ride defensively, watch the traffic, and be prepared to react.

Watch for cars pulling out
Make eye contact with drivers. Assume they don’t see you until you are sure they do.

Scan the road behind you
Learn to look back over your shoulder without losing your balance or swerving left. Some riders use rear-view mirrors.

Avoid road hazards
Watch out for parallel-slatted sewer grates, slippery manhole covers, oily pavement, gravel, pot holes, and ice. Cross railroad tracks carefully at right angles. For better control as you move across bumps and other hazards, stand up on your pedals.

Keep both hands ready to brake
You may not stop in time if you brake one-handed. Allow extra distance for stopping in the rain, since brakes are less efficient when wet.

Be equipped

Wear a helmet
Always wear a helmet whenever you ride a bicycle. Helmets dramatically reduce the risk of head injury in a bicycle accident.

Use lights at night
Always use a strong head light and tail light at night and when visibility is poor.

Bicycle Safety Video
“Competence and Confidence”, call Maryland DOT at (410) 865-1237

Trail Etiquette
- Stay to the right except when passing.
- Travel at a reasonable speed in a consistent and predictable manner.
- Always look ahead and behind before passing.
- Pass slower traffic on the left; yield to oncoming traffic when passing.
- Give a clear warning signal before passing (ring bell and say “passing on the left”).
- Move off the trail when stopped to allow others room to pass.
- Yield to others when entering and crossing the trail.
- Use a light and reflectors after dusk and before dawn; most trails are not lit.
- Stop for traffic where the trail crosses a road.

Bicyclist Education
One of the best ways to learn how to be safe and confident while cycling in traffic is to take a Bicyclist Education Course, administered by the League of American Bicyclists. They offer a three-hour class designed specifically for bicycle commuting. Call WABA, (202) 518-0524, or the League of American Bicyclists, (202) 822-1333, for more information on bicyclist education courses in the Washington area.
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**Bicycle Basics**

You don’t have to be a mechanic to commute by bike, but you should make sure your bicycle is in working order and safe to ride.

1) **Air:** Tires lose a little air every day. If your gauge says a tire is more than five pounds under the needed pressure (printed on the side of the tire), add air. No gauge? Push each tire hard against a curb. If you can flatten it, add air.

2) **Chain:** A dry chain can lock up or break suddenly. If your chain squeaks when you pedal or it hangs up when you pedal backward, lubricate the chain. Oil will do, but it attracts dirt; a greaseless chain lubricant is best.

3) **Wheel Spin:** Lift each wheel up and give it a slow spin. (Spin the back wheel forward so the pedals don’t move.) If the wheel won’t spin by itself or stops suddenly, see whether it’s rubbing against the brake pads, frame, or something else. If the wheel’s not rubbing, the problem might be the axle or hub.

4) **Tires:** Turn each wheel very slowly and look for big cuts, bulges, bubbles, or places you can see the inner casing. If you spot any, replace the tire. Remove glass or other debris. If the valve stem doesn’t point straight at the middle of the wheel, the rim might cut it; let the air out and straighten the valve.

5) **Shifting:** Try all of your gears, shifting each gear lever from high to low. You have a problem if the lever sticks, you can’t shift to all gears, the chain rubs the derailleur, or the chain jumps off the gears. These are usually caused by worn or dirty cables, or a derailleur that needs cleaning or adjustment.

6) **Handlebars:** Hold the front tire between your legs and try to turn the handlebars. If they’re loose, tighten the stem bolt.

7) **Brakes:** You should adjust or replace the brake cable or pads if you have any of these problems:
   (a) when you apply the brake on each wheel, one or both brake pads don’t touch the rim;
   (b) you can squeeze your brake lever all the way to the handlebars;
   (c) on each wheel, the brake can’t stop the tire from moving on dry, clean pavement.

8) **Loose Parts:** Pick up the bike and shake it hard. Check and fix anything that rattles.

