Share the Road

Utah Bicycle Commuter Guide

An Introduction to the Fun and Rewarding Art of Bicycle Commuting

UDOT
CONNECTING COMMUNITIES

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www.udot.utah.gov/index.php?m=c&tid=11

"It's Fun!"

LEAGUE OF AMERICAN BICYCLISTS
League-Certified Instructors (LCI)
The League of American Bicyclists (founded in 1880) promotes bicycling for fun, fitness, and transportation. The league has three certified instructors (see below) in Utah who teach in-depth "Bike Ed" courses that cover bike selection, maintenance, riding etiquette, safety skills, commuting, and other important aspects of bicycling for beginning to intermediate riders. See the league web site at www.bikeleague.org.

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"The course was not only educational, but a great confidence builder."

UTAH BICYCLE COMMUTER GUIDE

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The Utah Department of Transportation purchased the right to modify and reproduce this guide to meet the needs of Utah bicycle commuters. Additional copies may be obtained from the Utah Department of Transportation by contacting the department's Bicycle and Pedestrian Coordinator or any of the three League-Certified Instructors (listed above).

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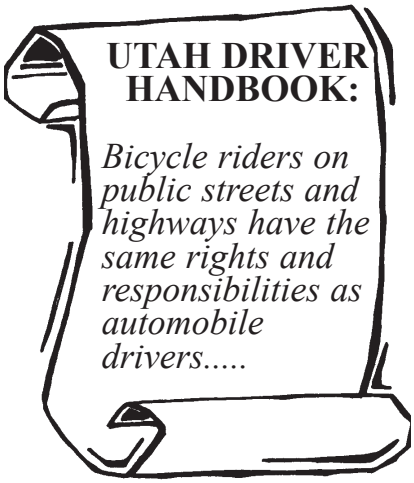
This Guide will Prepare You for the Fun and Rewarding Art of Bicycle Commuting...

Ready... Set... Ride!



The morning air is clear and crisp as you set out for work on your bicycle. As you head down the street and begin to limber up you notice how your neighbor's garden has grown over the past few weeks. You exchange a friendly wave with someone out for a morning walk. It's amazing—just a few months ago your bike sat in the corner of your garage, waiting for a fair-weather weekend to come along. Now you use it daily for commutes and errands and you're surprised at how much you enjoy cycling. The accessories and clothing that help you commute in all conditions are quickly being paid for by savings in gasoline and wear and tear on your car, and you're in much better shape than you were two months ago.

Waiting in line at a traffic light, you notice that most of the cars only have one occupant. What if they were on bikes or buses or TRAX or carpooling you wonder—how much traffic congestion would that reduce? When you first started bicycle commuting, you were thankful for that traffic light because it was a chance to catch your breath, but now your fitness has improved to the point that only biking up the big hill on your route makes you breathe hard. You are feeling awake and motivated as you pull into your workplace and lock your bike to the rack near the entrance of the building, while car drivers troll around the parking lot, searching for that elusive parking space. Once inside, you head for the restroom to clean up and change clothes. A few minutes later, you are at work, relaxed and wide awake, ready for the day ahead.

Why Commute by Bicycle?

Cycling is a quiet, clean, efficient, healthy, and fun way to travel. Since half of all daily trips in this country are five miles or less, bicycling is a practical way to travel to and from work or school, or for doing errands. Combined with transit, cycling can also be part of a commute over longer distances. Bicycle commuting is easy but it may require some small adjustments in your daily routine.

This guide was created to ease the transition and make the experience safer and more enjoyable. If you're new to bicycle commuting, it may take a little while to develop your routine. But be persistent — you'll not only arrive at work alert and motivated and back at home relaxed, you'll save a lot of money too! Even veteran commuters should find some helpful tips.

Bicycle Commuting Options

If doing your whole commute by bicycle is impractical or you need to build up your fitness level, try the following alternatives (contact UTA at 801-743-3882 for more information on bike accommodations):

- Ride to a bus stop and take a bus the rest of the way to work.
- Ride to a TRAX station and take your bike to work on TRAX.
- Drive yourself and your bike to a facility that is closer to work and ride to work from there.
- Ride to a co-worker's house and carpool from there.
- Drive yourself and your bike to work, and ride home. The next day, ride to work and then drive home.
- Combine biking with a vanpool if possible. Ask the vanpool manager to mount a bike rack on the van. Then you can take the vanpool in the morning and cycle home in the afternoon.

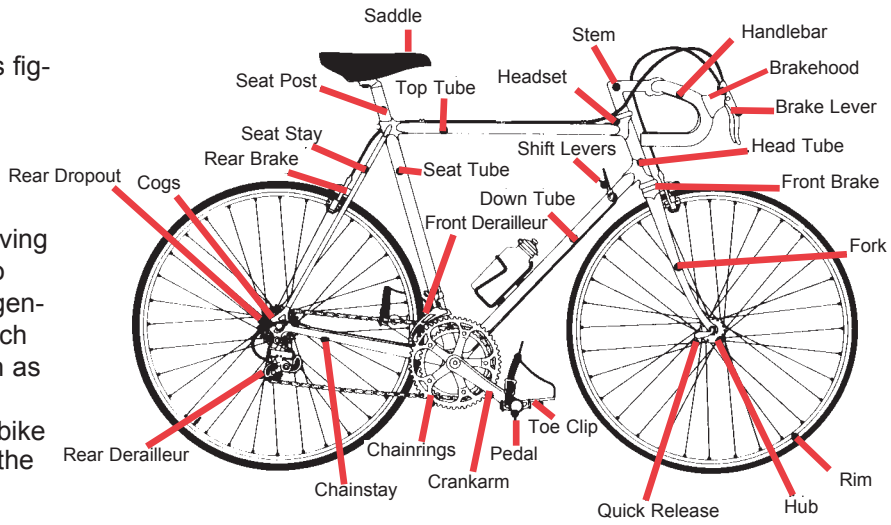
The bottom line is—***Be Creative!***

Before taking your bicycle on transit vehicles, ask your local transit agency for instructions. Always communicate with drivers before you load and unload your bike.

