

A Law Officer's Guide to Bicycle Safety - Reference Guide

How the traffic laws apply to bicyclists, why enforcing these rules is important, and how to do it.

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Section One: Introduction – Why Bicycle Enforcement?

This document was produced through cooperation of experts in bicycle law and bicycle riding, and the practical experience of police on forces that have active programs of bicycle enforcement. It is intended to be a guide to enforcement of traffic laws concerning bicycling – laws that apply to bicyclists, and to motorists as they interact with bicyclists. The infractions which are the major causes of crashes will be identified. This document also will provide some answers to the challenges of enforcement and education in this area.

Reasons for Enforcement

- It saves lives and prevents injuries
- It encourages all road users to be respectful of others' rights
- Most collisions (over 90%) are caused by unlawful behavior
- Misunderstanding of bicycle law is widespread
- Good bicycling behavior lays the foundation for good motorist behavior and vice versa.

For children, bicycling can be fun and accessible. But most children are not told they are operating a vehicle, and are not to follow the traffic laws. Many adults remain unaware of the law as it relates to bicycles. Both motorists and bicyclists alike share in this confusion. Bicyclists aren't always aware of the dangers of riding the wrong way down the street, or running a red light, or of riding without lights at night. Motorists aren't always aware of safe passing speeds and distances, or of the need to yield to cyclists who have the right-of-way.

Bicyclists who learn safe driving skills in their youth will carry those skills for the rest of their lives. Motorist who learn to respect bicyclists at an early age will also carry those skills for the rest of their life. If adults are educated about safe bicycling, they also will make the roads safer and more hospitable for everyone. Enforcement plays an important part in education. Even when people are made aware of the law, they may not feel compelled to respect it without the added element of enforcement.

The Role of Law Officers

When bicyclists operate their vehicles correctly, bicycling is about as safe as driving a car. When cyclists habitually violate the traffic law, riding a bicycle becomes much more dangerous. Lawful cyclists are put at risk by violations committed by motorists and law-breaking cyclists. Crash statistics show that most car-bike collisions could be avoided if everyone followed the rules of the road.

The purpose of traffic enforcement is to improve safety by increasing compliance with the traffic rules that apply to all. Because there is so little enforcement directed toward bicycling in most jurisdictions, even a small effort may have a big impact. Many motorists, as well as bicyclists themselves, are genuinely unaware of the rights and responsibilities of bicyclists.

A traffic stop is sometimes viewed as a punishment. In fact, it is an important opportunity to educate the public and improve safety by changing behavior. There is no authority other than police that can force scofflaw cyclists (or motorists) to change their ways **before** a collision occurs.

Prevention vs. Investigation

Crash prevention pays off. While it's true that many officers don't feel enforcing bicycle laws is worth the effort, enforcing bicycle laws has the same effect as enforcing other traffic laws; they all curtail behavior that all too frequently results in injuries and fatalities. You could probably make 100 ten-minute traffic stops for the same amount of effort as one fatal crash investigation. And you'll have 100 individuals who are less likely to be involved in a crash because of your efforts.

What prevents enforcement of bicyclist traffic law?

There are many reasons for the failure to stop bicyclists who flagrantly disobey traffic laws. Here are some examples, and answers:

- **bicyclists should not be “punished” with a fine, especially because they are mostly children;**

Actually, more than half of bicyclists are 16 or older. And for children, often a warning without a fine will be sufficient. Children are most in need of education because they do not know the traffic laws. Reporting a traffic ticket to a parent is better than reporting a fatality.

- **it is impossible to change people’s behavior;**

Many people simply do not know the law. Starting an enforcement program will create publicity and increase awareness by itself. Even a small amount of enforcement, and the publicity it generates, go a long way to changing behavior.

- **if bicyclists act irresponsibly they will only endanger themselves;**

Lawless bicyclists are a danger to pedestrians and other bicyclists, and although a crash with a bicyclist is unlikely to cause much injury to a motorist, there may well be psychological injuries, even if the motorist is not at fault. Bicyclists’ loved ones are also affected.

- **it’s too difficult to stop bicyclists;**

The vast majority of bicyclists stop when confronted by a person in uniform.

- **there are more important things for law enforcement.**

Preventing crashes, injury, and death is real police work. Is it more important to write parking tickets?

How can the issues be overcome?

Bicyclist enforcement is a normal part of traffic enforcement. It need not consume additional resources. To the same extent that motorists deserve to be protected by fair enforcement of traffic laws, bicyclists deserve the same too. This includes enforcement directed at bicyclists who violate the rules, and also at motorists who endanger cyclists by violating the rules, *even if no collision occurs*. If law officers do not stop law-breaking cyclists, who will?

Same roads, same rules

Bicyclists – law-abiding ones, as well as violators -- deserve to be treated in the same manner under the law as any other vehicle operator. This may be a difficult mindset to achieve, because an officer may sometimes want to stop a cyclist who is riding in a place the officer considers hazardous – even though the cyclist is doing nothing illegal. One of the most difficult situations between police and bicyclists is when a law officer tells a bicyclist not to do something which is actually legal. It may indeed make sense to intervene with a small child riding on a busy highway, but remember: most adult bicyclists who ride on busy streets and roads are confident in their abilities. Bicyclists who, for example, look back, signal and merge into a left-turn lane do know what they are doing, and they are only operating like any other vehicle driver, not violating the law! On the other hand, bicyclists who ride opposite the traffic flow, or fail to use lighting equipment at night, do *not* know what they are doing – and they are also committing a violation of law for which you have every reason to cite them.

When considering when to stop a cyclist, it may help to think of the cyclist as a slow motorcycle. Generally, if you could stop a motorcyclist in a given situation you could also

stop a bicyclist. There are certain equipment exceptions, but for the majority of cases, the laws are the same.

A traffic stop may surprise cyclists who are unaware of the law, so it is important to be understanding when approaching them. Remind them that they are legitimate vehicle operators and that they are responsible for operating safely just like any other vehicle operator. Let them know that most collisions are caused by unlawful riding, and that your job is to ensure everyone's safety. Assuring the cyclist that officers are also paying attention to motorists who endanger cyclists should defuse most arguments.

Motorists' Opinion About Bicyclists

Unfortunately, many people think of bicycles as inferior vehicles, and think of cyclists as rebels who run red lights and have no respect for other road users, or as poor individuals who can't afford a "real" vehicle. Motorists may even feel a hint of envy towards cyclists, because motorists may resent being stuck in a traffic jam, or they may simply be annoyed that someone is "in their way." A motorist with such attitudes may protest to an officer about being cited for endangering a bicyclist. Enforcing motorist traffic violations involving bicyclists will also play a major role in reducing crashes and creating an environment where everyone can Share the Road respectfully.

Section Two: Understanding Bicycle Crashes

Although they are only about 10% of all bicyclist injuries, collisions with cars, trucks, or buses account for many of the serious bicycling injuries and most of the fatalities. The most common crash type in bicycling is a single-bicycle incident -- and so, most bicycling injuries do not involve a motor vehicle.

Note: more detailed data about bicycle crashes appears in the appendix to this document.

As shown in Table 1, falls without a collision accounted for 59% of bicyclist injuries. Falls may occur due to road conditions, operator error, mechanical failure, or a combination of these problems.

Collisions with fixed objects were the next most common cause of injury. Collisions with moving motor vehicles accounted for only 11% of the total.

Table 1: Distribution of Bicyclist Injuries by Type

No other object - simple fall	59%
Fixed object	14%
Moving motor vehicle	11%
Bicycle	9%
Animal (dog, etc.)	3%
Pedestrian	2%
Stationary motor vehicle	1%
Other	1%
TOTAL	100%

Source Study of League of American Bicyclists members conducted by Moritz, 1998.

In 2002, there were 500,000 bicyclist injuries in the U.S. serious enough to warrant an emergency room visit. Roughly 60% of those injured are 15 and under and the other 40% are 16 and older. In the vast majority of these cases, 95%, the bicyclist is treated and released the same day.

In the same year, only 51,000 bicyclist injuries were recorded in police crash reports (NHTSA Traffic Safety Facts: Pedalcyclists 2000). Most of these involved a motor vehicle. Thus, 92% of bicyclist injuries are not recorded in statistics derived from police reports, mostly because these injuries do not involve motor vehicles.

In 2000 there were 690 bicyclist fatalities involving motor vehicles. There are roughly 1,000 bicyclist injuries for every fatality. The number of fatalities not involving motor vehicles is not available, but some estimates put it at 20% of total bicyclist fatalities.

Car-Bike Collisions

Almost all bicycle-motor vehicle collisions could be prevented if both bicyclists and motorists follow the rules of the road for vehicles.

Child cyclists are less likely to know and obey the traffic rules than adults. It is important to separate children and adults when examining the data on bicyclist injuries.

The table below summarizes car-bicycle crash data from a US DOT survey of police-reported crashes. Child cyclists (15 and younger) are listed separately from older cyclists, using age 16 as a divider. That is the age at which most people receive a driver's license, which requires knowledge of the rules of the road.

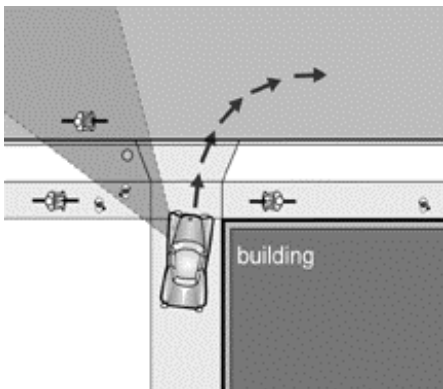
Table 2: Circumstances of Car-Bike Collisions by Age of Bicyclist, 1998-2002

Crash Type Percent Distribution	TOTAL 1988-2002	
	child	adult
bicyclist was riding on sidewalk	10%	10%
bicyclist on road, wrong way	8%	13%
bicyclist failed to yield, daylight	47%	23%
motorist failed to yield, daylight	13%	25%
bicyclist on road, right way, not daylight	7%	13%
motorist overtaking, daylight	4%	6%
bicyclist on road right way, daylight, no motorist error	7%	7%
other (mostly parking lot)	3%	3%
Total	100%	100%
% sidewalk	10%	11%
% at night	14%	24%
% wrong way (includes on sidewalk)	8%	14%
Sample size	8,505	11,089
	n =	19,594

Source: Tabulations by Paul Schimek from the NHTSA General Estimates System.

1. Bicyclist on Sidewalk

In about one out of ten car-bike collisions, the bicyclist was riding on the sidewalk or on a crosswalk. Bicyclists who habitually ride on the sidewalk and across crosswalks are more at risk of car-bike collisions than those who ride on adjacent roadways. The crash rate per mile for sidewalk riding was 1.8 times greater than the rate for using the adjacent roadway (Wachtel and Lewiston 1994).

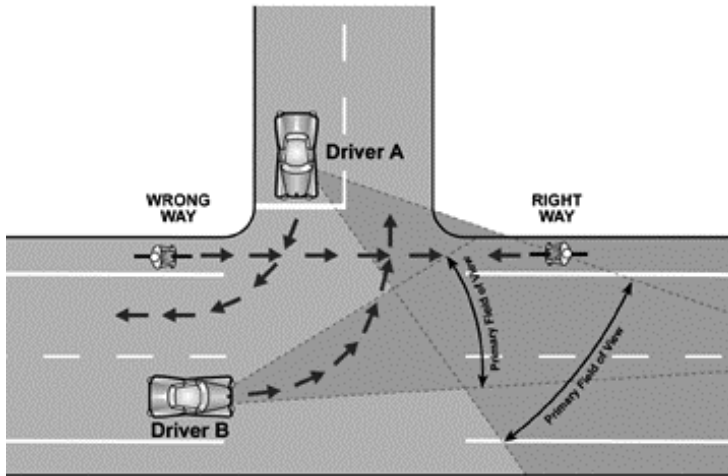


According to the same study, riding on the sidewalk opposite the flow of traffic is 4.3 times more likely to result in a car-bike collision than riding on the road with the flow of traffic. There is also a heightened risk of colliding with a pedestrian when riding on a sidewalk. However, in the case of a bicycle-motor vehicle crash on a sidewalk or crosswalk, the motorist could be legally at fault, if the cyclist had the right of way. Most states prohibit cycling on sidewalks in business districts. Whether cycling is permitted on

other sidewalks often depends on local ordinances.

2. Bicyclist On the Wrong Side of the Road

As shown in Table 2, riding the wrong way is the single largest factor leading to crashes for adult bicyclists, accounting for almost one-quarter of collisions. The obvious danger of a head-on collision with a lawful cyclist or motorist is only one of several types of crashes caused by wrong-way cycling. A motorist pulling out from a stop sign or driveway, or turning right at a stop sign or traffic signal (including right turn on red) looks in the direction of traffic, not in the direction of the wrong-way cyclist.



Cyclists riding against traffic accounted for nearly one-third of car-bike collisions in the Hunter et al. 1996 study and one-quarter in a Boston area study (Plotkin and Komornick 1984). The relative risk of riding the wrong way (against traffic) was 3.6 times as high compared to cyclists riding with traffic (Wachtel and Lewiston 1994).

3. Bicyclist Failed to Yield

Failing to yield (when entering the road, at a stop sign, when turning left, when moving across the road, etc.) accounts for *half* of all car-bike collisions among child cyclists.