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Excerpted from “Urban Bikers Tricks and Tips” by Dave Glowacz. Order a copy at Amazon.com keyword “Urban Bikers' Tricks & Tips.”
**Bicycle Fit**

Proper bike fit is important. A bicycle that’s too large or too small is difficult to control and can lead to discomfort or injury. As a general rule for road bicycles, you should have at least one inch of clearance between the top tube and your crotch as you stand astride the bike. Clearance should be approximately two inches for a hybrid or cross bike and three to four inches for a mountain bike. Ask your bike shop for help fitting your bike.

**Outfitting your Bicycle**

You don’t have to spend a lot of money on gear, but certain accessories can make bike commuting safer and more enjoyable. Prioritize spending on safety-related items. Keep in mind that you get what you pay for, and since bike commuting is very economical, you will save money in the long run. To make choosing among the wide variety of bicycle accessories a less daunting task, think about your needs, talk to friends and staff at your local bike shop and read equipment reviews in bicycle publications.

**Headlights & Taillights**

Headlights are required by law for night riding. Taillights are a good addition to the rear red reflector. Lights vary greatly in their quality of construction, mounting design, amount of light supplied and duration. Battery powered headlights can be either rechargeable or non-rechargeable, both have advantages. In general, rechargeable headlights are brighter but also cost more up front. “Reelights” do not require any batteries and are powered by magnets. They also retain some lighting after the wheels have stopped.

**Tools**

It’s a good idea to carry a basic tool kit with a small set of allen wrenches, a tire patch kit, and tire levers. Flat tire repair is often featured in bicycling magazines and is always included in repair manuals. Products such as puncture-resistant tires, tubes and tire liners can help prevent flats. Inquire at your local bike shop. Including a rag in your tool kit can help you stay clean in the event of a mechanical problem.

**Fenders**

Fenders help in wet conditions. They nearly eliminate spray from your wheels, keeping you drier, cleaner, and more comfortable.

**Mirrors**

Some cyclists use mirrors to keep track of traffic behind them. Mirrors come in two basic types: head-mounted and bar-mounted. Mirrors mounted on your helmet (or eyeglasses) are constantly in your field of view, requiring just a quick glance to check the road behind, but some find them distracting. Bar-mounted mirrors are not in the field of view, but often are subject to vibration from the road. Although mirrors can help you keep tabs on traffic, they are not a substitute for looking behind you before changing lanes.

**Hauling Items**

There are practical ways to haul items such as laptops, work files, extra clothes, etc. for daily commuting; or items carted for personal trips to the store for groceries and other purchases. Various methods include the use of messenger bags, backpacks, baskets and panniers. Each has its own advantage and there are many styles and sizes available, depending on your needs.
Outfitting Yourself

Helmets:
Using a helmet is recommended as it can reduce the chance and severity of injury, and may even save your life, if properly sized, adjusted, and consistently worn. Here are some important points about helmet use:

- The helmet should fit snugly and be worn level on your head. If tilted back, it will not protect your head. Side straps should meet in a ‘V’ below your ear lobes.
- Bicycle helmets are designed to withstand one crash only. Structural damage is not always visible, so always replace a helmet that has been in a crash and never buy used helmets.
- Light or fluorescent-colored helmets make you more visible to motorists, as does reflective tape applied to your helmet.
- You can never tell when a crash is going to occur, so wear your helmet every time you ride, no matter how short the trip.

Visible Clothing
Wearing bright clothing or accessories (e.g. reflective arm/leg bands, vests) can help make up for the fact that drivers often are not used to scanning for objects smaller than cars. In daylight conditions, fluorescent or light-colored items are very visible; but at night, reflective items are most visible.

Bike Shorts
Cycling shorts reduce friction and provide cushioning. For short commutes, they may not be necessary.

Rain Gear
Riding in the rain is possible, and rain gear makes it easier. Look for breathable fabric. Non-breathable fabric can cause you to overheat and sweat. “Pit-zips” in the jacket allow perspiration to evaporate. An inexpensive waterproof poncho, while not breathable fabric, allows good ventilation. Rain pants should be long enough to cover the top of your footwear to help keep your feet dry. The cuffs of the pants should cinch snugly against your ankles to keep them from getting snagged on anything (such as your bike’s chainrings).

