REPORT
OF THE
PANEL ON BICYCLE LAWS

AND

SUPPLEMENTARY AGENDA
FOR THE
SUBCOMMITTEE ON OPERATIONS

January 27, 1975
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INTRODUCTION

This is the report of the Panel on Bicycle Laws created by the Subcommittee on Operations of the National Committee on Uniform Traffic Laws and Ordinances to make recommendations regarding the regulation of bicycles under the Uniform Vehicle Code and Model Traffic Ordinance. This document will also serve as a Supplemental Agenda for use by the Subcommittee on Operations. This document contains recommendations of the Panel on Bicycle Laws. These recommendations have not yet been considered or approved by the Subcommittee on Operations, or by the full National Committee. This document does not reflect changes which have been or necessarily will be made in the Uniform Vehicle Code and Model Traffic Ordinance, but only proposals to make such changes.

The Panel on Bicycle Laws was directed to review the status of bicycles in the Uniform Vehicle Code and Model Traffic Ordinance, and to make recommendations. The Panel was created by the Subcommittee at its meeting on March 13-14, 1974. The Panel was subsequently appointed by the chairman of the Subcommittee. The staff supplied the Panel with information regarding bicycling laws in all 50 states, 50 selected municipalities, and selected European countries, and with statistical information regarding bicycle accidents. The Panel members also received a copy of the First Report of the Subcommittee on Operations (Sept. 6, 1974), a copy of all existing UVC-MTO provisions pertaining specifically to bicycles, and an informal outline agenda for use at the Panel meeting. Information supplied to Panel members was also sent to all persons who expressed an interest in the Panel's work (a list of about 50) and all such persons were invited to send comments and to attend the Panel meeting.

The Panel met on October 23-24, 1974. During the meeting the Panel gave consideration to each of the following:

1. All proposals regarding bicycles already pending on the agenda of the Subcommittee on Operations. Where appropriate this document contains cross references to those agenda items as they appear in the First Report of the Subcommittee on Operations (Sept. 6, 1974).

2. All provisions of the Code or Ordinance specifically dealing with bicycles.

3. All other Code and Ordinance provisions, particularly rules of the road, which would have application to bicycles although not specifically referring to bicycles.
4. Any other proposals, suggestions or problems called to the Panel's attention.

A very thorough and comprehensive review of the Uniform Vehicle Code and Model Traffic Ordinance in terms of bicycles was completed and recommendations were formulated.

Most of the Panel's decisions were unanimous. Where there was division of opinion in the Panel that fact is reported in the summary of the deliberations on the particular item.

Following the Panel meeting the staff prepared this Report of the Panel's deliberations, and completed necessary drafting where items had been approved by the Panel in principle without seeing a draft. This Report was then submitted by mail to all Panel members for their approval.

Subcommittee documents generally contain only proposals for changes in the UVC-MTO. In some cases the Panel discussed a particular problem extensively and then decided to recommend no change in the UVC-MTO. These deliberations are included in this Report to evidence that all problems called to the Panel's attention were fully discussed, and to provide the Panel's reasoning in deciding to recommend no revision.

All items in this Report will be considered by the Subcommittee on Operations at its next meeting. Any comments relating to any of the items on this agenda are invited and will be made available to Subcommittee members to aid in their deliberations. Any such comments should be received as soon as possible. Interested persons are also invited to attend the Subcommittee meeting February 26-28, 1975, at 1776 Massachusetts Avenue, N.W., Washington, D.C., Room 102A.

PANEL MEMBERS

Harold Michael, Chairman, Purdue University
Marie Birnbaum, U.S. Department of Transportation
Morgan Groves, League of American Wheelmen
Ken Pulver, Police Department, Reno, Nevada
Larry Wuellner, Automobile Club of Missouri
1. BICYCLES ARE VEHICLES

Panel Recommendation: Amend the definition of "vehicle" so that bicycles are included.

Summary of Deliberations: The complexity of the existing provisions was discussed. A bicycle is not a vehicle, but a bicyclist on the roadway has the same rights and duties as the driver of a vehicle. Too frequently judges, attorneys and police don't accurately perceive how the provisions work together to regulate bicycles, and if these people can't figure it out, how can the bicyclists and vehicle operators be expected to do any better. Laymen view the existing Code provisions as a bunch of "mumbo-jumbo." These provisions need to be simplified to make it clear that a bicycle is a vehicle, and that bicyclists must obey the rules of the road.

Bicyclists want bicycles to be considered vehicles, to clarify their rights and responsibilities. One big problem with bicycling today is that bicycles are viewed as children's toys. That image needs to be changed. Defining vehicle to include bicycles will have a great impact on the image and identity of bicyclists.

It was also observed that under the existing Code provisions, bicycling offenses rely upon UVC § 11-1202 for their validity. This section provides that bicyclists on the roadway have the same rights and duties as the driver of a vehicle, except as to those provisions which by their nature can have no application. This provision may be adequate to support convictions for minor offenses, but can a serious offense like driving while under the influence be validly applied to bicyclists by means of this section? Courts might well decide that the law is too vague to support a conviction. Just which rules of the road are the ones which "by their nature can have no application"?

The Code definition of vehicle could be modified either by inserting language to make it clear that bicycles are vehicles, or by deleting the existing exception of devices moved by human power. The latter modification would make not only bicycles but all other human propelled devices capable of transporting persons or property on the highways vehicles. This would include tricycles, wheelchairs, PPVs, push carts, sidewalk bicycles, toy vehicles, and unicycles. While inclusion of these devices as vehicles may necessitate some other revisions, it has the advantage of subjecting these devices to
regulation, giving them rights and duties which they now lack. A person propelling a wheelchair, for example, is not currently regulated by the Code. He is neither a pedestrian nor a vehicle driver, and he has no rights and no duties under the Code.

The Panel also considered some of the consequences of defining vehicle to include human powered devices in terms of other provisions of the Code.

1. Traffic laws which now apply by means of UVC § 11-1202 to bicyclists only when on the roadway, would apply to bicyclists everywhere on the highway, just as they apply to the drivers of other vehicles. Serious offenses in article 9 which also now apply to bicyclists only on the roadway would apply to bicyclists everywhere, both on and off the highway, just as they apply to the drivers of other vehicles.

2. A publicly maintained bicycle path will constitute a highway. All traffic laws applicable to the driver of a vehicle will apply to bicyclists on such bicycle paths. Under existing Code provisions only the special bicycle laws in article 12 are applicable on bicycle paths. Also, if a bicycle path is a highway, any crossing of the path by another highway constitutes an intersection. Unless signs or signals are erected to control right of way, the uncontrolled intersection right of way rule (UVC § 11-401) would apply.

3. Traffic laws would become applicable to small children using toy vehicles and sidewalk bicycles. Such devices are neither vehicles nor bicycles as those terms are defined by the current Code, but under the proposal all such devices would be vehicles. The civil and criminal law consequences for small children are treated further in agenda item 2, infra.

4. Many devices which are not now vehicles and which are frequently used on the sidewalks would become vehicles, prohibited from using the sidewalks by UVC § 11-1103. A proposal to resolve this problem is in agenda item 8, infra.

5. The Panel noted the necessity of adding appropriate exemptions to the Code to assure that provisions not intended for application to bicycles (registration, driver licensing, etc.) are not inadvertently made applicable to such vehicles. It was agreed that only the provisions of chapters 10 and 11 should apply to bicycles.
Draft: The Code's definition of "vehicle" would be revised as follows:

§ 1-184—Vehicle. — Every device in, upon or by which any person or property is or may be transported or drawn upon a highway, excepting devices moved by human power or used exclusively upon stationary rails or tracks.

Possibly the definition of "motor vehicle" should also be revised. Clearly bicycles and other human powered vehicles should not be classified as motor vehicles. Since these devices are now defined as vehicles, however, they might be construed to be motor vehicles. What is a vehicle which is "self-propelled"? All vehicles are designed to be propelled in some manner. Some vehicles such as trailers utilize an external source of propulsion, frequently another vehicle which pushes or pulls the vehicle. A horse drawn carriage also uses a source of power which is external to the vehicle itself. Other vehicles, such as the automobile, employ an internal source of power which is carried by the vehicle itself and transported along with the vehicle. Such vehicles are self-propelled. But a bicycle also uses a source of propulsion which is carried on the vehicle itself, and transported along with it. No external source of propulsion pulls or pushes the bicycle. Is a bicycle self-propelled? If there is a possibility that a bicycle might be construed to be a self-propelled vehicle, and thus a motor vehicle, the following revision should be made to obviate that possibility:

§ 1-134 — Motor vehicle. — Every vehicle which is self-propelled, and every vehicle which is propelled by electric power obtained from overhead trolley wires, but not operated upon rails, except vehicles moved exclusively by human power.

Since the Panel contemplated that bicycles should generally be allowed to use sidewalks, a sidewalk could be a portion of a highway "ordinarily used for vehicular travel" under the proposed definition of "vehicle." This would make the sidewalk a "roadway" unless the definition of that term is revised as follows:

§ 1-158—Roadway.—That portion of a highway improved, designed or ordinarily used for vehicular travel, exclusive of the berm or shoulder. 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.
The Subcommittee should also consider whether this definition of "roadway" needs further clarification. If an area which is now generally recognized as being a "shoulder" becomes an area which is ordinarily used for bicycle travel, is it still a shoulder? What if the area is specifically designated a bikeway by proper authorities such as by signs or markings, is it still a shoulder? Just what is a shoulder? What is a berm?

UVC § 3-102 (1968) should be revised to make it clear that no certificate of title is required for human powered vehicles.

§ 3-102—Exclusions

No certificate of title need be obtained for:

1. A vehicle owned by the United States unless it is registered in this State;
2. A vehicle owned by a manufacturer or dealer and held for sale, even though incidentally moved on the highway or used for purposes of testing or demonstration; or a vehicle used by a manufacturer solely for testing;
3. A vehicle owned by a nonresident of this State and not required by law to be registered in this State;
4. A vehicle regularly engaged in the interstate transportation of persons or property for which a currently effective certificate of title has been issued in another state;
5. A vehicle moved solely by human or animal power;
6. An implement of husbandry;
7. Special mobile equipment;
8. A self-propelled invalid wheel chair or tricycle;

Since UVC § 3-402 (1968, Supp. 1972) requires registration only for motor vehicles, trailers, semitrailers and pole trailers, no exemption for human powered vehicles is necessary.

If application of UVC Chapter 4, Antitheft Laws, to bicycles and other human powered vehicles is deemed undesirable, the following revision should be made in § 4-101 (1968):

§ 4-101—Exceptions from provisions of this chapter

This chapter does not apply to the following unless a title or registration has been issued on such vehicles under this act:

1. A vehicle moved solely by animal power; human or
2. An implement of husbandry;
3. Special mobile equipment;
4. A self-propelled invalid wheel chair or tricycle.
The provisions requiring licensing of used parts dealers, wreckers and rebuilders, however, should be revised as follows:

§ 4-201 -- Used parts dealers, wreckers and rebuilders must be licensed

(a) With respect to a motor vehicle, trailer or semitrailer of a type subject to registration, no person shall, except as an incident to the sale or servicing of vehicles, carry on or conduct the business of:

1. Selling used parts of or used accessories for vehicles;
2. Wrecking or dismantling vehicles for resale of the parts thereof; or
3. Rebuilding wrecked or dismantled vehicles; unless licensed to do so by the department under this section.

Since the Code's driver licensing requirements apply only to the driver of a motor vehicle, no exemption for bicycles or other human powered vehicles is necessary. See UVC § 6-101 (1968).

The Code's compulsory insurance requirement (UVC § 7-101 (Supp. 1972)) applies to all vehicles except those exempted in § 7-103. An exemption to cover bicycles should be added as follows:

§ 7-103—Exempt vehicles

The following vehicles and their drivers are exempt from this article:

1. A vehicle owned by the United States Government, any state or political subdivision;
2. A vehicle for which cash, securities or a bond in the amount of has been deposited or filed with the department upon such terms and conditions providing the same benefits available under a required vehicle insurance policy as shall be prescribed by the (commissioner or Commissioner of insurance);
3. A vehicle owned by a self-insurer certified as provided in § 7-107;
4. An implement of husbandry or special mobile equipment which is only incidentally operated on a highway or property open to use by the public;

5. A vehicle operated upon a highway only for the purpose of crossing such highway from one property to another;

6. A commercial vehicle registered or proportionally registered in this and any other jurisdiction provided such vehicle is covered by a vehicle insurance policy complying with the laws of any other jurisdiction in which it is registered.

