

BICYCLING AS TRANSPORTATION

A how-to guide for Twin Cities bike commuting.



Metro Transit

a service of the Metropolitan Council

metrotransit.org/bike

Bicycling as Transportation

Version 2.0

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Many people think of bicycles as equipment for recreation, not vehicles for transportation. The truth is they're both.

Bicycling saves money, saves time and improves fitness. Plus, a bicycle can provide a trip to work, school, the store — virtually everywhere someone might drive. Traveling by bicycle reduces traffic congestion and has little impact on the environment. And bicycles are fun!

Bicycle commuting is easy but it does require some adjustments to your routine. Read on for useful information for anyone — from the curious to the committed — on bicycle commuting in the Twin Cities (and beyond).



THE BENEFITS

Save money



Every year, the typical Twin Cities driver spends hundreds of dollars just to get to work and around town. Fuel and maintenance add up fast when drivers put on those miles day after day. And that doesn't include parking expenses or ownership costs like depreciation, insurance, financing, registration or taxes.

In fact, the American Automobile Association (AAA) estimates that the real cost to drive one mile on average is 57 cents. At 15,000 miles per year, that adds up nearly \$8,500.

You can save money by simply driving less. Use the savings to invest in a bicycle and pay for maintenance and commuter-friendly gear.

Save on parking too — bring your bicycle into your workplace, lock it up outside or store it in a locker. For \$4 per month, you can rent secure, weatherproof bicycle lockers at dozens of locations. Read more about bicycle lockers on page 18.

¹ AAA derives these figures from average fuel, routine maintenance, tires, insurance, license and registration, loan finance charges and depreciation costs.

2010 *Your Driving Costs*, American Automobile Association.
aaaexchange.com

THE BENEFITS *(continued)*



Stay fit

Lack of activity contributes to cardiovascular disease (the #1 killer in the United States), diabetes, obesity and other conditions that decrease quality of life and/or reduce lifespan. Bicycling provides low-impact exercise as you travel. You choose your pace and can continue to ride at any age.

You don't need to schedule time for workouts or pay for a health club membership — your commute is your workout. Plus your employer may provide incentives for bicycle commuters; ask at work.



Save time

More than 41 percent of Twin Cities trips are less than three miles; over a quarter are less than two miles.² A bicycle is often the fastest way to take these trips.

For longer trips, combining a bicycle with a bus or train ride can provide time-saving options. All Metro Transit buses and trains have free bicycle storage racks. Bicycling for part of the trip can eliminate the need for transfers or allow you to reach a transit stop faster than on foot. Or ride transit one way and ride your bicycle the other (p. 19).



² 2000 Travel Behavior Inventory. Table 58A. Metropolitan Council. metro council.org/planning/transportation/TBI_2000.htm

³ Green Power Equivalency Calculator Methodologies. U.S. Environmental Protection Agency. epa.gov/greenpower/pubs/calcmeth.htm



Reduce your impact



An average passenger vehicle produces tons of emissions each year, affecting air quality and climate change. Because bicycle travel is virtually emissions-free, every car trip you can replace cuts greenhouse gas emissions and improves air quality. For every mile you pedal instead of driving, you save about a pound of CO₂, the primary greenhouse gas.³

Enjoy yourself



You've heard "you never forget how to ride a bicycle" — the fun of riding comes back just as readily. The freedom of bicycling is a unique experience and the pace allows you to develop a new relationship with the areas you travel through. Bicycling is also an activity that is suited to socializing — it's easy to ride and chat.



GETTING STARTED

The Route

Learning a good, safe route will be key to the quality of your commute. Although it's legal to ride on nearly every roadway (except interstates or some restricted streets such as Marquette and 2nd avenues in downtown Minneapolis), many bicyclists prefer riding on bikeways, trails or streets with lower speed limits or less traffic. Also consider scenery, lighting and stops along the way.

For a new bicycle commuter, joining the Commuter Challenge program is a good way to get started. Learn more about this free program and sign up at mycommuterchallenge.org.

Other resources for navigation include Cyclopath — an online route finder — and free bicycle maps for some metro-area counties, cities and even neighborhoods. See metrotransit.org/bike for links to these resources.

