

# Silver Wheels Safe Cycling Practices

## Introduction

In January, 2015 the silver Wheels board agreed to create a Safety Committee for the purpose of preparing “standards” of expected riding behaviors from all members. What follows is the document produced by that committee.

This document includes more than just a list ways to ride safely. We have tried to include some of the thinking and reasoning behind the standards.

Readers should look at this as a “living” document that will continue to evolve over time. With input from member and other sources, we hope to continuously improve what we believe to be the best and safest practices for our members. As changes are made the membership will be informed so all can be kept up to date.

We intend to add more illustrations, photographs and even videos to this document. Often we can learn from a live or depicted action better than from mere words alone.

Accompanying this document is the smaller “Quick List” of Safe Cycling Practices. This is a card made for carrying with you if you wish. It also can be used as a quick reference for when a question might arise as to intended standards.

The Quick List format does not follow the same format of topics as the full document. They were developed for different reasons and at different times. We may change that later.

At any time, members should feel free to communicate with Ed Stewart about the Safe Cycling Practices. As stated above, this is a document that will evolve over time. Your comments are always welcome. Send them via email to [emsco514@gmail.com](mailto:emsco514@gmail.com). In particular, if you have suggestions for how items should be restated to make the practice better understood, please give us your ideas. We are also interested in ways to best depict these in illustrations, photos and videos.

# Silver Wheels Safe Cycling Practices

updated 4/17/15

## I. Communicating With Other Riders

### A. Calling Out - Road Hazards

1. Identifying road hazards can be done by yelling out to others behind you and pointing in the general direction where the hazard is and even saying if it is on the left or right.
2. The identifier does not have to name the item - this often becomes unclear in groups.
3. Simple voice calls are adequate, such as "Hole!" or "Rock!" or "Road Kill!"
4. In groups, simply pointing in the general direction of the hazard is adequate.
5. It is usually the lead rider who identifies hazards. In larger groups, others behind the leader should call out to those behind them also.
6. When riding at night, it will be helpful to add which side the hazard is on after you yell out. Riders behind you may not be able to see your arm pointing very well. "Hole, left!" works.
7. Only factors that pose as real hazards should be called out. A small amount of loose material may be no hazard at all and can be ignored. It is annoying when non-hazardous items are called out unnecessarily and makes riders toward the rear pay less attention to future identifications. Likewise, in the presence of repeated hazards, such as on a road with a lot of debris, calling out each and every item is annoying and unnecessary.

### B. Calling Out - "Clear"

1. This refers to when a lead person at an intersection yells out to others behind them that the road is clear of other traffic and supposedly is safe to cross without checking. And that is pretty much what happens - others behind that lead rider will proceed through the intersection believing it is clear and may not check for crossing traffic.
2. Calling out "Clear" poses a danger and **needs to be avoided**. Instead, each rider must decide for himself if the intersection is clear to proceed or not.
3. The reasoning behind this is that, while the intersection may be 'clear' for that first rider, situations change quickly at intersections. When there is a group of riders, it takes a while before each gets up to the point of being able to see if the way is clear; in that time the intersection can easily become not so clear.

### C. Calling Out - "Car Left", "Car Right"

1. It is appropriate to call out when traffic is approaching from the left or right.
2. In a group situation, it is also helpful to point in the direction of the oncoming vehicle because persons behind you may not be able to hear what you said. Pointing lets them know there is something to look at in that direction.
3. It is not necessary to indicate what type of vehicle is approaching. It is okay to call anything a "car" in this case. Yelling and pointing will get the desired reaction even if you call a Winnebago a car.

### D. Calling Out - "Car Back"

1. This refers to when someone in a group identifies that a vehicle is approaching from the rear and yells out "Car Back!"
2. Depending on the size of the group, this can be done by multiple riders, but is not necessary for all to yell it out. It is important that the riders at the front know of the approaching vehicle. One should assume others near them have heard the same call so it should not need to be repeated.
3. In dense urban traffic, all riders should assume there will be cars back and so this is

unnecessary in that situation.

4. When hearing this call, all riders should check to see where the traffic is (use your mirror or scan). Some riders will yell this out when cars are very far back, while others wait until the car is closer or just do not see it until it is closer. Each rider should be aware of where that car is so he can decide where is safest for his bike to be positioned.
5. In most situations, it is most courteous for all bikes to move over to a single file line to allow the vehicle maximum space to pass the group.

### **E. Calling Out - "Car Up"**

1. This refers to the situation when the group needs to know that a vehicle is approaching from the front.
2. Most often all riders are looking forward so they already realize that a vehicle is coming. In that case, the calling out is not required and to do so would be annoying.
3. "Car Up" is used when some riders may not be aware of the approaching vehicle. Examples of this would be on a blind curve and some riders are farther out in the lane; another situation would be when the leaders of the group crest a hill and see the vehicle approaching while others may be behind that crest and need to know of the vehicle. This is especially true if a rider has moved far to the left side of the lane or even into the opposing lane (where he should never be anyway). Also, on rural roads with no center line, riders tend to drift left of center and the call out can help them realize they need to move back into the lane.

### **F. Calling Out On Trails**

1. Many trails are full of hazardous conditions and it is appropriate to let riders behind you know when they occur. The practice here is the same as above - call and point.
2. Other trail users can be hazards that are good to point out. "Walker Up" or "Dog Up" are common calls on trails and provide important safety information to those behind you.
3. Because of the narrowness of trails, when this call is made, all riders should immediately fall into single file.
4. You also need to notify unaware pedestrians of your approach. Yell out "Bikes on left" or "Bikes back" will get their attention. This needs to be done early enough so they have time to move over. Note that often pedestrians will turn and look to their left first and will even step into your path. Be sure to yell early and loud.

### **G. Passing Other Riders**

1. When passing another cyclist you should let them know you are going to do that. No one likes to be surprised and if you pass silently and they decide to move into your line of travel, a collision is likely.
2. You should try to only pass another cyclist on their left. Because of how we proceed in a lane, we never expect anyone to ever be on our right side, especially not overtaking on the right. When you are coming up on them, let them know. "Passing on the left" is all you need to say.
3. Sometimes things happen and you find yourself creeping up on the right side of a rider. Often this happens when they slow down for some reason or they slowed while climbing a hill and you were unable to anticipate it. Consequently, you find you are approaching them on their right. You need to let them know you are there so they do not suddenly move to the right, into your line of travel. When this happens you need to announce, "Passing on your right," or simply "On your right."