Bicycle Basics

The "Anatomy" of a Bicycle

You don't need to be a mechanical expert, but a basic understanding of your bicycle is helpful. This figure illustrates the parts of a bicycle you should be familiar with (your bicycle may differ).



Bicycle Fit

Proper sizing and fit are extremely important. Having too large or too small a bike can make it difficult to control and can lead to discomfort or injury. As a general rule for road bicycles, you should have 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. See the "Adjustments and Quick Releases" section for more information on proper fit.

Outfitting Your Bicycle

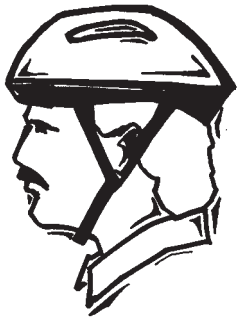
Certain accessories can make commuting safer and more enjoyable. Prioritize your spending on safety-related items first. Over time your savings in fuel expenses will more than pay for the additional accessories. To make choosing among the wide variety of accessories easier, think about your needs, talk to employees at your local bike shop, other cyclists, and read equipment reviews in bicycle publications.

Lights and Reflectors

Headlights and rear lights and reflectors (visible within 500 ft. of the low beams of a motorized vehicle) are required by Utah law for low light riding. Lights vary greatly in their durability, mounting design, brightness, and "run time." There are three primary types of bicycle lights:

- Non-rechargeable—inexpensive initially, however, battery costs pile up and so does the hazardous waste they create in spent batteries.
- Rechargeable—more expensive initially, but the savings from reusable batteries offset the cost, plus rechargables reduce hazardous waste.
- Generator-powered—no batteries required, but some may not be as bright as battery-powered lights. They only produce light when the bicycle is moving (it is safer to remain visible in low light situations, even when stopped).

Regardless of what system you use, consider keeping a spare headlight with you on your night commutes in case you forget your main light or it is not usable (due to dead batteries or mechanical failure). Make sure the spare light can be attached to your bicycle or yourself (41-6-90 (3) Utah Code).



Helmet Fit and Adjustment

Since helmets significantly reduce the chance and severity of head injury, making sure your helmet fits and is always correctly adjusted is one of the most important prerequisites to cycling. Use the following four steps to choose and adjust your helmet, or ask your local bike shop to assist you.

1. **Helmet Sizing:** Try several helmets to find the correct size. Ignoring the straps for now, place a helmet on your head, making sure it is level. Wiggle the helmet around—if there is significant side-to-side or front-to-back movement, it is too large and it will not work properly. If you are having trouble getting past this first step when shopping for helmets, try other models or brands (some helmets are narrow, others are wide).

2. **Adjusting the Junction Buckles:** Ignore the chin buckle for now and adjust each pair of straps so the junction buckles are situated just below your earlobes. This step can be difficult but it is very important. Use a mirror to help.

3. **Adjusting the Chin Buckle:** Close the chin buckle and adjust the straps so the buckle is roughly centered under your jawbones.

4. **Final Check:** When the chin buckle is engaged, all straps should be snug against your head. If any of the straps aren't snug, readjust them now, keeping in mind the previous steps. When the helmet is properly adjusted, you should be able to slip a finger under the straps. The straps should move back into position when you remove your finger. Do a final check of the helmet fit by gently yet firmly trying to push it off your head from the front, back, and the sides.

The Bicycle Helmet Safety Institute is an excellent resource.
(www.bhsi.org)

Basic Repairs

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. Mount a pump on your frame as well and make sure you know how to fix a flat before you need to! Flat repair is often featured in bicycling magazines and is always included in repair manuals. Products such as puncture-resistant tires and tubes, liquid sealants, and tire liners can help prevent flats. Inquire at your local bike shop. Include a rag in your tool kit to help you clean up after fixing a mechanical problem. Carry emergency bus fare in case you encounter a problem you cannot address immediately. A cell phone is also handy to have with you if you get stranded or encounter an emergency.

Fenders

Fenders are a must for cycling in wet conditions. They nearly eliminate spray from your wheels, keeping you drier, cleaner, and more comfortable. They also keep your bike cleaner, reducing the need for maintenance. Various designs of fenders are available. The more wheel coverage a fender offers, the better.

Mirrors

Many cyclists use mirrors to keep track of traffic behind them. Mirrors come in two basic types: helmet-mounted and bar-mounted. Helmet-mounted mirrors 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, and may be subject to vibration. Although mirrors can help you keep tabs on traffic, they are not a substitute for looking behind you, especially before turning, changing lanes, or passing.

Outfitting Yourself

Outfitting yourself for bike commuting consists of wearing safety and specialized clothing. Safety clothing should be your priority, while specialized clothing can make your commute more enjoyable.

Safety Clothing

Helmets

Approximately three out of every four bicycle-related deaths that occur in the U.S. are due to head injuries. Using a helmet can significantly reduce the chance and severity of a head injury and may even save your life. A properly sized and adjusted helmet (see "Helmet Fit and Adjustment") should always be worn.