Footwear
Ideal cycling footwear is stiff-soled and comfortable to walk in. Some cyclists use special shoes, but common footwear such as light hiking boots, sneakers, or even dress shoes may suffice. Weatherproof booties fit over most any footwear.

“Biking to work allows me to combine exercise, transportation, and relaxation. For me, it takes the same amount of time as transit or driving”
— Rodges Ankrah, Arlington
Cold Weather Clothing Tips
Cycling, like all exercise, warms you up. In cold weather, put a thin, wicking layer against your skin to keep yourself dry. Then use an insulating layer on top of that, and finally, if you need, a wind or rain jacket. Make sure the jacket has full front zippers and/or pit-zips to allow for ventilation. Your head, hands, and feet tend to get colder faster than the rest of your body. Ear warmers and thin, knit head coverings (like balaclavas) and gloves allow you to cycle comfortably in cold weather. If you have to be wet (due to rain or perspiration), at least be warm. Avoid cotton, which loses its ability to insulate when wet. Synthetics or wool keep you warm when wet, and dry out quickly.

Office Clothes
Cycling in partial or full office attire is often feasible, especially if your trip is relatively short or you maintain a moderate pace. Even in summer, it is seldom very hot in the early morning. You could also buy a garment bag that attaches to a bicycle (available at bicycle stores) and change when you get to work. Rolling clothes instead of folding is a great way to reduce wrinkling. Some health clubs offer “runner’s” memberships, where for a reduced rate, you can use the showers and the locker rooms. You could bring in an extra set of work clothes or have them cleaned near work. If your office has a casual day, use that as your first day for bicycling to work.

“Biking provides me choices I don’t have with other forms of transportation; I decide my own pace and route and can choose to sprint or take it easy and unwind and enjoy the trip. Regardless of pace, I am always more relaxed after I get off my bike.”

— Lizzy McErlean, Arlington
Bicycle Security
Nothing is theft-proof and no locking system is perfect, but you can take steps to ensure that your bike is a less-attractive target to a thief:

- Check to see if your office has secure bicycle parking.

- Consider where and how long your bike must be parked when deciding how to secure it. If possible, keep your bicycle in your office or in a secured room at your workplace.

- If your bike must be parked outside, lock your frame and both wheels to an immovable object. Don’t lock your bike to a sign or other object that can be easily unbolted, bent, cut or removed. Pick a well-traveled, lighted place; thieves don’t like working in exposed areas.

- Consider leaving your heavy U-lock at work, locked to the bike parking rack. Carry a light cable lock with you for quick errands, and use both locks at work.

- When not in use, cable locks can be wrapped around the seat post and U-locks can often be carried on a rear rack or bracket.

- Take all easily removed accessories with you when leaving your bicycle unattended.

Bikeshare
Capital Bikeshare has thousands of bicycles at hundreds of stations across Washington D.C., the city of Alexandria, and Arlington, Fairfax and Montgomery Counties. Bikes can be returned to any station near your destination. Take as many trips as you’d like during your membership period. Join for 24 hours, 3 days, 30 days, or a year. The first 30 minutes of each trip are included. Each 30 minutes thereafter incurs an additional fee. Access the bicycles 24/7, 365 days a year. For more information visit www.capitalbikeshare.com

MBike, the College Park bike sharing system, has over 125 bicycles available at 14 stations in the City of College Park and the University of Maryland campus. For more information visit http://bike.zagster.com/mbike/

Bicycles and Transit
Bicycling can be an easy and inexpensive way to get to a Metro, MARC, or VRE station, a bus stop, or park and ride lot. Folding bikes are permitted on all transit services. Standard bicycles are also permitted in many cases.
**Metrorail & Metrobus**

Standard-size bikes are allowed at all times, on any car of any train, provided that space is available. Customers with bikes are reminded to use doors at either end of the railcar – not the center doors – and to avoid blocking doors or aisles. In addition, Metro reserves the ability to restrict bicycles on the rail system during major events drawing high ridership, such as July 4 fireworks and Inauguration Day.

Bikes are permitted on Metrobus, secured to front-mounted racks. Folding bicycles are allowed onboard buses, while folded, and inside a sturdy case or bag. For more details, visit www.wmata.com/bike.

