



WASHINGTON AREA BICYCLIST ASSOCIATION

Women & Bicycles

The Ins and Outs of Urban Bicycling

SUPPORTED BY THE LEAGUE OF AMERICAN BICYCLISTS



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The Ins and Outs of Urban Bicycling



Name _____

Contact Info _____

Roll Model Name _____

Contact Info _____

To learn more about the Women & Bicycles Program, call (202) 518-0524 x202, email outreach@waba.org, or join the conversation: www.facebook.com/groups/WomenandBicycles.

This workbook is designed to be used as an educational tool in small group sessions with Roll Models to provide an initial overview on the main aspects of bicycling, through conversations and activities. If you'd like a digital copy of this workbook to organize your own Bicycling Meetup please request a "Facilitators Guide" by emailing outreach@waba.org.

Written and illustrated by WABA's Outreach Coordinator Nelle Pierson. Designed by Angela Parrotta, local graphic designer and bike enthusiast. Edited by the WABA staff, Kristin Farthing, Cecilia Dos Santos, Lesly Jones, and Megan Odett.

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WABA's mission is to grow bicycling as an easy, affordable, healthy, and fun way to travel from point A to point B in and around Washington, D.C. While the information presented here is a good starting point, ultimately it's up to you to decide whether bicycling is a safe mode of transportation. ***So we encourage you to continue to research and figure out what makes bicycling safe, comfortable, and enjoyable for you.***

Breaking Down Bicycling:

Myths & Misconceptions

BEFORE GETTING INTO THE INS AND OUTS OF URBAN BICYCLING, it's important to address some issues that keep some people from bicycling. For the most part these issues concern everyone along the way. So it's normal to share these concerns. Listed below are the 10 most common barriers to bicycling collected by **April Streeter**, author of *Women on Wheels*.



1. I'll be wet, cold, and miserable.

2. I won't be able to climb hills.

3. My underwear will show.

4. Lycra and pointy helmets
are my future.

5. I'll get too sweaty.

6. I'll get too tired.

7. I won't be able to look
professional at the office.

8. I'm too busy to bike.

9. I'll get hurt.

10. I'll get killed.



We want to equip you with the information and provide the encouragement to help you stay safe, stay comfortable, and enjoy your ride, **but you're going to have to spend some time on a bicycle to come to your own conclusions.**

We Ride Bicycles

HERE ARE SOME STORIES FROM LOCAL LADIES WHO MADE BICYCLING A PART OF THEIR LIVES. Even though our bikes may be different and the reasons why we choose to ride may be different, we are all bicyclists and we all enjoy the benefits.



MEGAN ODETT

Bicycling with my son on our longtail cargo bike has made my daily commute more fun than I ever thought possible. Our rides keep him happy and me healthy, and we love the freedom to stop at a moment's notice for whatever catches our fancy. What started as a practical choice to save money and avoid city parking struggles has turned into one of our favorite shared activities.



ZANNA WORZELLA

You can find me riding my dark green, hybrid Mongoose to work, to the store, to dinner, to (fill in the blank). I ride because...well I can't think of one good reason not to...but mainly because it gives me a strong sense of place. I get to experience my surroundings completely exposed to the elements, it's quite intimate actually.



SANDI FRANK

I am proud to say that I have logged many, many miles (only falling once). I've cycled in the heat, in the cold, early mornings, very late nights and even in the rain might I add. I've met new friends, discovered a strength I didn't know I had, encouraged friends to get bikes, convinced a few to ride bikes after many years of not being on one, and, I have a few friends who are now interested in learning to ride. Most of all, I've discovered a passion that has been lost since childhood.



MAGGIE SMITH

My interest in biking was sparked when I started leading tours for high schoolers; the same touring bike that has taken me across many states now carries me to and from work every day. I've since become both a commuter and a recreational cyclist, and have acquired a road specific bike for the latter. I bike because it's a convenient, cheap and human powered form of inner city transportation, because it's an exhilarating way to absorb a landscape, and because it's one of my favorite ways to share time with friends (or in the case of this photo, my mother).



ANGELA PARROTTA

I first got into cycling in 2008 when I teamed up with a non-profit, Bike & Build, to lead a cycling trip across the country, and raise money and awareness for affordable housing. The experience was so great, I did it again in 2010. I am a huge advocate of the bike and you can often find me on my women's specific Felt road bike heading to Carolina's BBQ on the W&OD trail. I also have a deep love for spandex and lady bibs.



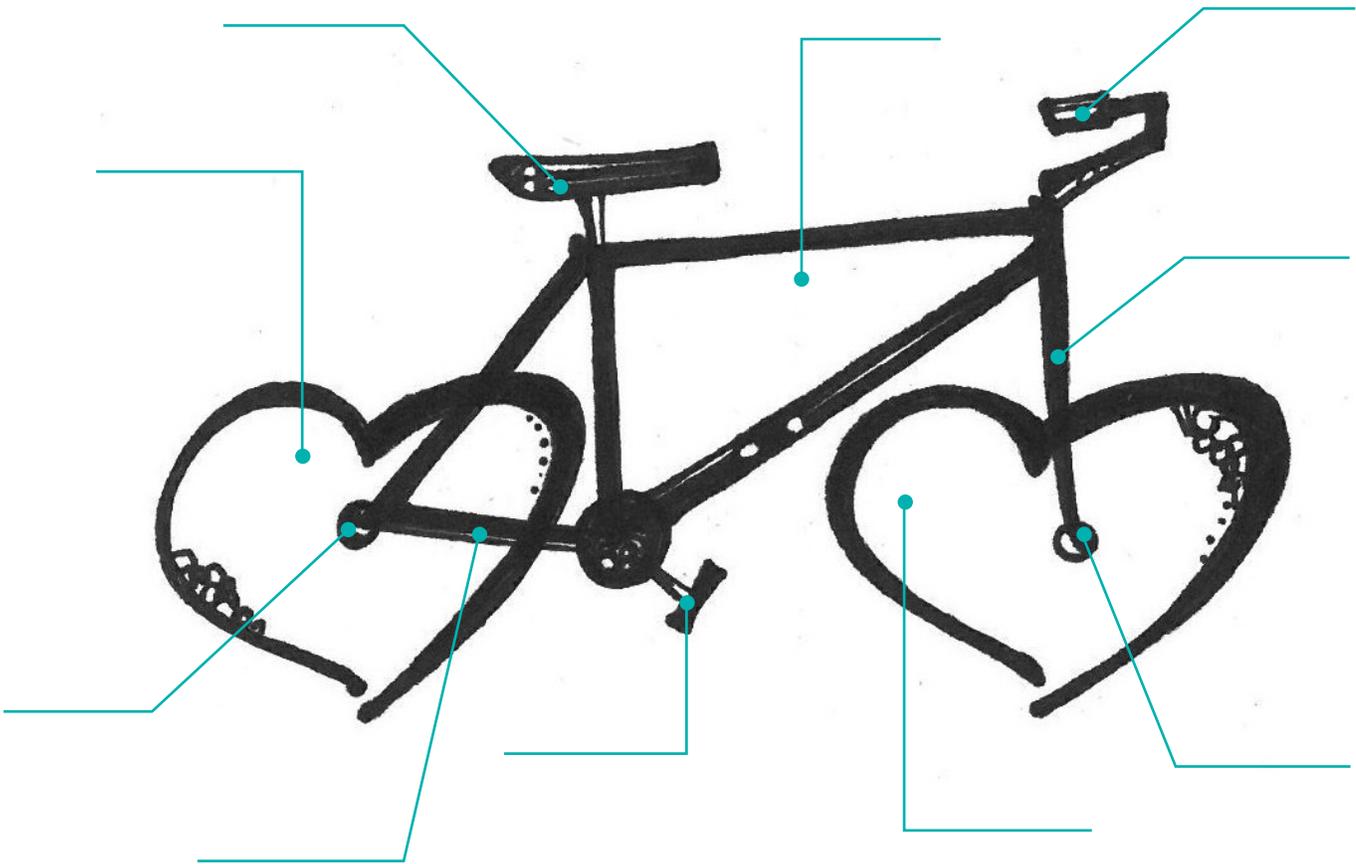
LAURETTA ELLIS

I wanted to kill two birds with 1 stone, so I decided to ride my bike when I ran my errands, that way, I would get the errands out of the way and exercise in at the same time. I started riding my bike all around the neighborhood to run my errands, to the bank, post office, library and even my weekly meetings. Once I got comfortable with that, I started riding trails and with groups, such as Black Women Bike D.C. My bike is a Trek Navigator 2.0. It is a comfort bike, with wide tires and seat, straight handlebars for an upright ride and 21 speeds. I now can ride 30+ miles trails.