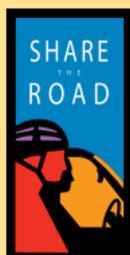
Develop a route to your liking by researching different ways of getting to your destination. Note the streets that bicyclists use and which might best meet your needs. Maybe one route is better on the way to your destination and another is better on the way home. To get comfortable with the timing and feel of the route (and to make sure that you are able to enjoyably ride it), practice on a weekend or during low-traffic periods.



The Law

The Minnesota Department of Transportation's Share the Road campaign distills safety guidelines and much of Minnesota bicycle law and into eight simple points:

- 1 Bicyclists may ride on all Minnesota roads, except where restricted.
- 2 Bicyclists should ride on the road, and must ride in the same direction as traffic.
- 3 Motorists must at all times maintain a three-foot clearance when passing a bicyclist.
- 4 Bicyclists must obey all traffic control signs and signals, just as motorists.
- 5 Motorists and bicyclists must yield the right-of-way to each other.
- 6 Bicyclists must signal their turns and should ride in a predictable manner.
- 7 Bicyclists must use headlight and rear reflectors when it is dark. To increase visibility, add a rear flashing light.
- 8 Bicyclists should always wear helmets.



sharetheroadmn.org is a great resource for more in-depth information on these points and a summary of all Minnesota bicycle laws.

GETTING STARTED *(continued)*

The Gear

Whether you are buying a new bicycle, resurrecting an old one or having one modified for commuting, talk with the staff at local bike shops and ask lots of questions. The right sizing and fit are very important — many styles of bicycles are available, and not all are designed for the types of riding you're interested in.

Many advanced bicyclists have very specialized gear. You may find that some of this equipment is handy for you too, but you really don't need all of it to get started commuting. Here are some basic considerations:

Safety



Although helmets are not required by law, wearing one can be the difference between life and death or serious injury in a crash. Rear reflectors (or lights) and headlights are required by law and are especially necessary for nighttime or poor weather riding. Light-colored, bright or reflective clothing makes

you more visible to motorists. A mirror can also improve your traffic awareness. Use special caution riding at dusk – this is the most dangerous time for bicyclists. Always carry personal identification.

Security

You'll want a good lock (or locks) to protect your bicycle. Even if you can store your bicycle indoors or in a garage, it's still a good idea to lock it to something. Combining a U-lock and a cable lock provides extra protection.

Lockers are available for rent through Metro Transit, the City of Minneapolis, the University of Minnesota and some employers as well. Find locations nearest you at metrotransit.org/bike.



Comfort

Shoes and clothing can make a big difference in how your ride feels. Dressing for the weather and in removable layers allows you to adapt to conditions throughout the day. Fenders keep roadway water and grime from spraying you.



GETTING STARTED *(continued)*

Cargo



There are many ways to bring things with you. A backpack works, but can be uncomfortable on longer rides. Racks and bags (such as messenger bags or panniers) can be used to carry loads more comfortably. Bottles and cages are helpful for carrying liquids.

Back-up plans



Carry change for a phone call or transit fare. Bring a cell phone. Join the Guaranteed Ride Home program (p. 18). Learning how to fix a flat tire and carrying a spare tube and patch kit can get you moving again quickly — many local bike shops provide sessions that teach this simple skill. There are also many step-by-step resources online — or ask another bicycle rider for a demo.



SAFE BICYCLING

“Cyclists fare best when they act and are treated as the drivers of vehicles.”

John Forester, author of *Effective Cycling*

Although bike paths are prevalent in the Twin Cities, it is likely that you will need to become comfortable riding on streets in traffic when commuting by bicycle. Riding on sidewalks is illegal in business districts and some other areas and is often the most dangerous option. Riding lawfully, predictably and confidently — while indicating your intentions to other vehicles — is essential for safety.

Traffic Tips

In general, ride in a straight line in the same direction of traffic. Ride to the right of faster moving traffic and at least three feet from the curb, parked cars or other obstructions to make yourself visible and to avoid roadside hazards. When riding alongside parked cars, signal and move into the lane far enough to avoid opening doors. Always pass other vehicles on the left.