Older cyclists do not often make the basic mistake of riding into the road without first checking for traffic, but failing to yield still accounts for 23% of car-bike collisions among bicyclists aged 16 and older.

4. Motorist Failed to Yield When Entering Road

The largest group of motorist-caused collisions occurs when the motorist fails to yield when entering the road. This could be from a driveway, parking lane, or stop or yield sign. This accounts for 25% of all car-bike crashes involving cyclists aged 16 and older.

5. Motorist Failed to Yield Turning Left

The other three types of motorist-caused collisions are rare for children but significant for adult cyclist crashes. In the first, the motorist fails to yield when turning left. The motorist may not have seen the bicyclist, may have underestimated the bicycle's speed, or may have assumed that the bicyclist would stop.

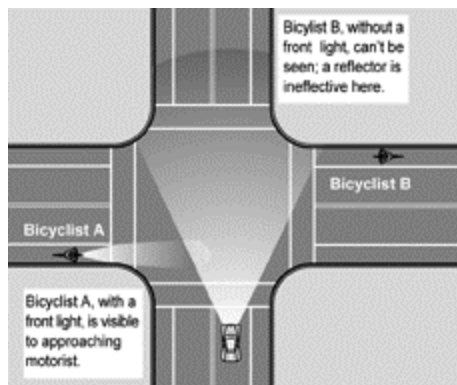
6. Motorist Improper Right Turn

In the second most common type of motorist-caused car-bike collision, the motorist turns right improperly. As already mentioned, the traffic law requires that the approach to a right turn be made from the far right portion of the road. A motorist right turn collision occurs when a right-turning motorist collides with a cyclist to his or her right. It can occur when the motorist tries to make a right turn from too far to the left, but it can also be caused by a bicyclist who passes on the right, in the motorist's blind spot. This type accounted for 6% of adult collisions but only 1% of child car-bike collisions.

7. Motorist Improper Overtaking

The final crash type is motorist overtaking. Sometimes the bicyclist is not seen, for example due to blinding sunlight. Sometimes the motorist misjudges safe passing distance. Sometimes the motorist is driving too fast for the conditions, as on a winding or hilly road with low visibility. Unfortunately, the specific circumstances were not known for more than half of the overtaking cases in the data.

8. Bicyclists on the Road Riding with Traffic, Crash Occurred at Night



Many bicyclists do not use the legally required front light and rear light or reflector. This is often the chief causal factor in night-time bicycle crashes.

Unfortunately, the study did not record whether bicyclists were using the legally required night-time equipment.

In a Boston study, 15% of cyclists were observed using either a headlight or taillight at night (Osberg, Stiles, and Asare 1998). The headlight is required in Massachusetts (and every other state). Although a rear reflector is a lawful substitute for a taillight, taillights are highly desirable and are probably more in use than headlights. Low-power, inexpensive

battery-powered red LED taillights are widely available.

Certain types of motor vehicle-bike collisions occur disproportionately at night, including motorist entering from side street or on-street parking, motorist turning left, motorist overtaking, and wrong-way cyclist hit head-on (Forester 1994 based on Cross and Fisher 1977). In the first two of these crash types, the motorist must yield to the bicyclist already in the road, but the motorist's headlamps will not be shining on the bicyclist. Therefore the bicyclist needs, and is required by law to use, a headlight to be seen by drivers in these situations.

Locations of Car-Bike Collisions

Urban vs. Rural

Because most bicycling happens in urban or suburban areas, most bicycle crashes occur in these areas. Rural car-bike collisions are more likely to be of the overtaking kind and are more likely to be serious or fatal, in part because of the higher motor vehicle speeds.

Intersections

Most urban car-bike collisions, about 80 or 90 percent, occur at an intersection or driveway. Bicyclists and motor vehicles can collide at intersections when they are approaching from opposite directions, or when one is turning and the other continuing straight.

Section Three: Bicycling and the Traffic Law

What the Traffic Laws Regulate

Note: the appendix to this document includes relevant Uniform Vehicle Code laws, as well as a sample of state laws, using Arkansas as an example.

The traffic laws regulate persons, not vehicles. There are two major classes of persons using the public ways: pedestrians and drivers of vehicles.

- *Pedestrians* include people on foot, in wheelchairs, or using skates, skateboards, or push-scooters. They are generally restricted to sidewalks and crosswalks, except when crossing the road or if there is no sidewalk.
- *Drivers* are those operating any kind of wheeled vehicle, or riding horses or driving animals, on roadways, shoulders, or driveways. Although you may have used the term “vehicle” interchangeably with the term “motor vehicle,” “vehicle” means both non-motorized vehicles and motor vehicles.

All drivers of vehicles must obey all the operating rules for drivers of vehicles. In addition, drivers of motor vehicles must obey rules requiring additional caution, certification, and insurance because of the great potential danger of motor vehicles when improperly operated.¹

How the Rules Apply to Cyclists

Bicyclists riding on the roadway, shoulder, or driveway are considered drivers of vehicles and must operate according to the laws for drivers of vehicles.

The general principles of traffic operation have been carefully thought out in a way to reduce collisions and to allow faster travel. Bicyclists can function very well when they operate within this system, but typically fare much worse when they follow different rules, or no rules at all.

- Bicyclists walking with their bicycles are considered to be pedestrians and must operate according to the laws for pedestrians. There are two "gray areas" where the rules overlap. Cyclists walking with their bicycles for a short distance, as when on a hill that is too steep to climb, should still be regulated as drivers of vehicles. This rule is commonly glossed over as unimportant.
- Bicyclists riding their bicycles on pedestrian facilities should be regulated as pedestrians. As discussed below, several states have explicitly adopted this rule, which is important for safety.

Where Bicyclists May Ride

Bicyclists are generally allowed to use the roadway or shoulder of any street, road or highway open for public use, except for express, limited-access highways such as Interstates. Note though that the western states, Pennsylvania, and New Jersey – 19 states in all as of this writing -- permit bicyclists on the shoulders of some rural interstates. Bicyclists are also permitted to use sidewalks and paths in some circumstances (see below).

Bicyclist Position on the Roadway

Some people believe that bicyclists on roadways must keep to the far right at all times. Bicyclists keep right more often than operators of other, faster vehicles, but in fact, the rules

¹ There are some vehicles with very small motors whose operation is regulated as if they did not have motors.

that apply to bicyclist position on the roadway depend on the bicycle's *speed* and *destination*, just as for all other vehicles.

Keep to the Right Half of the Road

The basic rule of driving is to keep to the right half of the road, except on a one-way street or where the road is obstructed. Operating on the wrong half of the road creates dangerous conflicts and is one of the leading causes of car-bicycle collisions.

Slower Vehicles Stay Right

Except at intersections, any vehicle that is proceeding at less than the speed of traffic at that particular time and place must keep to the right to allow passing on the left *when it is safe to pass*. If there is more than one lane, staying in the right lane provides room to pass. If there is only one lane, the slower driver should keep to the right part of that lane, but not further right than safety permits. For example, if the travel lane is next to a parking lane, bicyclists may, and should, ride outside the range of opening doors of parked cars.

Overtaking and Being Overtaken

Drivers generally overtake on the left. The overtaking driver is responsible for insuring that there is sufficient clear space ahead to overtake at a safe distance from the overtaken vehicle, and not to return to the right until safely past the overtaken vehicle (bicycle or motor vehicle). Because a bicycle is a very narrow vehicle and often moving at a much slower speed than other traffic, the time and space needed to pass a bicycle are usually much less than for motor vehicles.

Motorists frequently have to move partly or completely into the passing lane to pass bicyclists. If there is only a single lane in each direction, motorists sometimes need to cross the center line. If there is not sufficient sight distance ahead to do this safely (for example, when approaching a curve or the crest of a hill), the overtaking driver must wait until he or she can see that the way ahead is clear.

Some states require slow vehicles to pull off the road where there is a line of vehicles following and there is a safe place to wait for them to overtake. Except in this case, drivers, including bicyclists, are not required to leave the traveled portion of the road. It is very rare for a bicyclist to have to do this, because there are so many opportunities to overtake a bicycle.

Drivers may also overtake on the right in some circumstances. When the vehicle ahead is showing an intention to turn left, passing on the right is permitted if there is sufficient space. If there is a clearly marked lane, passing on the right is safe because no driver is permitted to change lanes without first yielding to traffic in the new lane. Most states also permit passing on the right when there is room for a line (not lane) of traffic, provided the overtaking can be completed safely.

Because a bicycle is so narrow, bicyclists often find there is room to overtake on the right. This can be safe if the vehicles ahead are stopped and cannot move forward (for example, when queued at a traffic signal), but is dangerous when the vehicle ahead can turn right, or where a motorist or pedestrian may cross in front of the bicyclist.

Use of Lanes

If a roadway is divided into marked lanes, drivers must stay within a single lane. If a travel lane is wide enough, motorists may be able to overtake a bicyclist safely without changing lanes. Similarly, bicyclists may in some cases overtake motorists within the same lane. But narrow lanes require a different approach. The bicyclist who rides in the far right of a lane that is not wide enough to share with motor vehicles invites motorists to pass unsafely. Riding in the center of such a lane indicates clearly to faster drivers that a partial or complete lane change is necessary in order to pass.

Bicycling side by side or single file

The width of normal travel lanes permits bicyclists to ride side by side (two abreast) in a single travel lane. Most states explicitly recognize this right by stating that bicyclists are permitted to ride two abreast, but not more than two abreast. Such bicyclists would be required to single-up, if necessary to allow other vehicles to overtake safely.

Only four states require bicyclists to ride single file with almost no exception. Some cyclists believe that this requirement is unreasonable and unnecessary given the other parts of the traffic law designed to facilitate passing. Riding two abreast provides some safety benefits for cyclists by facilitating communication and education of less experienced cyclists. Also, a compact group of cyclists is often easier for other vehicles to pass, compared to a long line of single file cyclists.

Turning

Yielding When Moving Across the Road

Every driver is normally expected to continue proceeding ahead. A driver who wishes to merge to the right or left must look for and yield to traffic in the new line of travel. Because a bicycle is not as wide as a full lane, a careful bicyclist will look back and yield even when only making a movement within the lane.

Turn Signals

A signal indicating the intention to change lane position or to turn is required when another driver might be affected by the movement. Motorists generally use automated turn signals. Hand signals were commonly used by motorists before the Second World War, but they are now used almost exclusively by law officers directing traffic – and by bicyclists. Despite this, the standard hand signals are designed for a driver in an enclosed vehicle who can signal only with the left hand. A growing number of states have amended their statutes to permit bicyclists to signal a right turn with the right hand. The right-hand right turn signal is much more readily understood by motorists.

Some states have a requirement for continuous use of turn signals in the 100 to 300 feet before a turn, forgetting that not all vehicles are required to have automatic turn signals. Because a bicyclist's hands may be required to brake or shift gears, it is not always safe for a bicyclist to signal and never practical to signal continuously. Many states have amended their statutes to recognize this situation.

Although failing to yield (that is, failing to look and wait until it is safe to go) can be a cause of collisions, inability to signal rarely is. Some signals are only a courtesy: for example, a right turn signal lets others know that they may cross in front since the bicyclist will not be continuing straight. The important need to signal occurs when a bicyclist is preparing to change lane position – and can signal -- rather than when slowing in approaching an intersection. When a bicyclist wants to move across the roadway, his or her turning head also serves as a signal, and is frequently a sufficient indicator of intent. If a following driver responds to this intent by slowing and letting the bicyclist in, communication is achieved and the legal requirement to yield is met, because the following driver has already slowed.

When a bicyclist is positioned in the left turn lane or near the center line at an intersection, his or her intentions are generally obvious. That the bicyclist's pedals are not turning is a very effective substitute for a brake light or slow signal.

Making Turns

Right Turns

The traffic law specifies that both the approach to a right turn and the turn itself must be made "in the rightmost lane and as close as practicable to the curb or edge of road." This is rarely a problem for bicyclists. However, motorists often fail to observe this rule. Passing a bicyclist and then immediately turning right is a violation of this rule. Drivers must pass at a

safe distance to the left and not return to the right until safely passed. It is impossible to do this while also turning right. Following the law means slowing and merging behind a bicyclist, and then turning right once the bicyclist has cleared the intersection.

Bicyclists intending to go straight ahead who overtake vehicles that are waiting to turn right are at high risk of collision. This is particularly a problem with trucks and buses that must necessarily begin the right turn from a distance away from the right curb. If the motorist is at the intersection first and is clearly indicating a right turn, it is the bicyclist who is at fault for passing on the right, since it is clearly unsafe to do so in such circumstances.

If there is a bike lane, just as with a bus lane or parking lane, motorists must merge into the bike lane in the intersection approach, before turning right. The existence of the bike lane does not supersede the rule on turning, which says that the approach to the turn must be made from the rightmost lane.

Left turns

A bicyclist who cannot readily merge left in advance of turning left may turn at the next block or stop at the far side of the intersection, turn left and then proceed across the street after complying with right-of-way rules. But when operating normally on the roadway, bicyclists, like motorists, must move towards the middle of the road before turning left. A left turn from the right side of the road is extremely dangerous, since the driver cannot readily yield to both traffic behind and traffic ahead at the same time.