## **H. Pulling in front of another rider.**

1. Frequently on group rides you need to go from the middle of a lane to the right side of the lane in order to return to single file. This movement can cause confusion if you do not announce your intentions.
2. If you are in the middle part of a lane and need to get over to the right, first look over to the right to see if the space you want is open. If no one is there, you don't need to do much of anything - your head movement should have informed the rider to your rear that you intended to move over.
3. If the space is occupied where you need to go, first look then call out and point to the space where you wish to go. Call out, "Coming over!" or "Pulling in!" It is important to both point and call out. Then you need to wait until that rider allows space for you to move in. Once the space opens up you can move in.
4. If you are the rider behind or next to the rider who wants to move over, acknowledge their request and call out, "Come on" or "Come on over". Generally you should slow down so that you create a space for that rider to move into. Likewise, if there are riders behind you, they need to realize what is happening and you should scan back to see how near they are to you. If they are very near, call out to them "Slowing".
5. There is additional discussion on this maneuver below under "Returning To Single File."

## **II. Proceeding Through Intersections**

### **A. Right of Way**

1. Considering right of way when riding a bicycle is no different from when driving another vehicle. Sometimes you will have the right of way and sometimes you will be required to yield that right of way to another.
2. Generally, right of way is determined as major before minor roadways (an arterial road will usually have right of way before a side street, for example). Right of way is also determined by traffic signals, such as stop signs, traffic lights and yield signs.
3. Pedestrians always should be given the right of way. Even if a pedestrian is not in a designated crosswalk, you should still give it to them.

### **B. Non-Signalized Intersections**

1. Most intersections we ride through have no signals or controls (Stop Signs and Lights) when we have the right of way. When you have the right of way, others are required to wait until you have proceeded through the intersection before they enter the intersection.
2. When we do not have the right of way, almost always we have some sort of control at the intersection to halt or delay our travel. See below for signalized intersections.
3. Just because we have the right of way does not mean we should let down our guard against possible traffic interference. Some motorists might not see you on the road, some may underestimate your speed, while others may not respect your right of way.
4. The safer way for you to travel through an intersection when you do have the right of way and there are other vehicles waiting to enter your lane of travel from a side street, is to make sure you are as visible as possible for that situation.
5. The best way to be visible is to be far enough out into your lane of travel so the others can easily see you. You should be riding in the right tire track or about four feet from the road edge. If you are "hugging the edge" by riding too far to the right, you could be missed when a motorist checks for traffic before entering the lane. This is one of the most

- important reasons to ride far enough out from the road edge - so you can be seen.
6. Other ways to help assure you are seen include the following:
    - continue to pedal so your moving legs are more visible
    - try to obtain eye contact with that motorist
    - wave your arm a little, as though to say 'thanks'
    - wearing light or bright clothing helps visibility
    - move even farther out into the lane, where the motorist may be looking
  7. If the motorist appears about to creep out into your right of way, be prepared to use other methods of distraction for him:
    - be ready to yell loudly at him
    - be ready to wave your arm broadly to attract attention
    - check for an escape route if he does come out, or be ready to stop quickly
  8. A group of cyclists usually have no difficulty riding through such a non-signalized intersection because the group has a good visual presence. The lead rider should still be a little farther out from the road edge to be most easily seen.

### **C. Signalized Intersections**

1. A signalized intersection is one that has any sort of device placed to control how traffic flows through that intersection. This can be a sign or a light. Usually this will be a stop sign or a stop light or maybe a yield sign.
2. The law says that you - as in all vehicles - are required to obey traffic signals. As an operator of a vehicle that means, you, a bicycle (vehicle) operator, must obey traffic signals.
3. You must also yield right of way to pedestrians at all times.
4. This means that we cyclists are required by law to come to a complete stop at stop signs and red lights, to proceed with caution through a yellow light and to yield to others who have the right of way in those signalized situations.
5. "Stop" in this instance will most often imply that you can place one foot on the ground when your bicycle comes to a stop. Some municipalities will use this as a 'test' as to whether you did come to a stop when observed by a law enforcement officer.
6. The recommended practice of safe cycling is for you to come to a full stop when required to do so. This includes stopping at all stop signs and red stop lights. This is the law.
7. As we generally practice, as operators of motorized vehicles as well as bicycles, there are times when coming to a full stop at a stop sign does not seem necessary.
  - When sight lines are excellent and you can see for a significant distance that no traffic is approaching the intersection.
  - In such a situation, you should still slow down enough to stop if need be, check for any traffic, then proceed with extreme caution.
8. Even though it may seem safe to proceed on red through a stop light, you should not do so. Besides this being the law, a lighted intersection is one that may have faster traffic that requires more control; in other words, the situation may change quickly so you are safer to not proceed through a red light. The safe practice at a stop light is to always stop and wait for the green light.
9. There are times when you want to turn left from a left-only lane at a stop light and it has a traffic sensor in the pavement that would activate a green left arrow signal for vehicles to proceed. These can also be present on straight-through lanes. Often these sensors are not tuned to the presence of a bicycle and the light will not turn green for you. It still is unsafe for you to ride through the red light.

You have a few options:

- Move over into the straight through lane and proceed to a point where you can turn around and come back to make a right hand turn.
- Move your bike to the crosswalk and walk your bike through that plus the crosswalk to take you across the road; then you can re-mount your bike when the way is clear and ride on your way.
- Wait until the light has gone through a couple of cycles; when it is obvious it is still not going to turn for you, if the way is clear, proceed on your left turn while pointing to the light to indicate to any observers that the light did not work.

#### **D. Using the Sidewalk**

1. Bicycles do not belong on sidewalks. Even riding slowly, a cyclist is a hazard for pedestrians. Most cities will have some sort of ordinance against sidewalk riding, especially in busier, downtown areas.
2. You can, however, become a pedestrian and walk your bike on a sidewalk to get through a difficult intersection; sometimes it may become impossible to move into your turning position and using the sidewalk becomes your better solution. When you use the sidewalk, you must walk it along, not ride it.
3. State law states that you must always walk your bike in a crosswalk.