Here are some important points about helmet use:

- The helmet should be worn level on your head. If tilted back, it will not protect your forehead.
- 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. Reflective tape, available at bike shops, can be applied to helmets to enhance visibility at night.
- Wear your helmet every time you ride, no matter how short the trip.

Highly Visible Safety Accessories

In daylight conditions, fluorescent or light-colored jerseys, vests, and jackets increase the ability of other vehicle drivers to see you on the road.

At night, reflective items greatly increase your visibility. Clothing or accessories (e.g. reflective arm/leg bands, front and rear reflectors, etc.) make you more conspicuous and can help motorists to see you easier.

Reflective Clothing:

vests or jackets

arm or leg bands

Gloves

Gloves enhance both safety and comfort. Cycling gloves protect your hands in the event of a crash, improve your grip on the bars, and have special padding to reduce road vibration. Warm, full-finger gloves make riding in cold or wet weather more comfortable.

Specialized Clothing

Pants and Shorts

Cycling pants and shorts reduce crotch friction and provide some additional seat cushioning. However, they are not for everyone, and some commuters prefer to wear regular clothing. Use a leg band, or tuck your pant leg into your sock, to keep the bottom of your pant leg from getting caught in the chain or from getting greasy.

Rain Gear

Rain gear comes in two main types: breathable and non-breathable. Non-breathable fabric can cause you to overheat and sweat, though even breathable fabrics will be less effective when cycling vigorously. The effectiveness of rain gear depends a lot on the ventilation it offers. Look for large “pit-zips” in the jacket to allow perspiration to evaporate. 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 (like your bike’s chainrings).

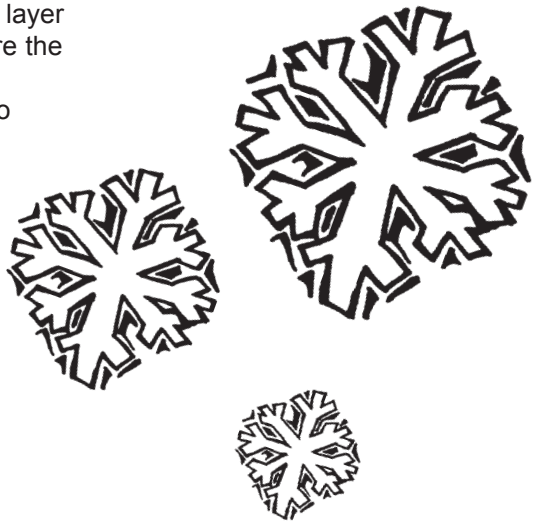
Footwear

Ideal cycling footwear is stiff-soled, waterproof, and comfortable to walk in. Some cyclists use special shoes that attach to the pedals, but common footwear such as hiking boots or sneakers may suffice for your commute. Experiment to see what footwear gives you the best combination of comfort, efficiency, and convenience. You can also get waterproof booties that fit over your specialized footwear.

Cold-Weather Clothing Tips

If you’re warm when you leave home, you’re overdressed. You may feel chilly at first, but remember, cycling generates significant heat and you will warm up after a few minutes in the saddle. In cold weather, put a thin, non-cotton wicking layer against your skin to keep yourself dry. Then use an insulating layer on top of that, and finally, if you need it, a wind or rain jacket. Make sure the jacket has full front zippers and/or pit-zips to allow for ventilation.

Ear warmers and head coverings like hats or balaclavas enable you to cycle comfortably in cold weather. Head coverings may require helmet readjustment. Wear booties to keep your feet nice and warm. If you have to be wet (due to rain or perspiration), at least be warm. If possible, avoid cotton, which loses its ability to insulate when wet. Ask your local bike shop to give you some pointers and show you their cold weather cycling clothes.



Riding Tips

Braking

Brakes are among the most important parts of your bike to keep in good working order. The front brake delivers approximately 70% of a bicycle's stopping power, yet many underutilize it because they are afraid of flipping the bike. By shifting your body weight backwards as you brake, your bike will remain stable. The harder you need to brake, the more you should shift your weight backwards.

For maximum stability, brake before (not during) a turn, especially in wet or gravelly conditions.

Looking Behind

Cyclists often swerve when they look over their shoulders prior to changing lanes or initiating turns. To minimize this tendency, concentrate on not moving your shoulders as you turn your head to look. Try bringing your chin to the shoulder you want to look over instead of just turning your head to the side. Practice this technique in an empty parking lot until you can look behind you without swerving. Using a rear-view mirror is not a substitute for actually looking over your shoulder.

Getting the Most From A Multispeed Bike

Using a multispeed bicycle is similar to driving a stick-shift car. In a car, you shift gears to keep the engine running at a reasonable pace. On a bicycle, *you* are the engine, and you should use the gears accordingly. A "cadence," or pace, of 60-80 revolutions per minute is a good target for novice cyclists, with higher cadences appropriate as your body and muscles adapt. Try pedaling at a constant cadence at different speeds by using different gears. Shifting to maintain a comfortable cadence may initially require a little practice but will soon become intuitive.

Riding Safely and Legally

Riding safely and legally starts with having a well-maintained bike. See the "Adjustments and Quick Releases" section to make sure your bicycle is in proper working condition.

