

Model Bicycle Traffic Laws for Bicycling

by Fred Oswald, Chuck Smith, Riley Geary, Paul Schimek, John Schubert, Kirby Beck, Sarah Etter, Preston Tyree, Ray Thomas, Alan Wachtel and Steve Magas.

This document includes portions of the Uniform Vehicle Code of particular interest to cyclists. Several provisions have been revised to increase safety or to improve fairness. Changes from current UVC are marked by underlined text. Brief rationale for the changes is in *italics text*. Existing provisions where we recommend NO changes are marked with an asterisk (*).

This is not a “clean sheet” model. It incorporates relevant portions of the UVC with a few changes to enhance safety and fairness.

The general principal behind these Model Laws is that the safest way to operate a bicycle is as the lawful driver of a vehicle. This means riding on the roadway and following the same traffic rules as other drivers. Cyclists who operate this way have one-fifth the accident rate of the average accident rate. Very few specific rules for bicycle drivers are needed. Most that now exist in the various state and local codes are discriminatory and dangerous.

§ 1-109 Bicycle

Bicycles should not be defined in terms of a minimum wheel size because recumbent and folding bicycles may have small wheels. Adult tricycles are usually treated as bicycles, indeed, in some state codes; they are defined to be bicycles. Hence, the clarifying definition below.

Every foot or hand-propelled vehicle, irrespective of the number of wheels in contact with the ground, except wheelchairs or devices primarily intended for children six years of age or younger.

§ 1-186 Roadway

*The words “where” and “may be” were added to emphasize that although bicycle travel on sidewalks and shoulders is often **permitted** it must never be expected or required. This is because bicycle travel on sidewalks is known to be dangerous and must not be encouraged. In addition, bicycle travel on shoulders is not safe in urban areas or other places where cross traffic is common.*

That portion of a highway improved, designed or ordinarily used for vehicular travel, exclusive of the sidewalk, berm or shoulder even where such sidewalk, berm or shoulder may be used by persons riding bicycles or other human powered vehicles. In the event a highway includes two or more separate roadways the term "roadway" as used herein shall refer to any such roadway separately but not to all such roadways collectively.

* § 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.

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

The changes suggested below enhance safety and clarity.

(b) Upon all roadways any vehicle proceeding at less than the normal and lawful 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 far enough to the right to allow overtaking and passing by faster vehicles if such passing is safe and reasonable, except under any of the situations listed below.

1. When overtaking and passing another 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 the operator must necessarily drive in a lane other than the right-hand lane to continue on such operator’s intended route.

The intent of this subsection is to facilitate the overtaking of slowly moving vehicles by faster vehicles, and shall not require the drivers of such slowly moving vehicles to risk their own safety in order to

facilitate overtaking. If there is a marked bicycle lane at the right side of the road, operators of bicycles shall not be required to use such lane unless such lane is free of debris and obstructions and as wide as the standard traffic lanes.

§ 11-303 Overtaking a vehicle on the left

The current language in part (b) is an antiquated leftover from the days of Model T Fords and dirt roads. Then, people drove towards the center of such roads to avoid ruts at the edge. A faster driver would signal with his horn to alert the leading driver to move over. On modern roads, people normally drive near the right; therefore, this instruction has little meaning. Use of horns must be reserved for emergency situations, not to intimidate slower drivers.

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 where overtaking and passing on the right is permitted; the driver of an overtaken vehicle shall not increase the speed of the vehicle until completely passed by the overtaking vehicle. If the roadway is of sufficient width to permit safe passing the overtaken driver shall not unnecessarily obstruct 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, except that a person operating a bicycle on the shoulder may pass on the right, provided the movement may be done in safety.

§ 11-307 No-passing zones

We recommend a new exception to the no-passing zones rule to allow faster vehicles to pass slow vehicles in under limited conditions. This is in accord with universal practice where motorists pass bicycles, farm equip., buggies, etc. in such places. A similar provision was added to Ohio Law in 2006.

(d) This section does not apply when (1) the slower vehicle is proceeding at less than half the speed of the speed limit at that point, and (2) the faster vehicle is capable of overtaking at the speed limit, and (3) there is sufficient clear sight distance of the left-hand lane to meet the standard overtaking limitations of § 11-305, considering the speed of the slower vehicle.

§ 11-310 -- Following too closely

There is no safety reason to apply this provision to drivers of non-motorized vehicles. As written, this section could be misinterpreted to make illegal the long-established practice of drafting and paceline bicycle riding. In case of a collision, the following cyclist is the one who suffers for following too closely, not the one being followed.