What Can the Bicycle Offer You?

THE BENEFITS OF BICYCLING ARE BOUNDLESS

Fill in the spaces below with the ways in which bicycling can benefit you.



“ It’s about freedom. It’s about independence. I can go where I want when I want, how fast or slow I want. I’m not held back by restrictions of wealth. I’m not held back by restrictions of status. I’m not held back by restrictions of time. I get to my location within the millisecond of when I predicted I would be there. I can park directly in front of the bar, restaurant or otherwise carpeted venue without paying a valet. Without belting in. Without stepping on any dirty gas pedal. Without making any payments to anyone. On the way there, I will feel the vivacity of being ALIVE. I will fill my lungs with air. I will feel the blood pumping through my veins. I will feel my heartbeat pounding in my chest. ”

—Kristin Tieche, Velo Vogue

Your Two-Wheeled Friend with Benefits

1. BICYCLING IS THE BEST WAY TO TAKE SHORT TRIPS

–Most trips Americans make are short:

**49% are less than 3 miles,
39% are less than 2 miles &
24% are less than 1 mile.**

2. BICYCLING CAN HELP YOU LIVE LONGER AND BETTER

–Women who bike 30+ minutes a day have a lower risk of breast cancer and adolescents who bicycle are 48% less likely to be overweight as adults.

–Time spent outdoors, and out with friends.

**3 hours of biking per week
reduces the risk of heart
disease and stroke by 50%.**

3. BICYCLING IS FREEING

–Freedom from the burdens of cars.

–Freedom to load up, leave, arrive, and park on your time schedule.

Fun, thrilling, adventurous.

4. BICYCLING SAVES YOU MONEY

–The average American household spends over \$8,000 per year on owning and driving their cars – more than they spend on food.

–Bicycles cost little to buy or operate, and there's no gas, parking, or insurance to pay for.

**On a round trip commute of
10 miles, bicyclists save
around \$10 daily.**

5. BICYCLING CAN SAVE YOU TIME

By avoiding traffic and parking.

6. BICYCLING REDUCES ROAD CONGESTION AND AIR POLLUTION

–Traffic congestion wastes nearly 3 billion gallons of gas per year in the U.S.

**For every one mile pedaled
rather than driven, about 1
pound of CO2 is saved.**

7. BICYCLING IS SAFE, AND TOGETHER WE CAN MAKE IT SAFER

–There is safety in numbers: the more cyclists there are, the safer bicycling is.

**The average commuter
cyclist has just one accident
every 8.7 years.**

8. BICYCLING IS EMPOWERING

–Micro challenges throughout your day are micro opportunities to boost self esteem.

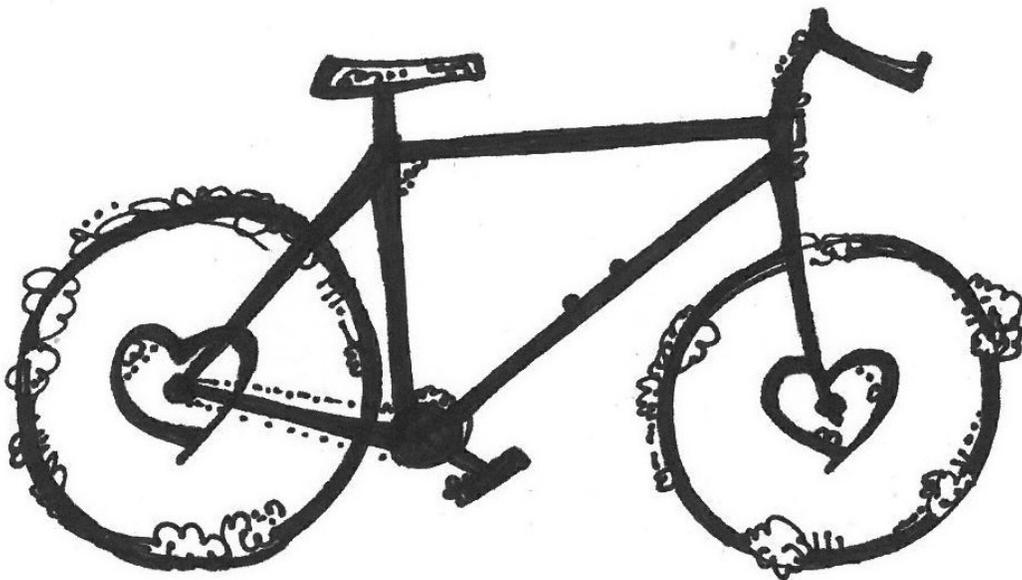
–Strong relationship between physical health and emotional health.

–Subconscious understanding that you are serving as a role model to others.

**You find yourself demanding
public space, defying
stereotypes, and finding more
mental strength.**

Top 12 Must-Knows for Urban Bicycling

- 1.** When riding in traffic, be calm, alert, confident, and **PREDICTABLE**.
- 2.** Take time to practice, ride with others, and take notes.
- 3. Safety is sexy;** wear a helmet, ride with lights, and ditch the headphones.
- 4. Obey signs and traffic laws. Stop at stop signs and stop lights.**
- 5.** Don't be a salmon. Ride with the flow of traffic.
- 6.** Though you may feel comfortable on the sidewalk, you're safer in the street.
- 7.** If a bike lane or facility isn't present, **IT'S IN YOUR INTEREST TO TAKE THE LANE.**
- 8.** Turn like a car using the full lane and signals, or turn like a pedestrian in the crosswalk.
- 9. Communicate passing and turning** with eye contact, verbal cues, and hand signals.
- 10. Try to bike three feet or more from parked cars in order to avoid the "door zone."**
- 11.** Always slow down and yield to pedestrians and joggers.
- 12. MOST IMPORTANTLY,** remember to relax and enjoy your bicycle ride.



Basic Bicycling Necessities

For most, the weather dictates whether it's a day for a bicycle ride. Hurricanes, thunderstorms, or blizzards? Below freezing temperatures? Probably good days to take the Metro or drive or telecommute. Some enjoy bicycling in the rain, as it can offer a whole new range of sensations. Others fancy a nice, dry bus ride. You're going to have to feel this aspect of bicycling out for yourself. Below is a helpful overview of the basics to be prepared for the elements, because even if you opt out of riding during extreme conditions, it's worth being prepared.