7. A vehicle moved solely by human (or animal) power.

Under the existing Code provisions, and the provisions of the Uniform Motor Vehicle Accident Reparations Act, bicyclists, like pedestrians, are entitled to reparations from an assigned claims plan when involved in an accident with a motor vehicle, and when no vehicle insurance policy covers the damages sustained. Where no motor vehicle is involved in an accident, however, (such as with a bicycle-bicycle or bicycle-pedestrian collision) the involved parties have no recourse to the assigned claims plan. Including bicycles within the definition of vehicle would modify this, giving bicyclists recourse to the assigned claims plan whenever involved in an accident, even though bicyclists are not required to carry insurance. In order to avoid this change in status of bicyclists with regard to assigned claims plans, the following exception should be added to UVC § 7-301(c) (Supp. 1972):

§ 7-301 -- Assigned risk and claims plans

(c) The (Commissioner of insurance) shall approve a plan for the apportionment among such companies of claims by residents, not covered by a vehicle insurance policy, for damages arising out of the ownership, maintenance or use of a vehicle upon the highways or upon property open to use by the public in this or any other state. Claims by persons who, at the time the claim originated, were in violation of § 7-101 shall not be eligible for payment under this subsection and payment of an assigned claim shall not exceed the limits in a required vehicle insurance policy.

except a vehicle moved solely by human power

Under the existing Code provisions, and the provisions of the Uniform Motor Vehicle Accident Reparations Act, persons struck and injured by bicyclists are not entitled to recover damages from their uninsured motorist coverage. Such persons
would be entitled to such reparations under the proposal, how­
ever, unless the following language is added to UVC § 7-302(b):

§ 7-302—Uninsured motorists coverage

(a) Under provisions approved by the (Commissioner of insur­ance), every vehicle insurance policy shall insure persons insured
thereunder against loss from death, bodily injury or damage to prop­erty in amounts not less than those specified in subsection (c) arising
out of the ownership, maintenance or use of uninsured vehicles.
(b) For purposes of this section, “uninsured vehicles” shall include
vehicles insured by insolvent insurers, hit-and-run vehicles, stolen
vehicles, and any vehicle whose insurer for any reason denies cover­age, but shall not include vehicles moved solely
by human power.

Provisions in chapters 8 and 9 of the Code apply only in
relation to motor vehicles, thus no exemptions for human
powered vehicles are required.

Equipment provisions for bicycles are contained in UVC
§ 11-1207, rather than in chapter 12. Nevertheless, some of
the provisions of chapter 12 might be construed to be appli­
cable to bicycles unless the following exemption is added to
UVC § 12-101:

§ 12-101—Scope and effect of regulations

(a) It is a misdemeanor for any person to drive or move or
for the owner to cause or knowingly permit to be driven or
moved on any highway any vehicle or combination of vehicles
which is in such unsafe condition as to endanger any person,
or which does not contain those parts or is not at all times
equipped with such lamps and other equipment in proper con­dition and adjustment as required in this chapter, or which is
equipped in any manner in violation of this chapter, or for any
person to do any act forbidden or fail to perform any act re­quired under this chapter.
(b) Nothing contained in this chapter shall be construed to
prohibit the use of additional parts and accessories on any ve­hicle not inconsistent with the provisions of this chapter.
(c) The provisions of this chapter with respect to equipment
required on vehicles shall not apply to implements of husbandry,
road machinery, road rollers or farm tractors except as herein
made applicable.² (REVISED, 1968.)
(d) The provisions of this chapter with respect to equipment
required on vehicles shall not apply to motorcycles or motor­
driven cycles, except as herein made applicable.³ (NEW, 1968.)
(e) The provisions of this chapter shall not apply to vehicles moved exclusively by human power.

The provisions of UVC §§ 13-101 and 13-104 apply to motor vehicles, trailers, semitrailers and pole trailers, and thus do not apply to bicycles. UVC § 13-102 applies to all vehicles, and under the proposal would apply to bicycles. This section should be amended as follows since application to bicycles is inappropriate:

§ 13-102—Inspection by officers

(a) Uniformed police officers may at any time upon reason­able cause to believe that a vehicle is unsafe or not equipped as required by law, or that its equipment is not in proper ad­justment or repair, require the driver of such vehicle to stop and submit such vehicle to an inspection and such test with ref­erence thereto as may be appropriate.

(b) In the event a vehicle is found to be in unsafe condition or any required part or equipment is not present or in proper repair and adjustment, the officer shall give a written notice to the driver and shall send a copy to the department. Said notice shall require that the vehicle be placed in safe condition and its equipment in proper repair and adjustment as soon as prac­ticable, specifying the particulars with reference thereto, and shall require that an official certificate of inspection and approval be obtained within 10 days.

(c) In the event any such vehicle is, in the reasonable judg­ment of the officer, in such condition that further operation would be hazardous, the officer may require in addition that the vehicle not be operated under its own power or that it be driven to the nearest garage or other place of safety.

(d) Every owner or driver shall comply with the notice and secure an official certificate of inspection and approval within 10 days or the vehicle shall not be operated on the highways of this State.

Although it is unlikely that any chapter 14 provisions would be construed to apply to bicycles, the following revi­sion would remove all possibility of such a misinterpretation:
§ 14-101—Scope and effect of chapter

(a) It is a misdemeanor for any person to drive or move or for the owner to cause or knowingly permit to be driven or moved on any highway any vehicle or vehicles of a size or weight exceeding the limitations stated in this chapter or otherwise in violation of this chapter, and the maximum size and weight of vehicles herein specified shall be lawful throughout this State, and local authorities shall have no power or authority to alter said limitations except as express authority may be granted in this chapter.

(b) The provisions of this chapter governing size, weight and load shall not apply to fire apparatus, road machinery, or to implements of husbandry, including farm tractors, temporarily moved upon a highway, or to a vehicle operated under the terms of a special permit issued as herein provided.

vehicles moved solely by human power.

Cross Reference: First Report of the Subcommittee on Operations, Item 42 (September 6, 1974).

Staff Report: In five jurisdictions (Kentucky, Maryland, Rhode Island, Wisconsin and the District of Columbia) devices moved by human power are not excluded from the definition of "vehicle." In another eight states (Alabama, Louisiana, Massachusetts, North Carolina, North Dakota, Ohio, Pennsylvania and South Dakota) bicycles are specifically included in the definition of "vehicle," at least for rules of the road purposes. Many of these follow the 1926 Code provision. In one other state (Missouri) human powered vehicles are excluded from one definition but not excluded from another, and both definitions apply to some rules of the road. Thus in a total of 14 jurisdictions a bicycle is a vehicle for some rules of the road.

Laws in 37 states, like the Code, exclude bicycles from their definition of "vehicle" for all purposes. The one remaining state has no definition of "vehicle." All of these 37 states, however, have a law comparable to UVC § 11-1202 which provides that a person riding a bicycle on the roadway has the same rights and duties as the driver of a vehicle.

The staff has received information about traffic regulations for bicyclists in nine European countries:

Belgium
Denmark
England
France
Germany
Italy
Netherlands
Norway
Sweden
In all of these countries, as well as in the United Nations Convention on Road Traffic, a bicycle is either included in the definition of "vehicle" or a bicyclist is included in the definition of "driver."
2. CIVIL AND CRIMINAL LIABILITY OF CHILDREN

Panel Recommendation: Add a section to the Code providing that violations by children shall not constitute negligence per se.

Summary of Deliberations: The Code has always exempted children operating small bicycles from the provisions applicable to drivers by defining "bicycle" so as to exclude bicycle-like devices with small diameter wheels such as are likely to be used by children, primarily on the sidewalk. Since such devices are not bicycles and not vehicles, they are not regulated under current Code provisions. The Model Traffic Ordinance does provide the following rule applicable to such devices:

§ 3-5—Use of coasters, roller skates and similar devices restricted

No person upon roller skates, or riding in or by means of any coaster, toy vehicle, or similar device, shall go upon any roadway except while crossing a street on a crosswalk and when so crossing such person shall be granted all of the rights and shall be subject to all of the duties applicable to pedestrians. This section shall not apply upon any street while set aside as a play street as authorized herein.

It was pointed out that under the proposal, all bicycles, regardless of wheel diameter, and all other similar toy devices propelled by human power would be vehicles, and the children operating them would be subject to all of the rules applicable to the driver of a vehicle. Violation of those rules could subject the children to criminal prosecution, and could be considered negligence as a matter of law in a civil court. This could adversely affect a child's recovery of damages. This may sound more harsh than it actually is. Children of all ages have always been subject to the Code's pedestrian rules, with no express Code exemption from the criminal or civil law consequences of their violations, and this has not proven unduly harsh. Legal doctrines which protect young children from harsh application of the law are as old as the common law. Where police, prosecutors and courts use reasonable judgment, there is not likely to be a serious problem. Nevertheless, the Panel discussed the question of whether the Code should contain some specific exemption for small children in terms of criminal and civil law consequences.
Criminal liability. The question was posed whether prosecuting children for their violations is harmful or beneficial. We often talk as if it is harmful, but the intent is to benefit the child, to teach him something that might save his life. Perhaps a better issue to look at would be procedures and penalties. Rather than exempting children, why not set up a system of procedures and "penalties" which are really designed to teach the child safe bicycling? It was also noted that any exemption would be based upon an age limit, and that a police officer has no way of ascertaining the age of a child without taking him into custody. One Panel member expressed the opinion that no group should be exempt from compliance with the law. The consensus of the Panel was that the Code should not contain any specific exemption for children regarding criminal liability, but that the matter should be left to already established legal doctrines and to reasonable enforcement.

Civil liability. Violation of a law intended to protect someone is generally considered to be negligence, as a matter of law (negligence per se). Such negligence could result in a denial of any recovery for damages in states where contributory negligence bars recovery, or could diminish the amount recovered in states where comparative negligence has been the rule. The Uniform Vehicle Code provides for comparative negligence as follows:

§ 9-202—Contributory and comparative negligence

Contributory negligence shall not bar recovery in an action by any person arising out of the ownership, maintenance or use of any vehicle to recover damages for negligence resulting in death or injury to person or property, but any damages allowed may be diminished in proportion to the amount of negligence attributable to the person recovering.

Case law in all states makes it clear that children are not held to the same standard of conduct as adults. Generally, a child is held to a standard of conduct which is reasonable for children of like age, intelligence and experience. Prosser, Handbook of the Law of Torts, (3rd ed., 1964) includes the following discussion of age limits for child liability on pages 158-59:
Some courts have attempted to fix a minimum age, below which the child is held to be incapable of all negligence. Although other limits have been set, those most commonly accepted are taken over from the arbitrary rules of the criminal law, as to the age at which children are capable of crime. Below the age of seven, the child is arbitrarily held to be incapable of any negligence; between seven and fourteen he is presumed to be incapable, but may be shown to be capable; from fourteen to twenty-one he is presumed to be capable, but the contrary may be shown. These multiples of seven are derived originally from the Bible, which is a poor reason for such arbitrary limits; and the analogy of the criminal law is certainly of dubious value where neither crime nor intent is in question. The great majority of the courts have rejected any such fixed and arbitrary rules of delimitation, and have held that children well under the age of seven can be capable of some negligent conduct. Undoubtedly there is an irreducible minimum, probably somewhere in the neighborhood of four years of age, but it ought not to be fixed by rules laid down in advance without regard to the particular case. As the age decreases, there are simply fewer possibilities of negligence, until finally, at some indeterminate point, there are none at all. There is even more reason to say that there is no arbitrary maximum age, beyond which a minor is to be held to the same standard as an adult.

The Panel decided that the Code should clearly specify that the violation of rules of the road by young children is not negligence as a matter of law. Such a statement would not preclude a finding by the jury that the child's conduct was negligence, but it would make it possible for them to conclude that the conduct was not negligent. The Panel did not want the child to be considered negligent merely because a rule of the road previously inapplicable to the child would now be applicable. The consensus of the Panel was that an age limit of around 13 or 14 should be specified.
Draft: A new section could be added to chapter 9 of the Code (which deals with civil liability) to provide as follows:

§ 9-xxx -- Negligence of children

A violation of any provision of this Act by a child under the age of 14 shall not constitute negligence per se, although such a violation may be considered as evidence of negligence.

Staff Report: Two laws comparable to the proposal have been located:

Massachusetts -- Chapter 85 § 11B (Supp. 1973) provides as follows:

A violation of any provision of this section by a minor under the age of eighteen shall not effect any civil right or liability nor shall such violation be considered a criminal offense.

Vermont -- Title 23 § 1143 (Supp. 1974) provides as follows:

A violation of any provision of sections 1136 through 1141 of this title by any person under sixteen years of age is not negligence or evidence of negligence.
3. APPLICATION OF SPECIAL RULES FOR BICYCLES

Panel Recommendation: Delete UVC § 11-1201(c).

Summary of Deliberations: Since a bicycle is a vehicle under the proposed definition, a publicly maintained path for the use of bicycles is a highway. Thus all rules of the road, including the special rules for bicycles, apply on such a path by virtue of UVC § 11-101. UVC § 11-1201(c) is no longer necessary.