If you must use a sidewalk or crosswalk, consider walking your bicycle or ride very slowly. Always yield to pedestrians and let them know you are approaching when passing. Be especially cautious when transitioning to and from the roadway.

SAFE BICYCLING *(continued)*



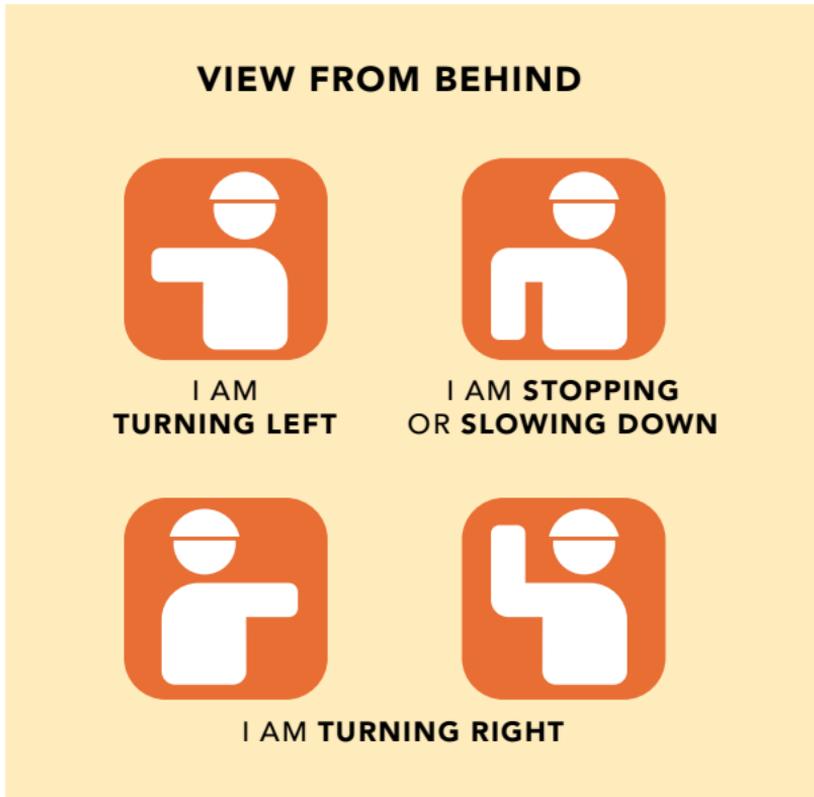
Cross train tracks, sewer grates and other obstructions at a right angle and transition your weight toward the back of the bicycle to prevent getting your wheel caught, which could cause a crash. Cross railroad tracks only at marked crossings. Expect a train from any direction, on any track at any time. Always look and listen before crossing tracks.

Safety Around Buses

- » Before passing a bus or making a lane change, make sure the driver can see you and be sure to signal. If you can't see the bus mirrors, the driver can't see you.
- » Never pass on the right side of a bus. Buses make frequent stops, so always pass on the left.
- » Never turn in front of a bus at an intersection — wait until the bus has left the stop.

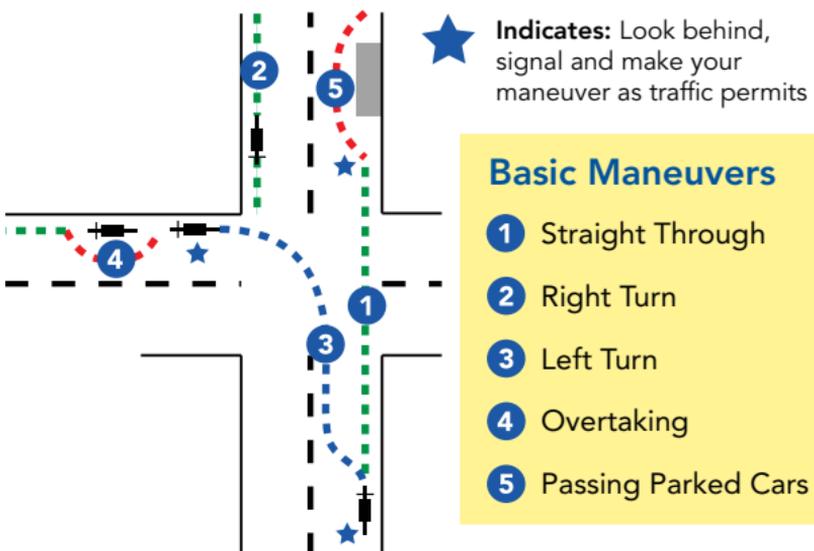
Turn Signals

When preparing to turn or to make a lane change, plan ahead to avoid a last-minute decision. Signal about 100 feet before turns or lane changes.