#### **E. Lane Position When Approaching A Stopped Intersection**

1. This section refers to where it is safest to position your bike in the travel lane when approaching an intersection with a stop sign or stop light.
2. Since you will be moving slowly, at the same speed as other vehicles, you should be in line with them, not to the right side. This means your safest position is in the center of the lane or perhaps even a little to the left of center.
3. The reason for assuming this position is to prevent the motorist from turning right in front of you at the intersection. When you are positioned to his right, he often cannot see you - the unseen cyclist is not there, so he feels free to turn in front of you. You can prevent this simply by being in front of the motorist.
4. This applies to both stop signs and stop lights.
5. The safe procedure to use when approaching the stop sign is to scan behind you for any traffic, then, if there is none approaching closely, signal that you are going to move over and move to the center of the lane. After you proceed through the intersection, resume your position at about four feet from the road edge.
6. The same procedure applies for approaching a stop light. However, often the light will turn red quickly and you may have no time to safely scan, signal and move. In this case, you have two options:
  - Slow down enough for the vehicle to pass then move over to the center.
  - If you are stuck at the right of the vehicle at the light and stopped, let him go first to see if he is going to turn - if he is, allow him to; if he is going straight, then you ride on straight.
7. Try to avoid ever being to the right of a vehicle in the same lane as you at a stopped intersection.
8. This also applies when you are coming up onto a line of stopped vehicles. Never pass them on the right to move toward the front of the line. This is unsafe and motorists find it rude and irritating. Instead, move over in line directly behind the last vehicle, in the center of the lane.
9. When riding in a group, it may be necessary for the group to split a little to allow vehicles to move in between subgroups. Each subgroup should still remain in the center of the lane, never to the right of vehicles.

10. It is legal and safe to be two abreast when in line for a light or stop sign. Avoid forming three or more across.
11. If riding in a group and approaching a stop sign, it is always good to scan behind to see if any cars are approaching. Cars coming up on a group may have a tendency to pass you to be first in line at the intersection. This action by motorists poses a potential danger to you and the group. Often that motorist will find his position ending up in the wrong lane because of his action. To make it safer for you and the group, when you see the car approaching from the rear, move farther over into the lane, even all the way to the left side of the lane. Your group should feel free to form a double line also. The motorist might still move over to the opposing lane but you and your group are in a safer position.
12. This same maneuver of position can be practiced safely for intersections with a stop light also. The difference here is that the light may change quickly and catch your group off guard. See the discussion above.

#### **F. Turning At Intersections - Left Turn From single Lane**

1. Left turns are to be made from the left side of the lane; right turns from the right side of the lane, *in general*. There are some times when, in order to be safest, you need to position your bike a little differently, in order to better inform other vehicles what your intention is, and to keep them from trying to overtake you while turning.
2. When traveling in a single lane and you want to make a left hand turn, first scan for any traffic behind you to make sure the way is clear to move to the left side of the lane. If the way is clear, first move to the center of the lane then scan again and if clear, continue to move to the left side of the lane. The left side of the lane means you will ride about where you see tire tracks from motorized vehicles.
3. Move over early enough so, if there is any traffic coming from the rear, you have time to get into position and so they can understand what you wish to do.
4. How early you move over depends on how fast you are moving, how quickly approaching traffic is coming up, and how far over you really need to move. This will most often be about the distance of a city block for a safe move from the right side to the left, with some traffic present.
5. There is no hard and fast rule for when to move over; just know that earlier is much better than late; you do not want to have to hurry your move.
6. When you move over, signal to any vehicles behind you, using your left hand turn signal. then when you prepare to make your left hand turn, signal again.
7. You are not required by law to use the left hand turn signal continuously; you need to use your own judgment as to how long to keep your left arm up so those behind you see it and understand what you want to do.
8. Once you complete your turn you should aim for the safe zone on the right side of the lane where you head, about four feet from the edge, same as any other time.

#### **G. Turning At Intersections - Left Turn From Left Turn Only Lane**

1. Making a left turn from a left-turn-only (LTO) lane is the same as from a single lane except you have farther to move left - to one more lane.
2. That additional distance takes more time and you need to allow for it. As before, you start by scanning left behind you for any traffic, then move to the middle of the lane then scan again and move again, signaling your move each time. Then you need to do the same again to move from the left side of the center lane into the LTO.
3. Once you are in the LTO, instead of keeping to the left side of the lane, you should stay in the center of the lane; turning lanes are often narrower and do not allow for your bike and another

- vehicle; also you do not want anyone trying to pass you in that lane.
4. Even though you are in a LTO you still should use your left hand signal; while it may seem obvious, you still need to communicate to other vehicles what you are doing.
  5. Once you complete your turn you should aim for the safe zone on the right side of the lane where you head, about four feet from the edge, same as any other time.

#### **H. Turning At Intersections - Right Turn From Single Lane**

1. Generally we make a right turn from the right side of the lane.
2. Prior to making your turn it is a good idea to scan behind you to make sure you understand where other traffic is.
3. If traffic is approaching from the rear, they need to know your intention. Signal using your right hand signal (either your left arm bent up or your right arm extended).
4. Even though you are turning right, you still need to hold your line at about four feet from the right edge through the turn. Others may be following behind you and you need to maintain a safe distance from the edge.

#### **I. Turning At Intersections - Right Turn From Right Turn Only Lane**

1. Making a right turn from a Right Turn Only (RTO) lane is not the same as from a single lane.
2. As with any lane change, scan first so you know the traffic situation from the rear. Things change quickly and you always need to know.
3. Similar to the left turn only lane, you do not want rear traffic to try to pass you. If they try to pass you on a right turn, too often they will come dangerously close when making the turn and cut you off. To avoid this, claim your spot in the middle of the lane while approaching the turn and all through the turn. this is the safest practice for this type of situation.
4. If the right turn is a large one, with a wide arc, you may even move farther to the left to keep others from passing you. This is your call - this is your safety.

#### **J. Going Straight Through An Intersection With LTO and/or RTO Present**

1. When your intention is to go straight through an intersection that also has an LTO, you need do nothing differently. Simply stay in your lane, at your safe distance from the right edge as usual and proceed straight.
2. When your intention is to go straight through an intersection that also has an RTO, you need to stay in your straight through lane and not go over to the right. Initially this may seem counter-intuitive but it really is not. The RTO is ONLY for those who are going to turn right. If your intent is to continue straight, you need to stay in a straight through position.
3. The counter-intuitive portion of this is that many novice cyclists will believe they must always stay in the right side of whatever lane is present, and that would include the RTO. ^The problem with that, though, is that once you go through that RTO and do not turn right, what do you do? Also, if other vehicles are following behind you, they will expect you to be turning right. You could become a hazard to others in this way.