Draft: The following section would be deleted from the Code:

(c) These regulations applicable to bicycles shall apply whenever a bicycle is operated upon any highway or upon any path set aside for the exclusive use of bicycles subject to those exceptions stated herein.

The same provision would also be deleted from MTO § 12-1(c).

Staff Report: Twenty-nine states have laws in substantial conformity with UVC § 11-1201(c), and another four have comparable laws which differ somewhat.
4. APPLICATION OF TRAFFIC LAWS TO BICYCLES

Panel Recommendation: Amend UVC § 11-1202 to make it consistent with UVC § 11-101, and retain it in the Code for its educational value.

Summary of Deliberations: Since a bicycle is a vehicle under the proposed definition, all rules of the road apply to a person riding a bicycle on a highway, just as they apply to the driver of any other vehicle. Thus UVC § 11-1202 which provides that a person riding a bicycle shall be subject to all the duties and granted all the rights applicable to the driver of a vehicle is no longer necessary. The Panel decided that the section should be retained, however, as it constitutes a good statement of bicyclists rights and duties for educational purposes.

The section should be revised to refer to a bicyclist on the "highway," rather than "roadway," however, in order to be consistent with UVC § 11-101.

Draft: UVC § 11-1202 would be revised as follows:

§ 11-1202—Traffic laws apply to persons riding bicycles

Every person riding a bicycle upon a highway shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle by this act, except as to special regulations in this article and except as to those provisions of this act which by their nature can have no application.

Although not discussed by the Panel, the staff has noted several additional problems. To be completely accurate the draft should refer to all human propelled vehicles rather than just to bicycles. The reference to "highway" in the draft above may suggest that the Code's serious offenses in article 9 of chapter 11 only apply to bicyclists on a highway. Those provisions, under the proposed revision of the definition of "vehicle," actually apply to bicyclists both on and off the highway, just as they apply to other vehicle drivers. Also, the language of the above draft suggests implicitly that a bicycle is not a vehicle. The following draft would alleviate these problems:
§ 11-1202 -- Traffic laws apply to persons riding bicycles

Every person propelling a human-powered vehicle [riding a bicycle upon a roadway] shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of [a] any other vehicle by this act, except as to special regulations in this article and except as to those provisions of this act which by their nature can have no application.

The draft above conforms with UVC § 11-1301 dealing with motorcycles.

Staff Report: All 37 of the states which do not include bicycles in their definitions of "vehicle" have a law which is comparable to UVC § 11-1202. Thirty-four of these laws, like the Code section, refer to "roadway" while three refer to "highway."

Of the 14 jurisdictions which do include bicycles in their definitions of "vehicle," 10 have a provision comparable to UVC § 11-1202. Six of the 10 refer to "roadway" while four refer to "highway."
5. POSITION ON ROADWAY

Panel Recommendation: Delete UVC § 11-1205(a) and allow bicyclists to use the roadway under the same conditions as other drivers.

Summary of Deliberations: UVC § 11-1205(a) requires bicyclists to ride as close as practicable to the right hand side of the roadway. This provision is very unpopular with bicyclists for a number of reasons. It treats the bicyclist as a second class road user who does not really have the same rights enjoyed by other drivers but who is tolerated as long as he uses a bare minimum of roadway space at the side of the road. The provision is also frequently misunderstood by bicyclists, motorists, policemen and even, unfortunately, judges. The provision requires the bicyclist to be as close to the side of the road as is practicable, which we all understand to mean possible, safe and reasonable. But many people apparently don't understand the significance of the word practicable, and read the law as requiring a constant position next to the curb. Even where the significance of the word practicable is recognized, the bicyclist is exposed to the danger of policemen and judges who may have a different idea about what is possible, safe and reasonable, and he is exposed to the very real danger of motorists who, because of their misconception of this law, will expect the bicyclist to stay next to the curb and will treat him with hostility if he moves away from that position.

The side of the road is a very dangerous place to ride. The bicyclist is not nearly as visible here as he is out in the center of a lane. Also there is reason to believe that motorists don't respect a bicycle as a vehicle when it is hugging the side of the road. It is at the side of the road where all the dirt, broken glass, wire, hub caps, rusty mufflers, and other road debris collects, and it is hazardous to try to ride through this mess. Storm sewer grates are generally at the side of the road. The roadway is frequently less well maintained in this position. Also, in urban areas there is frequently a dangerous ridge where the roadway pavement meets the gutter, and the bicyclist must try to ride parallel with this ridge without hitting it. A bicyclist riding near the right edge of the roadway is also in substantially greater danger from vehicles cutting in front of him to turn right than is the bicyclist who rides out in the middle of the right lane.
UVC § 11-301(b) requires all vehicles proceeding at less than the normal speed of traffic at the time and place and under the conditions then existing to stay in the right hand lane, or as close as practicable to the right-hand curb or edge of the roadway, except when passing or preparing for a left turn. This law will effectively require bicycles to stay in the right lane (although it will not require them to stay near the right edge of the roadway) when moving slower than other traffic. This is all that is needed.

Some members of the Panel expressed concern that a bicycle could ride anywhere in the right lane, and that where this is the only lane available, this would hold up traffic unnecessarily. Others noted that such an obstruction is no more than any other slow moving vehicle would cause when there is only one lane for the direction of traffic, and that the bicyclist should have no greater duty to pull over than any other driver of a slow moving vehicle. Most bicyclists will pull over as far as they think is reasonable and safe. They will not maliciously obstruct traffic, even though the law may entitled them to do so, because they are very much unprotected and they are unlikely to thumb their noses at several tons of steel kicking at their heels. Nevertheless, it should be left to the bicyclist to determine when he should pull over on the basis of his perception of what is safe and reasonable. If he has a good reason for not pulling over, he should be allowed to stay out in the lane, and the law should not suggest to other drivers that they have a legal right to substitute their judgment for the bicyclists and demand that he pull over.

The Panel concluded that UVC § 11-1205(a) should be deleted from the Code. One Panel member favored adding a provision to prohibit obstruction of traffic, requiring the bicyclist to pull over when other vehicles want to pass. It was noted that UVC § 11-303(b), which requires the driver of an overtaken vehicle to give way to the right on audible signal, might already serve this purpose though the principal duty would still be with the overtaking vehicle to determine when it is safe to pass.
Draft: UVC § 11-1205(a) would be deleted:

(a) Every person operating a bicycle upon a roadway shall ride as near to the right side of the roadway as practicable, exercising due care when passing a standing vehicle or one proceeding in the same direction.

Cross Reference: First Report of the Subcommittee on Operations, Items 44 and 45 (September 6, 1974).

Staff Report: Thirty-eight states have laws which conform substantially with UVC § 11-1205(a). Two of the 38 allow riding on the left side of a one way roadway. The remaining 13 jurisdictions have no comparable provision.

Under European laws all drivers are required generally to stay near the right edge of the roadway, leaving that position only under specified circumstances. In Germany bicyclists are required to stay near the right edge under circumstances in which other drivers can leave that position. Whether bicyclists can leave the right edge position under the same circumstances as other drivers in other European countries is not clear from the information available to the staff.
6. USE OF ADJACENT BIKE PATH

Panel Recommendation: Delete UVC § 11-1205(c):

Summary of Deliberations: UVC § 11-1205(c) provides that where a usable bike path has been provided adjacent to a roadway, bicyclists must use the path instead of the roadway. It was argued that use of a path should not be mandatory. Such paths may be adequate for some bicyclists, during certain times of the day, certain times of the year, or in certain weather conditions, but such paths are often inconvenient and unsafe for at least some bicyclists. High speed commuters, for example, should not be required to use a low speed trail. No bicyclist should be required to use a trail which has not been properly constructed or maintained. Trails frequently lack adequate road surface, drainage, lighting, width and other important characteristics of the adjacent roadway. The roadway may be much safer.

On the other hand it was noted that separation from motor vehicle traffic is important for the bicyclists safety. It was also observed that such trails will suffer from lack of use if the law does not mandate their use. If the trails are not used it is hard to justify constructing new ones or maintaining the old ones.

One other possible approach would be to attempt to define in the law just what is a "usable" path. Standards for width, surface condition, design speed, lighting, drainage, and possibly other factors could be specified. Only if a bike path conformed with the standards would its use be mandated. This approach did not find support in the Panel, however.

The consensus of the Panel following discussion was that if a trail is safe and convenient, it will be used without the necessity of a law mandating its use. The Panel favored the general principle that bicyclists may use any highway unless a sign is posted prohibiting such use. There is no more of a need for a law requiring bicyclists to use bike lanes than there is a law requiring bus drivers to use bus lanes. While bicycle paths do separate the bicycle and motor vehicle traffic, such paths create new and possibly more serious safety problems at intersections. The Panel was not convinced that requiring bicyclists to use a bike path adjacent to a roadway provides greater safety.
Draft: The following section would be deleted from the Code:

\[(c) \text{Wherever a usable path for bicycles has been provided adjacent to a roadway, bicycle riders shall use such path and shall not use the roadway.}\]


Staff Report: Thirty-six states have laws which conform substantially with UVC § 11-1205(c). One of the 36 would also require use of shoulders in preference to the roadway. Another allows banning bicycle traffic on a heavily traveled highway where a suitable bike path exists within one-quarter mile of the highway. One of the 36 laws refers to a bicycle lane rather than to a "usable path."

Eight of nine European countries surveyed require use of a bike path: Belgium, England, France, Germany, Italy, Netherlands, Norway and Sweden. Only Denmark does not.

A circular blue sign with a white bicycle is used to designate cycle paths whose use is mandatory but it does not appear the existence of a sign is necessary. In the Netherlands, two kinds of paths exist. The kind whose use is mandatory and a type for touring. Use of the latter is not mandatory.
7. RIDING TWO ABREAST

Panel Recommendation: Continue to allow bicyclists to ride two abreast, but specify that they must do so in a single lane.

Summary of Deliberations: It was noted that riding two abreast makes the cyclists more visible, and that where traffic is not heavy or where at least two lanes are available for the bicyclists direction of travel there is no reason to prohibit riding two abreast. It was also noted that prohibiting riding two abreast would not be consistent with the Panel's recommendation (item 5, supra) to delete the requirement that bicyclists ride as near as practicable to the right edge of the roadway.

On the other hand, bicyclists riding two abreast could legally obstruct traffic since there is no requirement to pull over and ride single file to let other vehicles pass. The bicycles, as slow moving vehicles, would be required to stay in the right lane, but would not be required to stay near the right edge of the roadway. One Panel member thought the Code should contain such a requirement, but the others did not. Most of the Panel felt that as a practical matter bicycles would pull over and would not obstruct traffic. It was also noted that whether bikes are abreast or single file makes little difference since in either case the driver will probably have to leave the lane in order to pass, assuming a lane of standard width.

It was noted that under the language of the current section, bicyclists might ride two abreast with one in each of two lanes. The Panel decided that bicyclists riding two abreast should do so within a single lane. Of course adding this language might then make it possible for bicyclists to ride four or six or more abreast, with two in each lane of a multiple-laned roadway. The requirement that slow moving vehicles generally stay in the right-hand lane would alleviate this problem, however, where the bicyclists speed is less than the prevailing traffic speed.

The Panel also decided that the provision on riding two abreast should apply only to bicycles, and not to tricycles or other human powered vehicles.

The Panel also discussed the exception in the current provision. It was noted that few paths for exclusive use may exist, since most are shared with pedestrians. The Panel did not want to allow riding more than two abreast on a path which is shared by bicycles and pedestrians, however.
Draft: The Panel recommendation would amend UVC § 11-1205(b) as follows:

(b) 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 on a laned roadway shall do so within a single lane.

Staff Report: Thirty-one states have laws which conform substantially with UVC § 11-1205(b). Six states generally require riding single file, but one imposes this rule only where the speed limit is greater than 25 mph. The District of Columbia provides that bicyclists may not ride abreast unless it is safe to do so. The remaining 13 states have no comparable law.

Under the nine European traffic regulations, bicyclists may ride two abreast so long as traffic is not obstructed or inconvenienced. Belgium requires riding single file in business districts and Italy requires it at night in rural areas. When a car overtakes, bicycles must be single file in France, Belgium and Denmark. England requires single file on narrow, busy roads.
8. RIDING ON SIDEWALKS

Panel Recommendations: A. Amend UVC § 11-1103 to permit human powered vehicles on the sidewalks generally.

B. Add a provision to the Uniform Vehicle Code regulating the use of sidewalks by bicycles and other human-powered vehicles.

Summary of Deliberations: It was noted that the Subcommittee had already decided to add a section to the Code to allow riding on the sidewalk except in a business district, where official traffic-control devices prohibit such riding, or where a usable bike only lane has been provided adjacent to the sidewalk. The section would also require bicyclists on a sidewalk or a bike path lawfully used by pedestrians to yield to pedestrians, and to give audible signal before passing them.