Most Metrorail stations have bicycle racks and/or lockers. Racks are free and available on a first-come, first-served, basis. Lockers must be rented by the year. To rent a locker, call 202-962-1116. Find out which stations have racks or lockers at www.wmata.com/bike or email BikeLocker@wmata.com.

**Baltimore Metro Subway, Light Rail, and Bus**

Bicycles are permitted on all MTA Light Rail and Metro subway trains except on crowded trains. Bicycle racks are equipped on all MTA buses. Most Metro subway and Light Rail stops have bicycle racks and some have lockers. For more information call (410) 767-3999. www.mtmaryland.com

**Commuter Rail**

Standard size folding bicycles are allowed on MARC Trains; and most stations have bicycle parking. Select weekend MARC Penn Line trains have a designated “bike car” to enable full-size, non-collapsible bicycles to be brought onto the trains. This special car has 16 spaces for bicycles and seating adjacent to the bike racks, which feature tie downs and other safety apparatus. Bike car spaces are provided on a first-come, first-served basis. For more information (800) 325-RAIL, www.mtmaryland.com.

Virginia Railway Express permits folding bikes on all trains and full size bikes on the last three northbound/southbound trains and on midday trains. Two bicycles are allowed on the north car and must be tethered to bench seats using a bungee cord. For more information 800 RIDE-VRE, www.vre.org.
Local Buses
Bicycle racks are mounted on the front of Montgomery County Ride On, Fairfax Connector, Frederick TransIT, DC Circulator, Alexandria DASH, PRTC OmniLink, and Arlington Transit buses. Each rack holds two bikes. Let the bus driver know you will be using the rack, then follow the instructions posted on the front of the rack.

Park-and-Ride Lots
Many area Park-and-Ride Lots have bicycle racks and some have lockers. 27% have some form of bicycle parking facilities. For more information contact the appropriate county rideshare office or call Commuter Connections (800)-745-RIDE. www.commuterconnections.org.

For bicycle lockers at Virginia Park & Ride lots call (703) 383-2233. For an online Park-and-Ride map visit www.commuterconnections.org. Click on Commuter Programs, then Ridesharing.

We’ll get you home. Guaranteed.

What if I need to get home in an emergency? The Commuter Connections Guaranteed Ride Home Program provides emergency rides home to people who bicycle or take other alternative transportation to work twice a week in the Washington/Baltimore metro areas. Register at www.commuterconnections.org. Some restrictions apply.
How to encourage your employer to support bicycling to work

You’re now well versed in the ways of bike commuting, but you would like to see a few changes at your office to assist you and your colleagues who might like to bike to work. Flip to the other side of this guide to learn about sound investments and policies employers can use to encourage cycling, improve employee health, and save money. Here are some ideas to get you started:

- Show this guide to your human resources representative and building manager.
- Organize a bike-to-work day at your office (see page Employer-7)
- Call the Washington Area Bicyclist Association, (202) 518-0524, or the Metropolitan Washington Council of Governments, (202) 962-3760 and ask about setting up a bike-to-work orientation at your work site.
- Use online bicycle routing websites for turn-by-turn directions, listed in the centerfold of this guide.

“Some folks that don’t bike to work tell me they think it’s “cool” that I do, but how they could never do it themselves. It’s not necessarily “cool” as much as it’s just really practical and fun. As long as you’re safe and stay alert, anyone can do it.”
— Lia Seremetis, DC Bike Party founder
Resources for Employers and Employees

Active Prince William
www.activepw.org

Bike Arlington
www.bikearlington.com

Bike Loudoun
www.bikeloudoun.org

Bike Maryland
www.bikemaryland.org

Bike Washington
www.bikewashington.org

Capital Trails Coalition
www.capitaltrailscoalition.org

Fairfax Advocates for Better Bicycling
www.fabb-bikes.org

Frederick Bicycle Coalition
www.frederickbicyclecoalition.org

Frederick Pedalers
www.frederickpedalers.org

League of American Bicyclists
www.bikleague.org

Metro
www.wmata.com/bike

Nat’l Hwy Traffic Safety Admin
www.nhtsa.gov/bicycles

Potomac Pedalers
www.potomacpedalers.org

Virginia Bicycling Federation
www.vabike.org

Washcycle
www.thewashcycle.com

Washington Area Bicyclist Association
www.waba.org

Washington Area Bike Forum
www.washingtonareabikeforum.com

Area Bicycle Planners
Call these numbers if you have questions or comments about bike lanes, trails, routes, racks or plans.