### **III. Bike Lanes**

#### **A. Bike Lanes - General**

1. A Bike Lane is a designated space on the road for the use by bicycles. A bike lane is a bike lane only if it has that marked designation. There may be a space to the right of a white line on a road but it is not a bike lane unless it is so designated. Such an undesignated space would be a paved shoulder or break down lane.

2. The designation of a bike will show the words BIKE LANE or BIKES ONLY or some similar wording. Some may also have symbols, such as the basic lines of a bike. Some places also use a diamond shape to indicate the bike lane (this is not universally used).
3. Bike lanes are used primarily in urban areas where more dense traffic is expected. The lanes are an attempt to help keep bicycles separated from motorized vehicles, presumably to make bicycle travel more safe.
4. There are many variations in bike lanes and their placement and configuration. Most often they will be four or more feet wide and placed adjacent to the curb area to the outside of the road. They are always separated by a line.
5. In most municipalities, the *expectation* is that if there is a bike lane present, the bicyclist will use it. And in most cases, that will make the most sense for safe travel.

### **B. Bike Lanes - How Are They Good?**

1. Bike lanes do separate bicycles from other traffic. They provide a space where other traffic is prohibited (except for service vehicles like UPS trucks and buses that need to make frequent stops).
2. Bike lanes get more people out riding bicycles. Since the general public views a bike lane as a “safe” area to ride, that removes some of their reluctance to ride otherwise. Statistics show that areas with bike lanes have more people riding bicycles in general; statistics also show a positive relationship between bike lanes in a city and how many people ride for all reasons.
3. Most people who ride bike lanes really like them. When asked, they will comment how the bike lane has made a big difference for their cycling, and they generally refer to their feeling of safety when riding in the bike lane.
4. Cities that have added bike lanes have not only increased overall cycling in town but have also reduced the rate of accidents per biking mile.
5. Traffic engineers have known for a long time that the presence of bikes on the road (whether in a bike lane or just on the side of the road) has a “calming” effect on traffic. More bikes = slower traffic. So, with more bike lanes and more bikes, we see a general slowing of traffic over all in those areas. When motorized traffic moves more slowly, the chances of incidents between bikes and other vehicles is reduced.

### **C. Bike Lanes - How Are They Not So Good?**

1. Some features of bike lanes that make them “good” also make them less than good. For example, While bike lane users do feel ‘safer’ when riding in the lane, they can also become overly confident of their safety. Bike lanes can give one a false sense of security.
2. Bike lanes do get more people out riding bikes. Many of the new riders are not experienced in riding with traffic - especially children and adults who have not ridden since they were children. These inexperienced riders often fail to follow traffic laws while riding and cause conflicts for themselves with other roadway users, motorists and experienced cyclists alike.
3. Many bike lanes are poorly designed and planned. Many will stop abruptly without concern for how bike lane users will adjust to the sudden change. Many will have varying lane widths that make little sense and can even create a hazard for the user. Cities typically do not provide any motorist or resident education to explain how and when bike lanes are to be used safely.
4. Most cities that design bike lanes do not budget for cleaning them properly. Consequently, they fill with debris swept from the road by faster vehicles. This build up often causes lane users to ride farther out in the road, eliminating the value of the lane.
5. Property owners often do not respect the need for the bike lane to be clear and will typically place their trash containers in the lane, along with lawn debris and leaves.
6. While certain service vehicles are permitted to stop (not park) in the bike lane, others will

- park there, such as utility trucks and construction trucks. This causes the lane user to ride out into the roadway, again negating the value of the lane.
7. Motorists leaving a driveway often will not check for traffic in a bike lane. This makes each driveway essentially an intersection, quite like riding on the sidewalk.
  8. Motorists often view bike lane users as having inferior rights to roadway usage. They typically believe that one is not to ever leave the bike lane, even when a turn is necessary. This causes more conflicts between motorists and cyclists.
  9. Often you will see pedestrians or joggers in a bike lane. They treat it as a sidewalk. You will also see more cyclists riding against traffic in a bike lane.
  10. There are some law enforcement individuals that believe if a bike lane is present, you are required to use it. [This is not true in Ohio. However, municipalities are permitted to create laws more restrictive than state law.]

#### D. Riding Bike Lanes Safely

1. Generally, in Ohio you are not required to ride in a bike lane just because it is present.
2. You are allowed to leave a bike lane for any reason you wish, especially if it relates to your own safety.
3. Why would you wish to leave a bike lane? Here are some examples;
  - The lane is filled with hazardous debris and you need to go around it
  - A vehicle is blocking your way
  - There is an object, such as a trash container, blocking your way
  - You need to move farther out into the lane to make yourself more visible, especially at an intersection or at a driveway entrance
  - You need to prepare for a lane change, such as for a left hand turn (you cannot, and never should attempt, try to make a left hand turn from the bike lane)
  - Any other reason you have for your own safety
4. **To make a left hand turn** after leaving a bike lane, you need to practice the same sequence of safe lane changing as you would any other time: **Scan, Signal, Move**. Just in case this is unfamiliar to you, let us explain more:
  - **SCAN** - you either look over your shoulder or check your rear view mirror (or do both) to see if any traffic is approaching from the rear. You do not want to move out of the lane into the path of an oncoming vehicle. Only when the way is clear do you move left out of the lane.
  - **SIGNAL** - state law states you must signal a lane change, which is what you will be doing. When the way is clear, signal a left turn normally, using your left arm stretched out. Your signal tells motorists (and cyclists) you plan to move left out of the bike lane.
  - **MOVE** - When the way is clear you can move, first to the right side of the right lane, then scan-signal-move from the right side to the left side of the lane. If there is a second lane to move over to for your turn, follow the same sequence, scan-signal-move.
5. **To make a right hand turn** from a bike lane, you need to follow the same safe cycling practice you would when turning right from a regular traffic lane. It is always a good idea to scan before making a turn - you want to know if any other vehicles may be turning along with you. If they are, you need to be even more diligent and aware of their presence. Use your right hand turn signal before turning so others know your intention.
6. Riding in a group in a bike lane normally means you will be riding single file. Bike lanes are typically too narrow for double file riding. Only if the bike lane is unusually wide would you try to ride double file.
7. Riding two abreast with one rider in the bike lane and the other to the left of the white line should be practiced with caution and only when there is little to no traffic present. This

becomes a matter of courtesy more than legality.