The Panel discussed the hazards of sidewalk riding. The sidewalk is a dangerous place for bicycling because the bicycle is often less visible there, and motorists do not expect bicyclists to be there. The danger is acute with regard to vehicles emerging from driveways, especially where a wall, hedge, bush or structure interferes with visibility. The danger is greater for bicyclists than for pedestrians because bicyclists can move more quickly into a position of danger. On the other hand, it was noted that the sidewalk may be safer than the roadway, especially where the roadway is narrow or carries heavy or rapidly moving traffic, or where the bicyclist lacks the skill to ride in traffic. For young children, in particular, the sidewalk may be the safest place to ride.

The danger to pedestrians using the sidewalk was also discussed. Speed differential between a bicyclist and pedestrian can be high, and a collision can cause serious injuries or death. Traffic on sidewalks is not well channelized like it is in the roadway. Should bikes pass pedestrians to the left or right? Should pedestrians be required to keep to the right (or left) side of the sidewalk? Should pedestrians be required to give way to the right on audible signal from a bike? All of these questions were posed. The Panel agreed that while pedestrians' movements, particularly when a bicycle approaches from the rear, are not very predictable, no attempt should be made in the Code
to channelize sidewalk traffic. The entire responsibility for avoiding a collision with a pedestrian on a sidewalk should be with the bicyclist. While there is some danger to pedestrians, it does not justify prohibiting all bicycle riding on sidewalks since there are many miles of existing sidewalks which are rarely used by pedestrians. Where a particular pedestrian hazard exists, signs could be erected to prohibit bike riding.

The problem of bicycle speed was noted. One Panel member suggested a speed limit for bicycles on the sidewalk. The consensus of the Panel, however, was that the basic speed rule is adequate to regulate bicycle speed on sidewalks and elsewhere. It was also noted that the maximum speed limit applicable on that portion of highway would apply to bicycles on the sidewalk, although such a limit would generally be higher than desirable for sidewalk riding.

It was the consensus of the Panel that bicyclists should generally be allowed to ride on the sidewalk, with certain exceptions to prohibit such riding where it would be dangerous.

The Panel agreed that bicyclists should be prohibited from riding on the sidewalk in a business district. The complexity of the Code's definition of "business district" was noted. A bicyclist may not know when he is in such a district. Also, a bicyclist riding on a street may pass in and out of several business districts. The tape measure specifications of the Code definition will not be particularly helpful in delineating the boundaries of a business district unless signs are erected. The Panel opposed the idea of erecting signs at every business district, however, due to the cost and aesthetic impact. It was the consensus of the Panel that the definition of "business district" should be revised to refer to an area specifically designated in regulations or local ordinances.

The Panel agreed that bicyclists should be prohibited from riding on the sidewalk at any place where official traffic control devices are erected to prohibit such riding.

The Panel discussed the third exception contained in the Subcommittee recommendation -- that bicyclists be prohibited from riding on the sidewalk where an adjacent bike path is provided. It was noted that for young children on bicycles it
may be safer to be on the sidewalk with the pedestrians than on a bike path with fast moving bicycles. It was the consensus of the Panel that this provision should be deleted from the recommendation.

The Panel discussed possible restrictions on direction of bicycle travel on sidewalks. One Panel member wanted to prohibit wrong-way riding. Others noted that some areas have sidewalks on only one side, that even where sidewalks exist on both sides it may be inconvenient and dangerous to cross to reach the opposite sidewalk, and that children will ride both ways on a sidewalk regardless of the law. The Panel decided that it would be unreasonable to require one-way riding on the sidewalk, but that good bicyclist education might suggest the desirability of riding in the same direction as traffic in the roadway on the same side.

The Panel discussed the question of right of way and decided that the law should clearly specify that bicyclists on a sidewalk must yield to all pedestrians. The Panel felt otherwise, however, with regard to a bicycle path which is lawfully used by pedestrians. On such a path which is primarily for bicycles, pedestrians should yield to bicycles just as they yield to vehicles when walking on a roadway. A bike path is a roadway rather than a sidewalk, and pedestrian-bicycle right of way should follow the roadway rules rather than the sidewalk rules. The Panel recommends revising the Subcommittee's recommendation in this regard.

The Panel also concluded that all human powered vehicles, rather than just bicycles, should be entitled generally to use the sidewalks, and should be prohibited from using the sidewalks where signs are posted. It would not make sense to prohibit riding a bicycle on a sidewalk if riding a tricycle is legal.

Draft: UVC § 11-1103 would be revised as follows:

§ 11-1103 -- Driving upon sidewalk

No person shall drive any vehicle other than a human-powered vehicle upon a sidewalk or sidewalk area except upon a permanent or duly authorized temporary driveway.
The Panel recommendation would also add the following new section to the Code:

§ 11-1208 -- Human-powered vehicles on sidewalks

(a) A person propelling a human-powered vehicle 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 human-powered vehicle upon and along a sidewalk, or across a roadway upon and along a crosswalk, in a business district or where such use of human-powered vehicles is prohibited by official traffic-control devices.

The definition of "business district" would be revised as follows:

§ 1-107--Business district.--The territory contiguous to and including a highway when within any 600 feet along such highway there are buildings in use for business or industrial purposes, including but not limited to hotels, banks, or office buildings, railroad stations, and public buildings which occupy at least 300 feet of frontage on one side or 300 feet collectively on both sides of the highway.

§ 1-107 -- Business district.--Any portion of a highway specifically designated as a business district by the (state highway commission) in a resolution or order entered in its minutes, or by local authorities in an ordinance.

If such a revision is made, a comparable revision to the definition of "residence district" (§ 1-154) should be considered.

The following provision would be deleted from the Model Traffic Ordinance:
§ 12-14—Riding on sidewalks

(a) No person shall ride a bicycle upon a sidewalk within a business district.

(b) The (chief of police) is authorized to erect signs on any sidewalk or roadway prohibiting the riding of bicycles thereon by any person and when such signs are in place no person shall disobey the same.

Alternate (b) No person (15) or more years of age shall ride a bicycle upon any sidewalk in any district.

(c) Whenever any person is riding a bicycle upon a sidewalk, such person shall yield the right of way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian.

Cross Reference: First Report, Item 49.

Staff Report: Fourteen jurisdictions have provisions like UVC § 11-1103 prohibiting driving vehicles on sidewalks. Five of these 14 are among those states which include bicycles within their definition of vehicle. Thus provisions comparable to UVC § 11-1103 in the District of Columbia, Maryland, Massachusetts, South Dakota and Wisconsin would prohibit riding a bicycle on the sidewalk. Two of these jurisdictions, the District of Columbia and Massachusetts, have provisions specifically related to sidewalk bicycling as described below:

Only three jurisdictions have laws relating to riding on the sidewalk in a business district. Minnesota prohibits such riding. Massachusetts appears to prohibit such riding, at least by implication, since the law specifically allows riding on sidewalks outside business districts when necessary in the interest of safety. The District of Columbia allows riding on all sidewalks except those in the central business district, an area specifically delineated in the law.

Only the District of Columbia has a law which specifically prohibits riding on the sidewalk where prohibited by official traffic-control devices.

Four states generally prohibit all sidewalk riding although in two of the four young children are, or may be, exempted. The New Hampshire law does not apply to children under 12. The Virginia law authorizes most local governing bodies to allow children under 15 to ride on the sidewalks in certain areas.
Three states require bicyclists on the sidewalk to yield to pedestrians, and to give an audible signal before passing a pedestrian. One other state requires a bicyclist on the sidewalk to use due care to avoid colliding with a person or vehicle.

Of the nine European countries, four (Belgium, England, Denmark and Norway) expressly ban bicycles from using all sidewalks though Norway allows such riding when a sign permits it. Provisions in two other countries (France and Italy) lead one to assume such usage is banned because France allows using sidewalks when the road is cobbled or being repaired and Italy allows children to ride there. The German Vehicle Code has no express prohibition. We could not determine the rule in Sweden and the Netherlands. European regulations may ban bicycles on sidewalks because there are too many pedestrians and bicyclists to use the same facility; and because a place for bicyclists in urban areas has been provided. Some sidewalks may be very narrow.
9. MANNER OF RIDING ON BICYCLES

Panel Recommendation: Delete UVC § 11-1203(a) which requires riders to sit upon or astride the bicycle seat.

Summary of Deliberations: It was noted that a bicycle with hand brakes rather than foot brakes can under some circumstances be propelled safely in a position other than upon or astride the seat. The Panel consensus was that the purpose of this provision was probably to prevent stunt riding by children. The existence of this law helps to perpetrate the attitude that the bike is a child's toy rather than a serious mode of transportation. If we are going to have laws which regulate bicycles, they ought to deal with important and significant problems. This one does not and should be deleted.

Draft: UVC § 11-1203(a) would be deleted:

§ 11-1203—Riding on bicycles

(a) A person propelling a bicycle shall not ride other than upon or astride a permanent and regular seat attached thereto.

Staff Report: Forty jurisdictions have laws in substantial conformity with UVC § 11-1203(a). The remaining 11 have no comparable provision.
Panel Recommendation: Amend UVC § 11-1203(b) to clearly allow children to be carried in child bike seats or in back packs.

Summary of Deliberations: It was noted that the Code section now prohibits carrying more persons on a bike than the number for which it is designed and equipped. A child seat which is specifically designed to carry children on a bicycle and which is securely attached to the bicycle may be a safe place to carry a child passenger. Such seats are in common use, but transporting children in this manner may be illegal under the existing section since the bicycle would be "equipped" but not also "designed" to carry a passenger. The Code section should be revised to refer to a bicycle which is designed or equipped.

There was considerable discussion as to whether such seats are in fact safe, and whether the Code should just prohibit all passengers on bicycles, including children in child seats, except on tandem bikes. Some of these seats are not well designed. Even if well designed, they place weight on the bicycle frame at points not designed to carry extra weight. This could lead to failure of components which are important to the safety of the riders. It was also noted that the extra weight of the child greatly affects the control and stability of the rider and can cause loss of control, particularly for a rider who is not experienced in riding with such weight. It was observed, however, that the same weight problems exist where the bicycle is loaded with camping equipment or any other kind of load, as well as with children. Thus it makes little sense to prohibit carrying children due to their effect upon the bikes stability unless we also prohibit carrying all heavy loads. The Panel felt that there was not sufficient information available to justify prohibiting a widely practiced mode of family recreation. It was suggested that the Consumer Product Safety Commission should stop worrying about reflectors and start looking at child seats.

The Panel also discussed carrying children in a back pack. This is also probably prohibited by the existing Code section since the bike itself is neither designed nor equipped for a passenger. The back pack may be safer than a child seat because the extra weight is carried on the seat, where the bicycle is designed to carry weight, and because the child's hands and feet are not in proximity to dangerous moving parts of the bicycle, as they sometimes are with a child seat. It was noted that
in terms of control of the bicycle there is no difference be­tween carrying a child and carrying any other load on a back pack, and bicyclists frequently use back packs both for children and for other loads. The majority of the Panel decided that the Code should be amended to clearly allow carrying a child in a back pack. One Panel member was opposed to the idea. A weight limitation was discussed but it was determined that back pain and fatigue would constitute an adequate limitation.

One Panel member questioned whether a banana seat would constitute proper equipment for carrying a passenger. It was the Panel consensus that it would not unless a safe and secure place to carry the feet was also provided, and the frame and wheels were of adequate strength to bear the load. Although this may be difficult for a police officer to determine, the Panel did not want to attempt any more specific restrictions.

Draft: UVC § 11-1203(b) would be revised as follows:

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

Staff Report: Thirty-six jurisdictions have laws which conform substantially with UVC § 11-1203(b). Four other states have laws relating to carrying passengers on a bicycle. One merely prohibits carrying a passenger on the handlebars. Two allow passengers only in special seats which meet specific require­ments. Connecticut specifies a seat "securely fastened to the machine in the rear of the driver and provided with footrests and hand-grips." Massachusetts refers to a baby seat attached to the bicycle which has a harness to hold the passenger in the seat and some means of protecting the passenger's feet from the spokes. The last state allows passengers only on a bicycle with a double seating device and double footrests, or with a side car; and only when the operator is at least 16 years of age.
11. BICYCLISTS CLINGING TO OTHER VEHICLES

Panel Recommendation: Delete UVC § 11-1204.

Summary of Deliberations: Several problems were noted with the existing section. Trailers designed to be towed by a bicycle are now available. Under the revised definition of "vehicle" such trailers would be vehicles, and this section may make it illegal to attach a bicycle to any other vehicle. Also bicycles are sometimes fastened together so that blind persons can ride under guidance of a sighted person.

The consensus of the Panel was that clinging to other vehicles is not a serious problem. The existence of this law means that not clinging to vehicles is stressed in the bicycle safety literature. This may actually create interest in doing so. Perhaps more importantly, the rule may divert attention away from far more significant safety rules for bicyclists.