EVERYDAY ESSENTIALS	SUPER SUGGESTIONS
Drivers license/ID/Insurance card/ cash/Metro card	Panniers and waterproof bags
Lights for visibility (white in front and blinky red in rear)	Fenders
Bell	Waterproof jacket and pants
Water bottle and snacks	Spare inner tube and tools to change a flat tire
Bike lock (U-Lock)	Extra bike lights or batteries
Helmet	Hand towel
Bicycle beauty kit	Flat pack and handheld pump/CO2 cartridge

...AND FOR THE MORE AMBITIOUS, AN OVERVIEW OF THE BASICS TO BE PREPARED FOR THE ELEMENTS

	HOT	COLD
DRY	Sunglasses	Bicycling cap
	Sunscreen	Protective eye wear/sunglasses with clear lens
	Bicycling cap	Waterproof gloves
	Thin, light, loose fitting clothing that breathes (dresses and skirts have built in AC!)	Scarf, buff, or anything that can cover your mouth and nose
	Long sleeved light linen button up shirt helps you stay more cool than short sleeves because it shades your skin from the sun.	A thin, synthetic or wool base layer that is sweat wicking for top or bottom, or both.
	Breathable shoes	Tights or leg warmers to stay warm or take off if you get too hot.
	Second change of clothes	Jacket that serves as a windproof shell, being mindful that your core heats up quickly, and can often overheat.
WET	Bicycling cap	Everything listed above
	Exercise shorts/spandex shorts	Waterproof winter jacket and pants
	Lightweight waterproof rain jacket (no plastic)	A couple base layers
	Breathable shoes, waterproof shoes like the keen sandals	Second change of clothes
	Second change of clothes	

Keeping Up Appearances:

How to Make Bicycling Look Good

Even though we all have different approaches to style, here are a few key tips to staying fresh on your bicycle and avoid arriving a hot mess.

TOP 5 TIPS TO STAYING FRESH

- 1. Find your fresh route:** Map out a low speed route for the days you need to arrive glistening, not soaked.
- 2. Take it easy and take your time:** Biking doesn't always mean turning your trip into a top-speed workout. Low pedal speeds = low heart rate = low sweat.
- 3. Figure out your schedule:** Determine the clothes, items, and packing routine that work best for you. If you can ride in your work clothes, great. If you need to fold and pack a second change of clothes, great. If you need to turn a desk drawer or entire filing cabinet into your work closet, great! No matter your approach, we do suggest keeping a spare change of clothes at work, including socks and underwear.
- 4. Seek out amenities:** Check to see if your office building has a space for you to freshen up.
- 5. Invest:** Seriously, invest in a rack and a rack bag. You'll celebrate the decision every day you ride. Do it.

BICYCLE BEAUTY KIT

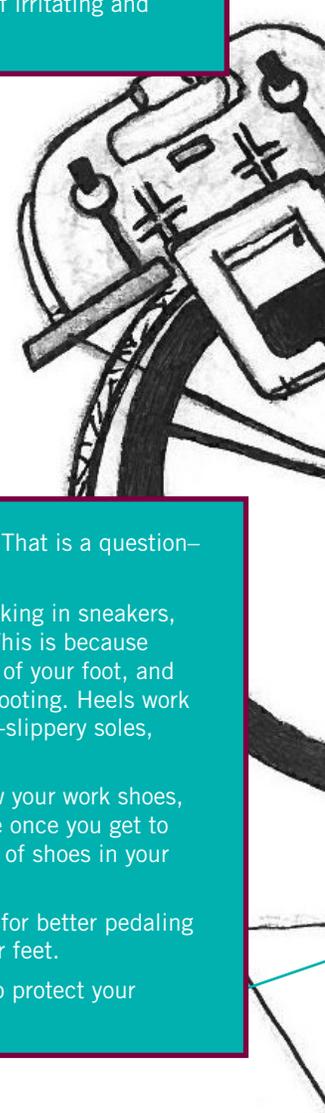
Clothing
Comb or brush
Hair product
Hand towel
Deodorant/Perfume
Safety pins
Sunscreen
Wet wipes

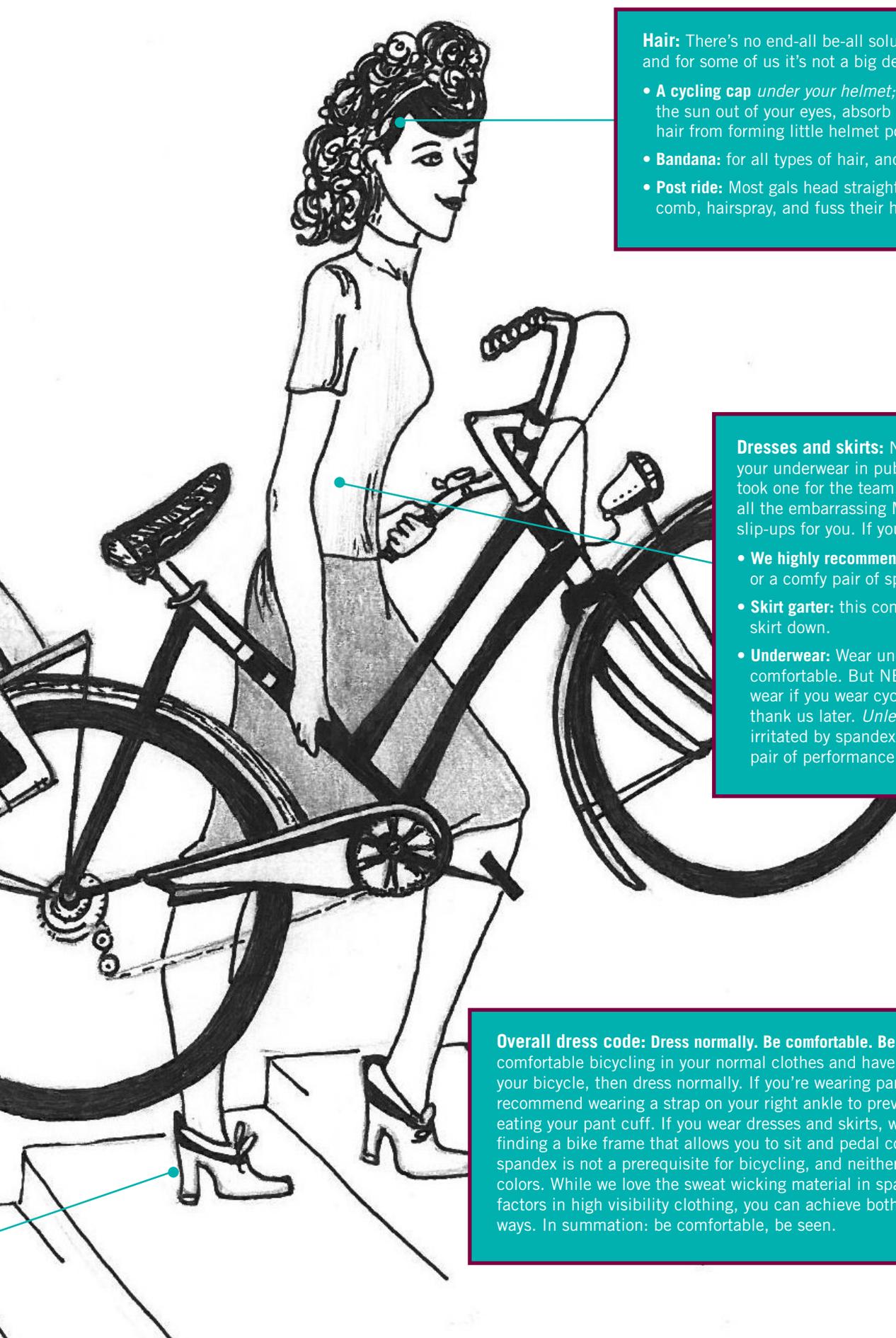
Other Aspects of Women & Bicycles:

- **Menstruation:** We highly recommend using tampons or a diva cup(!!). We know that sometimes pads are essential but avoid them if you can.
- **Yeast infections:** This is where bike seats and the breeze are your best friends. Avoid seats that restrict air flow, and clothing that traps moisture and heat; both increase the odds of irritating and painful infections.