(a) The driver of a motor vehicle shall not follow another vehicle more closely than is reasonable and prudent, having due regard for the speed of such vehicles and the traffic upon and the condition of the highway.

(b) The operator of a bicycle may follow another bicycle closely (drafting in the slipstream) only if both operators consent, except when traffic or roadway conditions make drafting unduly hazardous. Any bicycle operator injured in an accident resulting from such drafting shall be deemed to have contributed to the accident to the extent that drafting was a proximate cause of the accident.

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

In some places, where there is no reasonable alternative route, the language added in (c) will prevent serious inconvenience to cyclists.

(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.

(c) Notwithstanding section (a) above, operators of bicycles shall be permitted to operate on the shoulder of a controlled-access highway where no other reasonably practicable route exists, proceeding in the same direction as traffic in the adjacent travel lanes, unless an engineering study determines such use is incompatible with the normal and safe movement of that traffic.

§ 11-601 Required position and method of turning

Language added to §11-601(a) will help prevent the dangerous error called the “right hook”. This is similar to Calif. §21717.

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. Where there is a separate lane for bicycles at the right edge of the roadway, a driver making a right turn must merge into this bicycle lane before turning, after yielding to any traffic that may be present.

(b) Left turns - The driver of a vehicle intending to turn left shall approach the turn in the extreme left 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 so as to leave the intersection or other location in the extreme left lane lawfully available to traffic.

*** § 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

For clarity, the cyclists’ right arm turn signal should be included in (2) below rather than at the end.

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

*** § 11-909 Reckless driving**

(a) Any person who drives any vehicle in willful or wanton disregard for the safety of persons or property is guilty of reckless driving.

§ 11-1103 Driving upon sidewalk

Bicycle travel on sidewalks is known to be dangerous. Every opportunity must be used to deter local officials from requiring or encouraging this practice.

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. However, operators of bicycles shall neither be required nor encouraged to ride on sidewalks.

§ 11-1105 Opening and closing vehicle doors

Being “doored” is a particular hazard to bicycle operators. We suggest the reminder added below.

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 including bicycle 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

Uniformity of traffic laws is as important for cyclists as for other drivers. Dangerous and inconsistent local laws must be discouraged wherever possible.

Shoulder travel should be allowed but never required except on limited access highways.

(a) 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.

(b) Bicycle travel on the shoulder of the roadway shall be permitted except where local regulations prohibit such shoulder travel. Places where shoulder bicycle travel is prohibited shall be clearly marked with signs. Where bicycle travel on shoulders is permitted, it shall not be required, except on limited access highways, where bicycle travel may be permitted only on shoulders.

§ 11-1203 Passengers on bicycles

Children should be carried only in properly designed child seats, not in a back pack or sling.

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 the bicycle in a seat or trailer designed for carrying children.

*** § 11-1204 Clinging to vehicles**

(a) No person riding upon any bicycle, coaster, roller skates, sled or toy vehicle shall attach the same or himself or herself to any (streetcar or) vehicle upon a roadway.

(b) This section shall not prohibit attaching a bicycle trailer or bicycle semitrailer to a bicycle if that trailer or semitrailer has been designed for such attachment.

§ 11-1205 Position on roadway

11-1205 is often misinterpreted by police and courts as requiring riding as close as POSSIBLE to the edge of the road. Although the usual position of bicycles is near the right edge of the road, there are situations where this is unsafe and unreasonable. The present provision encourages the novice cyclist's mistake of “hugging the curb”.

Riding too close to the curb encourages motorists to attempt to pass even where passing is not safe. It contributes to mistakes where motorists turn in front of cyclists, the so-called “right hook”. It tends to force cyclists to ride too close to parked cars, exposing them to risk of being “doored”, to ride over and through hazards rather than around them and to pass on the right. It also leads to novice cyclists making left turns by swerving in front of traffic from the right edge, as in a “shooting gallery”.

(a) Any person operating a bicycle or a moped upon a roadway at less than the normal and legal speed of traffic at the time and place and under the conditions then existing shall be governed by the slow vehicle rules of 11-301(b), along with the following additional provisions:

1. If the right-hand lane then available for traffic is wide enough to be safely shared with overtaking vehicles, a bicycle shall be ridden far enough to the right to facilitate such overtaking movements, unless other conditions make it unsafe to do so.