Traffic Laws and Cycling

In his book *Effective Cycling*, John Forester writes, *"Cyclists fare best when they act and are treated as drivers of vehicles."* Why? When cyclists follow traffic laws they travel in a predictable fashion, clearly communicating their intentions to other road users. It's not just a good idea, it's the law (see Utah Codes listed on the back cover). Utah law defines bicycles as vehicles. Follow Utah traffic laws and, to maximize safety, remember to:

- Ride with the traffic flow and as far right as conditions safely allow.
- Occupy turn lanes when available.
- Obey all traffic signals including stop signs and lights.
- Have at least one hand in control of your bicycle at all times.
- Use bike lanes whenever possible.
- Yield the right-of-way to pedestrians.

Restricted Routes

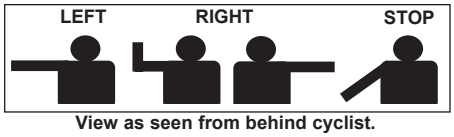
Bicycles are restricted from using certain routes due to safety concerns. Plan your route accordingly. Visit www.udot.utah.gov for a list of bike restrictions on state highways.

Signals, Turns, and Lane Changes

For left turns: extend your left arm straight out to the side.

For right turns: either extend your left arm to the side, bent upward at the elbow, or extend your right arm straight out to the side.

To signal for a stop or a decrease in speed: extend your straightened left arm to the side and down, with your palm facing to the back.



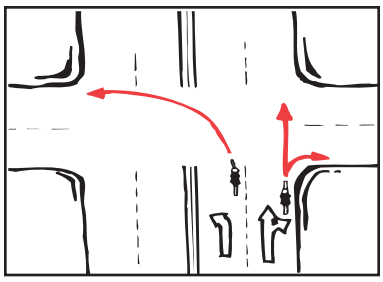
View as seen from behind cyclist.

Riding in Traffic

(Also see www.bikeleague.org/educenter/factsheets.htm)

- Be predictable by maintaining a steady line of travel. Avoid swerving in and out of lanes (including the parking lane). If possible, stay approximately three feet from parked cars. This can keep you from hitting opened doors and also makes you more visible to other drivers approaching from the side.
- Be alert when riding in traffic. Continually scan ahead for potential hazards such as road debris, potholes, car doors that may suddenly open in your path, and vehicles pulling into your path from side roads and driveways.
- Ride with confidence and make eye contact with other road users.
- At busy intersections, do not advance to the stop line by passing cars on the right—unless you are in a designated bike lane. (Even if you are in a bike lane, be cautious of vehicles swerving into the bike lane to pass on the right.) If there is no bike lane, wait in the through lane or turn lane with the other vehicles.

- At intersections, position yourself in the rightmost lane (or portion of it) that best reflects your travel intentions (i.e. use through lanes only when traveling straight, use dedicated turn lanes only when turning).
- In turn lanes that serve two destinations (i.e. a left and straight or a right and straight lane), ride on the side of the lane nearest your destination.
- It is legal (and safest) to occupy the center of a travel lane when cars cannot pass you safely and you can keep pace with traffic (see sidebar, "Taking the Lane").
- Sidewalk riding is more dangerous than street riding (and in some areas is illegal) due to reduced sight distances and reaction times. If you must use the sidewalk, be extremely cautious, especially when making the transition to and from the roadway, and always yield to pedestrians.
- Although shared-use or off-road paths may not have motorized traffic, they may have a mix of non-motorized users that are less predictable and make the path more dangerous than a street. Yield the right-of-way to pedestrians, skaters, pets, and wheelchairs, and be aware of less-experienced cyclists. Use hand signals and loudly announce "passing on your left" well in advance of passing. Remember, pedestrians have the right-of-way.



Utilize the rightmost lane or portion of a lane that goes to your destination

Riding in the Rain

Riding in wet conditions affects your bike's handling.

Remember these wet-weather cycling tips:

- Allow more time for braking.
- Sewer covers, grates, traffic-lane striping, and railroad tracks are slippery when wet. Avoid braking or turning while traveling on them.
- Avoid puddles, they often hide potholes or other road hazards that can cause you to lose control.
- Rain makes it difficult for drivers to see you, so be sure to wear highly visible clothing and ride with appropriate caution.

Riding at Night

At night, road hazards are less visible to you, and you are less visible to drivers. Utah law requires you to use a white headlight reflector visible for 500 feet and a red rear reflector. Blinking rear red lights are effective, but are not necessarily an acceptable substitute for a rear reflector. If you use only a blinking rear light, make sure it also complies with state law as a reflector. Using both a rear light and a red reflector is a good idea. Rear lights can fail (dead batteries, electronic or mechanical failure) and reflectors need incoming light to function (not all vehicles have properly aimed headlights, and some may have only one working headlight, which may not be aimed at you).

Additional reflectors or reflective tape on any moving part of the bike (wheels, pedals, etc.) will increase your visibility. Helmets, the highest point on your body when cycling, are also good places for reflective tape and front and rear lights. Helmet-mounted headlights illuminate wherever you look and allow you to get other drivers' attention by momentarily aiming your headlight at them.