It was also noted that any such clinging to a vehicle could be considered reckless driving, so even absent this section an officer would not be powerless to prevent such clinging if he observed it. The Panel decided that the section should be deleted.

Draft: The following section would be deleted from the Code:

§ 11-1204—Clinging to vehicles

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

Staff Report: Forty-three jurisdictions have laws comparable to UVC § 11-1204. Thirty-one of the 43 conform substantially in all respects with the Code section. Eight states have no comparable law.
Panel Recommendation: Amend UVC § 11-1206 to prohibit carrying objects which prevent keeping both hands, rather than just one, on the handlebars, and require at least one hand on the bars at all times.

Summary of Deliberations: It was noted that both hands are needed to safely control a bicycle, especially when it is equipped with hand brakes. It is very dangerous to try to brake, shift gears, start up or to make any maneuver with only one hand available for use. If the bicycle hits a pot hole or other obstruction, a person with only one hand available will have difficulty maintaining control. It was the consensus of the Panel that no person riding a bicycle should be carrying any object in his hands which would prevent using both hands to control the bicycle, and at least one hand should be on the handlebars at all times. The other hand should be removed only when necessary to signal or change gears or for some other purpose. In order to be in violation, the rider would have to be actually carrying something in such a way that he could not use both hands to control the bicycle. It would not be a violation to temporarily hold something in one hand incident to doing something with it other than just carrying it. It would not be a violation, for example, for a newspaper person to reach into his bag and pick out a paper and throw it onto your roof.

There was some sentiment on the Panel to simply delete the section on grounds that we have too many laws and that people will ride bikes reasonably without a law to require them to be reasonable. It was noted that children will be the principle violators and that many police officers view writing tickets to children as "chicken," and they won't touch it. Thus the major emphasis of the law may be in the civil law. Nevertheless, it was noted that carrying objects seriously interferes with control and may result in many accidents. The Panel decided that this should be prohibited.

A problem was noted with regard to people who only have one hand. These people should not be prohibited from riding bicycles. It was suggested that the draft refer to "all available" hands, rather than to "both" hands.
Draft: UVC § 11-1206 would be revised as follows:

§ 11-1206 -- Carry articles

No person operating a bicycle shall carry any package, bundle or article which prevents [the driver from keeping at least one hand upon the handlebars] 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.

In drafting, the staff has not used the suggested "all available" hands in place of both hands since the phrase sounds awkward and seems unnecessary. The above draft will not interfere with the rights of those very few bicyclists who have only one hand since it is not the carrying of an object which prevents their use of both hands to control the bicycle. The above draft might be construed to prohibit operation of a bicycle by a person who has no hands, although there may be available prosthetic devices which would make it safe for such a person to ride. Query whether the draft needs specific exceptions for such circumstances or should reasonableness of interpretation and enforcement be relied upon?

Staff Report: Between 1938 and 1944 the Code section prohibited carrying any package, bundle or article which prevents the rider from keeping both hands on the handlebars. The section was revised to refer to "at least one hand" in 1944. The Code has never contained a positive requirement to keep at least one hand on the handlebars, however.

Twenty-nine jurisdictions have laws which conform substantially with UVC § 11-1206. Two other states have similar laws which add other elements. One requires at least one hand on the handlebars at all times and prohibits removing the feet from the pedals. Another prohibits carrying any article which prevents full control at all times.

Two states have laws like the proposal and the earlier Code section prohibiting carrying any article which would prevent keeping both hands on the bars.

Four states have laws which directly require hands to be on the bars, rather than prohibiting the carrying of objects. All four require at least one hand on the bars at all times.

Fourteen states have no comparable law.
13. ARTICLE HEADING FOR SPECIAL BICYCLE RULES

Panel Recommendation: Delete the reference to play vehicles from the heading for article 12 of chapter 11.

Summary of Deliberations: The existing heading reads "Operation of Bicycles and Play Vehicles." The reference to play vehicles helps to continue the attitude that bicycles are toys. If play vehicles need regulation, it should be in a different article. Only § 11-1204 now refers to any vehicles other than bicycles, and the Panel has recommended deletion of that section. The Panel agreed the heading should be revised.

Draft: The heading for article 12 of chapter 11 would be revised as follows:

ARTICLE XII -- OPERATION OF BICYCLES [AND PLAY VEHICLES]

In the final draft this article heading will probably refer to bicycles and human-powered vehicles.
14. BICYCLE PARKING

Panel Recommendations:  
A. Require bicycles parked on the highway to generally comply with the Code's parking requirements for vehicles, but specifically allow bicycles to park on the sidewalk, to park diagonally or on an angle in a space designated for parallel parking for other vehicles, and to double park.

B. Amend MTO § 12-13 to require bicycles parked on the sidewalk to not obstruct traffic.

C. Add a new subsection to MTO § 12-13 to allow bicycles to be secured to any public pole unless specifically prohibited.

Summary of Deliberations:  
A. It was noted that bicycles normally will not be parked on the roadway, or even on the shoulder, but will be parked on a sidewalk. Bicycles will generally be parked on the roadway only where there is a designated bicycle parking area on the roadway, or where a large group of bicyclists all park at the same time. Where bicycles are parked on the roadway, however, they should generally comply with parking rules for all vehicles. The same is generally true for bicycles parked anywhere on the highway. The Panel noted three exceptions to this general rule. First, UVC § 11-1003(a)(1)(b) prohibits parking on the sidewalk. This rule clearly should not apply to bicycles. Second, UVC § 11-1004 requires vehicles to parallel park. Bicycles parked on a roadway can park diagonally or on an angle, however, and still be within the area that a full sized vehicle parked parallel with the curb would use. Parking bikes parallel on the roadway may waste space, may make them more difficult to get in and out, and may cause instability of the parked bicycle due to the crown of the road. Third, UVC § 11-1003(a)(1)(a) prohibits double parking. Where both vehicles are bicycles it would not appear necessary to prohibit double parking, although the Panel would not allow bikes to double park alongside a vehicle other than a bicycle.

While most of the Code's vehicle parking restrictions generally have little application to vehicles on the sidewalk, since parking on a sidewalk is prohibited, the rules would apply to bicycles parked on the sidewalk where bicycle parking would be allowed. Thus it was noted, for example, that a bicycle could not park on a sidewalk within 15 feet of a fire hydrant, or in front of a driveway.
It was suggested that parking bicycles anywhere on the roadway should be prohibited since it imposes too great a danger of damage to the bicycle. A driver trying to get out of a parking space boxed in by parked bicycles has no bumpers to protect the bikes from damage. The Panel decided, however, that while it is generally undesirable to park a bike on the roadway, and most bicyclists will not do so, there are circumstances where it may be desirable and should not be prohibited, so long as it is done in compliance with the rules for vehicular parking.

B. Existing MTO § 12-13 was heavily criticized as being unclear. The section seems to suggest, for example, that bikes may be parked on the roadway or on the sidewalk, but not on the shoulder or elsewhere on a highway. The section requires bikes to be parked so as to afford the "least obstruction" to pedestrians. It was noted that under some circumstances the "least obstruction" might actually constitute quite a bit of obstruction. It was also noted that the positioning of bicycles suggested by the section may not, under some circumstances, be the best positioning.

The Panel agreed that parking of bicycles on sidewalks should be allowed, although it was noted that where bicycle volumes are very high the sidewalk will not be an adequate area for bike parking. In such cases, if the volume is only occasional, parking in the roadway may be a solution. If such volumes are frequent, a designated parking lot or area for bicycles off the roadway and sidewalk may be necessary. For the bicycle volumes in most areas of the country, however, the sidewalk appears to be the most reasonable area for bicycle parking.

The Panel agreed that parked bicycles should not unreasonably obstruct pedestrian traffic, or any other form of traffic. It was noted that the current language may not effectively prevent such obstruction. In front of a public building exit, especially a theater or meeting hall, any obstruction may be very dangerous. Signs can be erected at such locations, however, rather than trying to specify all such locations in the law. It was noted that while one bicycle may not constitute an obstruction, others placed in proximity to it may constitute an obstruction. How can a police officer determine which bike was there first and which ones were added later to make the obstruction? The Panel decided that the staff should redraft the existing provision to make it more clear, to allow bicycles to park
on the sidewalk, and to require that they do so without obstructing pedestrian traffic. One Panel member suggested the law should prohibit "seriously" obstructing traffic.

C. Due to the theft problem most bicycles are parked in such a way that they can be secured to an immovable object by a chain, cable or other locking device. The availability of such objects will largely determine where bicycles will be parked. Although some new bicycle racks provide reasonable security, many of the older models which are found in use are not so designed that a bicycle can be easily secured. Hence bicyclists will generally park elsewhere, securing their bikes to a pole, tree or anything else which is not likely to move. A District of Columbia law authorizes securing bicycles to any public pole, with certain exceptions. The Panel liked this idea. Since the pole itself constitutes an obstruction, it is likely to be out of the main traveled pedestrian way, and a bicycle secured to it should not unreasonably impede pedestrians. One Panel member opposed the idea on aesthetic grounds. He thought it would result in the proliferation of signs to tell bicyclists they can't park at particular poles, and he opposed fastening bikes to trees. He favors grouping bikes together in racks. The Panel majority agreed that bikes should not be attached to trees, although one Panel member favored allowing bikes to be attached to large trees. The Panel otherwise approved the concept of the D.C. law.

Drafts: A. A new section could be added to article 12 of chapter 11 to read as follows:

§ 11-12xx -- Bicycle parking

(a) Notwithstanding the provisions of article 10 of this chapter, and unless otherwise provided by official traffic-control devices, bicycles may be parked

1. On any sidewalk;
2. On the roadway at any angle to the curb or edge of the roadway at any location where the parking of vehicles is allowed;
3. On the roadway abreast of another bicycle or bicycles near the side of the roadway at any location where the parking of vehicles is allowed.

(b) In all other respects, bicycles parked anywhere on a highway shall conform with the provisions of article 10 regulating the parking of vehicles.
B. MTO § 12-13 would be amended as follows:

§ 12-13 -- Parking

No person shall park a bicycle [upon a street other than upon the roadway against the curb or upon the sidewalk in a rack to support the bicycle or against a building or at the curb, in such manner as to afford the least obstruction to pedestrian traffic.] on any sidewalk where such parking is prohibited by official traffic-control devices, nor upon any sidewalk in any manner which would unreasonably obstruct pedestrian or other traffic.

C. A new subsection would be added to MTO § 12-13 as follows:

Any person may park near, and secure a bicycle to, any publicly owned pole or post for a period of not more than twelve consecutive hours, unless an official traffic-control device or any applicable law or ordinance prohibits parking or securing bicycles at that location. No bicycle shall be secured to any tree, fire hydrant, or police or fire call box. No bicycle shall be secured in any manner so as to unreasonably obstruct pedestrian or other traffic.


Staff Report: Only two jurisdictions have laws dealing with bicycle parking. The District of Columbia law authorizes attaching bicycles to most public stanchions provided traffic is not obstructed (for the text of this law see First Report, Item 50, page 109). Another D.C. law provides for the issuance of permits for placement if bicycle parking racks in public space.

Massachusetts has a law regulating bicycle parking as follows:

The operator shall park his bicycle upon a way or a sidewalk in such a manner as not to obstruct vehicular or pedestrian traffic.

Massachusetts also has enabling laws which authorize cities to acquire and maintain coin operated locking devices for bicycle parking, and to provide off-street bicycle parking.
Of the 50 municipalities whose ordinances were reviewed by the staff in a recent study, 18 had provisions in substantial conformity with MTO § 12-13. Eleven other municipalities had ordinances specifically regulating the parking of bicycles. Twenty-one municipalities had no comparable provision.
15. OBEDIENCE TO OFFICIAL TRAFFIC-CONTROL DEVICES


B. Require bicyclists to comply with all official traffic-control devices in the same way as the driver of any other vehicle.

Summary of Deliberations:  A. Since a bicycle is now a "vehicle," UVC § 11-201 requires bicyclists to obey official traffic-control devices, and MTO § 12-12(a) is no longer necessary. The same is true as to that part of § 12-12(b) which requires obedience to no-turn signs. These provisions may even conflict with UVC § 15-101 which prohibits local ordinances on any matters covered by Code provisions. Clearly the Model Traffic Ordinance sections should be deleted.

With regard to that part of MTO § 12-12(b) which suggests that a bicyclist who dismounts is then subject to pedestrian rules, a later agenda item deals with this question.