Alexandria, VA ................. (703) 746-4160
Arlington County, VA ....... (703) 228-3709
City of Fairfax, VA .......... (703) 385-7589
City of Falls Church, VA .... (703) 248-5041
Council of Governments ...... (202) 962-3760
College Park, MD ............ (240) 487-3541
District of Columbia ........ (202) 671-2331
Fairfax County, VA .......... (703) 877-5625
Frederick City, MD .......... (301) 600-1884
Frederick County, MD....... (301) 600-7402
Gaithersburg, MD .......... (301) 258-6313
Loudoun County, VA ....... (571) 258-3526
Maryland Department of Transportation .......... (410) 545-5656
Montgomery County, MD .... (301) 495-2191
National Park Service ....... (202) 619-6347

Prince George’s County, MD .... (301) 883-5687
Prince William County, VA ... (703) 792-8041
Rockville, MD ................ (240) 314-8527
Washington Metropolitan Area Transit Authority .... (202) 962-1027
Virginia Department of Transportation ............ (703) 259-2376

Area Bicycle Maps
Alexandria Bikeways Map
www.alexandriava.gov/goalex

Arlington County Bicycle Map

Capital Crescent Trail Map (202) 234-4874
www.cctrail.org

District of Columbia Map
delouis.fields@dc.gov

Fairfax County Bicycle Map
www.fairfaxcounty.gov/fcdot/bikemap

Maryland State Bicycle Map (410) 545-5656

Montgomery County Bicycle Map (240) 777-7223

TrailLink
www.traillink.com

Virginia State Bicycle Map
www.virginiadot.org/bikemap

W&OD Trail Map
(703) 729-0596
List of Bicycle Parking Equipment Dealers & Manufacturers

American Bicycle Security Co.
www.ameribike.com

BikeLid Systems LLC,
www.bikelid.com

BikeUp
www.bikeup.com

Bike Security Racks Co.,
www.bikeracks.com

Cora Bike Rack Inc.
www.cora.com

Creative Pipe, Inc.
www.creativepipe.com

Cycle Safe Inc.,
www.cycle-safe.com

Dero Bike Rack Co.
www.dero.com

eLock Technologies,
www.bikelink.org

Function First, Inc.
www.bikerack.com

Madrax Inc.
www.madrax.com

Peak Racks
www.peekracks.com

Saris
www.sarisparking.com

Sunshine U-Lok Corporation
www.sunshineu-lok.com

Urban Accessories, Inc.
www.urbanaccessories.com

Bike Sharing
Capital Bikeshare
www.capitalbikeshare.com

Mbike
http://www.bike.zagster.com/mbike

Bike Stations
Metro
www.wmata.com/bike

Bikestation DC
www.bikestation.com

Bike Rental
Bike and Roll
www.bikeandrolldc.com

Bicycle Routing Sites
Car Free A to Z
www.carfreeatoz.com/planner

Commuter Connections
www.commuterconnections.org

Google
www.maps.google.com

Map My Ride
www.mapmyride.com/routes/

Ride the City
www.ridethecity.com

Books

Anybody’s Bike Book (maintenance)
by Tom Cutherbertson, Ten Speed Press.

Effective Cycling by John Forester, MIT Press

A Woman’s Guide to Cycling by Susan Weaver

Acknowledgments:


Many thanks to the COG/TPB Bicycle and Pedestrian Subcommittee, planners and others who helped review drafts of this guide.

For electronic version of this guide and for information on all types of alternative commuting throughout the Washington region, contact COG’s Commuter Connections program at (800) 745-RIDE, www.commuterconnections.org