Lane positioning

The diagram below shows the correct lane positioning for a variety of different scenarios.



Graphic courtesy of Commuter Connection

SAFE BICYCLING *(continued)*

Other Important Signals

- » **Eye contact:** A simple way to acknowledge — and be acknowledged by — motorists.
- » **Pointing:** Clearly indicating where you intend to ride can be a useful signal in ambiguous situations.
- » **Scanning:** Briefly looking over your shoulder prior to signaling is a good way to both assess the traffic situation and indicate your intentions to motorists behind you. Practice this skill in an empty parking lot to learn to do it without swerving.
- » **Put your foot down:** When approaching an intersection with traffic from other directions, taking a foot off of your pedal while braking is often the clearest and easiest way to signal your intent to stop.



- » **Sound off:** Using a bell, horn or your voice when passing others or in other situations is also a good skill to develop.
- » **Caution behind:** In certain situations like narrowing streets or tight/blind turns, the “Stop/slow” signal can be effectively used to warn motorists of a change ahead. It can be used effectively along with . . .
- » **Taking the lane:** If you can ride the speed of traffic or traffic can’t pass you safely, pulling into the center of the lane is generally the safest way to ride.



READY FOR WORK

Appearing presentable at work after a ride is a concern for many considering bicycle commuting. Here are some ideas:

- » If your trip is short or you can ride at a relaxed pace, you may be able to ride in your work clothes (an ankle strap will keep your pant leg out of the chain).
- » Store your bicycle in a rack on the bus or train on the way to work then pedal home (p. 19).
- » If you need to change clothing, you can either leave clothes at work or carry them with you.
- » Your employer may have shower and locker facilities available or you may be able to find facilities nearby your workplace (in the same building, for instance).
- » Your employer may have a room where you can privately change into work clothes and clean up.
- » Changing in the restroom and freshening up is always an option. You may want to bring or store toiletries and a towel ("pack" towels are super absorbent, small and light). Some bicyclists use baby wipes to freshen up.



CONNECTING WITH TRANSIT

Bicycle Lockers

These lockers provide safe, weatherproof storage — it's like a garage for your bicycle and equipment. Bike lockers are available at many Park & Ride lots, light-rail stations and other Twin Cities locations.

For Metro Transit lockers, annual rental (April 1 through March 31) costs \$48 plus a refundable \$40 damage deposit. For details, visit metrotransit.org/bike or call 612-373-3333, and choose "bicycling programs" from the menu.

Lockers are also available through the City of Minneapolis, the University of Minnesota and some employers in the metro area.

Guaranteed Ride Home

With the Guaranteed Ride Home program, you won't have to worry about being stuck somewhere without a ride. It's easy to use and it's free.



When you enroll, you'll receive two coupons that can be used for a bus or train ride, or reimbursed for cab fare up to \$25. Every six months you receive replacement coupons with your program renewal.

Commuters who bicycle and/or ride the bus, train, carpool, vanpool, or walk at least three days a week to work or school are eligible. Sign up today at metrotransit.org/grh or call 612-373-3333 for more information.



Nice Ride MN is the Twin Cities public bicycle sharing program with many stations located close to transit connections. Learn more at niceridemn.org.



Bicycle Racks on Buses and Trains

All Metro Transit buses and trains have free bicycle racks on them so you can pedal part of the way and ride the rest.