2. If the right-hand lane then available for traffic is not wide enough to be safely shared with overtaking vehicles or if passing is otherwise unsafe, a bicycle may be ridden far enough to the left in that lane to prevent overtaking vehicles from attempting to pass within the same lane.

3. No person operating a bicycle shall be expected or required to ride over or through hazards at the edge of the road nor to operate without a reasonable safety space to the right.

4. Upon approaching an intersection where right-turn movements are permitted, a bicycle may be ridden far enough to the left to facilitate such movements by overtaking vehicles.

(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, subject to the conditions in subsection (a) above except applied to the left-hand lane.

§ 11-1206 Riding two abreast

Clarifying provisions added below to deter abuses in enforcement.

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. This provision does not prohibit the operator of one bicycle from passing other bicycles. Riding two abreast does not constitute an impediment to normal traffic at times of no conflicting traffic or if the lane is too narrow for a bicycle and a motor vehicle to travel safely side-by-side within the lane.

§ 11-1207 Carrying articles

The existing UVC language, would not allow even momentary “hands free” operation. This is unnecessary micro-management.

No person operating a bicycle shall carry any package, bundle, or article that prevents the driver from keeping at least one hand upon the handle bars.

§ 11-1208 Left turns

The added language in (a) will prevent misunderstanding. The people who would place bicycle-specific traffic control devices mentioned in (c) are not trained in bicycle operation. Such devices are discriminatory and often require practices more dangerous than what is prohibited. The exception added for the new section (c) is needed because it is much safer for cyclists to prepare early for a left turn. It can take some time (and distance on the road) to merge to the turn lane, depending on traffic. Sometimes, a courteous driver will give way, allowing a fast lane change. In such cases, the cyclist will enter the turn lane early, possibly before the place indicated by pavement markings.

(a) A person riding a bicycle or a moped intending to turn left shall either follow the directions for a vehicular turn as described § 11-601 [required position and method of turning] or may make the turn in two steps as described 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 bicycle or moped driver shall stop, as much as practicable out of the way of traffic. After stopping the bicycle or moped driver shall yield to any traffic proceeding in either direction along the roadway he or she 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 bicycle 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.~~

(c) Notwithstanding the provisions of section 11-201 (a), the operator of a bicycle may merge into position for a left turn in advance of a designated left turn lane where this is necessary for safety.

§ 11-1209 Bicycles and human powered vehicles on sidewalks

Bicycle travel on sidewalks is known to be dangerous. Every opportunity must be used to deter local officials from requiring or encouraging this practice. Note that in states where bicycles are not defined to be vehicles, the restrictions in (c) and (d) must apply to bicycle traffic as well as vehicular traffic.

(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. This audible signal may be given by the voice or by a bell or other warning device capable of giving an audible signal and shall be given at such a distance and in such a manner as not to startle person or persons being overtaken and passed.

(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 shall not operate a bicycle from a sidewalk so as to suddenly leave a curb or other place of safety and move into the path of a vehicle that is so close as to constitute an immediate hazard

(d) No person shall operate a bicycle on a sidewalk at a speed greater than an ordinary walk when approaching or entering a crosswalk, approaching or crossing a driveway or crossing a curb cut or pedestrian ramp if a vehicle is approaching the crosswalk, driveway, curb cut or pedestrian ramp. This paragraph does not require reduced speeds for bicycles when other vehicles are not present.

(e) 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.

(f) No person shall be required to operate a bicycle on a sidewalk.

*** § 11-1210 Bicycle parking**

(a) A person may park a bicycle on a sidewalk unless prohibited or restricted by an official traffic control device.

(b) A bicycle parked on a sidewalk shall not impede the normal and reasonable movement of pedestrian or other traffic.

(c) A bicycle may be parked on the roadway at any angle to the curb or edge of the roadway at any location where parking is allowed.

(d) A bicycle may be parked on the roadway abreast of another bicycle or bicycles near the side of the roadway at any location where parking is allowed.

*** § 11-1211 Bicycle racing**

(a) By agreement with the approving authority, participants in an approved bicycle highway racing event may be exempted from compliance with any traffic laws otherwise applicable thereto, provided that traffic control is adequate to assure the safety of all highway users.

(b) Bicycle racing on a highway shall not be unlawful when a racing event has been approved by state or local authorities on any highway under their respective jurisdictions. Approval of bicycle highway racing events shall be granted only under conditions which assure reasonable safety for all race participants, spectators and other highway users, and which prevent unreasonable interference with traffic flow which would seriously inconvenience other highway users.