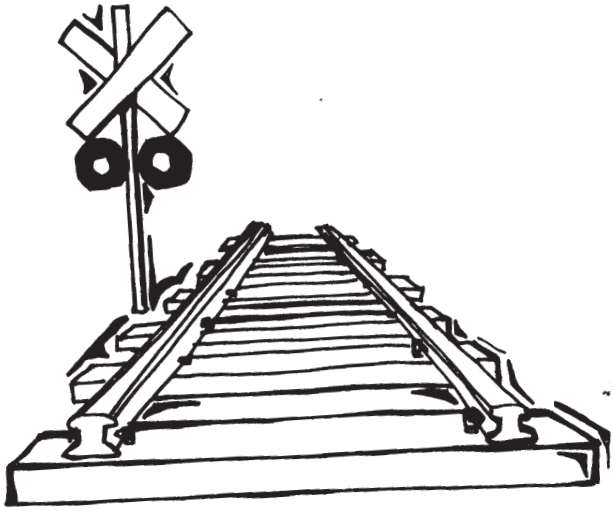
Think you've got all the visibility bases covered? See how you look to motorists by having a friend wear your visibility clothing and ride your light-equipped bike at night. Shine car headlights on your friend from the front, sides, and back. You may find the results illuminating!

Taking the Lane

Riding in the center of a lane (taking the lane) may be the safest course of action in certain situations, such as when:

- you are traveling at traffic speed and you need to prevent motorists from cutting you off,
- descending a hill and you need extra lane space due to your increased speed,
- lane width does not permit a motorized vehicle behind you to safely pass,
- road conditions (potholes, road debris or parked cars) keep you from riding farther to the right, and
- turning movements at intersections are involved (see illustration).

To be safe, use both the required red rear reflector and a red flashing rear light.



Storm Sewer Grates

Some storm sewer grates can trap or deflect front wheels, causing loss of control, so look for and avoid them. Public works departments are often willing to retrofit such grates with “bike-friendly” designs. Help them out by calling and telling them where safer grates are needed.

Crossing Train Tracks

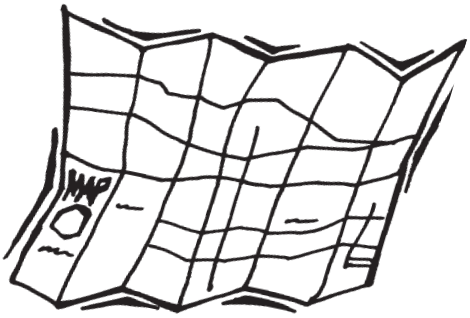
Train tracks, a significant hazard for cyclists, can almost always be crossed safely by taking a few precautions:

- Approach the tracks at a 90-degree angle.
- Unweight your front wheel slightly and stand with knees and elbows bent as you cross, in order to absorb road shock from the uneven road surface.
- Tracks can be slippery, so try not to alter your course or speed as you cross them.

Dealing With Discourteous Motorists

Most motorists are courteous and happy to share the road with cyclists. However, a few motorists feel like they own the road or are ignorant of the legal rights of bicyclists and sometimes forget their manners. Fortunately, these occurrences are rare. If it happens to you, keep your cool and remember that your safety is the priority. Avoid a confrontation, there is no sense in further aggravating an already tense situation. Your best bet is to know your rights, ride legally, and stay calm in all situations. If a motorist intentionally jeopardizes your safety, note his description and memorize the car’s license plate and description. This will allow you to file a report to the authorities.

Let’s get going!



Getting Started

Plan your commute route before you ride it the first time, then test it out on a day off. Prepare for your test ride as if you were actually going to work so that you get a good idea of how long it will really take you. Leave a little early the first few times until you get used to the routine and your fitness level increases. Consider asking around the workplace for bike commute buddies to ride with. You may find others who already bike commute or are considering doing so.

Talking With Your Employer

Let your supervisors know that you’re going to start bicycle commuting and ask for their support. If you work at a large organization, you may be helping your workplace to meet alternative transportation goals, and you may qualify for transportation-related incentives. Even small employers should be supportive of employees improving their health and making the community more livable by bicycling.

Pro-bicycle-commuting employers often supply secure bike parking and places to change and store your cycling and working clothes. You might even inspire or challenge your friends to join you in cycling to work!

Dressing for Work

If your workplace has an informal dress code, you might find it easy to ride in some or all of your work clothes, especially on nice days. If your work requires that you wear formal business clothing most or all of the time, or you have a lengthy commute that makes biking in your work clothes impractical, you'll probably find it easier to leave a variety of work clothing at work. Some commuters keep clothes at their workplace. You can store your clothes in a locker room, office, or other area provided by your employer.

- Suit separates, like jackets, slacks, and skirts, are ideal for keeping at work because they require less-frequent cleaning and need only be switched as seasons change. When they need cleaning or pressing, look for a cleaner near your office that provides pick-up and delivery service. Or, swap clothing on days that you drive, carpool, or take transit.

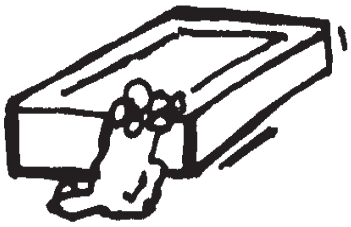
- If you plan to bring your work clothes in daily, it's a good idea to keep at least one neutral-colored shirt or blouse at your workplace in case you forget. Pack easily wrinkled clothing by rolling several pieces together, with the least-likely-to-wrinkle clothes on the inside.

- Cotton knit dresses, separates, and sweaters don't wrinkle easily, can be stored in a drawer, and can look as formal as pressed shirts and skirts.

- Keep a supply of shoes in the colors you need at work (your shoes will also last longer from not being worn outside as often!).

- It's handy to keep a stash of accessories like ties, scarves, socks, stockings, and clean undergarments at work.

Washing Up



Cleaning up is easy, even if your workplace doesn't have shower facilities. At a minimum, you can wash up in a restroom. You may want to keep a stash of toiletries and clean towels at work.