Here are some ways to use them:

- » To increase the number of transit connections and eliminate transfers
- » For one-way commuting
 - Ride into work on a bus or train if you're dressed for work and don't want to change clothes
 - Pedal in for a morning energy burst and take transit home from work if you're tired at the end of the day
 - If one direction of your route is mostly uphill, consider using transit for that portion
- » During poor or dangerous weather
- » For an equipment failure, such as a flat tire
- » For recreational outings
 - Leave your car rack behind and take transit one-way

Other things to know:

- » Only two-wheeled, non-motorized bikes are permitted.
- » Racks will hold many wheel and frame sizes — bicycles with wheels from 20 to 29 inches in diameter generally fit.
- » Call Metro Transit Lost & Found at 612-373-3333, option 3, if you have left your bicycle on a bus or train.
- » Metro Transit is not liable for damage to bicycles, except if Metro Transit is found to be negligent or at fault in an accident. Theft, damage, injury while loading and unloading, acts by a third party and all other incidents are solely the responsibility of the bicyclist and not Metro Transit.

CONNECTING WITH TRANSIT *(continued)*



Pre-boarding tips

These tips apply to Metro Transit buses — policies may vary by transit provider.

- » Consider practicing loading your bicycle when a bus is between trips, during less-busy times, such as midday, evenings or weekends or on a practice rack. Check metrotransit.org/bike to find locations with practice racks.
- » Always approach the bus from the curb — never ride around to the front of a bus from the street side.
- » Wait with your bicycle on the curb for the bus to come to a complete stop — do not wait in the street. When it is dark outside, consider using a flasher light to hail an approaching bus. This can be especially helpful during the winter months when snow has accumulated on the curb.
- » Consider locking your bicycle's rear tire and frame together before loading your bicycle on the rack. Bring any loose items with you and consider removing water bottles and bags from your bicycle.
- » You do not need to speak with the bus driver before loading your bicycle on the rack. But, do make eye contact to make sure you are seen as you move in front of the bus to load your bicycle.
- » Use a kickstand to stabilize your bicycle or position the bicycle between yourself and the bus and just reach over it to begin loading.
- » Note: By policy, bus drivers cannot leave their seat to assist you with loading.

Loading your bicycle on the rack

Step-by-step loading instructions are printed on the rack.

If yours is the only bicycle:

1 Squeeze the handle to release the locking pin



2 Lay the rack down flat and release the handle



3 Hoist (or roll) your bicycle into the slot closest to the driver if possible



Always load the bicycle directly in front of the bus or from the curb — do not expose yourself or your bicycle to passing traffic. Hoisting the bicycle by the seat tube and stem provides good leverage and keeps the bike stable.

continued on next page

CONNECTING WITH TRANSIT *(continued)*

4

Pull the support arm out completely and then up and over the front tire



5

Secure the arm as closely to your fork or fender as you can



Do not place the arm on top of a fender or brake — it should be in contact with the tire directly.

If there is already a bicycle on the rack, hoist or roll your bicycle into the available slot and proceed as above.

If the rack is loaded with two bicycles, you may ask the driver if you may bring your bike aboard. The driver **always** has the discretion to determine whether or not your bicycle can be safely accommodated on that trip.



Unloading your bicycle from the rack

- » Notify the driver that you will be unloading your bike.
- » Exit the bus through the front door.
- » Unload your bike by simply reversing the loading procedure.
- » If yours is the only bicycle on the rack, squeeze the handle and return the rack to its upright position.
- » Return to the curb with your bike.
- » Never cross in front of a bus — wait until the bus has left the stop.

Riding the bus with your bicycle

- » Hop on and pay your fare. There is no additional charge for your bicycle.
- » If possible, sit near the front of the bus where you can check on your bike.

If the driver determines that you can bring your bicycle inside the bus:

1. Allow other passengers to board first.
2. Quickly remove any sand, snow, water or debris from the wheels.
3. Cautiously hoist or roll your bicycle onto the bus.
4. Ask the driver where you should sit or stand with your bike — generally this will be the rear of the bus.

CONNECTING WITH TRANSIT *(continued)*

Loading your bicycle on a light-rail train

- » Walk — do not ride — bicycles at stations, on platforms and on trains.
- » Bicyclists are required to use elevators or ramps (where available) to access station platforms.
- » Pay your fare on the platform. After paying, walk your bicycle to the boarding area and wait behind the line.