*** § 12-201 When lighted lamps are required**

Every vehicle upon a highway within this State at any time from a half hour after sunset to a half hour before sunrise and at any other time when, due to insufficient light or unfavorable atmospheric conditions, persons and vehicles on the highway are not clearly discernible at a distance of 1,000 feet ahead, shall display lighted head and other lamps and illuminating devices as respectively required for different classes of vehicles, subject to exceptions with respect to parked vehicles, and further that stop lights, turn signals and other signaling devices shall be lighted as prescribed for the use of such devices.

§ 12-702 Head lamp and taillight required at night

A headlight and rear reflector are among the most important safety items required for bicycle operation at night. They must be given prominence in traffic law. A taillight is nearly as important. Some clarifying provisions are needed.

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 300 feet to the sides, and a taillight on the rear emitting a steady or flashing red light visible from a distance of at least 1000 feet to the rear. A generator powered lamp, which emits light only when the bicycle is moving, may be used to meet the headlight requirements of this section. The headlight and taillight may be attached either to the bicycle or the operator.

§ 12-703 Rear reflector required at all times

“Approved by the department” language is unnecessary and ambiguous and may exclude the brightest (SAE automobile) reflectors.

Every bicycle shall be equipped with a red or amber 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.

~~§ 12-704 Side reflector or light required at night~~

Side and wheel reflectors have very little value for safety. They may look impressive under some situations (typically where visibility is not important) but they often fail when visibility is essential. Wheel reflectors can be dangerous at high speed because they unbalance the wheel. Headlights constitute the necessary and sufficient equipment for such situations. Specifying superfluous equipment encourages people to neglect the necessary safety equipment – headlight, rear reflector and light.

~~Every bicycle when in use at the times described in § 12-201 shall be equipped with reflective material of sufficient size and reflectivity to be visible from both sides for 600 feet when directly in front of lawful lower beams of head lamps on a motor vehicle, or, in lieu of such reflective material, with a lighted lamp visible from both sides from a distance of at least 500 feet.~~

§ 12-705 Additional lights or reflectors authorized

A bicycle or its rider may be equipped with lights or reflectors in addition to those required by the foregoing sections. These lights may be light emitting diode or incandescent, steady or flashing. Any such lights or reflectors displaying to the front or sides shall be colorless or amber and those displaying to the rear shall be red or amber.

Some state laws require that the brake "skid the wheel", which suggests irresponsible operation. In addition, skidding the wheel is impossible for the front wheel of most bicycles and it is extremely dangerous to try this test. The present UVC metric is a good one.

*** § 12-706 Brake required**

Every bicycle shall be equipped with a brake or brakes which will enable its driver to stop the bicycle within 15 feet from a speed of 10 miles per hour on dry, level, clean pavement.

*** § 12-707 Sirens, whistles prohibited**

No bicycle may be equipped with a siren or whistle. No person may use a siren or whistle when operating a bicycle.

*** § 12-708 Bicycle identifying number**

A person engaged in the business of selling bicycles at retail shall not sell any bicycle unless the bicycle has an identifying number permanently stamped or cast on its frame.

~~§ 12-709 Inspecting bicycles~~

Police are not trained to inspect bicycles. 12-709 invites abuse of police power.

~~At any time upon reasonable cause to believe that a bicycle is unsafe or not equipped as required by law, or that its equipment is not in proper adjustment or repair, a uniformed police officer may require the person riding the bicycle to stop and submit the bicycle to an equipment inspection, including any equipment test which may be necessary.~~

§ 15-102(a) Powers of local authorities

Inconsistent and often dangerous local bicycle ordinances are a very serious problem. Fortunately, the current UVC does not include local regulation but language to actively deter such regulation is still needed. Bicycle registration must be voluntary. It provides little benefit unless police vigorously pursue stolen bicycles. There have been incidents where communities have used a registration requirement to harass non-residents of the community.

(a) The provisions of this code shall not be deemed to prevent local authorities with respect to streets and highways under their jurisdiction, or with respect to private property when specifically authorized in this section, and within the reasonable exercise of the police power from:

8. Regulating the parking of bicycles and adult tricycles and offering a voluntary program for registration of same, a including nominal registration fee, the requirement that a bicycle and adult tricycle must have a frame number before being licensed, and a prohibition on altering or removing any such frame number. No local authority shall enact or enforce any regulation that is inconsistent with the uniform rules of the road.