8. Some bike lanes have designs to them that can be puzzling at first. Traffic engineers struggle with ways to help motorists and cyclists share the roadway safely. Sometimes they will create areas where motorists need to turn through the bike lane while the cyclist will be going straight. You will often see lane lines that are dashed; these are those merge areas and when you see them you need to be extra cautious and on the lookout for turning cars.
9. Sometimes you will see bike lanes adjacent to parking lanes (these could be to the left or right of the bike lane). Again, you need to be extra cautious of persons entering or exiting any cars parked there.

## **IV. Shoulders**

### **A. What is a shoulder?**

[The following discussion of shoulders was excerpted from Wikipedia.com.]

A shoulder, often serving as an emergency stopping lane, is a reserved lane by the verge of a road or motorway, on the right in countries which drive on the right. Typically the shoulder is not for use by moving traffic.

Shoulders have multiple uses, including:

- In the event of an emergency or breakdown, a motorist can pull into the shoulder to get out of the flow of traffic and obtain a greater degree of safety.
- Emergency vehicles such as ambulances and police cars may use the shoulder to bypass traffic.
- Paved shoulders provide additional space should a motorist need to take evasive action (such as avoiding a wrong-way driver) or need to recover control of their vehicle before a run-off-road collision occurs.
- In some rural areas without sidewalks, pedestrians and cyclists may be allowed to walk or ride on the shoulders.
- On curbed roadways, shoulders move the gutter away from the travel lanes which reduces the risk of hydroplaning, and reduces splash and spray of stormwater onto pedestrians using any adjacent sidewalk.
- Paved shoulders move water away from the roadway before it can infiltrate into the road's subbase, increasing the life expectancy of the road surface.
- Shoulders help provide extra structural support of the roadway.

### **Shoulders and Cyclist Safety**

Direct rear impacts with cyclists are a more prominent collision type in arterial/rural road type situations. When they occur in such circumstances they are also associated with significantly increased risk of fatality. Data collated by the Oxford English college Dictionary indicates that rural locations account for 35% or more of cycling fatalities in Denmark, Finland, France, Great Britain, Japan, the Netherlands, and Spain.

Shoulders are useful to bicyclists traveling on roads that do not have a dedicated bike lane. However, cyclists are not required to ride in a shoulder. Again, debris often collects in a road's shoulder, and a cyclist will avoid these hazards by riding in the lane of vehicular traffic.[17]

### **Where is the road edge?**

Normally, slower traffic keeps to the right, and faster traffic passes on the left. Since cyclists are usually slower than other traffic, they ride near the right edge of the road. Generally, the usable width of the road begins where one can ride without increased

danger of falls, jolts or blowouts. A road may have a gravel shoulder, its edge may be covered with sand or trash or the pavement may be broken.

Shoulders are optional use for cyclists and should never be considered safe. Some shoulders are too narrow to safely ride in and invite dangerously close passing at high rates of speed from motorists. Some shoulders are unsuitable for cycling on due to the composite. Shoulders are not intended to be driven on and are made of a lower quality material than the travel lane. This material quickly erodes and creates unsafe surfaces to cycle on. Cycling on the shoulder puts you in conflict with motorists who are turning right or left into an adjoining roadway. Think of shoulders as sidewalks. They are optional and if you feel safer there, then you are allowed to be there. If you don't feel safe there, you are not required to ride there. The travel lane belongs to all vehicles.

[End of Wikipedia excerpt.]

## **B. Riding On Shoulders**

1. A shoulder is NOT a bike lane. Do not call it that, do not consider it that.
2. As mentioned above, the shoulder is not part of the roadway - it is an adjunct for non-riding purposes. If an accident of any type occurs on that part of the road, the operator will not be considered as having been on the roadway. (This is true in Ohio and most other states, but not in all states.)
3. Our state law that says you are to ride as far to the right as practicable, is talking about the roadway, not including the shoulder. The roadway begins at that white line to the left of the shoulder.
4. there may be times when riding on a paved shoulder feels more 'comfortable' to those who fear traffic. If the paved shoulder is free of debris and is at least four feet wide, many will choose to ride there.
5. You are not required to ride your bike in paved shoulder.

## **C. Edgeline Rumble Stripes**

1. An Edgeline Rumble Stripe is a section of the outside lane edge line being gouged out in a pattern so that when a tire runs through it, it makes a "rumble" noise by vibration in the vehicle, thus alerting the driver that he has run outside the lane. These are intended as alerts against sleepy drivers running off the road. They are normally about the width of an edgeline and may or may not have regular spaces to allow bicycles to move outside/inside the edgeline without disruption of riding.
2. Sometime around the year 2010, the Federal government gave transportation funds to states for them to use in preparing "edgeline rumble stripes" along state highways as each state deemed appropriate. Consequently, each state has its own style of edgeline rumble stripes.
3. In Ohio, the use of these was agreed to be only on state roads where the paved shoulder was three feet or wider. (As you might imagine, there was plenty of heated discussion among cyclists about these. The Ohio Dept. of Transportation agreed to place them as stated here.)
4. The problem with these is that a bicyclist needs to move into and out of that shoulder often. This has created a real problem for many areas where the shoulder varies from paved to unpaved and varies in width often.
5. Individuals riding 3-wheeled bikes have no options left to them – it is nearly impossible to avoid hitting the rumble stripe and makes riding on it hazardous.
6. Essentially what has happened is that the shoulder is often not an option for you, without the probability of riding on a jarring surface.
7. Your safest cycling practice will be to ride to the left of the edgeline rumble stripe. The shoulder generally is not to be ridden anyway. But now you must move even farther out in the

lane it seems.