The bicyclist should turn left from the right side of a left-turn lane, or from the middle to left of a lane that also serves through traffic. Moving to the proper position for a left turn may require the bicyclist to begin moving left a block or more in advance of the turn, especially if there are several lanes to cross.

All drivers turning left must yield to traffic coming from the opposite direction. The duty to yield depends on who is turning and who is going straight, not the type of vehicle the operator is driving. The failure to yield when turning left is, as will be shown below, one of the most common causes of car-bicycle collisions where the fault lies with the motorist.

Straight through

Drivers may have to change lane position in order to go straight through an intersection. If the right lane becomes a right-turn-only lane, bicyclists will need to merge left in order to go straight. If the rightmost lane permits both straight-through and right-turn movements, a bicyclist may merge towards the center of the lane to communicate to following motorists that the bicyclist does not intend to turn right, and to prevent the motorists from overtaking and turning at the same time.

Bicycle Lanes

A *bicycle lane* is a portion of the roadway indicated by pavement markings. It should not be confused with a *bicycle path* which is completely separate from the roadway. The existence of a bicycle lane does not change the rules of the road. Motorists must merge into the bicycle lane before turning right. Bicyclists must not overtake on the right if it is unsafe to do so.

There are many situations in which bicyclists may choose not to use a bicycle lane. For example: the bicyclist may be preparing a left turn or passing slower traffic on the left; there may be a parked car, pedestrian, or slower cyclist blocking the bicycle lane; the bicycle lane may have potholes or debris; or the bicycle lane may lead the bicyclist into an unsafe position, such as to the right of a lane that permits right turns. Only a handful of states require bicyclists to use bicycle lanes, and in those states there are exceptions listed that cover most of these situations.

Far Right Rule

Most states have a rule requiring bicyclists to keep as far to the right within the travel lane as practicable. This rule does not supersede the rules on roadway positioning in the traffic laws applying to all drivers. It is not necessary for safe and efficient operation of traffic. In fact, nine states do not have any version of this rule, and the other states have a wide variety of different variations of it. The wording of this bicycle-specific rule in a particular jurisdiction does not change safe bicycling techniques or bicycle enforcement priorities.

Sidewalk Bicycling

Although bicyclists generally use the roadway, sidewalk bicycling is permitted under some circumstances. The details of sidewalk prohibitions vary from state to state and town to town. Sidewalk cycling is generally prohibited in business districts. When cycling is permitted on sidewalks, cyclists usually must yield to pedestrians, and are sometimes required to make an audible signal before passing. Cyclists using the sidewalk generally are treated as pedestrians under the law. As discussed below, cyclists who habitually use the sidewalk and crosswalk are more at risk from collision with motor vehicles. In addition, these cyclists risk colliding with pedestrians or with objects on the sidewalk.

Roadway Prohibitions

As mentioned earlier, bicyclists are generally permitted on all roadways except limited-access and express highways where prohibitions are posted – though some states do permit bicycles on the shoulders of rural interstates.

Some local governments prohibit cycling on ordinary roads. Some of these prohibitions may be contrary to state law. Cycling organizations often seek to overturn such prohibitions because they find them unreasonably restrictive of the right to travel and unnecessary for bicyclist safety.

Currently, 17 states have a *mandatory sidepath rule*, which prohibits cyclists from using the roadway when there is a sidepath adjacent. Eight of these 17 states require a local ordinance or sign before the use becomes mandatory. Cyclists often object to such regulations because using the road is often safer and faster than using the path. If the path works well for cyclists, they need not be compelled to use it. Paths located like a sidewalk, that many driveways and streets, are generally slower and more hazardous than riding on the road. Many states have repealed or modified mandatory sidepath rules as a result of such concerns.

Manner of Riding

Some states have laws requiring bicyclists to have at least one hand on the handlebar, to ride only on a seat, and to carry articles in such a way so as not to interfere with the operation of the bicycle. Many of these rules seem to be directed at behaviors that children commonly engage in on bicycles.

Equipment Regulations

Night-time Equipment

Proper night equipment is essential for bicyclist safety after dark. Although bicyclists in urban areas may be able to see by streetlights, this does not mean that they can be seen in time to avoid a collision. Bicyclists operating at night must have a white lamp facing forward and a red lamp facing backward. In most states, a red reflector may be used in place of the red lamp. Though some states do require additional reflectors, the headlight and rear reflector or tail lamp make the bicyclist visible in all of the situations in which a collision with another bicyclist, motor vehicle or pedestrian is likely

Brakes

Most states require bicycles to have a working braking system. “Track” bicycles do not have brakes because they are designed to be used on bicycle racetracks (also called velodromes), not on public roads.² These bicycles cannot be stopped quickly enough to be safely used on the street. Some bicycles (generally children’s bicycles) have no hand brakes but only a “coaster” brakes which operate by pedaling backward. Such bicycles can be identified as having brakes because they have a brake arm extending forward from the left side of the rear hub to a clip on the frame. (The brake arm serves to keep the brake shoes inside the hub from turning with the wheel when the brake is applied.)

Bells and Audible Warnings

A few states require bells on bicycles. Bells are not essential equipment, because bicyclists can use their voice to give an audible warning in every circumstance where a bell would be effective. Some states prohibit bicyclists from using whistles and sirens. These are reserved for official use.

Helmets

Many states require minor cyclists to wear a bicycle helmet when operating a bicycle. The cutoff age varies from 11 to 17. No states require adults to wear bicycle helmets. Helmets can reduce the severity of injuries in the event of a fall or collision. They do not of course prevent crashes.

A helmet is only effective if it is properly adjusted. The helmet must be level and tight. A loose helmet will slide off in the event of a fall and will likely be of no benefit. Because head injuries are one of the leading causes of serious injuries and fatalities among bicyclists, wearing a properly fitted helmet is important to reduce the risk of injury. It is important, however, to realize that there are many other ways to reduce injuries besides encouraging helmet use. Enforcing the rules of the road so as to prevent crashes is even more important.

Other Laws Applying to Bicyclists

Uniformity of Traffic Laws

Generally, local ordinances may not contradict or supersede state law. However, some states give local governments permission, either explicitly or implicitly, to regulate the operation of bicycles. Many states specifically permit local governments to restrict bicycling on *sidewalks*, and to register bicycles.

Bicycle Registration

Many local and a few state governments have bicycle registration programs. The purpose of these programs is to reduce losses due to theft. These programs are usually voluntary.

Some densely populated urban areas with a large volume of messenger traffic require licensing and ID plates on commercial bikes. This can be a very important part of any bike initiative since the public often d paints with a broad brush when complaining about bike violators. Knowing who is creating hazard allows a department to better focus efforts in reduction.

Parking Bicycles

Parking bicycles on public sidewalks is generally permitted. Some laws specify that parked bicycles must be out of the normal vehicular or pedestrian traffic flow.

² These bicycles do have a kind of braking system – just as children's tricycles have -- in that the rider can slow down by resisting the forward motion, since the chain is connected directly to the rear wheel (technically, there is no freewheel mechanism). But if the pedals get turning too fast for the rider to keep up, the ability to brake is lost.

Reporting Crashes

State laws vary. Generally crash reports are not recorded unless a motor vehicle is involved. This policy excludes about 90% of bicyclist injuries from the recorded statistics.

Racing

In some states, competitive bicycle races on public roads require an event permit or approval of the police department in order to suspend the normal rules of the road. Other group rides do not require any special permission except when very large groups of cyclists would require special traffic control.

Intoxicated Bicycling

In most states, bicyclists may be cited for operating under the influence.

Vehicular Homicide and Assault

In most states, motorists may be cited for operating a vehicle like a deadly weapon.

Section Four: The Laws in Action

This title is merely a placeholder to avoid confusion about numbering.

The Laws in Action section is intended to visually show how motorists and bicyclists interact on the roadway. The sections exists solely in the Powerpoint Presentation.

Section Five: Enforcement: Reducing Bicyclist Injuries

Reducing Falls

Most bicyclist injuries are the result of a fall due to inexperience and poor road conditions. Experienced bicyclists are careful to stay away from hazards such as sand, holes, drain grates, and debris at the edge of the road. They may operate further to the left than some motorists would prefer, but this is often necessary for safety.

Following Traffic Rules

The evidence on bicyclist injuries, shows that cyclists can prevent many car-bike collisions by following the rules of the road. They can also prevent some collisions with other cyclists. However, they must rely on the cooperation of other road users for safety. Enforcement designed to get motorists to obey the rules is also important.

Lane Positioning and Emergency Maneuvers

Experienced bicyclists reduce the incidence of right turns across their path by merging farther into the roadway at urban intersections with a high volume of right-turning traffic and no right-turn lane. Keeping away from the edge of the road also makes bicyclists more visible to motorists entering the road from a driveway or side street, thus reducing drive-out type collisions.

If a motorist is turning across a bicyclist's path, the only escape route is a sharp turn to the right, into the street or driveway that the motorist is turning into. Experienced bicyclists can make an emergency turn very quickly. If a bicyclist has to make such a sharp, unwanted turn, it is clear that the motorist has failed to yield.

Gloves and Helmets

Following the traffic laws and using the above lane positioning and emergency techniques can dramatically reduce the crash rate for bicyclists. It is also important to take measures to reduce injuries in the unlikely event that a crash does occur.

Bicycling gloves protect a bicyclists' hands from numbness on long rides, and protect the palms from serious abrasion in the event of a fall.

A bicycle helmet can protect against head (including brain) and facial injuries, and these are the injuries most likely to be permanently disabling or fatal. There is a 70 percent reduction in risk of head and brain injury associated with helmet use (Rivara et al. 1996). Helmets must be snug and low against the forehead for maximum effectiveness. Cyclists who reported their helmets fit poorly were *almost twice as likely* to suffer head injury as cyclists whose helmets fit best (Rivara et al. 1996). Cyclists whose helmets came off during a crash were *three times* more likely to have head injuries than cyclists with snug helmets (Rivara et al. 1996). Helmets should be used when cycling in any location, even where there is no motor traffic, since any fall can result in head injury, and falls are by far the most common cause of injury.

A helmet can only prevent or reduce injuries, not prevent crashes. Helmet laws are similar to seat belt laws in that they are really only designed to protect the user in the case of a crash, but they do not otherwise improve overall roadway safety.

Most Dangerous Cyclist Infractions

These are the bicyclist infractions connected with the largest number of motor vehicle-bicycle collisions. They are the offenses that should be targeted.

- Driving against the flow of traffic on the roadway.
- Cycling at night without required headlight and rear light or reflector.
- Riding on the sidewalk where prohibited or at an unsafe speed.

- Failure to obey traffic signals.
- Failure to yield at stop or yield signs or when entering the road.
- Failure to yield when moving across the road or when turning left.

A one-page sheet in the appendix material includes a summary of violations, fines, and citations of the statutes. You may want to keep this with you while on patrol.

Important Motorist Violations

These are the motorist infractions that most often lead to motor vehicle-bike crashes:

- Failure to yield when entering the roadway or at intersection.
- Failure to yield to cyclist when turning left.
- Unsafe passing of cyclist.
- Improper right turn.
- Driving too fast for conditions.
- Driving while intoxicated.
- Opening car doors into traffic

How to Ticket Cyclists

- Use a warning for educational purposes
- Tickets must be on a local jurisdiction ticket book
- Follow the normal interview procedure, as you would with motorists
- Stick to the violation - do not debate side issues
- Obtain cyclist's identification

Cyclists are not required to carry identification, but failure to give name and address is sometimes an arrestable offense.

Problems arise when offenders want to argue about their rights. If you know the law, you can be clear about the offense and avoid getting into long debates. Write the ticket, and tell the offender that he/she has every right to contest the violation in court.

If you are suspicious as to an individual's identity, or ID is not presented, ask again at the end of the interview. Hesitation or slightly different information suggests false information. Check the signature on the ticket to see if it matches the name given. A bicyclist who refuses to give any information may be arrested.

Ticketing Motorists

The following is mostly review for law enforcers: in stopping a motorist, make sure that the driver understands that all types of vehicles, including bicycles, may be used on public roads. While it is true that some cyclists are disrespectful, the majority are just trying to get to work, school, or shopping just like the motorists. Also remind the motorist that endangering people is simply not acceptable behavior. If the driver is cooperative and understanding, a warning may be all that is necessary. Again, assuring the motorist that officers are paying equal attention to bicyclists who endanger others may be a useful strategy. If the motorist becomes argumentative, and wants to debate whether cyclists should be allowed on public roads at all, remind the motorist that your job is to enforce the laws. Refuse to participate in the argument, and issue a citation for the specific offense(s). This way, the driver will have an opportunity to debate the issue before a judge, if he or she chooses to contest the ticket in court.

Section Six: Crash Investigation

Crash (defined for bicyclists): A way to describe the event in which a bicyclist meets the ground, another vehicle, or any other solid object in a way that can result in bodily harm and/or property damage. A crash is not an accident. The word "accident" implies heavy doses of chance, unknown causes, and the implication that "nothing can be done to prevent them."

Detailed investigation of cyclist crashes can help planning, engineering and education professionals target effective countermeasures. There are some bicycling-related factors officers should note in the narrative that are not adequately addressed in standard crash forms. These will help with data collection and assure fair treatment of both parties. Keep the following in mind:

Types of Impacts and Falls

Types of Falls:

- Stopping
- Skidding
- Diversion
- Insufficient speed

There are four types of falls.