If you would like to take a shower after your commute but your workplace doesn't have one, find a nearby gym where you can shower and change. From there you can walk, ride slowly, or take transit to your workplace. Another option if your workplace does not have showers is to commute at a leisurely pace.

The Commute Home — *Time to Have Some Fun!*

While you may not want to work up a heavy sweat on your way to work, the ride home may be the perfect time for a refreshingly vigorous ride. Try timing your first few rides home, then when you feel you are up to the challenge, see if you can begin reducing the time it takes you to get home.

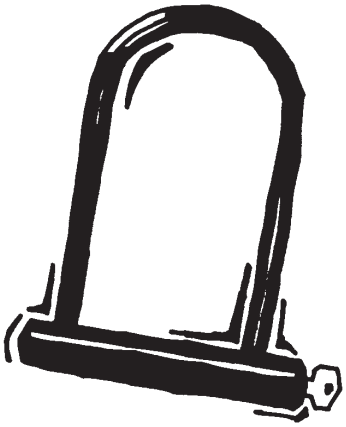
You can make the ride home a real workout by pedaling at a faster, more aerobic pace. If your commute home is short, try taking a longer route to increase your level of exercise. For variety, you may want to choose several different alternative routes that vary in length and degree of difficulty. Remember:

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 for theft.

U-Locks

U-locks are among the strongest locks available, but they are heavy and rigid—if they cannot get around an object such as a pipe or tree, they cannot secure your bike. One of the main ways U-locks are broken is by inserting tools inside the "U" to pry them open. Minimize this space by getting as small a U-lock as is practical. Then, take up the remaining space by locking your removable front wheel along with the rear wheel and frame.



Cable Locks

Cable locks offer more flexibility and are lighter weight than U-locks. Because they usually offer less security, they're best used in well-traveled areas and on quick errands. Cable locks with the lock built in are lighter and more convenient than those requiring a separate combination or padlock. Some all-in-one cables are opened with keys while others use combination locks.

- Consider where and how long your bike must be parked when deciding how and where to secure it. If possible, keep your bike inside your workplace or in a secure storage area at your workplace.

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

- Consider leaving your heavy U-lock at work, locked to your parking rack, and carrying a light cable lock with you for quick errands. At work, use both locks because thieves need more time and different large, bulky tools for each type of lock. Some thieves only carry tools to break one kind of lock, not both, making your bike much more difficult for them to steal.

- When not in use, cable locks can be wrapped around the seatpost and U-locks can often be carried on a rear rack. This frees up space on the frame for other accessories.

- Many lock manufacturers offer warranties that will replace your bike if it is stolen while using their lock. Be aware that such insurance may not be free. Read the product's fine print.

- Take all easily removed accessories with you when leaving your bike unattended (quick release seats, tools, pumps, etc.).

Lockers

Talk with your employers and see if they would be willing to install bike lockers. Lockers not only provide a higher level of security, but also a measure of protection from the elements. They can be installed singly or in large numbers, based on the number of bike commuters at your workplace. As mentioned previously, your employer may qualify for incentives or reach other transportation demand management goals by adding bike lockers.

You Can Do It!

Many people find that when they give bicycle commuting a try, their initial concerns fall by the wayside and they discover what a fun and exhilarating experience it is. Bicycle commuting is a great way to:

- meet new people and discover your community,
- get exercise on a regular basis and reduce stress,
- increase your energy level,
- reduce your transportation and vehicle-maintenance costs,
- save wear and tear on your car, and
- produce less pollution and traffic congestion.

Hopefully this guide has been helpful in making bicycle commuting in your community easier and more enjoyable. More help is available! The following sections provide some technical bike-oriented information and provide resources for getting additional information on bicycle commuting. ***Ride safely and have fun!***

Before you Ride

Here's a recap of the things you should address before bicycle commuting:

✔ make sure your bike operates safely;

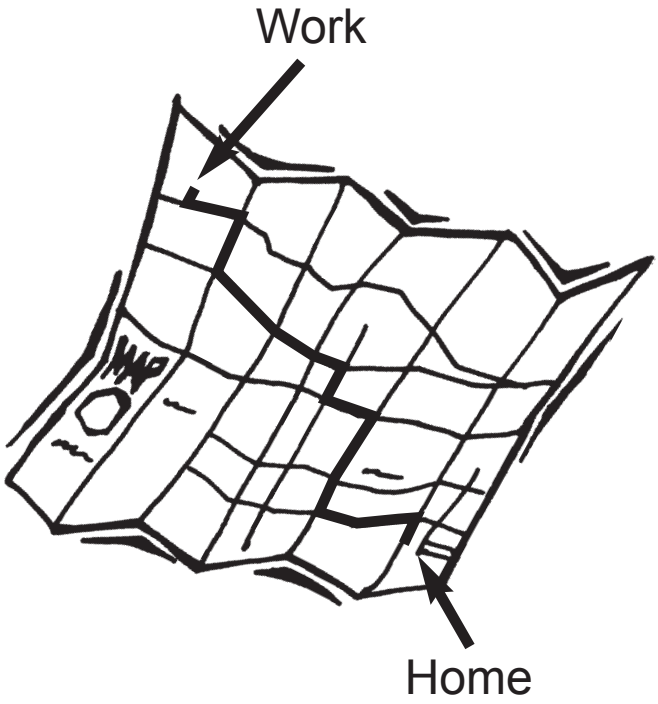
✔ acquire safety equipment and clothing;

✔ choose a route to and from work;