Several problems were noted in terms of bicyclist's compliance with official traffic-control devices. Some traffic actuated signals are not sensitive enough to detect bicycles. The bicyclist is forced to wait for a car to trip the signal, dismount and try to locate the pedestrian button, or violate the signal. The opinion was expressed that this is an engineering problem and that detection devices are available which are sensitive to bicycles. Another problem involves signal light lenses which are directional, that is, they are visible only from a particular position on the roadway. Bicyclists at the side of the road often cannot see such signals. Again, this is an engineering problem. Bicyclists who encounter either of these problems should and will react just as any driver reacts when a signal device is broken or otherwise not functioning. No driver is required to obey any official traffic-control device which is not in proper position and sufficiently legible to be seen by an ordinarily observant person. (See UVC § 11-201(b).) The Panel decided that no attempt should be made to deal further with these problems in the Code.

B. The Panel discussed stop signs, red lights, yellow lights, and the position for a required stop, in terms of whether the rules for bicyclists should be the same as for other drivers. The Panel concluded in all cases that the same rules
should apply to all drivers, regardless of whether they are driving a bicycle or some other kind of vehicle. In particular, the Panel was persuaded that it would not be desirable to teach children rules as to the meaning of various devices which they would then have to forget when they become old enough to drive a motor vehicle.

In regard to stop signs, it was noted that the Code requires a complete cessation of forward movement. For most bicyclists this would mean putting a foot on the ground since few bicyclists can balance a bicycle that is not moving forward. It was noted that most bicyclists do not make this kind of stop at all stop signs, and that many bicyclists treat stop signs like yield signs.

It was suggested that a special stop sign rule for bicyclists be adopted to require them to slow and yield, but not to stop unless necessary. In support of the proposal it was noted that bicyclists have good visibility and are well able to see whether it is safe to proceed. A bicycle is most unstable while being started and stopped, hence stop signs increase the bicyclists danger. Stop signs are particularly difficult for a bicyclist using toe clips, as the foot must be reinserted into the clip as he starts up again. On the other hand it was noted that while adult bicyclists may have the judgment needed to roll through a stop sign, children may not and should be required to stop for their protection. Also, if children learn that they can roll through stop signs, they will pick up bad habits which will later affect their motor vehicle driving. On the other hand, if the law ignores what many reasonable people are doing and defines their conduct as illegal this will breed disrespect for the law.

One Panel member suggested that the problem is with the definition of "stop." He urged changing the definition to require only a "safe and reasonable stop" rather than a complete cessation of motion. This change would apply to both bicycles and motor vehicles, thus obviating the objections to a special rule for bikes. It was the consensus of the Panel, however, that the courts would construe "safe and reasonable stop," or any other definition of "stop," to require a cessation of movement since that is implicit in the concept of stop.

The Panel considered all the arguments and decided to recommend no change in the law. It was the consensus that bicyclists should be required to comply with stop signs just
like other vehicle drivers are required to do. The problem is not with the law but with the proliferation of unwarranted stop signs. It was agreed that there are far too many stop signs and that most of them are not warranted. The solution for motor vehicles and bicycles is removal of many of these signs, rather than rewriting the laws to account for their overuse.

In regard to red lights the Panel concluded that all comments about stop signs were applicable. One additional question with red lights is whether the bicycle should be allowed to make a right turn, even if other vehicles may not turn on red. It was argued that since the bicycle stays near the right he doesn't interfere with cross traffic and thus should be allowed to make the turn. The Panel was not convinced, however, and decided again that no special rules for bicycles were warranted in regard to red lights.

In regard to yellow lights it was noted that drivers of vehicles can proceed but pedestrians cannot enter an intersection on a yellow signal. The reason for the difference is that the pedestrian, being much slower, might not be able to clear the intersection in time and might obstruct passage of cross traffic on the green. Doesn't the same reasoning apply to the bicycle, which is also slower than the motor vehicle, especially when moving up hill? Once he is lawfully in the intersection the bicyclist has the right of way to clear it, even if this holds up the cross traffic. Should bikes be required to stop for yellow lights? It was noted that the duration of a yellow signal varies at different intersections. Sometimes it is long enough for a bike to cross and sometimes not. An experienced bicyclist will stop unless he knows the duration of the yellow is adequate. He will do so in recognition of the considerable danger he faces when the cross traffic gets a green signal while he is still in the intersection. The consensus of the Panel was that a different rule for bikes would cause more confusion and create more problems than it would solve. The meaning of a yellow light is already confused by substantial lack of uniformity. It should not be made more complex by adding another element. The proper solution to the problem is bicyclist education rather than a special law for bicyclists.

With regard to the position for a required stop it was observed that bicyclists frequently pass a line of vehicles stopped at a stop light and move to the front of the line. Once at the front of the line, many bicyclists will pull out into the lane
directly in front of the front car, so that they can be assured that they will be seen, and that right-turning drivers will not cut them off. It is dangerous to stay near the right curb when entering an intersection due to the conflict with right turning vehicles. It is much safer to occupy the right hand lane by riding in the center, or just left of center, of that lane when entering an intersection. In order to get into this position, however, the bicyclist must pull beyond the stop line and stop in the cross walk. Should a special law for bicycles be adopted to allow this? The majority of the Panel considered this more of an engineering than a legal problem. Some people at the meeting suggested that bicyclists should not pull in front of the car, but should stay to the side near the front fender. They felt that the position in front would be dangerous and would only irritate drivers. The Panel concluded that no special law to deal with this problem was desirable.

Draft: The following section would be deleted from the Model Traffic Ordinance:

§ 12-12—Obedience to traffic-control devices

(a) Any person operating a bicycle shall obey the instructions of official traffic-control devices applicable to vehicles, unless otherwise directed by a police officer.

(b) Whenever authorized signs are erected indicating that no right or left or U turn is permitted, no person operating a bicycle shall disobey the direction of any such sign, except where such person dismounts from the bicycle to make any such turn, in which event such person shall then obey the regulations applicable to pedestrians.

Staff Report: No state has a law comparable to MTO § 12-12. Of the 50 municipalities reviewed, 24 had comparable ordinances. Thirteen of the 24 are in substantial conformity with all of MTO § 12-12. Seven more of the 24 conform with subsection (a) but omit subsection (b). One more conforms with (b) but omits (a). The remaining three are different but generally require obedience to traffic-control devices. Twenty-six municipalities have no comparable ordinance.
16. OVERTAKING AND PASSING OTHER VEHICLES

Panel Recommendations: A. Allow bicycles to pass other vehicles in either the same or a different lane, and on either the right or left of the other vehicle, when it is safe to do so.

B. Provide specifically that bicyclists passing on the right may drive off the roadway in making the passing maneuver, if it is safe to do so.

Summary of Deliberations: It was noted that under existing UVC § 11-304(b), it would probably be illegal for a bicyclist passing on the right to drive off the roadway in order to so pass. Under UVC § 11-304(a) such passing might be allowed only when the vehicle being passes is making a left turn or when there is room for at least two lines of vehicles moving in the appropriate direction. This latter condition might be construed to permit such passing only where there are two lanes, or at least an amount of roadway space equivalent to two lanes. A better construction would interpret the "room for at least two lines" requirement in terms of the width of the vehicles actually involved, which would mean that a bicycle could pass on the right where the same maneuver would be illegal for a larger vehicle. It was urged that the Code should be clarified to allow passing on the right whenever it would be safe to do so.

The primary reason for prohibiting vehicles from driving off the roadway in passing on the right is that the shoulder is not built to bear that much traffic. Bicycles, on the other hand, due to their light weight, are much less likely to destroy the shoulder by using it to pass.

The Panel agreed that bicyclists should be free to pass on the right in the same lane. Generally they would do so when other vehicles are stopped or slowed by heavy traffic or by traffic controls. If bicycles are not able to pass in such situations the primary utility of the bicycle as a means of getting through traffic would be lost. The bicycle is a slower vehicle than motor vehicles, but makes up for it by being able to avoid stopping when other traffic gets jammed up. It was also noted that the law allows motor vehicles to pass bicycles in the same lane when those motor vehicles are moving faster than the bicycle. It would be very unfair to not allow the bicyclist the same privilege when he can take advantage of it.
It was also observed that if the bicyclist has to wait in line with other traffic, he suffers unnecessarily direct and prolonged exposure to exhaust fumes. The bicyclist is particularly susceptible to such fumes because he is out in the open and very close to the source of the fumes, and because his need for oxygen causes him to take in large quantities of air.

The dangers of passing on the right were noted, particularly with regard to the right-turning driver who normally does not anticipate traffic on his right when he is proceeding in the right-hand lane. The law now provides, and the proposed new section would likewise provide, that a person passing on the right may do so only under conditions permitting the movement to be made in safety. Hence the bicyclist passing on the right would be required to determine the safety of the maneuver before passing. On the other hand, the driver making a turn also has duties to signal and to ascertain that he can safely turn before making the maneuver. Thus the primary duty of care would be with the bicyclist, but where the driver is turning he also would have a duty.

Bicyclists should also be allowed to pass on the left when it is safe to do so. The bicyclist who wants to go straight through an intersection should not be trapped behind those drivers who want to turn right, and the bicyclist certainly should not pass these vehicles on the right. When a bus pulls over to the curb to pick up or discharge passengers, a bicyclist can't pass on the right, and he clearly should be allowed to pass on the left. The bicyclist can frequently make these maneuvers without leaving the right hand lane and interfering with traffic in other lanes. Thus the Panel decided, bicyclists should be allowed to pass on the left in the same lane, or in a different lane, when it is safe to do so.

The Panel also discussed the question of bicyclists passing between lines of vehicles. Under some circumstances this could be very dangerous, particularly if the lines of vehicles start to move, or if a driver in one lane tries to change lanes quickly. On the other hand, passing between lines may be a desirable or necessary maneuver under some circumstances. Where there is a right turn only lane, for example, a bicyclist who wants to go straight through may find it desirable to pass to the left of a line of vehicles waiting to turn right. In doing so he will be passing between two lines of vehicles. Likewise, a bicyclist passing a line of vehicles on the left for any other
reason (such as where the vehicles are too close to the curb to allow passing on the right) will be passing between lines of vehicles. Such passing by bicyclists would be legal under the recommendations discussed above to allow passing on the right or left in the same lane. The Panel decided it would be undesirable to specifically deal with passing between lines of vehicles in the Code. Any reference specifically permitting such passing might encourage it, but any prohibition would unreasonably limit the mobility provided by the recommended passing rules. The Panel decided that the recommended passing rules are adequate to deal with the problem.

Draft: A new section could be added to article 12 of chapter 11 to read as follows:

§ 11-12xx -- Overtaking and passing other vehicles
(a) A person riding a bicycle may overtake and pass any other vehicle on either the left or right side, staying in the same lane as the overtaken vehicle, or changing to a different lane, or riding off the roadway, as necessary to pass with safety.
(b) A person riding a bicycle may overtake and pass another vehicle only under conditions which permit the movement to be made with safety.
(c) Except as otherwise provided in this section, a person riding a bicycle shall comply with all rules applicable to the driver of any other vehicle when overtaking and passing.

Cross Reference: First Report, Item 54.

Staff Report: Three relevant state laws have been located. Massachusetts specifically allows bicycles to pass on the right. Michigan prohibits operating a motorcycle or bicycle between lines of traffic, and allows passing on the left on a two-way street, and on either the left or right on a one-way street, in an unoccupied lane. Oklahoma prohibits operating a motorcycle or bicycle between lanes of traffic moving in the same direction.
17. LEFT TURNS

Panel Recommendation: Allow bicyclists to make a left turn either following the course specified by the Code for vehicles turning left (see diagram, course A), or by staying near the right while crossing the street being entered, then again staying to the right while crossing the street being exited (see diagram, course B).

Diagram:

Summary of Deliberations: UVC § 11-601(b) now specifies that bicyclists must make left turns, just like the drivers of any other vehicles, by approaching in the extreme left-hand lane lawfully available to the appropriate direction of traffic, and when practicable, by turning to the left of the center of the intersection and leaving the intersection in the left-hand
lane lawfully available to the appropriate direction of traffic (turning course A in the diagram above).

The only other lawful option for a bicyclist is to get off the roadway and move around the intersection in compliance with laws applicable to pedestrians (course C in the diagram above). The Panel agreed that while bicyclists should have the option of getting off the roadway and acting like a pedestrian, they should never be forced to do so by a lack of other reasonable and lawful options. If a bicyclist must get off the roadway and act like a pedestrian in order to make a lawful and safe left turn maneuver, he is greatly inconvenienced and this would represent a failure of the traffic system to adequately provide for bicycle movement. A safe, reasonable, convenient and lawful option for passage which does not require the bicyclist to surrender his status as a vehicle and temporarily become a pedestrian should be provided wherever bicycles are allowed. The pedestrian-type left turn maneuver (course C in the diagram) is, therefore, not a reasonable option.