## V. Special Conditions

### A. Railroad Tracks

1. Often railroad tracks present a unique hazard because they often have uneven surfaces, the surface itself may be broken, and there is a separation between the road and the metal track. All tracks must be approached with caution and the rider needs to be prepared to avoid any holes or broken surface areas.
2. A railroad intersection should be approached as you would another signalized intersection, by assuming a central position in the lane. You do this for two reasons:
  - you do not want other vehicles to pass you on the tracks
  - you want to be able to move laterally if you need to avoid previously unseen hazards
3. If the tracks run at an obtuse or acute angle to your line of approach, you must make preparations ahead of the tracks so you can cross them as close to a right angle as you can manage. When you see you are approaching railroad tracks, first check for traffic behind you. You need to move over to the center of the lane, so as with any lane change, Scan-Signal-Move. Do this early enough so motorists are not surprised by your move. But do it early enough so you are able to be in place well before the tracks.
4. By being in the middle of the lane prior to the tracks, you should be able to keep others from trying to pass you on the tracks. Some will still try to do so, which is illegal, but that is their decision. Their presence may make your moves more difficult but you still need to cross the tracks at a right angle.
5. If you do not cross the tracks at a right angle, your front wheel might become trapped or diverged in the space between the road surface and the tracks, causing you to fall. If you fall on tracks, you will likely be injured. If you fall and traffic is nearby, you might be hit by a vehicle.

### B. Curbed Lanes

1. A curb is a raised portion at the outside edge of the road. Usually it is a concrete form that keeps the road and a grassy area separated. The curb allows for the grassy area to be built up higher than the road for better drainage.
2. Often a curb is part of an actual drainage system for the road. You will see a section of the concrete form that comes out into the road a ways, maybe a foot or so, and it has a slight angle to it to help water drain toward the outside of the road, toward the curb. That section is also called a "Gutter Pan." The gutter pan almost looks like part of

the roadway but it is not. It is part of the drainage system. The gutter pan will collect all sorts of debris from the road and from water drainage.

3. Since a gutter pan is not part of the roadway and is often debris-filled, that is not an area for you to ride.
4. Curbs will be seen in a variety of forms and dimensions. Some will be relatively low and could be easily ridden over, while others could be quite high and pose real danger to you if you



5. You need to stay well away from curbs by treating them as the road edge and keep your four foot distance. This also includes the gutter pan - you need to avoid that area as it is not part of the roadway either.

- The biggest hazard posed by curbs is that your wheel will be diverted if you run up against it. Also, for a high curb, your pedal might strike it on your downstroke and that will surely throw you.

### C. Open Grate Bridges; Expansion Joints On Bridges

- An open grate bridge has at least part of its surface as a span of steel with openings to allow for drainage, uniform temperature fluctuation and minimal surface upkeep.
- Depending on the style of open grate used, the surface can be bothersome or dangerous to the cyclist trying to ride on it.
- Often the grate will even have raised points to aid in tire traction for autos and trucks but they make for even more concern for bikes.
- Most cyclists will likely choose to walk their bike over such a surface. If you do choose to ride, you should shift your rear *dérailleur* to a higher gear to give you more control and stiffen your arms to avoid any divergence caused.



- Occasionally you will see an open grate bridge with a protected area like the one shown here. This protected area would be okay to ride on.
- Expansion joints on bridges are designed to allow for temperature fluctuations of the surface so the bridge can actually expand or contract along with weather changes. These are used mainly on larger bridges.

- There seem to be two main types of expansion joints, a straight pattern and a zig-zag pattern.
- For the straight pattern, your concern is when it comes across the bridge at an angle. It will

normally have metal edges that will be slick when wet but also can be wide enough to grab your front wheel and cause a fall. You will need to approach the expansion joint at a right angle - same as for a railroad crossing.

- The zig-zag pattern can be more difficult to adjust to, depending on how wide the gap is. If the gap is not wide at all, you should be able to ride right over it with no concern; if the gap is wide enough to grab your front wheel, you will need to have an alternate way to go over or through it. Often that will require dismounting and walking your bike through the joint.

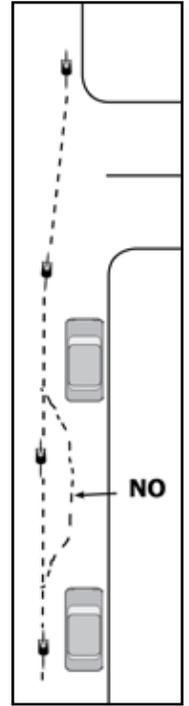


### D. Parked Cars

- When riding adjacent to cars in a parking lane, you need to be alert for any car doors that might be opened as you pass. That is a dangerous situation you want to avoid. That space near the parked cars is often referred to as the “Door Zone.”
- As you ride near parked cars, look ahead into the cars to see if there is anyone in the driver’s seat. If there is, you should veer to your left a little to anticipate the door opening.
- A car door will come out about four feet from the car when opened; larger vehicles will have even wider doors. That means you need to come out more than four feet from the side of a car if you see the possibility of the door opening.
- Another caution when passing parked cars is to not swerve back into the parking lane if there are unused parking spaces. While this may seem to be obeying the “as far right as practicable” law, what you are really doing is moving into a blind spot for any vehicles

following behind you. When you disappear from view, you disappear from their awareness. They may believe you pulled off into a drive or onto the sidewalk and will no longer care about you. Instead of moving back inside the parking lane, you should maintain your straight line.

5. The exception to no. 4 above would be that if there is a long stretch of unused spaces, such as a block or so, then you can move over a little to the right. The decision is whether or not the vehicles behind you can see you any more or not. You need to remain visible.
6. A parking lane is another non-riding area. It is not designed or intended for travel. Also it often is filled with debris and hazardous material you need to avoid.



### E. Riding At Night

1. Riding your bike at night is a wonderful way to enjoy cycling but it comes with its own set of cautions and safe practices.
2. What should be obvious is that the thing you need most when riding at night is light - illumination. You need two types of light, actually: One to see with and one so you can be seen.
3. Being seen is important because other road users are not accustomed to seeing bikes out after dark. To be seen you need reflective gear on your bike and your clothing. Most cycling-specific clothing will normally come with some amount of reflective strips. these are usually sewn into the seams or added in conspicuous places and still fit in with the design of the garment. Reflective strips on garments work well, although they often are used minimally so you do not get a lot of visibility from them. These alone are insufficient for being seen at night.
4. In addition to reflective strips on your clothing, you need reflective or illuminated areas on your bike. The best items here are red rear lights. These are usually made with LED bulbs that are the best for visibility - they are designed to be seen more so than to project light to see with. If you are to be riding at night you must have a red rear light at minimum. you are allowed to have multiple rear lights to increase your visibility (such as for a commuter who rides amid denser traffic).
5. Red rear lights come in all sorts of styles and sizes. Most also come with different modes, including solid on, some sort of patterned movement, and a flashing strobe. These can usually be seen for a long distance of hundreds of feet - plenty adequate enough for motorists approaching from the rear. Extremely bright flashing red lights might be distracting to some motorists. You should look at your bike from the rear at night to see how it appears. If a flashing light bothers you, it will surely bother others.
6. You also need a good white headlight to help you see the road before you. A good headlight will also provide plenty of visibility for you from the front, so no additional front lighting should be required, unless you are riding a unique area that requires side lighting, too.
7. Headlights come in more varieties than rear lights. They vary in power and in bulb type. the bulb type will be either halogen, LED or some other incandescent bulb.
8. The amount of power you need, that is, the amount of roadway you need to have illuminated ahead of you, depends on where you are riding. Ride a trail at night and you need a wide span of light that will also show you at least 30-40 feet ahead. You need to be able to see possible hazards on the trail. Ride in the city at night and you have a lot of ambient light coming from streetlights or businesses and cars. Int the city you need lees light for seeing but still need to be seen. ride on the road in the country at night and you need a lot of light so you can see