Shoes: To wear heels, or not to wear heels? That is a question—with a simple answer: be comfortable.

- **Heels:** Biking in heels is no harder than biking in sneakers, as long as you get the right type of heel. This is because you're doing all the pedaling with the ball of your foot, and the heel can actually help give you more footing. Heels work best when they have a solid platform, non-slippery soles, and straps.
- **Sneakers:** Are always an option. Just throw your work shoes, or going-out shoes in your bag and change once you get to your final location. Or store a couple pairs of shoes in your desk drawers.
- **Flats:** Be sure to find flats with stiff soles, for better pedaling support and to protect the muscles in your feet.
- **Sandals:** Closed-toe shoes are important to protect your toesies.





Hair: There's no end-all be-all solution to helmet hair and for some of us it's not a big deal at all. We suggest:

- **A cycling cap** *under your helmet*; they're cute, keep the sun out of your eyes, absorb sweat, and prevent hair from forming little helmet poofs.
- **Bandana:** for all types of hair, and especially braids.
- **Post ride:** Most gals head straight to the bathroom to comb, hairspray, and fuss their helmet hair away.

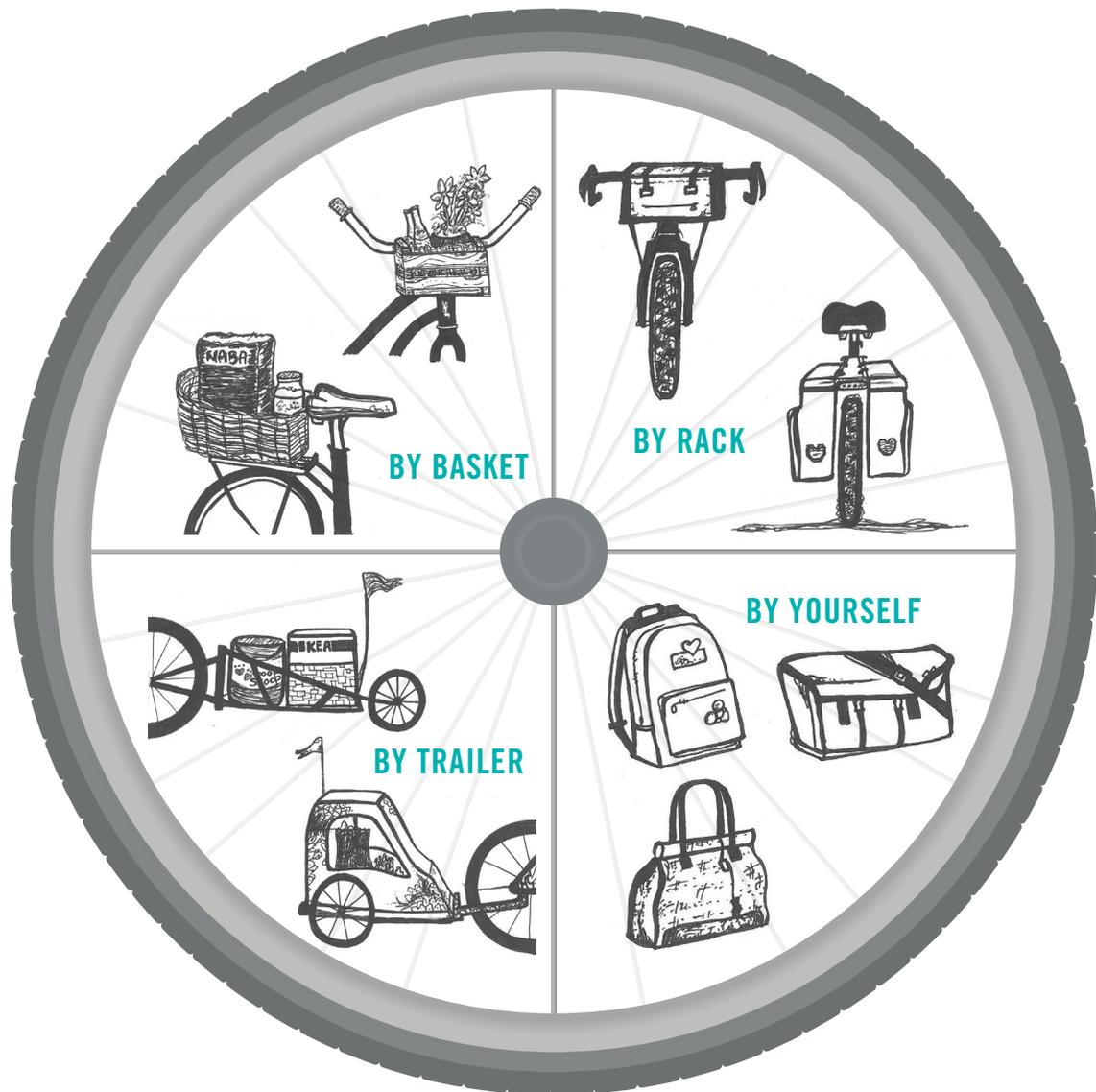
Dresses and skirts: Not into exposing your underwear in public? Don't worry, we took one for the team, and experienced all the embarrassing Marilyn Monroe slip-ups for you. If you're wearing skirts:

- **We highly recommend:** tights, leggings, or a comfy pair of spandex shorts.
- **Skirt garter:** this contraption holds your skirt down.
- **Underwear:** Wear underwear that is comfortable. But NEVER wear underwear if you wear cycling spandex. You'll thank us later. *Unless* your skin gets irritated by spandex, then invest in a pair of performance fabric underwear.

Overall dress code: Dress normally. Be comfortable. Be visible. If you're comfortable bicycling in your normal clothes and have sufficient lights on your bicycle, then dress normally. If you're wearing pantsuits, we recommend wearing a strap on your right ankle to prevent your chain from eating your pant cuff. If you wear dresses and skirts, we recommend finding a bike frame that allows you to sit and pedal comfortably. Cycling spandex is not a prerequisite for bicycling, and neither are day-glow neon colors. While we love the sweat wicking material in spandex and the safety factors in high visibility clothing, you can achieve both priorities in other ways. In summation: be comfortable, be seen.

Carrying Things by Bicycle

There are several options for loading up your bicycle with your daily belongings. These options vary depending on where you'd like to carry things, how much you'd like to carry, what your bicycle can accommodate, and how much you're willing to spend.



Carrying things with a backpack, messenger bag, or purse is easy and there's a good chance you already have something like this that you regularly use. This is the option with the lowest barrier to entry which is why you see so many people riding with bags. It's easy to fill up your backpack!

What do you need to carry, how would you like to carry it, and how much are you willing to spend?

Selecting Your Bicycle Route

To map out an ideal bicycle route, here are a few good questions to keep in mind. How much time do you have? Will you incorporate the Metro or bus system? Do you prefer bike trails, or bike lanes? To avoid hills or busy roads, would you rather take a slightly longer route? Or do you want to take to the hills and the long open roads, and go a little faster to get a better workout?

Combining bicycling with other forms of transportation:

Incorporating the bus, the Metro and regional trains into your bike trip is a convenient tool that can improve your commute and serve as a trusted backup transportation option.