Stopping - involves either a collision with an object or other hazard where the front wheel is stopped from turning. The bicyclist usually flies forward. These crashes are often serious.

Skidding - the bicycle skids and falls to the side due to swerving, collision, or other quick maneuvers. Usually, these crashes result only in skin abrasions but may be more serious if speeds are higher.

Diversion - the bicycle is swept out to the side, for example by a diagonal railroad track, sand, mud, or a crack in the pavement. This often results in a very sudden fall to the side and can cause a broken hip or collarbone, or head injury.

Insufficient speed: The bicyclist can no longer maintain balance. Such falls are not usually very serious.

Usually, falls that are caused by or accompanied by collisions are more serious than falls alone.

Types of Impacts:

- **Collision:**
two objects making contact
- **Fall:**
bicyclist unable to control vehicle
- **Combination:**
bicyclist collides with other object and falls off or is thrown off bicycle

Injury and /or damage may result from a collision with another object, such as a motor vehicle, fixed object, other bicycle, dog, or pedestrian. A fall may result from driver error, attempting to avoid a collision, or encountering a road hazard. Frequently, a fall is combined with a collision, especially when a bicyclist collides with a motor vehicle.

Remember, a collision is not required to find fault with another vehicle operator.

Investigation: General

- Equal credence to the statements of cyclists, motorists and others who witness or are involved in a crash.
- Position of sun, time of day, glare factor.
- Nighttime driving issues: critical distance visibility, positive and negative contrast, night vision diminishes.
- Surface hazards: sand, glass, puddles, debris, potholes, railroad tracks, irregular road surface, etc. that might cause the cyclist to swerve suddenly.
- Visual obstructions: signs, trees, etc. that would interfere with the cyclist and motorist seeing one another.
- Location on highway — Was the cyclist in a designated bike lane or on a paved shoulder? Check for physical evidence such as motor vehicle and bicycle tire marks.

The Cyclist

- Lighting and reflectivity — If the crash occurred at night, was the bicycle equipped with a headlight and taillight? Were they on? If the lights were damaged in the crash, were the batteries charged? Were reflectors present? Was additional reflective material used on the bicycle or cyclist?
- Brakes — Were the brakes connected and were brake pads present?
- Helmet — Required for children 12 and under; recommended for everyone. Was one properly worn and secured?
- Preserving evidence: advise cyclists to save all clothing and equipment involved in the crash, to refrain from repairing or cleaning any items, and to have any injuries checked by a doctor or at least photographed.
- If necessary, draw upon the experience of mechanical bicycle experts (who often work at bike shops) to determine the bicycle's pre- and post-crash condition.

The Motorist

- Did the motorist fail to scan for a cyclist? It is the motorist's duty to scan the sidewalk as well as the street before proceeding. (A bicyclist on a sidewalk could just as easily have been a pedestrian, unless the cyclist was proceeding at such a speed as to be outside the motorist's field of view).
- A motorist's claim not to have seen a cyclist in plain view in good weather should trigger questions about drug or alcohol use, distractions, or fatigue.
- Added problems at night:
 - Tinted windshields
 - Tinted eyeglasses
 - Dirty headlights
 - Dirty windshields
 - Combinations of the above

Crash Reconstruction – A Brief Overview

- Where were they going?
- How fast were they going?
- What kind of impact was it?
- What caused the damage or injury?
- Who was at fault?

A patrol officer is not likely to be required to analyze the crash beyond recording it, but it may be useful to be aware of the process. If you want more information, there are courses that can give you all the details you need to conduct a rigorous bicycle crash reconstruction analysis.

For more information on crash investigation and analysis, check out the Bicycle Crash section on the Pedestrian and Bicycle Information Center's website:

<http://www.bicyclinginfo.org/bc/index.htm>

Time, Distance, and Reaction Time - General

- Speed is the rate of change of *distance* over *time*.
- Different types of vehicles have different stopping times.
- Reaction times are different depending on time of day, lighting effectiveness, and operator alertness/abilities.

Various elements should be taken into consideration when calculating what has occurred in a crash. As you may know, excessive speeds are often a major factor in a crash, so it is important to have an estimate of the speeds that vehicles were traveling before the crash. It is also important to understand any factors that may have prevented vehicle operators from stopping in time to avoid the crash - these may include impaired driving, poor sight lines, environmental conditions, and inexperience.

Time, Distance, and Reaction Time – the Motorist

- Understanding how speed relates to Time and Distance
 - Convert mph into feet per second (fps)
 - Use conversion rate for fps (feet in a mile/seconds in an hour) or $(5,280/3,600 = 1.466$ or $22/15$)
 - Multiply the speed by 1.466 (mph x 1.466 = feet per second)
 - Example: $55 \text{ mph} \times 1.466 = 80 \text{ fps}$
- Stopping distance at City and Highway Speeds
 - Skid to stop ($S^2/30 \times f = D$)
 - Examples: $35^2/30 \times .75 = 54$ feet; $65^2/30 \times .75 = 187$ feet
- Normal Reaction Times
 - Typical reaction time is 1.5 seconds (daytime)

- Calculate feet traveled during reaction time (fps x 1.5 seconds)

Examples: 80 fps (55 mph) x 1.5 seconds = 120 feet
110 fps (75 mph) x 1.5 seconds = 165 feet

- Reaction times and stopping distance are both factors in crash avoidance

- Reaction Time + Stopping Distance = Total Distance Needed

- Examples:

55 MPH		75 MPH
120 feet	(reaction time)	165 feet
<u>134 feet</u>	(stopping distance)	<u>250 feet</u>
254 feet	(total distance needed)	415 feet

- Time of Day

- Nighttime affects operators' eyesight, increasing reaction time.

- Average nighttime reaction is 2.5 to 4 seconds (compared to daytime 1.5 seconds)

- Examples:

- 80 feet per second x 1.5 (daytime) = 120 feet
- 80 feet per second x 2.5 (nighttime – low) = 200 feet
- 80 feet per second x 4.0 (nighttime – high) = 320 feet

- Headlight illumination

- Average low beam: 160 feet (as low as 90 feet)
- Average high beam: 220 feet

- Over-driving a motor vehicle's headlights

- Examples:

- 55 mph x 1.466 = 80 feet x 2.5 seconds (reaction) = 200 feet
- 75 mph x 1.466 = 110 feet x 2.5 seconds (reaction) = 275 feet.

Time, Distance, and Reaction Time – the Bicyclist

The average daylight reaction and stopping time combined is 2.5 seconds for a bicycle.

The equation for calculating total stopping distance is:

$$\text{Stopping Distance} = \left\{ \frac{V^2}{30 (f \pm G)} \right\} + 3.67V$$

Where

V = Velocity (mph)

f = coefficient of friction (2.5 in wet)

G = grade (ft/ft) (rise/run)

Here are some estimated stopping distances in damp weather:

a child using training wheels	At 6 mph — 22 ft
the average cyclist	At 12 mph — 60 ft
an athlete	At 20 mph — 122 ft
a cyclist going down a hill!	At 30 mph — 400 ft

These estimated stopping times are for the average bicyclist on a damp day with standard hand brake systems and rubber brake pads on a flat road (except the downhill figure). Some bicycles are now equipped with more efficient braking systems, including disc brake systems and ceramic brake pads. Kids bicycles often have coaster brakes that are about the same efficiency as hand brakes but they may fail during longer/more forceful stops or cause the bicycle to skid.

Also note that braking hard sometimes stops the bicycle very quickly, but doesn't stop the bicyclist! Cyclists call this situation an "endo" — where the cyclist goes over the handlebars and the bike ends up on top of him or her.

These equations are from the "Sight Distance" section of the Guide for the Development of Bicycle Facilities, by the American Association of State Highway and Transportation Officials (AASHTO)

Injuries

Injuries will be assessed by the medical community, obviously, but damage to the vehicles and other equipment needs to be done. For bicycle damage analysis, you may want to consult a trained bicycle mechanic who will be familiar with different types of bicycles and material strengths. Many bicycles are now made of aluminum and other alloys, which crush easily, while other bicycles are made of steel, which may take a lot of force and show very little damage. Remember, also, that bicycle helmets are made to withstand a high amount of blunt force, so even a small dent such as this one could have resulted from a high impact crash that sent the wearer to the hospital with a concussion.

Note: when a helmet has been in a crash, its structure is compromised and should never be used again for protection. Many helmet manufacturers have crash-replacement programs, and will provide a new helmet either free or at a large discount.

- The crash site is a crime scene if there is a fatality.
- As with any other fatality involving a vehicle, a trained crash reconstructionist should be called in. State Police usually maintain a list of crash reconstructionists.
- Do not move the bicycle until its location and position have been photographed or otherwise accurately recorded.
- The bicycle should be thoroughly inspected by the investigator.
- The bicycle should be held as evidence and only released when the case is closed.
- Post-crash tests are available to determine visibility and speed.

Optional Sections

Bicycle Driver Training: The Abridged Version

The law of the road identifies a bicyclist as a vehicle operator. Passenger cars, trucks, buses, horsedrawn carriages, mopeds, bicycles – all are subject to the same rules of the road, with only minor differences depending on the different vehicles' speed, size and maneuverability..

You already know how to drive a car, right? The rules for a bicycle are the same, only you have to learn how to follow them while driving a narrow vehicle which usually goes more slowly. In fact, there are no important differences between the rules for riding a motorcycle slowly, and riding a bicycle.

You are a part of traffic and you have a right to expect to be treated as other drivers are. Ride as if you belong on the road. Trying to be out of the way of cars all the time makes you less safe. If you do not act as a driver, you will not be treated as one, and, worse, you will put yourself in situations where you are not expected by motorists, pedestrians and other bicyclists resulting in crashes.

Once you realize that you have the same rights and responsibilities as other drivers, you will see that driving your bicycle is not much different than driving your car. What does it mean to follow the rules of the road when bicycling? Here are the basic principles.

1. Go with the flow

Many bicyclists are most fearful of being struck from behind, and so they think that it must be safer to ride against traffic. But that's very wrong. Being struck from behind is rare; crossing and turning collisions are at least ten times more common. And riding against the flow multiplies the risk of these collisions by several times !

If you ride against traffic, drivers entering the street from a cross street or driveway are likely not to notice you, because they are be looking for a break in traffic coming from the other direction. You also cannot see traffic signs or signals, and are you directly in the path of oncoming bicyclists.

Some bicyclists ride on the sidewalk, thinking that is safer. It isn't. Sidewalks are designed for pedestrians, not vehicles. At intersections, turning drivers may not see you coming off the sidewalk until a collision is unavoidable (and doubly so if you are riding on the sidewalk against the direction of traffic). Sidewalk cyclists get hit by cars emerging from cross streets, driveways or alleys. Drivers don't look for anyone approaching faster than a pedestrian on the sidewalk.

2. Yield to traffic on bigger streets

When exiting a driveway or a small street, give way to traffic on the main street. Stop signs and traffic lights clarify who has the right of way. Don't imitate the many bicyclists who run red lights: it's dangerous and rude.

3. Ride in a straight line and yield when you must deviate from that line

What happens if you see a double-parked car or a pothole ahead? Look well ahead, so you have plenty of time before reaching the obstacle. Look over your shoulder for traffic. If you see none close, move far enough left to avoid the obstacle ahead. If there is overtaking traffic, either slow and wait for it to pass, or, if traffic is steady, point left with your left hand. When the next driver behind you slows or moves aside to make room for you, it is safe to move left. If the first motorist ignores you, try the next one.

4. Pick the correct position at intersections

Most car-bike collisions happen at intersections or driveways. Just as when you are driving a car, you must pick your lane position depending on where you are going (right, left, or straight through). Since you are usually slower than other traffic, pick the rightmost lane that serves your destination if there is more than one. One more complication: since a bicycle doesn't occupy an entire lane, you must choose your position within the lane. Here's the rule: if the lane serves only one destination, ride on its right side; otherwise, ride on the side closer to your destination.

For example, ride on the left side of an unmarked lane when turning left, but ride on the right side of a left-turn only lane. If there is heavy right-turning traffic and you are going straight, move towards the center of the lane to prevent being "hooked" by a right-turning motorist.

Give yourself plenty of room when overtaking. Don't sneak along close to the side of any vehicle. You want to be where drivers will see you as they look over their shoulders before merging – and where you have time to brake and drop back if a driver does start to merge toward you. Stay three feet or more from passenger cars; five feet or more from the side of a long truck or bus, which could sweep across your path if it turns or merges.

If you must pass on the right in congested traffic, do so slowly and carefully, and never where a motorist can turn right. Stop behind the first vehicle in line at a traffic light—you never know if someone is going to turn right without signaling. Don't get next to a long truck or bus that could possibly turn toward you.

To position yourself for a left-turn, merge to the left-turn position as described under #3 above, and give yourself plenty of time and distance to cross to the left-turn position. Cross each lane in two steps, once to cross to the far side of the lane, then another to cross the lane line into the next lane. Look behind and yield to overtaking traffic at each step.

5. Pick the correct position between intersections.

- Normally, ride on the right portion of the travel lane, being sure to allow 1' of space from the edge of good pavement, 2' from a raised curb, and 4' from a parked car whose door might open. If you are moving as fast as other traffic (on congested streets or steep downhills), move towards the center of the lane and pass slower traffic on the left, just as you would on a motorcycle. Even if not riding as fast as other traffic, ride in the center of a lane that is too narrow to share, or you will be squeezed out by motorists passing too closely. Some basic principles: Ride a safe distance away from

hazards along the edge of the road such as drain grates and debris. Ride a straight line. Don't weave around parked cars.