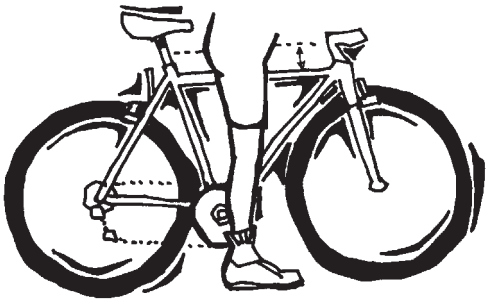
✔ choose work and commuting clothes and determine storage options;

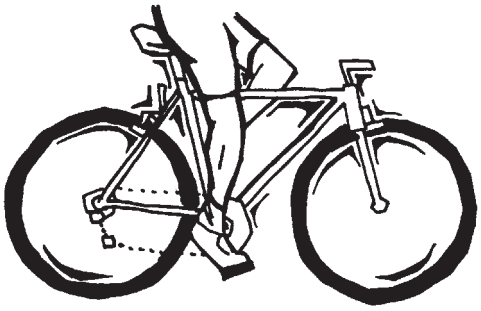
✔ find secure workplace storage for your bike;

✔ decide if bicycle commuting will require any schedule adjustments.



Adjustments and Quick Releases





Bicycle-Fit Tips

A knowledgeable bicycle expert or bicycle book can help you determine the size of bicycle frame that will best fit you. Before riding, you will need to adjust the seatpost height, saddle fore/aft position, and degree of saddle tilt.

- Seatpost height should be adjusted so that when seated on your bike, there is a slight bend in your knee when your leg is at the bottom of a pedal stroke.
- Fore/aft saddle position: Adjust the saddle so it provides you with a strong, comfortable riding position (ask a bike shop for help).
- Adjust the saddle so it is level initially, and make small adjustments if necessary. You may have to adjust the "reach" (horizontal size) of your bicycle so that your back, neck, and arms are comfortable. Reach adjustments are made by either adjusting stem height, or exchanging the stem or handlebar for one that gives you proper positioning. Your arms should be slightly bent to provide cushion from road shock and your hands should completely enclose the handlebar and easily reach the brakes.

Quick Releases

Many bicycles are equipped with quick releases that hold and adjust the seatpost and clamp the wheels to your bicycle's frame and fork. Learning the proper way to use quick releases is very important for safe bicycle operation and, fortunately, it's very easy.

Quick releases have a lever on one side and an adjusting nut on the other. The adjusting nut is used to change the amount of clamping force generated as the lever is moved from the open to the closed position. **When correctly adjusted, clamping action will start when the lever is approximately halfway through its travel.** Practice using your quick releases by opening and closing them a few times while changing the adjusting nut's position.

Remember to follow these rules with quick releases:

- Check your wheel and seat quick releases before each ride.
- Make sure the wheel axles are all the way in the dropouts and that the wheel is centered in the frame/fork before closing the quick release.
- When closed, most quick-release levers curve towards the bike, and the word "close" or "closed" can be seen. These visual cues can help you notice when quick releases are and are not closed properly.

A well-maintained bicycle is safer and more enjoyable to ride. The following checklist will help you ensure safe operation of your bike:

Saddle, Handlebars, and Pedals

These allow you to control your bike, so make sure they are securely fastened. Stems and seatposts have "minimum insertion" marks, which should not be exposed (if either mark is visible, the component is over-extended and may break without warning during use). Bike shops carry longer seatposts and stems to safely accommodate any riding position.

Special Fit Notes for Women

Many bicycles are designed primarily to fit men. If you are shopping for a new bike, you may want to spend a little extra time to find one that fits you properly. Bike shop personnel have the expertise to help you find one that will fit you comfortably, which will make your rides much more enjoyable.

If you already have a bike, but it feels uncomfortable in any way, check with your local bike shop to see about adjusting it or retrofitting it with items like different length stems, better brake levers, a more comfortable saddle, etc.

Safety Checks

✔ Tire Inspection and Inflation

Make sure tires are in good condition (no splits in sidewall or tread). Inflating tubes to their recommended pressure keeps them in place, helps prevent flats, and increases your bike's efficiency (it will be easier to pedal). Make sure your quick-release levers are tight before each trip. If one of your tires wobbles, have it checked by a bike mechanic.

✔ Brake Inspection

Squeeze both brake levers. If the levers touch the handlebar, your brakes are too light and need to be adjusted. Bike shops or repair manuals can show you how to make adjustments. Have frayed or rusted cables and damaged housing replaced. Inspect the brake pads to make sure they contact the rim squarely and will not touch either the tire or the spokes. The small cutouts on brake pads are "wear indicators," when they are no longer visible, replace the pads.

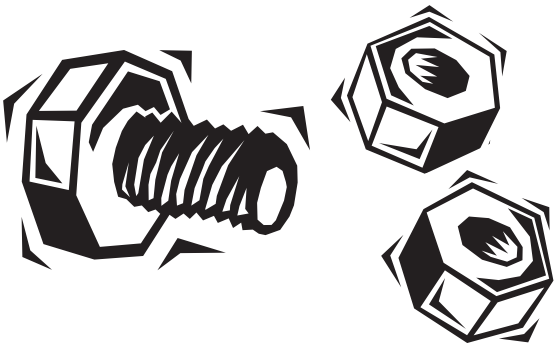
✔ Nuts and Bolts

Regularly check your racks, fenders, and other accessories to make sure they are mounted securely and do not obscure your lights or reflectors.