WHEN? Use buses, Metro, or Amtrak trains, when you want to travel long distances, when the weather is poor, when you've enjoyed too many libations, when you have a flat tire or a bike problem, or when you're feeling lazy.

HOW? These options take some practice and some getting used to, but with time they become second nature.

CAPITAL BIKESHARE: DC, Arlington, and Alexandria are all home to one of the best bikeshare systems in the Nation. With a daily, monthly, or annual membership (at affordable rates) you can have access to over a thousand bikes stationed throughout the region. You can pick up a bike at any station, ride around cost free for 30 minutes, and return the bike to any station. If you have the same bike out for more than 30 minutes you will be charged for the time. If you already own a bike, having a membership certainly comes in handy.

PARK AND RIDE: Pack your bike and drive your car to a Metro station or a friend's house and bike the last leg of your commute. Make sure leaving your car for an extended period of time is safe and legal.

METRO: You can bring folding bikes on Metros all hours of service, and non-folding bikes in non-rush hours (rush hours are 7–10am and 4–7pm), at no additional charge. You must use elevators, and find a spot at the front or rear of the subway car.

BUSES: You can bring your bike on all city buses, at no additional cost, if there is an open space on the front bike rack.

AMTRAK: You can bring bikes on Amtrak trains if they are a train with walk-on bicycle service. Folding bikes can be taken on all trains in lieu of baggage. Be sure to check the organization's website before planning your trip.

There many tools at our disposal to find routes that meet your needs. Here are some good starting points.

BIKE MAP: Track down a bike map, study the trails and bike lanes, and plot out a few key connections.

FRIENDS: Pair up with a friend who bikes and is familiar with your area and ask them nicely to be your bike guide for a day, and get to know their favorite routes.

FORUMS: If your friends aren't familiar with your region's bike lanes and trails, post your route questions to our Women & Bicycles Facebook page, or the Washington Area Bike Forum, (bikearlingtonforum.com), and a helpful bike enthusiast will follow-up with suggestions.

GOOGLE MAPS: Hop onto google maps, select the "bicycling" feature, and let google figure out your route. This isn't always the best option; you may not be provided with the most direct route, or road information may not be the most up-to-date. Also this option isn't available on smartphones.

BIKE PLANNER: For an even better online mapping tool, check out www.bikeplanner.org. This new site will map your bike route and give you the ability to decide whether you want your route to be more "quick," "flat," "bike-friendly," or include bikeshare stations.

SMARTPHONE APPS: If you're looking for a smartphone approach, download "Bike Nav", a bike mapping app, or mapmyride.

Once you have a route in mind, write it down and test it out. Always give yourself some extra time for new routes. Getting lost, and finding the way can be pretty rewarding on a bike, but getting lost is never fun when you're running late.

You'll find the city comes to life in a very personal way as you build on your mental bike map. You'll find yourself shaping routes around your favorite scenery, best spots to see sunsets—or sunrises, and you'll start to notice many familiar faces in the bike lanes.

Tips for Bicycling in Traffic and on Trails

TYPES OF BIKE INFRASTRUCTURE

In most places you can ride your bicycle in bike lanes, protected bike lanes, and on multi-use trails, sidewalks, and _____. _____, or shared lane markings, encourage bicyclists to use the full lane, and they remind cars that bicyclists will be present.

Even though it is not advised, and often a less safe option, in D.C. it's legal to ride your bike on the sidewalk—except for _____.

Protected bike lanes are also called _____ and _____.

On multi-use trails and paths, you are sharing space with _____.

You should always stop at _____ and _____.

LANE PLACEMENT

When bike lanes or sharrows are not present, ride to the _____ side of the traffic lane that goes in the direction you are traveling.

When changing lanes, when the lane is too small for cars to pass you safely, or when you are avoiding potholes, debris, or parked cars, it is most safe to ride in the _____ of the lane.

When turning left, you should position yourself in the lane like a _____ or behave as a pedestrian and initiate a box turn.

PASSING AND YIELDING

Use hand signals when it's safe to do so, and when it benefits the people behind you when you are turning left and right and _____.

When riding with other bicyclists it helps to use verbal signals to let them know when you are turning left and right and _____.

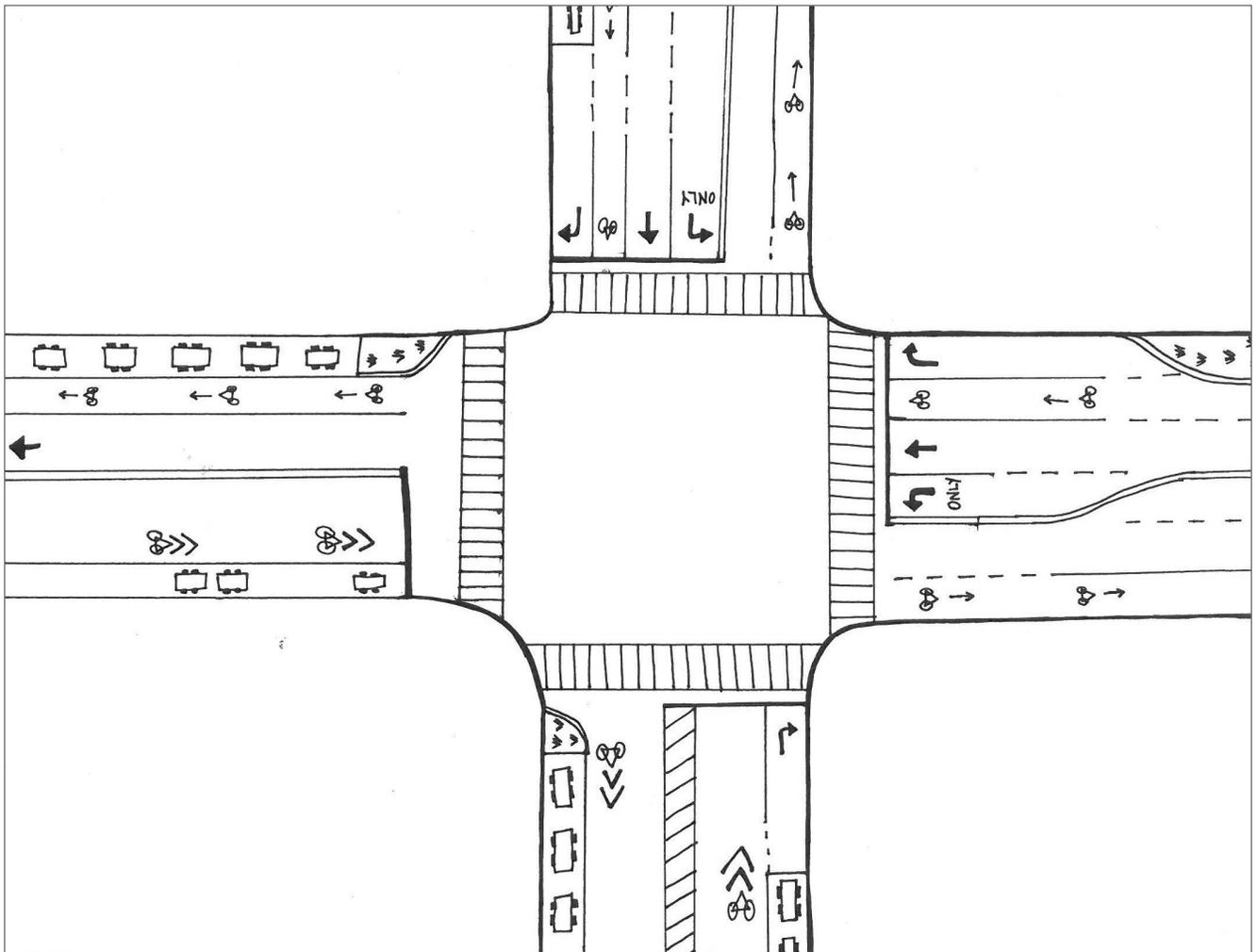
TURNING

A box turn is a simple way to turn _____ at major intersections.