- far ahead as well as some width.
9. For trail riding, it would help if your light was able to be focused wider. For riding in the country, it would help if the beam could be focused shaper out front.
  10. For trail riding and for country riding you want to get the most powerful light you can afford. Generally there is a relationship between power, length of charge and price. It pays to shop around and ask other cyclists what their experience has been.
  11. For city riding only, you do not need quite as much light or power. Length of charge - or re-charge - is always a concern. You do not want to run out of battery power and be left in the dark. Literally.

## **VI. Selected Unsafe Practices**

These items do not fit well into the topical structure above but are important to note.

### **A. Aerobars**

1. Aerobars are useful for individuals who want to get into a slightly more aerodynamic position by placing their hands farther out in front of their handlebars and grip onto a separate pair of grips out front. This lowers the rider's torso and produces less wind resistance. The new position also aligns the legs in a slightly different manner which can produce more power, for a faster ride.
2. Riding in aerobars decreases one's control over steering and braking, however. Because of those limitations, aerobars are not be used when riding in a group; this does not mean you can not have them on your bike, only that you are not to use the aerobars while riding with the group.
3. If you have a specific situation that makes riding with aerobars necessary for you, you need to discuss this with your ride leader. The ride leader might permit it *IF* you ride well away from the rest of the group, such as off the back.

### **B. Personal listening and communication devices**

1. This includes earbuds or earphones (1 or 2), cellphones and any other device one might use for listening or communication. This does not include GPS devices used for navigation that are attached to the bike in some way.
2. Anything that distracts or limits the rider's ability to sense surroundings or paying attention to the riding environment, is dangerous and not allowed on rides. One should never use any of these while riding in a group or alone.
3. It is not unusual for your cellphone to ring while riding. If you feel the call is necessary to respond, you should stop off the roadway where you can use the device safely.
4. Granted, listening to music is an important, pleasant entertainment option for us all. But it is not possible to be fully attentive to the riding environment when listening with devices that shut out exterior sounds. Your personal safety and that of others riding with you is more important.

## **VI. Additional Concerns For Ride Leaders**

### **A. When is a 'sweep' needed and what are his 'duties'**

1. A "sweep" is a rider appointed by the ride leader to remain at or very near the rear of the group to "sweep" clean the group so no one is left behind unknowingly.
2. Most often the sweep is the last person on the ride. On rides with very large groups and the main group becomes separated into other subgroups that may separate some distance, the ride leader may need to appoint a sweep for each subgroup.
3. It is the ride leader's duty to appoint or ask for a volunteer to serve as sweep. Some riders prefer to stay at the rear for various reasons and will often volunteer. If no one does volunteer, the ride leader needs to appoint someone. If the ride will be over many hours, the sweep individual can change, as long as the others know who is sweeping and when.
4. The main purpose of a sweep is to be sure a rider or riders do not get too far behind from the main group. The sweep must have a map or cue sheet and have an idea when and where stops will be made. The sweep needs to have a cell phone and know the ride leader's cell number.
5. If a rider has difficulty on the ride, he might choose to work on his bike while the rest of the group rides on. The sweep would stay with that rider. The ride leader would appoint another temporary sweep to fill that vacancy or ask another rider to stay back to help. That rider should have knowledge of the route and have a cell phone with the ride leader's number.
6. Not all rides would require a sweep to be appointed. A small group that is unlikely to get separated would not need a sweep, for example. Even a larger group in which all riders are familiar with each other, are known to ride at the same pace together and are familiar with the route and territory would not likely need a sweep.
7. Anytime you have a new rider with unknown skill or a rider who is unsure if he can keep the pace, a sweep should be appointed.
8. Whether or not a sweep is needed is decided by the ride leader.

### **B. Group separation at stop signs, stop lights, other times of separation**

1. In urban riding, it is not unusual for the group to become separated. Because of frequent signs and signals and breaks in traffic, a group of riders can become well separated into numerous smaller subgroups.
2. The ride leader should explain to the group before they enter into the area where separation may occur how they will deal with group separation.
3. Being separated from the main group can create anxiety for many riders. They simply do not want to be separated from the others for fear of being left behind. (Yes, we can call it separation anxiety.)
4. Separation occurs when a group stops at an intersection and only part of the group goes through the intersection, leaving the others behind until they can get through the intersection.
5. When separation occurs, the ride leader needs to do one of the following:
  - slow down on the route to allow the others to catch up
  - pull off the roadway to allow the others to catch up
  - have a designated stopping area that is known to all so they can regroup
6. The ride leader needs to let the others know which way they will regroup.
7. It is rude and irresponsible for a ride leader to leave a subgroup stranded after being separated from the main group. A ride leader needs to be aware of the entire group at all times possible.

### **C. How/when to platoon**

1. Platooning is when a larger group breaks into smaller groups intentionally, to leave ample space for vehicles to get between the subgroups to assist in getting around the entire group. A long group of cyclists can be very difficult to pass when the lanes are narrow or there are many

turns or hills.

2. There is no hard and fast rule for what size group is too large to pass in every circumstance. A group size of ten is a likely number to start with. If your group is more than ten, you should consider platooning, if your route takes you onto a road that warrants it.
3. Platooning is not an easy task. The ride leader needs to explain to the group before they enter an area that may need such group division just how they will do it and who should manage each subgroup. It will work better if individuals know they are assigned the task of slowing down slightly to let their group reform.
4. How much space should be left between the groups? Consider how it will appear from the rear by the motorist. If you allow only one car length between groups he will not interpret that as a space where he can fit, even though he might fit okay. Instead, leave about three car lengths between groups.
5. The ride leader needs to let the group know that they will not be separated and left behind. The group will reform somewhere down the road or by pulling off at a rest stop.