Thus it was the consensus of the Panel that the Code now provides only one safe, reasonable, convenient and lawful course for left-turning bicycles, the vehicle left turn (course A in the diagram). It was argued that while this course is safe under many conditions, it may be undesirable under some circumstances for some or all bicyclists, and it should not be the only option. Where there are multiple lanes to cross, where the motor vehicle traffic is moving at a very high speed in relation to bicycles, where traffic is heavy, where there is no left turn pocket or other protected area in which the bicyclist can wait to make his turn, for example, some or all bicyclists may not want to make the vehicle left turn. Do we want to require small children or other inexperienced riders to make the vehicle left turn on a busy roadway? The Panel agreed that bicyclists need another option which they might use in their own discretion.

The suggested second option (course B in the diagram) allows the bicyclist to stay at the right side of the road while entering the intersection and crossing the roadway being entered. The bicyclist would then stop in the intersection near the right side of the roadway being entered (at point X in the diagram) and wait for traffic to clear. He would then cross the roadway being exited and proceed on his journey.
The Panel first concluded that at a signalized intersection, since the bicyclist has lawfully entered on a green signal, and has not left the intersection at point X, he may clear the intersection whenever traffic clears, without waiting for a green signal for traffic moving on the roadway being entered. The problem with this is that it may be unsafe. It may involve crossing a substantial number of lanes when traffic on those lanes is authorized to proceed by a green signal and will not expect cross traffic. The other option, to require the bicyclist to wait at point X for a green signal for traffic moving on the roadway being entered, also has problems. It is unfair to the bicyclist to require him to wait for two signals in order to make a left turn. This option is not really very different than the pedestrian-type option (course C in the diagram), in that the bicyclist must make two separate roadway crossings, waiting for two separate signal indications. The other problem with requiring the bicyclist to wait for the signal is that this maximizes the amount of time he must stay at point X, and point X is not a safe place for a bicyclist to be. He is stopped in an intersection. He represents an impediment to traffic on the roadway being exited, particularly to other bicycle traffic, and especially after he turns his bicycle perpendicular to that roadway in preparation for continuing along the other roadway. While stopped at point X the bicyclist also makes it impossible for a driver proceeding along the roadway being entered to make a right turn on red.

The conflict with right turn on red was discussed extensively. Regardless of whether or not the bicyclist must wait for a signal change, whenever he is at point X he will be in conflict with right turn on red. It was suggested that if the bicyclist is aware of this problem he might stop far enough away from the curb to allow vehicles to pass between the bicycle and the curb to make their right turn. This would place the bicyclist in a dangerous position, however, if when the signal turned green a driver in the right lane proceeded straight through the intersection. This would leave the bicyclist out between lines of moving vehicles. The Panel concluded that there is no good solution to the problem, and that the interference with right turn on red will just have to be tolerated.

Draft: A new section could be added to article 12 of chapter 11 as follows:
§ 11-12xx -- Left turns

(a) A person riding a bicycle intending to turn left shall, unless he complies with the provisions of section 11-601, approach the turn in a position as close as practicable to the right hand curb or edge of the roadway. The turn shall be made at a position as close as practicable to the right hand curb or edge of the roadway along which the bicyclist intends to proceed after turning.

(b) If the turn is made at a location where traffic movement is controlled by a police officer or by a traffic-control signal, the bicyclist may not proceed after turning until a signal to proceed is given to traffic moving in the appropriate direction on the roadway along which the bicyclist intends to proceed. At all other locations, after turning and before crossing the roadway he is leaving, the bicyclist must yield the right of way to all traffic approaching on that roadway.

(c) 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 different course from that specified in this section or in section 11-601 be traveled by turning bicycles and when such devices are so placed no person shall turn a bicycle other than as directed and required by such devices.

The Panel did not discuss left turns at locations other than at intersections. The draft assumes that the special bicycle left turn option would be allowed for non-intersection turns as well as at intersections.

The Panel also did not discuss subsection (c) of the draft. It is taken from UVC § 11-601(c) and would appear necessary since the existing subsection alone would not authorize devices to modify the proposed special bicycle left turn course. This section would also allow devices to modify the turning course for bicycles without modifying the course for other vehicles.
Staff Report: No state law prescribes a course for left turns specifically for bicycles. One of the 50 municipalities reviewed has such an ordinance but the turning course specified is the same as that required for all vehicles.

Several European countries have adopted special rules for bicyclists to follow in making a left turn.

Denmark has adopted a requirement that a bicyclist desiring to turn left must remain near the right curb, proceed through the intersection, and turn left from that position when it can be done without inconvenience to other traffic. This rule applies even though roadway markings or signs for motorists indicate otherwise. In other words, this course must be followed even though the right lane is for right turns only. The only exception for this general course for bicyclists' left turns is when a sign for bicycles indicates a different course to follow. One Denmark correspondent stated:

This special rule for bicyclists at crossings is now three years old and appears to be a matter that is difficult to teach the bicyclists!

On May 1, 1974, Sweden adopted a modified form of the Danish rule. Signs are installed at some intersections indicating the proper course to follow. The Danish rule applies at complex intersections, where traffic is dense or where traffic is moving fast. Otherwise, bicyclists may turn left by moving into the left lane or by using the Danish rule. At many intersections in Sweden, bicyclists may choose which rule to follow.

The Netherlands provides that bicyclists do not have to follow the course used by motorists to turn left but may instead proceed through the intersection and turn left when traffic permits.

Of these developments, our correspondent in Norway stated:

When turning left, a bicyclist is required to pull in towards the centre of the carriageway (roadway) in good time. A Nordic Committee has proposed a different rule, already in force in Denmark and approved, but not yet in force, in Sweden. This would mean that a bicyclist wanting to turn left should go straight on to the extreme
right, across the crossing carriageway (roadway), turn there and then wait to cross the carriageway (roadway) he is about to leave. Due to much resistance from bicyclists, and doubts about the effect of the rule on ordinary roads with little traffic, the rule has been left out of a recent draft of new rules of the road for Norway. The remarks to the draft point out, however, that bicycle riders should be encouraged to step off and proceed as pedestrians through crossroads where the layout or the traffic makes it unsafe or difficult to ride according to the vehicle rules.
18. TURN SIGNALS

Panel Recommendation: Amend the Code's requirement as to duration of a turn signal to allow the bicyclist to discontinue a signal whenever he needs to use his hand to help control the bike, and require a bicyclist stopped waiting to make a turn to give a signal.

Summary of Deliberation: The whole matter of turn signals by bicyclists was extensively discussed. It was noted that when a bicyclist is approaching an intersection and slowing to prepare for a turn is a bad time to require him to take his hand off the handlebars for any purpose. Frequently he will also have to use his hand to shift gears at this time. On the other hand, it is very important that motorists know what a bicyclist intends to do and where he is going, and signals are the only way to communicate this information. The existing provision requires a turn signal to be given "continuously during not less than the last 100 feet traveled by the vehicle before turning." The Panel agreed that this requirement is unreasonable for bicyclists because of the "continuous" requirement. A good bicyclist will attempt to let all drivers know where he is going, but not by sacrificing his control of the bicycle. He may give a signal more than once, but is unlikely to signal continuously for the last 100 feet. It was suggested that for bicycles the Code should require an "ample" signal. Others argued that just what constitutes an "ample" signal, and whether an ample signal had been given, would constitute difficult problems for civil courts. Another suggestion was to require a signal for a specific duration such as 3 seconds. At 15 mph such a signal would be given over a distance of about 66 feet. Of course in many circumstances a bicycle would not average 15 mph just prior to making a turn. The consensus of the Panel was that any time duration standard would be too inflexible. It was noted that in some circumstances a bicyclist just can't signal because he has to have his hands on the handlebars to control the bicycle. It was suggested that bicyclists should be required to signal only when other traffic is present and would be affected by the maneuver. This is very difficult to determine, however, and when the bicyclist is unaware of the presence of other traffic is the very time when the signal he gives may be most effective in preventing an accident. It was the Panel consensus that bicyclists should be required to give a clear signal somewhere on the approach to the turn. The Panel decided that the existing Code requirement, including the 100 feet duration, is acceptable.
but for bicycles the requirement of signal continuity needs to be modified to allow the signal to be stopped if the bicyclist needs his arm to control or operate the bicycle.

The Panel also discussed the matter of signals by a stopped bicycle waiting to make a turn. It was the Panel consensus that such a signal should be given so that all drivers know the bicyclists intention. If a new driver enters the area after the signal has been given, it should be given again. But such a signal should not be required to be continuous since this would be unnecessary and overly tiring.

The question of how turn signals should be given was also discussed. The signal for a right turn given with the left hand and arm is hard to see, and somewhat difficult to give, when the bicyclist is bent down over dropped handlebars. Also, this signal tends to make the bicycle unstable to a much greater extent than an arm extended straight out to give a signal. It was urged that bicyclists should be allowed to give a right turn signal with the right hand and arm extended straight out, rather than with the left hand and arm bent upward. The Panel opposed this proposal, however, on several grounds. It was noted that children already get confused about turn signals and that adding another option would only further confuse the situation. It was noted that cyclists riding in a group often use the right hand to point out road hazards to following riders, and such signals should not be mistaken for turn signals. It was also pointed out that almost all bikes have the front hand brake control on the left and rear on the right (CPSC Regulations will require this for new bikes when those regulations become effective). Since it is dangerous to use the front brake alone or before the rear brake, except for very experienced riders, if any hand is removed from the brake control to signal it should be the left hand which controls the front brake. It was also noted that the standard hand and arm signals are well recognized and uniform; a signal with the right hand would not be recognized. It was the unanimous decision of the Panel to not modify the manner of giving a turn signal for bicycles.

Draft: UVC § 11-604(b) could be modified as follows:
(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 vehicle before turning, and shall be given while the vehicle 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 vehicle.

This draft would affect all vehicles, not just bicycles. There is no significant reason why bicycles should be treated separately in this regard. The proposed revisions should apply to any signal given by hand and arm, and all vehicles should be required to give a signal when stopped waiting to turn, as well as when traveling.


Staff Report: A Massachusetts law provides that a bicycle operator "shall signal by either hand his intention to stop or turn." No other state laws deal specifically with turn signals by bicyclists.

Traffic Laws Annotated describes the status of state laws comparable to UVC § 11-604(b). Thirty-five jurisdictions have laws which conform substantially with the Code section. Two more states require a signal to be given for a reasonable distance or sufficient time. Two others describe the duration of the signal in terms of seconds. Eight specify a distance but vary the distance in terms of the speed limit or type of highway. The remaining four other states have no law dealing with the duration of a turn signal.

Although many of the state laws might be construed to require such a signal, none specifically requires a turn signal while the vehicle is stopped waiting to make a turn.

In terms of the manner of giving a hand and arm signal, every state but Michigan specifies the same hand and arm signals as the Code, and although the staff has not seen the law we have been advised that the Michigan law has recently been changed to conform with the Code in this respect.
19. BICYCLISTS -- DRIVERS OR PEDESTRIANS

Panel Recommendations: A. Require bicyclists on a sidewalk or in a crosswalk, regardless of whether riding or walking the bicycle, to comply with laws applicable to pedestrians and grant them the same rights as pedestrians.

B. Require bicyclists at any other location on a highway (other than a sidewalk or crosswalk), regardless of whether riding or walking the bicycle, to comply with laws applicable to drivers of vehicles and grant them the same rights as vehicle drivers.

Summary of Deliberations: If a bicycle is a vehicle, then a person riding a bicycle, exercising control over its operation, would be a "driver" under the definition in UVC § 1-114. A person walking a bicycle is probably also a "driver" under that definition, however, since it includes "every person who drives or is in actual physical control of a vehicle." A person walking a bicycle would also be a "pedestrian," however, under the definition in UVC § 1-143, which includes "any person afoot." Hence a person riding a bicycle is a driver, while a person walking a bicycle is both a driver and a pedestrian. Two issues need resolution. Should a person riding a bicycle always be treated as a driver, regardless of where he is riding? When a person is walking a bicycle, should he comply with rules for drivers or for pedestrians, or should this vary depending on where the bicycle is being walked?

A. Where a bicycle is being ridden on a sidewalk, should the bicyclist comply with rules applicable to pedestrians or rules applicable to vehicles? For example, if a bicyclist riding on the sidewalk approaches an intersection where a red light is displayed for vehicular traffic and a walk signal is simultaneously displayed for pedestrians, should the bicyclist stop, or should he proceed? The Panel concluded that bicyclists on the sidewalk or crosswalk should comply with rules applicable to pedestrians rather than rules applicable to drivers of vehicles, and this should be true whether the bicyclist is walking or riding his bicycle. The principle applied, therefore, is that for bicyclists the difference between being a driver and being a pedestrian is where, not how, the bicycle is being operated. If on the sidewalk or crosswalk the bicyclist is considered a pedestrian regardless of whether walking or riding the bicycle. This is reasonable because the bicyclist on the
sidewalk, even when riding, is more like a pedestrian than a vehicle driver. He needs the same kind of protection that the pedestrian needs in terms of right of way over vehicles. Also, it wouldn’t make much sense to have different rules for pedestrians and bicyclists on the same sidewalk. This would result in situations where the pedestrian would be required to stop while the bicyclist could go, and vice versa.