When turning right, point _____ with your _____ hand.

When turning left, point _____ with your _____ hand.

If you want to continue learning about safely navigating our city streets and the rules of the road, check out the WABA website, take one of WABA's Confident City Cycling classes, and come out to our Women & Bicycles rides and workshops.



Biking with Children

Even though you may not be looking to bike with your children any time soon, this topic is important to explore. Generally speaking women are still the primary caretakers in our society, and largely responsible for their family's transportation choices which means we have the power to bring the benefits of bicycling to our family members AND significantly grow the number of people on bikes. With overall improvements in bicycling conditions in our region, and growing popularity in bicycling, more and more parents are taking to the bike lanes with their children.

DISCLAIMER: this is just an introduction. The topic of biking with kids is worthy of its own booklet. Fortunately, comprehensive guides, books, blogs, and social groups are easily accessible and provide infinite tips and suggestions.

The following are excerpts from *Bring the kids on your next bike ride with these products* by **Megan Odett**.

As the organizer of Kidical Mass D.C., and events like ABC's of Family Biking, I love to share the ins and outs of biking with kids. Biking around D.C. with my son during the past 2 years has been more fun than I ever could have imagined. It's a joy for both of us because my son loves that we can pull over on the road whenever we see anything interesting. And I get a very real thrill that unlike other parents in the area, I don't have to worry about hunting for parking when I'm dropping him off at day care. Plus, by using the bike to run everyday errands with him in tow, I'm teaching him that bikes are a safe, useful, and normal way of getting around.

I've learned a lot about the different approaches to biking with kids and think that with the right knowledge, nearly any parent can share the delights of cycling with their own children. Below is a summary of some of the most common cycling options for parents who have kids aged from infancy to early school age, listed in order of cost.

BIKE SEATS (\$)

If you want to try biking with your children without making a big investment in gear, aftermarket bike seats are a great first step. Easily adaptable to a variety of bike types and brands, relatively cheap, and offering the intimacy of having your child within arm's reach during the whole ride, bike seats that bolt onto either the front stem or rear rack of your bike are a great economical choice.

The most commonly-seen bike seats are **Topeak's rear seat** (ubiquitous in bike shops) and the **iBert** front-mounted seat, a neon green contraption that is outstanding for its ability to fit onto a broad range of bike types and sizes.

I have used both front and rear seats and there are pluses and minuses to both. Front seats are unbeatable for staying in contact with and monitoring the comfort of your child. Your child gets to see everything that's going on around him or her, and drivers can't miss the fact that you're child is with you.

A front seat's main disadvantage, is that they're only usable for 2 or maybe 3 years because most have a maximum weight limit of 35 pounds. Rear-mounted seats, though, will hold kids weighing up to 50 pounds. Kids riding behind cyclists are also a little more protected from the weather than kids riding on the front of the bike. **With a price point of \$100 to \$200, child seats are the most economical way to start biking with kids if you already have an appropriate bike.**

TRAILERS (\$\$)

For many years, trailers were the ultimate bike accessory for the hard-core, year-round cycling parent in the United States. They attach to nearly any kind of bike, include canopies to keep out the cold and rain, can carry a significant amount of cargo, and can accommodate a broad age range of passengers. Many trailers also convert to strollers, meaning that parents can potentially address two needs with a single tool. If you're on a limited budget and need to invest in a single kidhauling accessory that will carry your child from an infant (in a car-seat, of course) to school age, trailers are probably your best bet. There is also a strong resale economy for trailers, so it's usually easy to either find a used trailer online or sell your own trailer when you're finished with it.

The two big names in the trailer world are **Burley** and **Chariot**. Made in the U.S.A. and Canada respectively, Burley and Chariot offer trailers in a wide range of sizes and weights at prices ranging from \$300 to close to \$700 depending on the size and features. Thanks to its many years in the business, Burley has a fantastic customer support system that offers replacement parts even for models that haven't been made in five or more years. Chariot produces a similar fleet of trailers but focuses more on the multi-sport market: they offer conversion kits for walking, jogging, and even skiing to increase the versatility of their trailers. A strong new entry to the bike trailer market is Canada-based Wike, whose "Moonlite" trailer is a great budget option for carrying two kids and extra cargo.



LONGTAILS (\$\$\$)

A recent innovation, longtails are a great compromise between the speed and maneuverability of a regular two-wheeled bike and the cargo capacity of a boxbike. The original longtail is **Xtracycle's Free Radical**. The Free Radical is a frame extension that bolts on to an existing bike frame in the place of the rear wheel, moving the rear wheel back and adding an extended platform to the back of the bike.

Since first developing the Free Radical, Xtracycle has continued to refine its design and has spawned several variations on the original concept of bikes with extended tails. The company partnered with Surly to design an all in one longtail bike, the Big Dummy, that incorporates the longtail concept in a single frame and is therefore sturdier and able to handle larger loads. Recent other variations have included Xtracycle's Radish (a lighter-weight, step-through frame), the Yuba Mundo, and the Kona Ute. Longtails are a great way to carry multiple children at the same time or to carry older kids. Even after they outgrow bike seats and trailers, kids can perch on the rear decks of these versatile bikes. With a little creativity, you can even fit three kids at a time on a longtail. Longtails are relatively lightweight for their cargo capacity and, though even a simple FreeRadical conversion kit costs more than some trailers, are a great investment for their ability to accommodate many different combinations of cargo and kids. Free Radicals are about \$500 while other longtail styles can cost from \$1,100 to \$2,000.

For additional information, we highly recommend the following resources:

kidicalmassdc.blogspot.com

[The San Francisco Bicycle Coalition Family Biking Guide](#)

simplybikeblog.com

totcycle.com

humofthecity.com

BOXBIKES (\$\$\$\$)

The true SUVs of the cycling world, cargo trikes and bakfietsen are low-maintenance, weatherproof, nearly bombproof kidhauling machines. Both types of cargo bikes feature a dramatically extended front end with a large, sturdy front box mounted on the frame. Cargo trikes have one rear wheel and two front wheels on either side of the box while bakfietsen (the Dutch plural for "boxbike") have one rear wheel and one front wheel that sits in front of the box. Some bakfietsen sport a box large enough to comfortably accommodate even four children, or two children, a dog, and a bunch of groceries.

Equipped with weather canopies, plenty of cargo space, built-in seats with seatbelts, and sometimes even integrated lighting systems, boxbikes are the ultimate turnkey option for families who want to make a full commitment to going car-free or extremely car-light. They often feature fully enclosed shifting and braking systems for maximum weatherproofness, so keeping these bikes outside shouldn't be a problem. This is especially important for those without dedicated garage space. Many boxbikes have chain guards while some even include full chain cases for the ultimate maintenance-free drivetrain.

As you might expect, all these features come with a price. Boxbikes typically start at \$2,700 and, depending on capacity and other factors, can increase in price to \$4,000 or more. Of course, that's about 10 times more than most people would ever dream of paying for a bike. But \$4,000 is about one-third the cost of the very cheapest car you can purchase new. Plus the annual maintenance costs for the boxbike are practically nil. More than any other family biking tool, boxbikes are designed to serve as true car replacements, giving that price tag a different context and making them a worthwhile investment. Additionally, considering how much space car seats take up in the back seat of a sedan, a cargo trike or bakfiets could even carry more children than your typical family sedan!