- If the lane is too narrow to share with a car, ride in the middle of the lane.

These concepts may sound tricky or dangerous at first, but with practice they become natural. The rules are the same whether your fuel is gasoline or a peanut-butter sandwich, so you already know the basic ideas.

Special crash-avoidance techniques apply to single-track vehicles. Through police motorcycle training, you may already know the techniques of:

- countersteering to initiate a quick turn;
- using the front brake hard for a quick stop while avoiding loss of control;
- quick steering and recovery of balance to dodge obstacles on the road surface.

All of these techniques require practice, and are slightly different on bicycles and motorcycles due to its somewhat different handling characteristics. In addition, on a bicycle, it is possible to jump over potholes and other obstacles.

The best way to learn these principles and skills, and to develop your confidence in traffic, is to take a class. Police bicycle training through the International Police Mountain Bike Association, and the Bike Ed classes of the League of American Bicyclists, teach safe and efficient bicycling techniques with classroom instruction, parking lot practice, and on-road coaching. There are also published materials you may use for self study; see the list of references at the end of this document.

In addition to the traffic skills above, having a bike in good working order, a well-fitting helmet, gloves to protect your hands from scrapes and lights for night riding are essential for safe cycling.

Working with Your Community

Local bicycle groups can work with your department to solve recurring problems. There are many bicycling groups. You can work with these groups to encourage bicyclists to treat all road users with respect. Groups which you may encounter include ride clubs, professional racers, recreational rides, charity rides, and demonstration rides.

A child's first vehicle is usually a bicycle. Introducing kids to the fun and freedom of riding a bike should go hand in hand with teaching them about bicycles, how to ride them, and how to maintain them.

Bicycles are fun to ride — but because they're also legally considered vehicles, it is the responsibility of every cyclist to adhere to the laws as well as other safety guidelines. The minute a bicycle enters a pathway, a sidewalk, a park, a street or road, it is not a toy; it is a vehicle.

Why Kids Are at Risk

In the simplest terms, kids are at risk for bicycle-related injuries because kids — more than 70% of 5–14 year-olds — ride bicycles. This age group also rides about 50% more than the average bicyclist. So it's not hard to understand why they also account for approximately one-quarter of all bicycle-related deaths and more than half of all bicycle-related injuries.

Head injury is the leading cause of death in bicycle crashes and is the most important determinant of death and permanent disability. The single most effective way to reduce head injury from bicycle crashes is to wear a helmet. Unfortunately, national estimates report that helmet use among child bicyclists ranges from 15 to 25 percent. It is lowest among children ages 11 to 14.

Collisions with motor vehicles are another significant risk factor. It is estimated that motor vehicle collisions account for about 80 percent of all bicycle-related deaths. Collision with a motor vehicle increases the risk of death, severity of injury, and probability of head injury.

Other risk factors:

- Children ride more often and so are more likely to die from motor vehicle-related bicycling injuries in the summer and in the late afternoon than at other times. They are much more likely to die in crashes in the middle of the street, on bike paths or on the sides of streets than at intersections.
- Children are four times more likely to be injured when riding in low light (nighttime, dawn, or dusk) than in daylight (most likely because children's bicycles rarely have the proper nighttime equipment).
- Children tend not to ride very far, and so they are most likely to be injured on residential streets close to home. The typical bicycle/motor vehicle crash occurs within 1 mile of the bicyclist's home; nearly 60 percent of all childhood bicycle-related deaths occur on minor roads.
- Children under age 10 are more at risk. They are more likely to be seriously injured and suffer a higher proportion of head injuries.
- Children ages 4 and under are more likely than older children to be injured around the home (driveway, garage, yard).
- Unfortunately, a child's behavior is often a risk factor. Most childhood bicycle-related fatalities are associated with behaviors such as riding into a street without stopping, turning left or swerving into overtaking traffic, running a stop sign, or riding against the flow of traffic.

Positive Reinforcement

Bicycle Rodeos

- Bicycle rodeos teach children basics about safe cycling behavior.
- They offer community outreach
- They are a good summertime activity when children are most at-risk for bicycle-related crashes.

Local bicyclists' organizations can probably find you materials to hand out, provide suggestions for good activities, and even help volunteer.

Safe Driving Tickets

Many law officers are wary of stopping children, often feeling that this results in negative publicity. But enforcement should be viewed as reinforcement of educational programs, and if preventing crashes is a goal, then correcting dangerous bicycle driving behavior in children should be a priority.

The Bicycle Safety Patrol Program of the Fairfax County (Virginia) Police Department seeks to increase helmet usage by cyclists who are covered by the county bicycle helmet law. Traffic safety officers patrolling on bicycles issue warning tickets to youngsters found riding without a helmet. For those unable to afford helmets, the tickets are redeemable at local bicycle shops for free helmets.

Another initiative, the Bicycle Safety Reward program, involves officers giving children “tickets” for wearing their helmets and displaying safe bicycling habits. The “tickets” can be redeemed for ice cream, and are kids are entered into a drawing for the grand prize of a new bike.

An alternative to a ticket is to require a child (or even an adult) to attend a safety education class for a specific number of hours or sessions. The child offender would simply get a warning ticket and the parents would get a letter explaining why their child was stopped and why he or she must attend a safety education class. This approach has been successfully implemented in some communities and is very popular with parents. It is also popular with law officers who do not like to give regular tickets to children.

If your department wishes to develop any of these programs, or something similar, you may want to collaborate with your town’s bicycle committee or ride club.

Bicycling-Related Statutes to Research in Your State

This section will aid in understanding the nuances behind state laws. First, the Uniform Vehicle Code will be discussed, followed by the use of Arkansas as an example of how to research laws in a particular state.

Important notes: The Uniform Vehicle Code is published as a model ordinance by The National Committee on Uniform Traffic Laws and Ordinances, and it is frequently used by the states and adopted into statute.

Here are a variety of issues that may come up while researching state laws:

Are bicyclists considered drivers of vehicles?

Look for a statute that gives bicyclists “all of the rights and all of the duties applicable to the driver a vehicle” (UVC 11-1202).

Definition of “vehicle.”

The definitions are usually found in the first chapter of the traffic code. The definition of vehicle includes bicycles unless it specifically excludes them, or excludes devices moved by human or muscular power generally. Note that bicyclists are still drivers of vehicles under the law, whether or not bicycles are vehicles.

#Definition of “bicycle”.

The definition is usually written to exclude children’s tricycles, play vehicles (e.g. tricycles), and kick scooters. However, some versions are so broadly written that they exclude adult tricycles and adult bicycles with small wheels. (UVC 1-109). A few states have no statutory definition.

Roads where bicycling may be prohibited.

As drivers of vehicles, bicyclists generally have a right to use the same roads that other drivers may use. One exception is a “controlled-access” or “limited-access” facility. The rules for these facilities (sometimes located in the chapter on highways, not the chapter on vehicles) may either prohibit bicycles outright, or else give highway authorities the discretion to prohibit bicyclists (as in UVC 11- 313). Several states permit bicyclists to use rural sections of limited-access highways.

Where should bicyclists positioned for normal travel?

Many states have a rule that requires bicyclists to ride “as far right as practicable,” sometimes with exceptions. Nine states have no version of this rule, and, in fact, it is unnecessary. As drivers of vehicles, bicyclists are required in other parts of the traffic law to keep to the right when moving slower than other traffic (UVC 11-301(b)) and to move right when being overtaken (11- 303 (b)).

Whether it lists specific exceptions or not, the “far right rule” should not be interpreted to mean that bicyclists must rigidly stick as close to the gutter as possible. The language of the rule is “as far right as *practicable*,” not “as far right as *possible*.” There are many hazards at the edge of the road, such as drain grates, debris, and opening car doors, that make it impractical—and unsafe—to travel as close to the edge as *possible*. Further, keeping to the right is not required when it would interfere with the bicyclist’s intended path of travel, as when preparing a left turn, avoiding a right-turn area, or overtaking another vehicle. It should be noted that the intent of the traffic law, taken as a whole, is to permit faster drivers to overtake when it is reasonably safe to do. The slower driver is obliged to make overtaking easy, but does not give up his right to travel to his intended destination, and in safety. In

congested traffic or on steep descents, bicyclists may be traveling as fast as is safe for the conditions.

Is there a mandatory bike lane or shoulder rule?

A handful of states have a statute requiring bicyclists to use a bike lane or shoulder, where one exists. The statutes generally provide exceptions, as when the bike lane or shoulder is not in rideable condition. As with the Far Right Rule, this rule should be interpreted within the context of the vehicle code as a whole.

Continuous turn signals

When automatic turn signals became common, a requirement to signal continuously in advance of the turn was adopted in many states. While it is inconvenient for a motorist to make a continuous hand signal, it can be dangerous as well as inconvenient for a cyclist to do so, since both hands are needed for steering or braking. So far 24 states have either explicitly exempted cyclists from the continuous signal requirement or have never adopted the requirement. The current UVC makes the continuous signal applicable only to vehicles equipped with automatic turn signals (11- 604(b)).

Manner of signaling right turn

The standard hand signals for stopping and turning assume that the operator is seated on the left side of an enclosed vehicle and therefore can only use the left hand to signal. However, either hand of a bicyclist can be seen. For the past 50 years, motor vehicles have been equipped with automatic turn signals. Most people are not familiar with the standard hand signals, especially a right turn signal made with the left hand. Pointing right with the right arm is much more easily understood by all. Ironically, the only drivers who regularly use hand signals any more are bicyclists. So far 22 states have changed their statutes to permit bicyclists to make a right turn signal with the right hand. The Uniform Vehicle Code adopts this provision as well (11- 606).

Number of bicycle riders abreast

There is no need to prohibit riding abreast since the rules on passing require cyclists to move right to permit overtaking and the slow-moving vehicle rule requires cyclists to keep to the right if going slower than other traffic. Eight states have no rule concerning the number of riders abreast. Fifteen other states prohibit bicycling *more than* two abreast, but permit riding two abreast. Twenty states permit riding two abreast unless traffic is impeded. New York permits riding two abreast except when a cyclist is being overtaken. The remaining six states require cyclists to ride single file, but all but three of these provide an exception for when no other traffic is affected.

Passing on the right.

The UVC allows passing on the right (11-304) as long there is “sufficient width for two or more lines vehicles.” You should also check to see if your state explicitly allows passing on the right specifically for bicycles – this provision would generally be in the bicycle law section of the state statute.

Restrictions on sidewalk bicycling

First check if there is a statute that prohibits any driver of a vehicles from operating on the sidewalk (e.g. UVC 11-1103). It may specifically exempt bicyclists, or may specifically

refer to *motor* vehicles. Second, check if there is a statute (usually in the bicycle section) that regulates bicycle operation on sidewalks (e.g., UVC 11-1209). Third, check if there is a statute on “powers of local authorities” that includes the permission to regulate bicycling on sidewalks or bicycle operation generally.

Mandatory sidepath rule

The uniform vehicle code formerly include the following provision: “Whenever a usable path for bicycles has been provided adjacent to a roadway, bicycle riders shall use such path and not the roadway.” The authors of the UVC and many states repealed this rule in the 1970s and 1980s in response to the objections of cyclists and the liability exposure which resulted from mandatory use of facilities shown to be hazardous. As of 2004, 18 states still had this rule, but in half of these states the rule only applies if there is a local ordinance or sign requiring path use. Because of the hazard and mobility impairment of requiring cyclists to use paths along roads, bicycle organizations are working to remove this law where it still exists.

Night time equipment.

Bicycle night-time equipment is usually found in the bicycle section, but may instead be located in the chapter on vehicle equipment. All states require a white front light. All states require either a rear light or a rear reflector. In addition, some states have requirements for reflectors on the sides of the bicycle or the pedals. The UVC requires a rear light, in addition to a reflector. Ohio is the only state that requires a rear light.

Helmet use requirements.

As of March 25, 2004, 19 states and the District of Columbia required children to wear bicycle helmets. The age at which the mandatory requirement no longer applies ranges in these state statutes from 11 to 17. There are several local jurisdictions with helmet requirements; some apply to adults as well as children (especially in Washington State). For a complete list, see <http://www.bhsi.org/mandator.htm>

Driving under the influence

Some statutes on driving under the influence apply specifically to *motor* vehicles, and thus not to bicyclists.

Harassment, assault, and battery

Bicyclists are sometimes victims of inconsiderate motorists (or their passengers) who threaten or attempt to frighten the bicyclist by shouting, deliberately following or passing closely, or throwing objects. These actions could meet the legal definition of harassment, assault, or battery, depending on the laws in your state. One statutory definition of harassment is the attempt or threat to touch a person with intent to alarm without good cause. One definition of assault involves the “apprehension of imminent physical injury.” In addition to more obvious cases, battery includes, in one definition, someone who “*negligently* causes physical injury to another person by means of a deadly weapon” (emphasis added). A motor vehicle can be a deadly weapon.

Checklist of Most Dangerous Violations

Uniform Vehicle Code (2000 edition) numbers shown. See text of UVC below.