#### **D. Stopping along the ride**

1. There are many reasons for stopping while on a ride: there may be a breakdown, the group may need a break for water or rest or to change clothes. When, where and how are decided by the ride leader.
2. Where you stop the group is important. It is not legal to stop directly on the roadway itself. Being on the lane of travel, you pose a hazard to any other roadway user. At a minimum, you need to pull all bikes off the roadway and at least onto the shoulder.
3. You should avoid stopping the group for a break at a signalized intersection. The clutter you create poses a hazard for anyone else coming to the intersection. Even if you are on the shoulder at a signalized intersection, you might impede clear vision of traffic, which is hazardous.
4. Instead, find a larger area where the entire group can pull in off the road and off the shoulder. A driveway or parking lot are much better for pulling off a group for a break. If it is a commercial lot, be sure you are not interfering with their parking traffic; if it is a residence, be sure you do not interfere with their entry or exit.
5. If your only choice is on a shoulder, select an area with excellent visibility for other vehicles. Select a straightaway rather than a curve or hill.

#### **E. “Unsafe” riders**

1. Occasionally a ride leader may notice a newer, less experienced rider riding in an unsafe manner. By unsafe we refer to the set of safe cycling practices in this text. How should the leader deal with this rider?
2. If the unsafe behavior poses an immediate danger to the rider or others, or anything that the ride leader feels is dangerous without immediate intervention, he must intervene as soon as possible.
3. Discretion is always preferred as the initial approach. The ride leader needs to take the rider aside and explain what is wrong with the style of riding and how to correct it. A sense of urgency needs to be conveyed.
4. The ride leader should consider ‘assigning’ the rider to another, more experienced rider so the new rider can learn from modeling after them. Explain to both what the situation is and what would be expected from both.
5. The important thing is that the dangerous behavior be stopped as soon as possible.
6. For less offensive riding behavior, the ride leader can consider delaying the discussion until after the ride or perhaps during a scheduled break. then, the ride leader can engage in

a discussion that starts with, “I noticed that when we.... you....” From there you need to point out that the behavior has some hazardous aspects to it. Always explain what the correct thing to do is. Ask if they would like some help in riding so they can improve. Usually more experienced riders are very open to helping others (in their own style of course).

## **F. Mechanical Emergencies**

1. There are two types of emergencies: mechanical and medical.
2. When a rider on your ride has a mechanical emergency you need to determine if it is fixable or unfixable.
3. For a fixable emergency, say a flat tire, it is courteous to all stay with the rider who had the problem until he has fixed it. If you are already near a destination, you can leave the rider but make sure he knows how to get to the end and that he has a cell phone.
4. After the ride, and before leaving the parking lot, the ride leader should check with the rider to make sure he is okay and will have no further problems if you leave the starting area.
5. If the mechanical emergency is unfixable, the entire group should decide what to do from there. But it is the ride leader's call as to how the group responds. Your options include:
  - Call for someone to come and pick up the rider and bike; the groups stays until the action is known (who will come and when)
  - Assign for someone to stay with the rider while the rest of the group finishes and someone returns to pick up the riders and bikes left behind.
  - Assistance is requested at a local residence. The ride leader should not leave until it is known how the situation will be dealt with.
6. Any rider left behind should have a cell phone, either his own or someone else's. The ride leader needs to know how to reach him.

## **G. Medical Emergencies**

1. As with mechanical emergencies these come in varying degrees of urgency, too.
2. A minor medical emergency would one that can be treated or cared for on the spot and the rider can proceed.
3. Training in first aid care will help in dealing with such minor situations. Riders and ride leaders should carry at least some form of first aid supplies to clean and bandage minor cuts or scrapes.
4. A major medical emergency is one that requires the rider to stay where he is and wait for help to arrive. Any time the rider feels he cannot continue because of an injury or other health concern, help should be sought.
5. An injured rider should never be left alone. Even if there are only two of you on the ride, use your cell phone to get help.
6. Sometimes when an emergency occurs, the rider stops in the roadway (such as in a fall). The group needs to first asses if the rider can be moved out of the roadway and if that makes sense, to go ahead and move him, or let him move himself.
7. While the situation is being assessed and if the rider needs to not move right away, other riders need to be posted at both ends of the scene to warn traffic to be careful, slow down and go around the scene. Bikes and riders need to be off the roadway.

## **G. Staying within posted levels**

1. This is always a challenging situation for ride leaders. The group tends to develop a mind of its own and standards for the posted ride may tend to slide. There is no better way to dissuade a new rider from enjoying riding with the group than to be caught on a ride they discover is inappropriate for them.

2. Since the ride leader is in charge of the ride, it is the ride leader's responsibility to provide the ride as promoted and expected.
3. Prior to the ride, the ride leader can ask if anyone would like to go at a different pace or on hills or however else a ride can vary from the level expected. If all are okay with a modification, then that is okay. If anyone objects, the expected level should be followed.
4. If a ride leader prefers to ride at a different level, he should announce that via the ride calendar.

#### **H. Riders ahead of group**

1. Sometimes we get riders who wish to go faster than the rest of the group. Often this is no real problem for the ride leader or the group, but sometimes it can be.
  2. Riders who get far from the rest of the group may be off the route. If they are off the route, are they still on your ride? That would be a ride leader decision.
  3. Riders who start on a ride are the responsibility of the ride leader, at least to a degree.
  4. This does not have to be an adversarial situation. If riders show for a ride and are known to frequently ride ahead, they might be given a map and told where the group will convene for a break, thus given permission to ride ahead.
  5. On the other hand, if no map is available, the ride leader could announce before the ride that anyone leaving the route will not be considered as having been on the ride and are on their own.
  6. How a ride leader handles this is up to him. It's your ride and you have a level of responsibility for rider's safety. If they disregard that, you should consider them not to be on your ride.
  7. It is also possible to plan ahead for faster riders by giving them a map and show some additional mileage they could take but still meet up with the rest of the group at a designated spot. However, when out away from the others they are on their own. They should have a cell phone with them.
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