Selecting the Bicycle for You

WHICH BICYCLE IS BEST FOR YOU?

What matters most is that you're comfortable, and you enjoy riding your bicycle. You need to find a bike that fits your body, your needs, your terrain, and your style. There are many bike options to choose from, each with various functions and varying price tags.

TYPES OF BICYCLES

City bikes



Touring



Recumbents



Longtails



Dutch bikes



Hybrids



Folding



Electric-assist



Road bikes



Tricycles



Cargo bikes



Capital Bikeshare



Mountain bikes



Cruiser



Tandem



Your bike

Budget:	_____
Terrain:	_____
Style:	_____
Needs:	_____
Size:	_____

BUYING YOUR BICYCLE

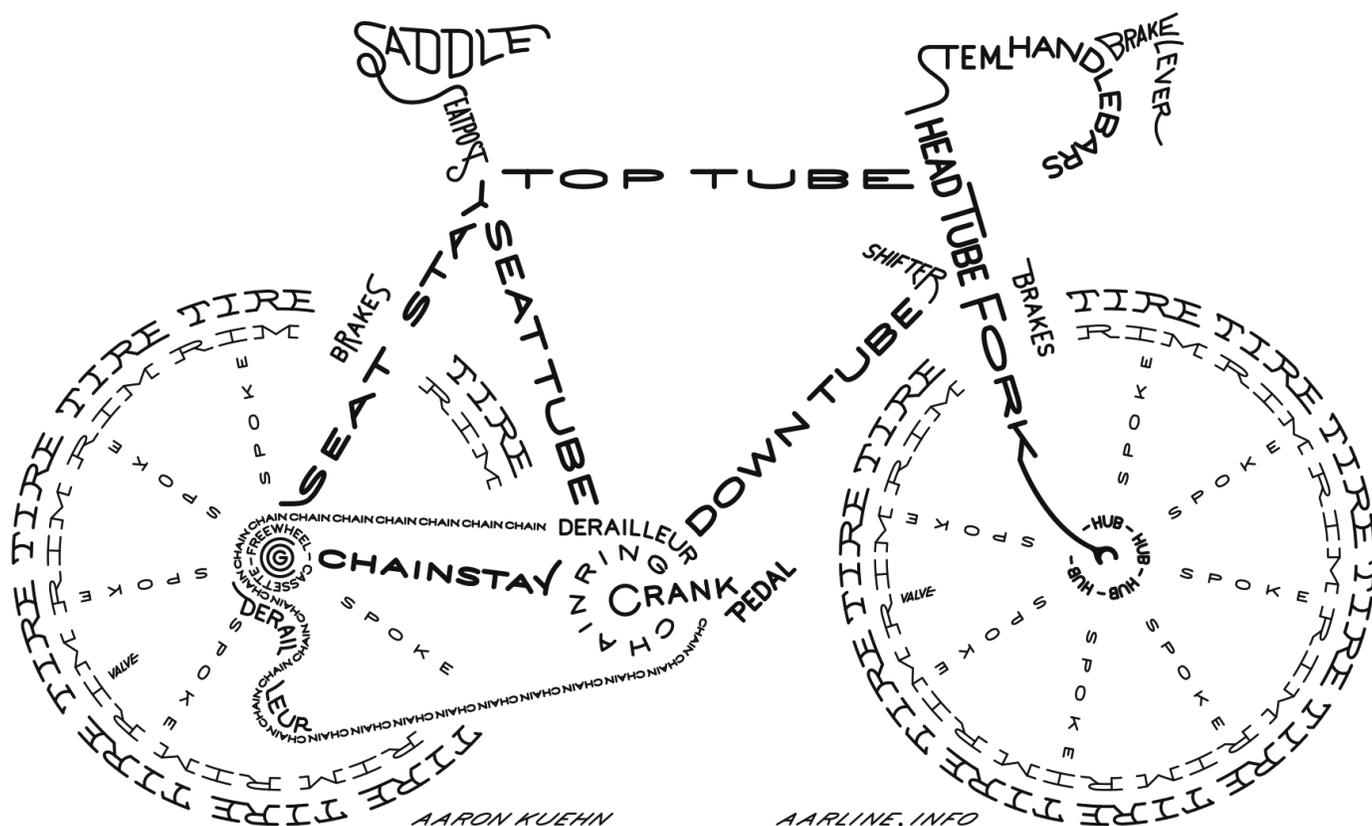
If you plan to buy a new bike, first know your needs and your terrain, and then head to your local bike shop to spend some time getting to know what feels good and what size you need. Make sure you get the correct size to ensure you have the most comfortable ride, and to avoid aches and pains. If the bike shop doesn't have your dream bike, not to worry, there are many shops in the region who specialize in different types and brands, so get to know a couple shops and one that works best for you. Definitely be sure to own or purchase a helmet, lights, and a bell before you ride your new bike home.

A few bike shops in Virginia and Maryland sell used bikes, but regulations prevent shops in D.C. from doing the same. If you plan to go online, the D.C. region has an impressive Craigslist bike market, where you can find an array of good quality and affordable options. But be forewarned, this can be time consuming, so know your bike size and the type of bicycle you're in the market for before starting your search.

Parts of the Bicycle

PARTS OF THE BICYCLE

You don't need to know the parts of your bicycle to ride it. However, being familiar with the names of parts will come in handy on many occasions. We encourage you to spend time getting to know your bike, and then get to know your local mechanic.



BIKE SEATS

Our behinds are like snowflakes. They come in all different shapes and sizes and what may feel great to me might not work for you.

Most bike seats are designed for men: They poke out and up right where women need them to poke down. This can cause all sorts of problems from pain to chafing to infections.

Signs of a good seat: More padding does not mean more comfort. A good seat will support the bone structure resting on the seat (the pubic rami and the ischial tuberosities), rather than allowing the soft flesh and muscles to collapse onto the seat. You may benefit from a cut out in the middle of the seat to relieve pressure and increase airflow.

Try out a variety: If you've given your seat a few test rides and it's still causing you pain, try out another seat. Most people go through a few before they find the one that works best, and most bike shops will offer you a loaner.

Give it time: Even when you've found a good fit it's going to take some getting used to. Your body still needs time to adjust and time for seat muscles to grow.

Bicycle Maintenance & Care

EVERY TIME YOU RIDE

Before you hop on your bicycle for a short trip, or a long ride, it's important to perform this simple bike check to make sure everything is in its right place.

ABC QUICK CHECK

AIR: Pinch your tires with your fingers to see if your inner tubes may need more air, or use a bicycle pump to check your tire pressure. It's important to make sure your tires are always properly inflated. The recommended tire pressure (PSI- pounds per square inch) can almost always be found written on the side of your tire.

BRAKES: Make sure your brakes are doing their job. Look to see that your brake pads are lined up with your wheel rims, and test out your brakes by pulling your brake levers a couple times. When you fully engage your brake levers, you should have enough room to stick your thumb between your brake lever and your handlebar, this means you'll have enough braking power when you need it.

CRANKS, CHAIN, AND CASSETTE: Give a quick look to make sure your crank arms; the part that connects your pedals to the bike frame, rotate easily and the bolts that connect them to the frame are tight. Also, make sure your chain isn't loose and that it isn't skipping gears.

QUICK RELEASES: Are the rotating levers that attach your wheels to your bike frame. It's really easy to forget about tightening your quick releases if you're taking your wheel off and on a lot. The levers should always be tight, and pointed toward the back of your bike to ensure nothing catches on them along the way.