For Bicyclists

Failure to operate on right half of road: 11- 301

Wrong way on one-way street: 11- 301

Moving across roadway without yielding: 11- 604 (a)

Entering intersection on red signal: 11- 202

Failure to yield the right of way at stop or yield sign: 11- 403

Failure to yield the right of way before entering roadway: 11- 404

Failure to use head light: 12-702

Failure to use rear light or reflector: 12-703

Failure to yield to pedestrians in crosswalk not controlled by traffic signals: 11 - 502

Operating on sidewalk where prohibited: 11-1209

Driving while intoxicated: Section 102 (stand alone section)

For Motorists

Failure to make right turn from rightmost part of roadway: 11- 601 (a)

Failure to yield when turning left: 11- 402

Entering intersection on red signal: 11- 202

Failure to yield the right of way at stop or yield sign: 11- 403

Failure to yield the right of way before entering roadway: 11- 404

Failure to yield the right of way before starting from parked position: 11- 603

Unsafe distance when overtaking: 11- 303

Unsafe place to overtake on left: 11- 305 and 11- 306

Unsafe overtaking on right: 11- 304

Operating at unsafe speed: 11- 801

Opening door of motor vehicle when unsafe: 11-1105

[Failure to yield to pedestrians in crosswalk not controlled by traffic signals: 11- 502]

Driving while intoxicated: Section 102 (stand alone section)

Harassment (includes attempting or threatening to touch a person with intent to alarm without good cause): Not part of the UVC.

Third degree assault (“apprehension of imminent physical injury”): Not part of the UVC.

Third degree battery (“negligently causes physical injury to another person by means of a deadly weapon”): Not part of the UVC.

Uniform Vehicle Code 2000 Edition, Selected Excerpts

§ 1-109, Bicycle

Every vehicle propelled solely by human power upon which any person may ride, having two tandem wheels and except scooters and similar devices.

§ 1-215 Vehicle

Every device in, upon or by which any person or property is or may be transported or drawn upon a highway, excepting devices used exclusively upon stationary rails or tracks.

§ 11- 202 Traffic-control signal legend

Whenever traffic is controlled by traffic-control signals exhibiting different colored lights, or colored lighted arrows, successively one at a time or in combination, only the colors Green, Red and Yellow shall be used, except for special pedestrian signals carrying a legend, and said lights shall indicate and apply to drivers of vehicles and pedestrians as follows:

(a) Green indication

1. Vehicular traffic facing a circular green signal may proceed straight through or turn right or left unless a sign at such place prohibits either such turn. But vehicular traffic, including vehicles turning right or left, shall yield the right of way to other vehicles and to pedestrians lawfully within the intersection or an adjacent crosswalk at the time such signal is exhibited.
2. Vehicular traffic facing a green arrow signal, shown alone or in combination with another indication, may cautiously enter the intersection only to make the movement indicated by such arrow, or such other movement as is permitted by other indications shown at the same time. Such vehicular traffic shall yield the right of way to pedestrians lawfully within an adjacent crosswalk and to other traffic lawfully using the intersection.
3. Unless otherwise directed by a pedestrian-control signal as provided in § 11-203, pedestrians facing any green signal, except when the sole green signal is a turn arrow, may proceed across the roadway within any marked or unmarked crosswalk.

(b) Steady yellow indication

1. Vehicular traffic facing a steady circular yellow or yellow arrow signal is thereby warned that the related green movement is being terminated or that a red indication will be exhibited immediately thereafter.
2. Pedestrians facing a steady circular yellow or yellow arrow signal, unless otherwise directed by a pedestrian-control signal as provided in § 11-203, are thereby advised that there is insufficient time to cross the roadway before a red indication is shown and no pedestrian shall then start to cross the roadway.

(c) Steady red indication

1. Vehicular traffic facing a steady circular red signal alone shall stop at a clearly marked stop line, but if none, before entering the crosswalk on the near side of the intersection, or if none, then before entering the intersection, and shall remain standing until an indication to proceed is shown except as provided in subsection (c)3.
2. Vehicular traffic facing a steady red arrow signal shall not enter the intersection to make the movement indicated by the arrow, and unless entering the intersection to make a movement permitted by another signal, shall stop at a clearly marked stop line, but if none, before entering the crosswalk on the near side of the intersection, or if none, then before entering the intersection and shall remain standing until an indication permitting the movement indicated by such red arrow is shown except as provided in subsection (c)3.

4. Unless otherwise directed by a pedestrian-control signal as provided in § 11-203, pedestrians facing a steady circular red or red arrow signal alone shall not enter the roadway.

§ 11- 301 Drive on right side of roadway--exceptions

(a) Upon all roadways of sufficient width a vehicle shall be driven upon the right half of the roadway, except as follows:

1. When overtaking and passing another vehicle proceeding in the same direction under the rules governing such movement;
2. When an obstruction exists making it necessary to drive to the left of the center of the highway; provided any person driving to the left of the center of the highway shall yield the right of way to all vehicles traveling in the proper direction upon the unobstructed portion of the highway within such distance as to constitute an immediate hazard;
3. Upon a roadway divided into three marked lanes for traffic under the rules applicable thereon; or
4. Upon a roadway restricted to one-way traffic.

(b) Upon all roadways any vehicle proceeding at less than the normal speed of traffic at the time and place and under the conditions then existing shall be driven in the right-hand lane then available for traffic, or as close as practicable to the right-hand curb or edge of the roadway, except when overtaking and passing another vehicle proceeding in the same direction or when preparing for a left turn at an intersection or into a private road, alley, or driveway. The intent of this subsection is to facilitate the overtaking of slowly moving vehicles by faster moving vehicles.

§ 11- 303 Overtaking a vehicle on the left

The following rules shall govern the overtaking and passing of vehicles proceeding in the same direction, subject to those limitations, exceptions and special rules hereinafter stated:

(a) The driver of a vehicle overtaking another vehicle proceeding in the same direction shall pass at a safe distance to the left of the vehicle being overtaken and shall not again drive to the right side of the roadway until safely clear of the overtaken vehicle.

(b) Except when overtaking and passing on the right is permitted, the driver of an overtaken vehicle shall give way to the right in favor of the overtaking vehicle on audible signal and shall not increase the speed of the vehicle until completely passed by the overtaking vehicle.

§ 11- 304 When passing on the right is permitted

(a) The driver of a vehicle may overtake and pass upon the right of another vehicle only under one or more of the following conditions:

1. When the vehicle overtaken is making or about to make a left turn;
2. Upon a roadway with unobstructed pavement of sufficient width for two or more lines of vehicles moving lawfully in the direction being traveled by the overtaking vehicle.

(b) The driver of a vehicle may overtake and pass another vehicle upon the right only under conditions permitting such movement in safety. Such movement shall not be made by driving off the roadway.

§ 11- 305 Limitations on overtaking on the left

No vehicle shall be driven to the left side of the center of the roadway in overtaking and passing another vehicle proceeding in the same direction unless such left side is clearly visible and is free of oncoming traffic for a sufficient distance ahead to permit such overtaking and passing to be completely made without interfering with the operation of any vehicle approaching from the opposite direction or any vehicle overtaken. In every event the overtaking vehicle must return to an authorized lane of travel as soon as practicable, and in the event the passing movement involves the use of a lane authorized for vehicles approaching from the opposite direction, before coming within 200 feet of any approaching vehicle.

§ 11- 306 Further limitations on driving on left of center of roadway

(a) No vehicle shall be driven on the left side of the roadway under the following conditions:

1. When approaching or upon the crest of a grade or a curve in the highway where the driver's view is obstructed within such distance as to create a hazard in the event another vehicle might approach from the opposite direction;
2. When approaching within 100 feet of or traversing any intersection or railroad grade crossing unless otherwise indicated by official traffic control devices;
3. When the view is obstructed upon approaching within 100 feet of any bridge, viaduct or tunnel.

(b) The foregoing limitations shall not apply upon a one-way roadway, nor under the conditions described in § 11-301(a)2 [an obstruction requires driving to left of center], nor to the driver of a vehicle turning left into or from an alley, private road, or driveway.

§ 11- 313 Restrictions on use of controlled-access roadway

(a) The (State highway commission) by resolution or order entered in its minutes, and local authorities by ordinance, may regulate or prohibit the use of any controlled-access roadway (or highway) within their respective jurisdictions by any class or kind of traffic which is found to be incompatible with the normal and safe movement of traffic.

(b) The (State highway commission) or the local authority adopting any such prohibition shall erect and maintain official traffic-control devices on the controlled-access highway on which such prohibitions are applicable and when in place no person shall disobey the restrictions stated on such devices.

§ 11- 402 Vehicle turning left

The driver of a vehicle intending to turn to the left shall yield the right of way to any vehicle approaching from the opposite direction which is so close as to constitute an immediate hazard.

§ 11- 403(b) Stop signs and yield signs [Driver procedures at stop signs]

Except when directed to proceed by a police officer, every driver of a vehicle approaching a stop sign shall stop at a clearly marked stop line, but if none, before entering the crosswalk on the near side of the intersection, or if none, then at the point nearest the intersecting roadway where the driver has a view of approaching traffic on the intersecting roadway before entering it. After having stopped, the driver shall yield the right of way to any vehicle in the intersection or approaching on another roadway so closely as to constitute an

immediate hazard during the time when such driver is moving across or within the intersection or junction of roadways. Such driver shall yield the right of way to pedestrians within an adjacent crosswalk.

§ 11- 403(c) Stop signs and yield signs [Driver procedures at yield signs]

The driver of vehicle approaching a yield sign shall in obedience to such sign slow down to a speed reasonable for the existing conditions, and if required for safety to stop, shall stop at a clearly marked stop line, but if none, before entering the crosswalk on the near side of the intersection, or if none, then at the point nearest the intersecting roadway where the driver has a view of approaching traffic on the intersecting roadway before entering it. After slowing or stopping, the driver shall yield the right of way to any vehicle in the intersection or approaching on another roadway so closely as to constitute an immediate hazard during the time such driver is moving across or within the intersection or junction of roadways. Such driver shall yield the right of way to pedestrians within an adjacent crosswalk. If such a driver after driving past a yield sign is involved in a collision with a vehicle in the intersection or junction of roadways or with a pedestrian in an adjacent crosswalk, such collision shall be deemed prima facie evidence of the driver's failure to yield right of way.

§ 11- 404 Vehicle entering roadway

The driver of a vehicle about to enter or cross a roadway from any place other than another roadway shall yield the right of way to all vehicles approaching on such roadway.

§ 11- 502 Pedestrians' right of way in crosswalks

(a) When traffic-control signals are not in place or not in operation, the driver of a vehicle shall yield the right of way, slowing down or stopping if need be to yield to a pedestrian crossing the roadway within a crosswalk when the pedestrian is upon the half of the roadway upon which the vehicle is traveling, or when the pedestrian is approaching so closely from the opposite half of the roadway as to be in danger.

§ 11- 601 Required position and method of turning

The driver of a vehicle intending to turn shall do so as follows:

(a) Right turns--Both the approach for a right turn and a right turn shall be made as close as practicable to the right-hand curb or edge of the roadway.

(b) Left turns--The driver of a vehicle intending to turn left shall approach the turn in the extreme left-hand lane lawfully available to traffic moving in the direction of travel of such vehicle. Whenever practicable the left turn shall be made to the left of the center of the intersection and so as to leave the intersection or other location in the extreme left-hand lane lawfully available to traffic moving in the same direction as such vehicle on the roadway being entered.

§ 11- 603 Starting parked vehicle

No person shall start a vehicle which is stopped, standing or parked unless and until such movement can be made with reasonable safety.

§ 11- 604 Turning movements and required signals

(a) No person shall turn a vehicle or move right or left upon a roadway unless and until such movement can be made with reasonable safety nor without giving an appropriate signal.

(b) For vehicles equipped with mechanical or electrical turn signals, a signal of intention to turn or move right or left shall be given continuously during not less than the last 100 feet traveled by the vehicle before turning.

§ 11- 606 Method of giving hand-and-arm signals

All hand-and-arm signals shall be given from the left side of the vehicle in the following manner and such signals shall indicate as follows:

1. Left turn-Hand and arm extended horizontally.
2. Right turn-Hand and arm extended upward.
3. Stop or decrease speed-Hand and arm extended downward.

Notwithstanding the foregoing provisions, a person operating a bicycle may give a right turn signal by extending the right hand and arm horizontally and to the right side of the bicycle.

§ 11- 801 Basic speed rule

No person shall drive a vehicle at a speed greater than is reasonable and prudent under the conditions, including actual and potential hazards then existing. Consistent with the foregoing, every person shall drive at a safe and appropriate speed when approaching and crossing an intersection or railroad grade crossing, when approaching and going around a curve, when approaching the crest of a hill, when traveling upon any narrow or winding roadway, and when special hazards exist with respect to pedestrians or other traffic or by reason of weather or highway conditions.

§ 11-1103 Driving upon sidewalk

No person shall drive any vehicle upon a sidewalk or sidewalk area except upon a permanent or duly authorized temporary driveway. This section shall not apply to any vehicle moved exclusively by human power nor to any motorized wheelchair.

§ 11-1105 Opening and closing vehicle doors

No person shall open any door on a motor vehicle unless and until it is reasonably safe to do so and can be done without interfering with the movement of other traffic, nor shall any person leave a door open on a side of a vehicle adjacent to moving traffic for a period of time longer than necessary to load or unload passengers.