- » As a train approaches, position yourself to board. Each train car has four doors; the middle two doors are closest to the onboard racks.
- » Wait for those getting off the train, then let others board before rolling your bicycle through the doors.
- » There are two upright racks. If available, load your bicycle in the one farthest from the door.



« See an instructional video on bikes and transit at metrotransit.org/bike.

- » Position the rear wheel between the hoops of the lower rack and hook the front wheel at the top.



- » Remove any unsecured items and collapse your seat post if possible.
- » Stand with your bike or take a nearby seat.
- » As you approach your stop, prepare to remove your bike from the rack as soon as the train stops moving.
- » Allow others to exit before you unload your bicycle.

To ensure safety, Metro Transit reserves the right to limit onboard storage of bicycles during special events or when trains are crowded. If there is no room for you and your bicycle on the train or the bike racks are full, wait for the next train.

CONNECTING WITH TRANSIT *(continued)*

Loading your bicycle on a Northstar train

- » Walk — do not ride — bicycles at stations, on platforms and on trains.
- » Bicyclists are required to use elevators or ramps (where available) to access station platforms.
- » Pay your fare on the platform. After paying, walk your bicycle to the boarding area and wait well away — *behind the yellow line or further* — from the approaching train.
- » As the train approaches, position yourself to board. Each train has two doors. Load your bicycle at the door marked with the bicycle symbol.
- » Allow others to board and exit the train before lifting your bicycle through the entrance.



- » You will see the storage area a few feet away. Instructions are printed above the foldable seat.

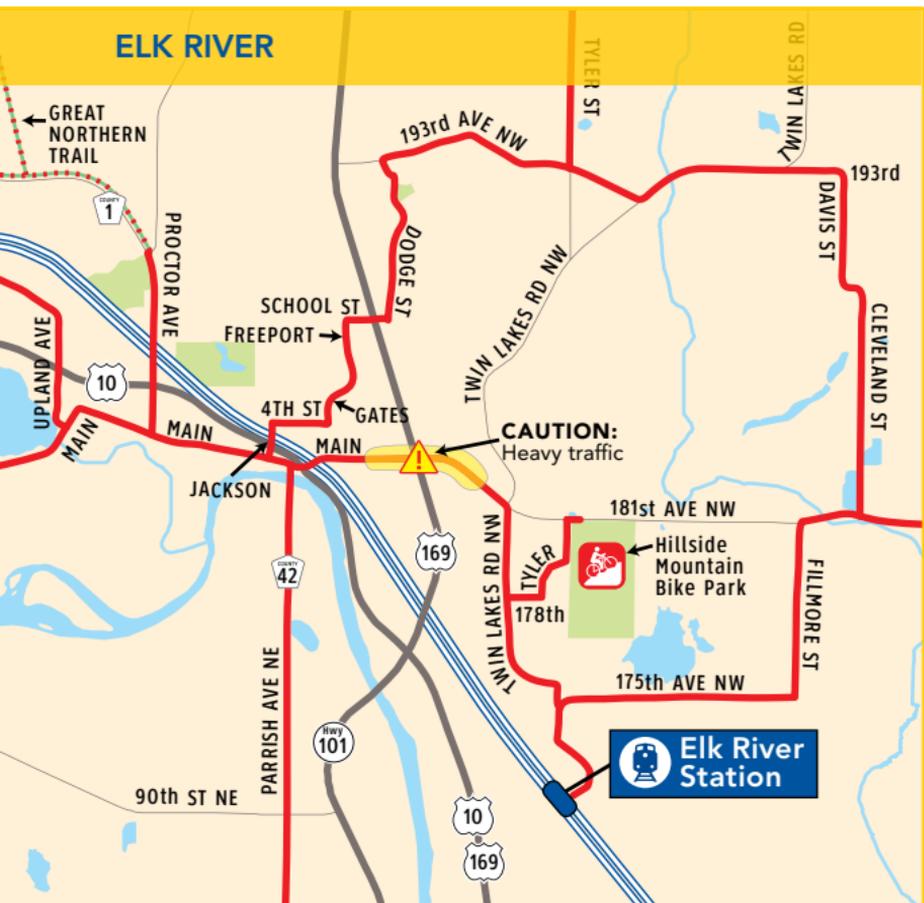
- » If necessary, fold up the seat and place your wheel in the bracket closest to the folded seat. Secure the wheel tightly with the yellow strap.