CHECK: Give it a spin! It's important to become familiar with your bike, and know how it sounds and feels in normal conditions. That way, you'll be in tune to the little changes your bike experiences overtime that indicate it's time for new parts and a tune-up.

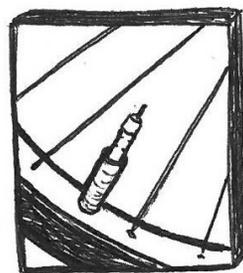
DO IT REGULARLY, DO IT YOURSELF, BICYCLE MAINTENANCE

Pump your tires regularly at least once a week, using the recommended PSI. This will reduce your chances of getting flat tires, and make pedaling a lot easier. You must know what type of valve your inner tube has before pumping up your tire because your bicycle pump must have the matching system. You will either have a presta valve or schrader valve. Both are pictured below.

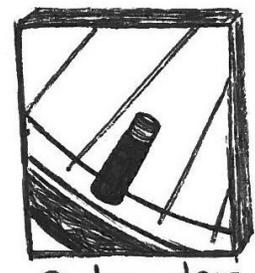
Clean and lube your chain at least once a month and after rides in wet weather. You wouldn't go months without flossing, would you? A clean chain is more efficient and makes your parts last longer.

Learn a little about basic bike maintenance: This can be a very empowering and quite a rewarding hobby for some, plus it's inexpensive and a nice way to get intimate with your bike. Many local bike shops offer classes and bike co-ops whose mission is to teach you how to work on your bike. If bicycle maintenance and repair is not your thing, support our local bike economy and get to know your local bike shop mechanics! These folks are the experts and appreciate your business. They will even sometimes share a good deal of bicycling know-how with you.

*** No matter what, take the time to take care of your bike. It's very easy to let "little, preventative" problems turn into "big, expensive" problems.**



Presta Valve



Schrader Valve

Additional Bicycle Resources

YOUR FRIENDS AND ROLL MODELS

Stay in touch with a Roll Model, our program mentors. We're here to answer questions, offer suggestions, meet up at the bike shop, or go on rides. If you want to join the conversation, **head to www.facebook.com/groups/WomenAndBicycles** to post questions, get answers, meet friends, share bicycling cheer, and find out about our next skill share events.

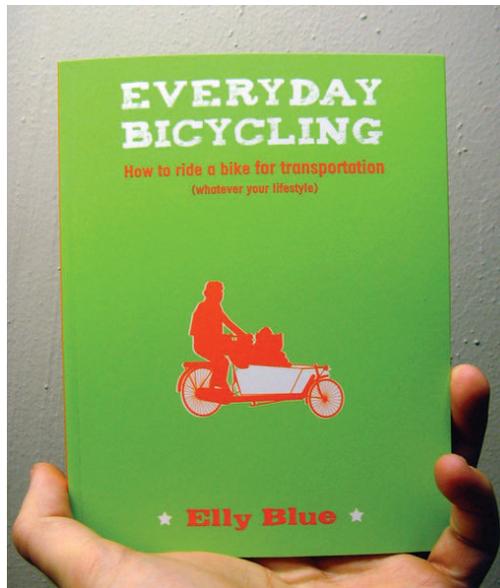
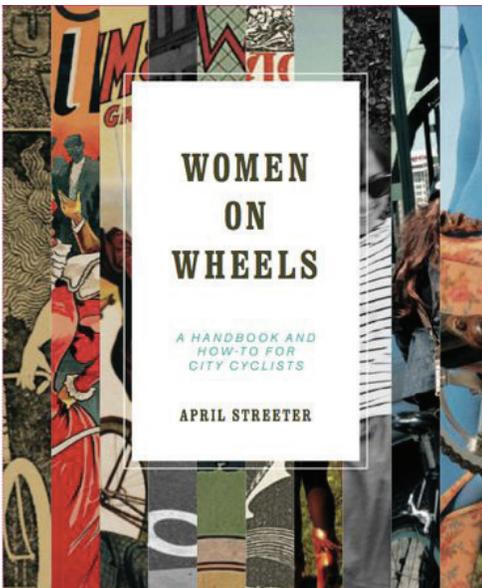
GROUP RIDES, BIKE SHOPS AND BIKE CO-OPS

Many shops and co-ops host regular rides and workshops too! Get to know the shops in your area because they can be a really helpful resource. There are many local grassroot groups where you can find networks of bike savy people who organize bike events and are working to get more people on bikes, like Potomac Pedalers, Oxon Hill Bike Club, Black Women Bike DC, Kidical Mass DC, Sassy Sister Cycling, DC Bike Party, Capital Spokeswomen, The Assembly, Mt. Pleasant Cruisers, Soul Roll, Dandies and Quaintrelles, and more springing up all the time.

MAIN REFERENCES, AND MUST-READS

Elly Blue's *Everyday Bicycling* is a simple and comprehensive guide on everything you need to know to start riding a bicycle for transportation, and can be purchased at **www.microcosmpublishing.com**.

Similarly, **April Streeter's** *Women on Wheels*, concisely lays out the nuts and bolts of urban bicycling—from road rules, to helmet hair, to all-weather riding. **Check out her book at www.womenonwheels.me**.



About WABA



Women & Bicycles is the Washington Area Bicyclist Association's outreach and encouragement program geared to address the gender gap in bicycling, one meetup, social ride, or workshop at a time. We provide a space to learn about and experience the joys of bicycling through opportunities for helpful exchanges between women who already bicycle and women who are interested in bicycling.



**WASHINGTON
AREA
BICYCLIST
ASSOCIATION**

The Washington Area Bicyclist Association (WABA) supports and promotes bicycling as a transportation mode for area residents. Bicycling provides a low cost, enjoyable way to travel that is healthy for both the bicycle operator and for our quality of life. WABA is a member supported nonprofit advocating for better bicycling conditions and transportation choices for a healthier environment. We provide bike education for children, adults, and motorists about safe bicycling, and host regional events that celebrate bicycling.

Join the movement, join WABA today!

Call WABA at (202) 518-0524 or visit our website at www.waba.org.

Follow us @WABADC and on Facebook www.facebook.com/wabadc.



The League of American Bicyclists represents the interests of the nation's 57 million bicyclists and provides support to local bike advocacy organizations across the country. In 2012, they set out to close the gender gap in bicycling by creating Women Bike, an outreach program that empowers more women to bicycle and become engaged in the diverse leadership opportunities of the bicycle movement.

To learn more about the League of American Bicyclists and Women Bike, please visit www.bikeleague.org/programs/women.

“Our bike culture in the U.S. is growing and changing, and while it definitely isn't Copenhagen Chic, it's not just “geek” either - it is as varied and multi-cultural as our society. That's good, because ultimately it's not whether you're riding chic or geek. It's just the fact that you're riding.”

—April Streeeter, Women on Wheels, 2012

Women & Bicycles Supporters

OUR 2013 SEASON OF WABA'S WOMEN & BICYCLES PROGRAM WAS MADE POSSIBLE BY THE FOLLOWING SUPPORTERS.

The program is proudly supported by Women Bike, the League of American Bicyclists' national initiative to close the bicycling gender gap; the Alice Rowan Swanson Foundation; and the Metcalf Family Fund whose contribution funded our match-grant campaign.

ROLL MODELS

Gillian Burgess
Erin Casgren-Tindall
Sondra Frank
Angie Hermes
Kathleen Herndon
Laurie Lemieux
Elizabeth Lyttleton
Lolly Walsh
Lacy Wilhoit
Elizabeth Willis

Lauren Blau
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