§ 11-1202 Traffic laws apply to persons on bicycles and other human powered vehicles

Every person propelling a vehicle by human power or riding a bicycle shall have all of the rights and all of the duties applicable to the driver of any other vehicle under chapters 10 and 11, except as to special regulations in this article and except as to those provisions which by their nature can have no application.

§ 11-1203.Riding on bicycles

No bicycle shall be used to carry more persons at one time than the number for which it is designed or equipped, except that an adult rider may carry a child securely attached to adult rider in a back pack or sling.

§ 11-1205.Position on roadway

(a) Any person operating a bicycle or a moped upon a roadway at less than the normal speed of traffic at the time and place and under the conditions then existing shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:

1. When overtaking and passing another bicycle or vehicle proceeding in the same direction.
2. When preparing for a left turn at an intersection or into a private road or driveway.
3. When reasonably necessary to avoid conditions including, but not limited to, fixed or moving objects, parked or moving vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes that make it unsafe to continue along the right-hand curb or edge. For purposes of this section, a "substandard width lane" is a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the lane.
4. When riding in the right turn only lane.

(b) Any person operating a bicycle or a moped upon a one-way highway with two or more marked traffic lanes may ride as near the left-hand curb or edge of such roadway as practicable.

§ 11-1206.Riding two abreast

Persons riding bicycles upon a roadway shall not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles. Persons riding two abreast shall not impede the normal and reasonable movement of traffic and, on a laned roadway, shall ride within a single lane. (FORMERLY 11-1205(b))

§ 11-1207.Carrying articles

No person operating a bicycle shall carry any package, bundle or article which prevents the use of both hands in the control and operation of the bicycle. A person operating a bicycle shall keep at least one hand on the handlebars at all times.

§ 11-1208. Left turns

(a) A person riding a bicycle or a moped intending to turn left shall follow a course described in 11-601 or in subsection (b).

(b) A person riding a bicycle or a moped intending to turn left shall approach the turn as close as practicable to the right curb or edge of the roadway. After proceeding across the intersecting roadway to the far corner of the curb or intersection of the roadway edges, the bicyclist or moped driver shall stop, as much as practicable out of the way of traffic. After stopping the bicyclist or moped driver shall yield to any traffic proceeding in either direction along the roadway the bicyclist had been using. After yielding, and complying with any

official traffic control device or police officer regulating traffic on the highway along which he or she intends to proceed, the bicyclist or moped driver may proceed in the new direction.

(c) Notwithstanding the foregoing provisions, the state highway commission and local authorities in their respective jurisdictions may cause official traffic-control devices to be placed and thereby require and direct that a specific course be traveled by turning bicycles or mopeds, and when such devices are so placed, no person shall turn a bicycle or a moped other than as directed and required by such devices.

§ 11-1209. Turn and stop signals

(b) A signal of intention to turn right or left when required shall be given continuously during not less than the last 100 feet traveled by the bicycle before turning, and shall be given while the bicycle is stopped waiting to turn. A signal by hand and arm need not be given continuously if the hand is needed in the control or operation of the bicycle.

§ 11-1210 Bicycles and human powered vehicles on sidewalks

(a) A person propelling a bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall yield the right of way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian.

(b) A person shall not ride a bicycle upon and along a sidewalk, or across a roadway upon and along a crosswalk, where such use of bicycles is prohibited by official traffic-control devices.

(c) A person propelling a vehicle by human power upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall have all the rights and duties applicable to a pedestrian under the same circumstances.

§ 12-702-Headlight and taillight required at night

Every bicycle in use at the times described in 12-201 shall be equipped with a headlight on the front emitting a white light visible from a distance of at least 500 feet to the front, and a taillight on the rear emitting a red light visible from a distance of at least 1000 feet to the rear.

§ 12-703 Rear reflector required at all times

Every bicycle shall be equipped with a red reflector of a type approved by the department which shall be visible for 600 feet to the rear when directly in front of lawful lower beams of headlights on a motor vehicle.

Section 102 (Stand alone UVC Section). Driving under the influence of alcohol or drugs; under the extreme influence of alcohol

Note: this section applied to “any vehicle,” including bicycles.

(a) A person shall not drive any vehicle while:

1. the alcohol concentration in such person's blood or breath is 0.08 or more;
2. the alcohol concentration in such person's blood or breath as measured within (two) hours of the time of driving is 0.08 or more;
3. under the influence of alcohol;

4. under the influence of any drug or combination of drugs to a degree which renders such person incapable of safely driving; or,
5. under the combined influence of alcohol and any drug or drugs to a degree that renders such person incapable of safely driving.

(b) Under the Extreme Influence of Alcohol. A person shall not drive any vehicle while:

1. the alcohol concentration in such person's blood or breath is (0.16) or more; or,
2. the alcohol concentration in such person's blood or breath as measured within (two) hours of the time of driving is (0.16) or more.

Example Bicycle-Specific Laws - Arkansas

Important notes: this document uses the state of Arkansas as an example of how to fill in state specific information throughout Section Three of the presentation, "Safe Bicycling and the Traffic Law." The #s for each question correspond to where to input the information on each slide.

#1 What is the legal definition of "bicycle"?

Not defined.

#1 Bicycle operation on roads falls under what general law section/s?

27-49-111

#2 Are bicycles prohibited from any types of roads?

They *may* be prohibited from a "controlled-access facility" per 27-68-107.

#3 Where should a cyclist be positioned for normal travel?

Following same rules as motor vehicle.

#4 (Turning) What are some legal reasons that bicyclists should leave the right side of the road?

Following same rules as motor vehicle.

#5 What are the rules for a bicyclists to signal?

Bicyclists are required to signal like other vehicles 27-51-403, but no continuously if they need both hands for safety 27-49-111.

#6 What are the rules for motorists passing other vehicles, including bicyclists?

Unsafe distance when overtaking: 27-51-306

Unsafe place to overtake on left: 27-51-307

Unsafe overtaking on right: 27-51-308

#7 Are bicyclists allowed to pass other vehicles on the right?

Yes, as per. 27-51-308

#8 Are bicyclists permitted to drive on the sidewalk?

Yes. State law does not prohibit driving any vehicles on sidewalks, nor does it give permission to local governments to regulate bicycling on sidewalks.

#8 What are the rules for bicyclists driving on sidewalks, paths, and trails?

No statutes.

#9 What equipment is required for night-time bicycle operation?

Front and rear light; reflector may be substituted for rear light. 27-36-220

#10 Are there any requirements for bicycle helmet use for kids?

No.

#11 Are bicyclists prohibited from operating their vehicles while intoxicated?

No. Statute applies to *motor* vehicles.

#12 What are the laws regarding the use of a motor vehicle as a weapon, either intentionally or unintentionally?

The statutes on Assault (no contact) and Battery (contact). See 5-13.

Summary of Major Violations - Arkansas

For Bicyclists

Failure to operate on right half of road: 27-51-301

Wrong way on one-way street: 27-51-304 Class C misdemeanor

Moving across roadway without yielding: 27-51-403 (a)

Entering intersection on red signal: 27-52-107.

Failure to yield the right of way at stop or yield sign: 27-51-503, 27-51-601

Failure to yield the right of way before entering roadway: 27-51-603

Failure to use head light: 27-36-220 (a)

Failure to use rear light or reflector: 27-36-220 (a) and (b)

Operating on sidewalk where prohibited: n/a

Failure to yield to pedestrians in crosswalk not controlled by traffic signals: 27-51-1202

Driving while intoxicated: Applies only to *motor* vehicles.

For Motorists

Failure to make right turn from rightmost part of roadway: 27-51-401 (1)

Failure to yield when turning left: 27-51-502

Entering intersection on red signal: 27-52-107.

Failure to yield the right of way at stop or yield sign: 27-51-503, 27-51-601

Failure to yield the right of way before entering roadway: 27-51-603

Failure to yield the right of way before starting from parked position: 27-51-1308

Unsafe distance when overtaking: 27-51-306

Unsafe place to overtake on left: 27-51-307

Unsafe overtaking on right: 27-51-308

Operating at unsafe speed: 27-51-201 Speeding in excess of 15 MPH over posted speed limit - Class C misdemeanor

Parking in travel lane (bicycle or shared lane): n/a

Opening door of motor vehicle when unsafe: 27-51-1307

Failure to yield to pedestrians in crosswalk not controlled by traffic signals: 27-51-1202

Driving while intoxicated: 5-65

Harassment (includes attempting or threatening to touch a person with intent to alarm without good cause): 5-71-208.

Third degree assault (“apprehension of imminent physical injury”): 5-13-207

Third degree battery (“negligently causes physical injury to another person by means of a deadly weapon”): 5-13-203 (a)(3)

Arkansas Code - Selected Statutes

Complete code is here:

<http://www.arkleg.state.ar.us/NXT/gateway.dll?f=templates&fn=default.htm&vid=blr:code>

27-19-501. Report required.

The driver of a vehicle of a type subject to registration under the motor vehicle laws of this state that is in any manner involved in an accident within this state, which accident has resulted in damage to the property of any one (1) person in excess of five hundred dollars (\$500) or in bodily injury to or in the death of any person shall report the accident within thirty (30) days after the accident on an electronic or paper form approved by the Director of the Department of Finance and Administration to the Office of Driver Services subject to the exemptions provided in §§ [27-19-509](#) and [27-19-604](#).

27-36-220. Lamps on bicycles.

(a) Every bicycle shall be equipped with a lamp on the front exhibiting a white light visible from a distance of at least five hundred feet (500') to the front and with a lamp on the rear exhibiting a red light visible from a distance of five hundred feet (500') to the rear.

(b) A red reflector meeting the requirements of § [27-36-215](#) may be used in lieu of a rear light.

27-49-111. Use of bicycles or animals.

Every person riding a bicycle or an animal, or driving any animal drawing a vehicle upon a highway, shall have all the rights and all of the duties applicable to the driver of a vehicle, except those provisions of this act which by their nature can have no applicability.

27-50-304. Penalties for misdemeanors.

(a) It is a misdemeanor for any person to violate any of the provisions of this act unless the violation is by this act or other law of this state declared to be a felony.

(b) Every person convicted of a misdemeanor for a violation of any of the provisions of this act for which another penalty is not provided shall:

(1) For a first conviction, be punished by a fine of not more than one hundred dollars (\$100) or by imprisonment for not more than ten (10) days;

(2) For a second conviction within one (1) year thereafter, the person shall be punished by a fine of not more than two hundred dollars (\$200) or by imprisonment for not more than twenty (20) days, or by both fine and imprisonment; and

(3) Upon a third or subsequent conviction within one (1) year after the first conviction, the person shall be punished by a fine of not more than five hundred dollars

(\$500) or by imprisonment for not more than six (6) months, or by both fine and imprisonment.

27-51-201. Limitations generally.

(a)(1) No person shall drive a vehicle on a highway at a speed greater than is reasonable and prudent under the conditions and having regard to the actual and potential hazards then existing.

[. . .]

27-51-301. Vehicles to be driven on right side of roadway - Exceptions.

(a) Upon all roadways of sufficient width, a vehicle shall be driven upon the right half of the roadway, except as follows:

(1) When overtaking and passing another vehicle proceeding in the same direction under the rules governing that movement;

(2) When the right half of a roadway is closed to traffic while under construction or repair;

(3) Upon a roadway divided into three (3) marked lanes for traffic under the rules applicable thereon; or

(4) Upon a roadway designated and signposted for one-way traffic.

(b) Motor vehicles shall not be operated continuously in the left lane of a multilane roadway whenever it impedes the flow of other traffic.

27-51-304. One-way roadways and rotary traffic islands.

(a) Upon a roadway designated and signposted for one-way traffic, a vehicle shall be driven only in the direction designated.

(b) A vehicle passing around a rotary traffic island shall be driven only to the right of such island.

27-51-306. Overtaking of vehicle on left.

The following rules shall govern the overtaking and passing of vehicles proceeding in the same direction, subject to those limitations, exceptions, and special rules stated:

(1) The driver of a vehicle overtaking another vehicle proceeding in the same direction shall pass to the left at a safe distance and shall not again drive to the right side of the roadway until safely clear of the overtaken vehicle;

(2) Except when overtaking and passing on the right is permitted, the driver of an overtaken vehicle shall yield to the right in favor of the overtaking vehicle and shall not increase the speed of his or her vehicle until completely passed by the overtaking vehicle.

27-51-307. Restrictions on passing overtaken vehicle on left.

(a)(1) No vehicle shall be driven to the left side of the center of the roadway in overtaking and passing another vehicle proceeding in the same direction unless the left side is clearly visible and is free of oncoming traffic for a sufficient distance ahead to permit overtaking and passing to be completely made without interfering with the safe operation of any vehicle approaching from the opposite direction or any vehicle overtaken.

(2) In every event, the overtaking vehicle must return to the right-hand side of the roadway before coming within one hundred feet (100') of any vehicle approaching from the opposite direction.

(b) No vehicle shall, in overtaking and passing another vehicle or at any other time, except upon a one-way roadway, be driven to the left side of the roadway, under the following conditions:

(1) When approaching the crest of a grade or upon a curve in the highway where the driver's view along the highway is obstructed;

(2) When approaching within one hundred feet (100') of or traversing any intersection or railroad grade crossing;

(3) When the view is obstructed upon approaching within one hundred feet (100') of any bridge, viaduct, or tunnel;

(4) Where official signs are in place directing that traffic keep to the right, or a distinctive center line is marked, which distinctive lines also so direct traffic as declared in the sign manual adopted by the State Highway Commission.