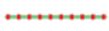
- » When your bicycle is secured, stand with your bike or take a nearby seat.
- » As you approach your stop, prepare to remove your bicycle from the rack.
- » Allow others to exit the train before you exit with your bicycle.

CONNECTING WITH TRANSIT (continued)

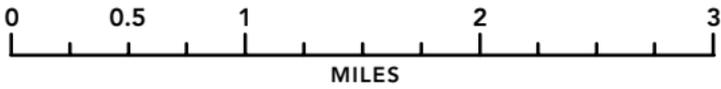
Bicycle connections to Northstar stations



LEGEND

-  Northstar Rail
-  Bike trail
-  Recommended bike route*

SCALE

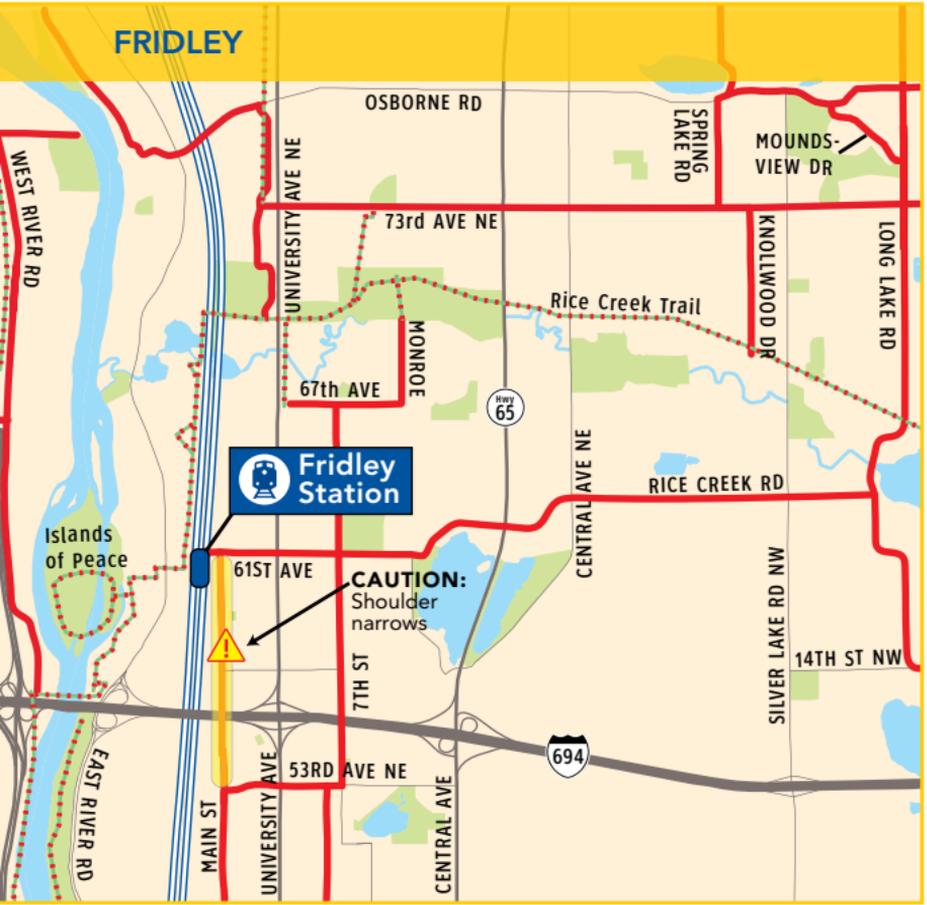


* Routes recommended by Bikeeverywhere



CONNECTING WITH TRANSIT (continued)

See legend on p. 29.





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Learn about all of the ways Metro Transit is Going Greener at metrotransit.org/gogreener



metrotransit.org/bike



- 494 Commuter Services**
494corridor.org



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