✔ General Maintenance

Consult your local bike shop or owner's manual to learn the basics for keeping your bike in good operating condition. Regularly cleaning and lubricating your chain, and inspecting your bike will help you spot potential problems and will indicate when a professional tune-up is needed.

See http://www.bikeleague.org/educenter/factsheets/abcquickcheck.htm for more information.



Resources

Organizations

* League of American Bicyclists (national advocacy & safety information) (202) 822-1333 www.bikeleague.org

* Utah State Dept. of Transportation
  - (801) 965-4000
  - UDOT Bicycle & Pedestrian Coordinator (801) 964-4564

* Clubs—ask at bike shops or contact the Bicycle & Pedestrian Coordinator

* Utah Bicycling Information
  - www.cyclingutah.com

Books

* *A Woman's Guide to Cycling* by Susan Weaver. This book provides a wealth of moral support from women cyclists.

* *Bicycle Commuting Made Easy* from Bicycling Magazine. This book covers riding in traffic, eating right, and commuting in poor weather.

* *Effective Cycling* by John Forester. The ultimate guide to safe and efficient cycling.

Internet

* *Commute-Logistics* is a very helpful e-mail forum for bicycle commuters. To join the forum, go to www.topica.com/lists/commute-logistics.

* The following site addresses frequently asked cycling questions and has many useful links: http://draco.acs.uci.edu/rbfaq.

* UDOT Web site: www.udot.utah.gov

Utah Bicycle Laws Summary

This list is a plain-language summary of the laws that apply to bicyclists and is provided for general information only. The actual wording of these laws, and additional laws, may be found in the referenced sections Title 41, Chapter 6 of the Utah Code, available online at **www.le.state.ut.us** under Laws/Constitution.

- A "Bicycle" means every device propelled by human power upon which any person may ride, having two tandem wheels, except scooters and similar devices **(41-6-1)**.
- Your bicycle is considered a vehicle and you have the same rights and are subject to the same provisions as the operator of any other vehicle **(41-6-84(1))**. This includes obeying traffic signals **(41-6-24)**, stop and yield signs **(41-6-72.10)**, and all other official traffic control devices **(41-6-23)**. The following paragraphs point out those laws specifically addressing the needs and responsibilities of bicyclists.
- Ride in the same direction as traffic **(41-6-87(2))**.
- Ride as far to the right as practicable except when:
  - Passing another bike or vehicle,
  - Preparing to turn left,
  - Going straight through an intersection past a right-turn-only lane,
  - Avoiding unsafe conditions on the right-hand edge of the roadway **(41-6-87(1))**.
- Ride no more than two abreast and then only if you would not impede traffic **(41-6-87(3))**.
- In some instances where an off-roadway bike path has been provided, you may be directed by an official traffic control device to use the path rather than the roadway **(41-6-87(4))**.
- To make a left turn, you have two options as a bicyclist:
  - Use the left turn lane or two-way left turn lane in the same manner required of motor vehicles **(41-6-66)**; or
  - Staying on the right side of the roadway, ride through the intersecting roadway to the far corner and stop. After it is safe and legal to do so, cross going in the new direction, continuing to travel on the right side of the roadway **(41-6-87.5)**.
- Always signal your intention to turn right or left, change lanes, or stop at least three seconds before doing so **(41-6-69)**. You do not have to maintain a continuous signal if you need your hand to control the bike. Once stopped in a designated turn lane you are not required to signal again before turning **(41-6-87.7)**.
- The acceptable hand signals are:
  - Left turn - left hand and arm extended horizontally;
  - Right turn - left hand and arm extended upward or right hand and arm extended horizontally; and
  - Stop or decrease speed – left hand and arm extended downward **(41-6-71)**.
- Always yield to pedestrians and give an audible signal when overtaking them. Use care and safe speeds to avoid collisions. Never ride where bicycles are prohibited **(41-6-87.3)**.
- Never carry more people on your bike than it was designed and equipped to handle; though, as an adult, you may carry a child securely attached to you in a back pack or sling **(41-6-85)**.
- While cycling, never attach yourself or your bike to any vehicles moving on the highway **(41-6-86)**.
- Never race bicycles on the highway except in events approved by state or local authorities **(41-6-87.9)**.
- Do not carry any package, bundle, or article that prevents using both hands to control your bike. You must have at least one hand on the handlebars at all times **(41-6-88)**.
- You are required to have a white headlight, red taillight or reflector, and side reflectors, all visible for at least 500 feet **(41-6-90)** any time you ride earlier than a half hour before sunrise, later than a half hour after sunset, or whenever it is otherwise difficult to make out vehicles 1000 feet away **(41-6-118)**.
- You must have brakes capable of stopping you within 25 feet from a speed of 10 miles per hour on dry, level, clean pavement **(41-6-89)**.
- You cannot have a siren or whistle on your bike **(41-6-89) .**
- You may park your bike on sidewalk along a roadway anywhere it is not expressly prohibited or where it would impede pedestrian or traffic movement. You may also park your bike on the roadway anywhere parking is allowed as long as you are parked within 12 inches of the curb or edge of roadway **(41-6-104)** and your bike does not block any legally parked motor vehicles. Your bike does not have to be parallel to the curb, but may be parked at any angle to the curb **(41-6-87.4)**.
- A peace officer may at any time upon reasonable cause to believe that your bicycle is unsafe or not equipped as required by law, or that its equipment is not in proper adjustment or repair, require you to stop and submit the bicycle to an inspection and a test as appropriate **(41-6-87.8)**.