27-51-308. Conditions when overtaking on right.

(a) The driver of a vehicle may overtake and pass upon the right of another vehicle only under the following conditions:

(1) When the vehicle overtaken is making or about to make a left turn;

(2) Upon a street or highway with unobstructed pavement not occupied by parked vehicles of sufficient width for two (2) or more lines of moving vehicles in each direction;

(3) Upon a one-way street or upon any roadway on which traffic is restricted to one (1) direction of movement where the roadway is free from obstructions and of sufficient width for two (2) or more lines of moving vehicles.

(b)(1) The driver of a vehicle may overtake and pass another vehicle upon the right only under conditions permitting this movement in safety.

(2) In no event shall this movement be made by driving off the pavement or main-traveled portion of the roadway.

27-51-401. Turning at intersections.

The driver of a vehicle intending to turn at an intersection shall do so as follows:

(1) Both the approach for a right turn and a right turn shall be made as close as practical to the right-hand curb or edge of the roadway;

(2) The approach for a left turn shall be made in that portion of the right half of the roadway nearest the center line of the road. After entering the intersection, the left turn shall be made so as to leave the intersection to the right of the center line of the roadway being entered;

(3)(A) The approach for a left turn from a two-way street into a one-way street shall be made in that portion of the right one-half ($1/2$) of the roadway nearest the center line and by passing to the right of the center line where it enters the intersection.

(B) A left turn from a one-way street into a two-way street shall be made by passing to the right of the center line of the street being entered upon leaving the intersection.

27-51-403. Signals for turning, stopping, or decreasing speed required.

(a) No person shall turn a vehicle from a direct course upon a highway unless and until the movement can be made with reasonable safety and then only after giving a clearly audible signal by sounding the horn if any pedestrian may be affected by the movement or after giving an appropriate signal in the manner provided in subsection (b) of this section in the event any other vehicle may be affected by the movement.

(b) A signal of intention to turn right or left shall be given continuously during not less than the last one hundred feet (100') traveled by the vehicle before turning.

(c) No person shall stop or suddenly decrease the speed of a vehicle without first giving an appropriate signal in the manner provided in this subchapter to the driver of any vehicle immediately to the rear when there is opportunity to give such signal.

27-51-502. Vehicle turning left at intersection.

The driver of a vehicle within an intersection intending to turn to the left shall yield the right-of-way to all vehicles approaching from the opposite direction which are within the intersection or so close thereto as to constitute an immediate hazard. The driver, after having so yielded and having given a signal when and as required by this chapter, may

make the left turn after all other vehicles approaching the intersection which constitute an immediate hazard shall have cleared the intersection.

27-51-503. Vehicle or streetcar entering stop or yield intersection.

(a) Preferential right-of-way at an intersection may be indicated by stop signs or yield signs as authorized by law.

(b) Except when directed to proceed by a police officer or traffic control signal, every driver of a vehicle and every motorman of a streetcar approaching a stop intersection indicated by a stop sign shall stop as required by § [27-51-601](#), and after having stopped, shall yield the right-of-way to any vehicle which has entered the intersection from another highway or which is approaching so closely on the highway as to constitute an immediate hazard. The driver having so yielded may proceed, and the drivers of all other vehicles approaching the intersection shall yield the right-of-way to the vehicle so proceeding.

(c)(1) The driver of a vehicle or the motorman of a streetcar approaching a yield sign shall, in obedience to such sign, slow down to a speed reasonable for the existing conditions, or shall stop if necessary as provided in § [27-51-601](#), and shall yield the right-of-way to any pedestrian legally crossing the roadway on which he is driving. The driver shall also yield to any vehicle in the intersection or approaching on another highway so closely as to constitute an immediate hazard. A driver having so yielded may proceed, and the drivers of all other vehicles approaching the intersection shall yield to the vehicle so proceeding.

(2) If a driver is involved in a collision with a pedestrian in a crosswalk or a vehicle in the intersection after driving past a yield sign without stopping, the collision shall be deemed prima facie evidence of his failure to yield right-of-way.

27-51-602. Stop before driving across sidewalk.

When in a business or residence district and emerging from an alley, driveway, or building, the driver of a vehicle shall stop the vehicle immediately prior to driving onto a sidewalk or into the sidewalk area extending across any alleyway or private driveway.

27-51-603. Yield on entering highway from private road.

The driver of a vehicle about to enter or cross a highway from a private road or driveway shall yield the right-of-way to all vehicles approaching on the highway.

27-51-1202. Pedestrians' right-of-way in crosswalks.

(a) Where traffic-control signals are not in place or in operation, the driver of a vehicle shall yield the right-of-way, slowing down or stopping if need be to yield, to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at

an intersection, except as otherwise provided in this subchapter.

(b) Whenever any vehicle is stopped at a marked crosswalk or at any unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of any other vehicle approaching from the rear shall not overtake and pass the stopped vehicle.

27-51-1307. Opening door on traffic side.

No person shall open the door of a motor vehicle on the side available to moving traffic unless and until it is reasonably safe to do so, nor shall any person leave a door open on the side of a vehicle available to moving traffic for a period of time longer than necessary to load or unload passengers.

27-51-1308. Starting of vehicles.

No person shall start a vehicle which is stopped, standing, or parked unless and until movements can be made with reasonable safety.

27-52-107. Signal legend.

(a) Whenever traffic is controlled by traffic-control signals exhibiting the words "GO", "CAUTION", or "STOP", or exhibiting different colored lights successively one at a time, or with arrows, the following colors only shall be used, and the terms and lights shall indicate and apply to drivers of vehicles and pedestrians as follows:

(1) Green alone or "GO" means:

(A) Vehicular traffic facing the signal, except when prohibited under § [27-51-802](#), may proceed straight through or turn right or left unless a sign at such place prohibits either turn. But vehicular traffic, including vehicles turning right or left, shall yield the right-of-way to other vehicles and to pedestrians lawfully within the intersection or an adjacent crosswalk at the time the signal is exhibited;

(B) Pedestrians facing the signal may proceed across the roadway within any marked or unmarked crosswalk;

(2) Steady yellow alone means:

(A) Vehicular traffic facing the signal is warned that the red or "STOP" signal will be exhibited immediately thereafter, and vehicular traffic shall not enter the intersection when the red or "STOP" signal is exhibited; and

(B) Pedestrians facing the signal are advised that there is insufficient time to cross the roadway, and any pedestrian then starting to cross shall yield the right-of-way to all vehicles;

(3) Steady red alone or "STOP" means:

(A) Vehicular traffic facing the signal shall stop before entering the crosswalk on the near side of the intersection or, if none, then before entering the intersection and shall remain standing until green or "GO" is shown alone, except that:

(i) Vehicular traffic facing the signal, after coming to a complete stop, may cautiously enter the intersection for the purpose of making a right turn only, unless there is a sign prohibiting the turn; and

(ii) Vehicular traffic in the left lane of a one-way street facing such signal, after coming to a complete stop, may cautiously enter the intersection for the purpose of making a left turn into the left lane of another one-way street only, unless there is a sign prohibiting such turn;

(B) No pedestrian facing the signal shall enter the roadway unless he can do so safely and without interfering with any vehicular traffic;

(4) Steady red with green arrow means:

(A) Vehicular traffic facing the signal may cautiously enter the intersection only to make the movement indicated by the arrow but shall yield the right-of-way to pedestrians lawfully within a crosswalk and to other traffic lawfully using the intersection;

(B) No pedestrian facing the signal shall enter the roadway unless he can do so safely and without interfering with any vehicular traffic;

(b)(1) In the event an official traffic-control signal is erected and maintained at a place other than an intersection, the provisions of this section shall be applicable except as to those provisions which by their nature can have no application.

(2) Any stop required shall be made at a sign or marking on the pavement indicating where the stop shall be made, but in the absence of any sign or marking, the stop shall be made at the signal.

(c) The motorman of any streetcar shall obey the signals as applicable to vehicles.

(d) Whenever special pedestrian-control signals exhibiting the words "WALK" or "WAIT" or "DON'T WALK" are in place, such signals shall indicate as follows:

(1) "WALK" means pedestrians facing the signal may proceed across the roadway in the direction of the signal and shall be given the right-of-way by the drivers of all vehicles;

(2) "WAIT" or "DON'T WALK" means no pedestrian shall start to cross the roadway in the direction of such signal, but any pedestrian who has partially completed his crossing on the walk signal shall proceed to a sidewalk or safety island while the wait signal is showing.

27-53-202. Reports of accidents required - Supplemental reports.

(a) The driver of a vehicle involved in an accident resulting in injury to or death of any person or total property damage to an apparent extent of one thousand dollars (\$1,000) or more shall notify the nearest law enforcement agency immediately. All persons involved in the accident shall make themselves readily available to the investigating agency's officer or officers.

[. . .]

27-68-102. Definition.

As used in this chapter, unless the context otherwise requires, "controlled-access facility" means a highway or street especially designed for through traffic over, from, or to which owners or occupants of abutting land or other persons have no right or easement, or only a controlled right of easement of access, light, air, or view, by reason of the fact that their property abuts upon the controlled-access facility or for any other reason. These highways or streets may be freeways open to use by all customary forms of street and highway traffic or they may be parkways from which trucks, buses, and other commercial vehicles shall be excluded.

27-68-107. Regulation of use.

The highway authorities of the state, counties, cities, villages, and towns may regulate, restrict, or prohibit the use of controlled-access facilities by the various classes of vehicles or traffic in a manner consistent with § [27-68-102](#).

5-71-208. Harassment.

(a) A person commits the offense of harassment if, with purpose to harass, annoy, or alarm another person, without good cause, he:

(1) Strikes, shoves, kicks, or otherwise touches a person, subjects him to offensive physical contact or attempts or threatens to do so; or

(2) In a public place, directs obscene language or makes an obscene gesture to or at another person in a manner likely to provoke a violent or disorderly response; or

(3) Follows a person in or about a public place; or

(4) In a public place repeatedly insults, taunts, or challenges another in a manner likely to provoke a violent or disorderly response; or

(5) Engages in conduct or repeatedly commits acts that alarm or seriously annoy another person and that serve no legitimate purpose; or

(6) Places the person under surveillance by remaining present outside his or her school, place of employment, vehicle, other place occupied by the person, or residence, other than the residence of the defendant, for no purpose other than to harass, alarm, or annoy.

(b) Harassment is a Class A misdemeanor.

(c) [. . .]

5-13-207. Assault in the third degree.

(a) A person commits assault in the third degree if he purposely creates apprehension of imminent physical injury in another person.

(b) Assault in the third degree is a Class C misdemeanor.

5-13-203. Battery in the third degree.

(a) A person commits battery in the third degree if:

(1) With the purpose of causing physical injury to another person, he causes physical injury to any person; or

(2) He recklessly causes physical injury to another person; or

(3) He negligently causes physical injury to another person by means of a deadly weapon; or

(4) He purposely causes stupor, unconsciousness, or physical or mental impairment or injury to another person by administering to him, without his consent, any drug or other substance.

(b) Battery in the third degree is a Class A misdemeanor.

Reference Resources

Graphics Used

All graphics used were originally created by the Oregon Department of Transportation for its 1997 Bike Manual.

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Sources of Materials and Further Information

Organizations and Sources of Materials

National Highway Traffic Safety Administration
400 Seventh Street, SW
Washington, DC 20590
202-366-1739
www.nhtsa.dot.gov

Massachusetts Bicycle Coalition
20 Park Plaza, Suite 1028
Boston, MA 02116
617-542-2453

www.massbike.org
bikeinfo@massbike.org

The Thunderhead Alliance
P.O. Box 3309
Prescott, AZ 86302
928) 541-9841
www.ThunderheadAlliance.org

League of American Bicyclists
1612 K Street NW, Suite 401
Washington, DC 20006
202-822-1333
www.bikeleague.org

International Police Mountain Bike Association
583 Frederick Road, Suite 5B
Baltimore, Maryland 21228
PH: 410-744-2400
www.ipmba.org

Pedestrian and Bicycle Information Center,
730 Airport Road, Suite 300, Campus Box 3430,
Chapel Hill, NC 27599-3430
919.962.2203
www.bicyclinginfo.org

National Bicycle Safety Network
c/o Centers for Disease Control
www.cdc.gov/ncipc/bike/default.htm

National Center for Bicycling and Walking
1506 21st Street, NW, Suite 200
Washington, DC 20036
202-463-6622
www.bikewalk.org

Surface Transportation Policy Project
1100 17th Street, NW, 10th Floor
Washington, DC 20036
202-466-2636
www.transact.org

Oregon Department of Transportation Bicycle Program
<http://www.odot.state.or.us/techserv/bikewalk/>

Sources of promotional safety items (e.g. reflective stickers, hang tags, lights):

www.asisupplier.com/81233/cycling.htm
www.mcgruff.com
www.planetbike.com (ask for bulk discounts)

Helmet Programs:

www.bhsi.org
(Also available through the Massachusetts Governor's Highway Safety Bureau.)
Rubel Bike Maps of Massachusetts
www.bikemaps.com

Many resources, including free stock photos:
www.bicyclinginfo.org