The Panel discussed each section of article 5 which has application to pedestrians on sidewalks, and concluded that each should apply also to bicyclists on the sidewalk. Not only the duties of pedestrians but also the rights would apply to bicyclists.

The question of bicyclists using crosswalks was discussed. It was noted that a bicyclist riding across a roadway in a crosswalk is endangered by right turning vehicles. Drivers may not anticipate traffic moving faster than pedestrian speed entering a crosswalk. Nevertheless, it would not be reasonable to allow bicycles to be ridden on sidewalks but not in crosswalks. The Panel consensus was that wherever bicyclists can ride on a sidewalk they can also ride in crosswalks, yielding to pedestrians just as they would on a sidewalk.

B. The Panel extensively discussed the problem posed by UVC § 11-506. A bicyclist walking his bicycle, if he is considered a pedestrian, would be required by UVC § 11-506 to walk on the left-hand side of a two-way roadway if there is no sidewalk or shoulder available. Thus the bicyclist who encounters a steep hill which he is unable to ride up might have to cross the road to walk up the hill on the left side, and then cross back to the right side at the crest of the hill in order to resume riding. This would be an unreasonable and unsafe requirement since it would require two roadway crossings at a location where sight distances are likely to be restricted by the hill. Yet the Panel felt strongly that no specific exception to § 11-506 should be written for bicycles. There is already some confusion as to which side of the road bikes should be ridden on, and any reference to bicycles in this section would add to that confusion and might add support to the misconception that bicyclists, like pedestrians, should keep to the left side. The Panel concluded that no change should be made in UVC § 11-506.
The problem can be resolved, however without revision of § 11-506, by applying the same principle which the Panel used to make bicyclists, whether riding or walking, subject to pedestrian rules when on the sidewalk. If bicyclists anywhere on a highway except on a sidewalk or crosswalk are considered to be drivers of vehicles, regardless of whether walking or riding, § 11-506 would no longer apply to a bicyclist walking his bicycle, since he would be a driver and not a pedestrian. The possible adverse effect would be that such a person could walk his bicycle in the roadway (just as he could ride it there) even where a sidewalk or shoulder is available. This probably involves less danger, however, than a requirement that he cross the roadway each time he wants to shift from a riding to walking mode, or vice versa. A rule that a bicyclist is a vehicle driver, regardless of whether walking or riding, when anywhere on a highway except on a sidewalk or crosswalk, is a reasonable rule (the contrary rule that a person walking a bicycle is a pedestrian ignores the presence of a moving vehicle on the highway) and it is consistent with a provision already in the Model Traffic Ordinance. MTO § 3-4 provides that a person propelling a push cart on the roadway has all the rights and duties of a vehicle driver, even though such a person would be a pedestrian under UVC § 1-143.

This proposal was not discussed by the Panel at its meeting but was submitted for Panel approval by mail, along with the preliminary Panel report.

Although the Panel's discussion of this particular item was limited to bicyclists, it was recognized at several points in discussion of other items that persons propelling other human-powered vehicles would generally be treated the same. The Panel specifically decided that 3 or 4 wheeled human-propelled vehicles should be allowed to use sidewalks and crosswalks just like bicyclists, and with the same rights and restrictions.
Draft: Even independent of any changes relating to bicycles, it may be desirable to amend the Code definitions of "pedestrian" and "driver" to make those terms exclusive of each other. This problem already exists. A person walking and pushing a disabled motorcycle, for example, is both a pedestrian and the driver of a vehicle, and as such is subject to conflicting requirements in terms of where on the highway he should walk. The following revision of § 1-143 would make the terms mutually exclusive:

§ 1-143 -- Pedestrian.--Any person afoot except a driver.

The effect of this revision alone would be that any person propelling a bicycle in any way, whether walking or riding, would be a driver and would not be a pedestrian, and this would be true anywhere on the highway. In order to change this effect for bicycles being propelled, either by walking or by riding, on and along a sidewalk or crosswalk, the following provision could be added in article 12 of chapter 11:

§ 11-12xx -- Bicycles on sidewalks and crosswalks
A person propelling a human-powered vehicle upon and along a sidewalk, or across a roadway upon and along a crosswalk, shall be granted all the rights and shall be subject to all the duties applicable to a pedestrian under the same circumstances.

Cross Reference: First Report, Item 49.

Staff Report: No laws comparable to the proposal have been located.
20. AVOID COLLIDING WITH BICYCLE

Panel Recommendation: Revise UVC § 11-504 to specifically require drivers to exercise due care to avoid colliding with a bicyclist.

Summary of Deliberations: The bicyclist has the same disadvantage as the pedestrian. He is unprotected and will be seriously injured in any collision. The Panel concluded that the bicyclist needs the protection of § 11-504 just as much as the pedestrian.

Draft: UVC § 11-504 would be revised as follows:

Notwithstanding other provisions of this chapter or the provisions of any local ordinance, every driver of a vehicle shall exercise due care to avoid colliding with any pedestrian and shall give warning by sounding the horn when necessary and shall exercise proper precaution upon observing any child or any obviously confused, incapacitated or intoxicated person. \[or any person propelling a human-powered vehicle\]

Staff Report: Of the 41 jurisdictions with laws comparable to UVC § 11-504, none specifically requires drivers to use due care to avoid colliding with a bicyclist.
21. **YIELD TO BICYCLISTS ON SIDEWALK**

**Panel Recommendation:** Amend UVC § 11-509 to require drivers of other vehicles to yield to bicyclists on a sidewalk.

**Summary of Deliberations:** Bicyclists on the sidewalk now have no rights. UVC § 11-509 requires drivers to yield to pedestrians but not to bicyclists. If bicycles are allowed to use sidewalks, they should have the right of way over other vehicles crossing the sidewalk, just as pedestrians do.

**Draft:** The draft in item number 19, *supra*, may adequately deal with this problem. The following revision to § 11-509 could also be considered:

§ 11-509 -- [Pedestrians'] Right of way on sidewalks
The driver of a vehicle crossing a sidewalk shall yield the right of way to all traffic proceeding along and upon the sidewalk [any pedestrian on a sidewalk].

**Cross Reference:** First Report, Item 49.

**Staff Report:** No state has a law comparable to the proposal specifically requiring drivers of vehicles to yield to bicyclists on a sidewalk. All of the comparable laws refer to and protect pedestrians only.
22. TAILGATING

Panel Recommendation: Revise UVC § 11-310(a) which prohibits following too closely so that it will apply to bicyclists.

Summary of Deliberations: UVC § 11-310(a) which prohibits following too closely applies to the driver of a motor vehicle, hence not to bicyclists. Bicyclists frequently follow other vehicles too closely, and motor vehicles can generally stop faster than bikes. The Panel consensus was that the section should apply to bicyclists.

Draft: UVC § 11-310(a) would be revised as follows:

§ 11-310—Following too closely

(a) The driver of a 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.

Staff Report: All states have laws comparable to UVC § 11-310(a). Four of these laws, like the proposal, apply to the drivers of all vehicles. The others, like the current Code, apply only to the drivers of motor vehicles.
23. SOLID TIRES

Panel Recommendation: Either delete UVC § 11-806(b) from the Code or make it inapplicable to bicycles.

Summary of Deliberations: A new process is available to replace the air in standard bicycle tires with a solid polystyrene foam material. Tires filled with the material are similar in characteristic to pneumatic tires, but are filled with a solid rather than with air. Bicycles equipped with such tires should not be limited to 10 mph. The primary purpose of § 11-806(b) is to protect the roadways from damage, and bicycles with solid tires do not seriously threaten damage to roads.

The Panel was also advised that this same or a very similar process is being used on tires for some trucks and that a proposal to delete § 11-806(b) is before the Subcommittee. The Panel concluded that if § 11-806(b) is retained, it should be amended to exempt bicycles or possibly all human propelled vehicles.

Draft: UVC § 11-806(b) could be amended as follows:

(b) No person shall drive any vehicle other than a human powered vehicle equipped with solid rubber or cushion tires at a speed greater than a maximum of 10 miles per hour.

Cross Reference: First Report, Item 35.

Staff Report: Of the 20 states with laws comparable to UVC § 11-806(b), none specifically excepts bicycles. Some impose a slightly higher limit (15 to 20 mph), and several allow a somewhat higher limit (25 mph) for vehicles under 10,000 lbs.
24. BICYCLE HIGHWAY RACING

Panel Recommendation: Amend the Code to allow bicycle highway races when approved by authorities with jurisdiction over the course.

Summary of Deliberations: Bicycle highway racing is a recognized olympic sport. It is very popular in Europe and is becoming more and more popular in this country, but is also encountering more and more problems with traffic laws and enforcement authorities. The California Highway Patrol, for example, has recently announced that it will no longer authorize such races if traffic law violations are involved.

UVC § 11-808 prohibits all vehicle racing on highways. Thus bicycle road racing is now prohibited by the Code. Also, the essential nature of racing is probably inconsistent with a number of other Code provisions regulating the operation of bicycles and other vehicles. Thus road racing may involve a number of other violations, although with proper precautions these violations may not constitute the danger which they would otherwise create. Thus bicycle racing may frequently involve failure to comply with official traffic control devices, failure to stay in the right lane or even on the right half of the roadway, failure to yield where it would otherwise be required, failure to follow the course specified for right or left turns, failure to signal turns, violation of speed limits or the basic speed rule, possibly reckless driving, and violation of some equipment requirements. The use of police officers or race marshals to control and warn other traffic may reduce the significance of these violations in terms of safety.

Proponents of bicycle racing urged that the Code be amended to allow sanctioned races where they have been approved by appropriate local authorities. They noted that the United States bicycling team can never become competitive with other country's teams if road racing is prohibited by the laws of most states.

The Panel discussed some of the problems involved in bicycle road racing:

1. Just what is a "sanctioned" race? Who can sanction races? It was noted that some races are held just for fun and are not sanctioned, especially on college campuses.
2. In spite of all the promises to the contrary when the race is being organized, once it starts there are violations, particularly as to stop signs, red lights and center lines. The police must then either stop the race or ignore the violations, or refuse to approve future races. It was suggested that penalties for violations should come from race officials (disqualifications, etc.) rather than from the police.

3. Sometimes races are approved on condition that the organizer provides marshals to control and warn traffic. The marshals lack authority, and they lack training in traffic control. Also they sometimes can't keep up with the race, particularly if the field gets spread out. The end result is that the police have to do the marshals' job. Why should the city make this expenditure of police time in order to allow a bicycle race?

4. Bicycle races can be run on a closed highway, in which event it is no longer a "highway" and traffic laws do not apply. This is optimal in terms of resolving the problem with the traffic laws, but it may inconvenience other traffic, and it is simply not possible for a race over a long course. Some bicycle races are run on a point to point basis for over 100 miles, and some multiple day events are substantially longer. For this type of racing generally front and rear pilot cars are used, and traffic on cross streets is held up by police or marshals while the pack goes by. In such races the highway remains open and all traffic laws apply. There is always potential in such races for danger, particularly to the participants in the race or to pedestrians, and potential interference with the flow of other traffic.

5. There are serious questions of liability for damages resulting from a race. The "technical violations" of traffic laws which may be ignored by the police who authorized the race may not be ignored by the courts that must resolve the civil law consequences of an accident. There is danger that the individual bicyclists, the club sponsoring the event, or the governmental agency that approved it may be held liable for injuries. In some areas organizations sponsoring races provide insurance; in other areas apparently this is not generally done. It seems likely that as bicycle racing becomes more popular, more local governments will recognize the potential liability problem and will either require insurance or will simply not approve any races. Unless some of the problems can be
can be resolved, bicycle highway racing may be a headache that no one wants in their jurisdiction. This could destroy the sport even if the law does not prohibit it.

6. Equipment requirements may also constitute a problem for bicycle racing. All excess weight is removed from a racing bicycle, and it is unlikely that such bicycles will be equipped with the required red rear reflector while racing. The Panel concluded that at least one red rear reflector should be on the bike if racing at night.

7. Another problem involves the question of who should authorize a race. While there is general agreement that it should be authorized by the agency with jurisdiction over the highway, this may sometimes involve multiple agencies. Some races are run on very long courses that run into several states and through many counties and municipalities. Is it necessary to get approval from every county and municipality or should state approval be adequate?

The Panel noted that racing on the highways involves some serious problems, but concluded that it should be allowed where approved by appropriate authorities. The staff was requested to consider all of the problems and provide a draft.

Draft: UVC § 11-808 could be revised to refer to "motor vehicles" rather than vehicles. This section would then prohibit only motor vehicle racing and would not prohibit bicycle racing. One problem with existing UVC § 11-808 is that certain kinds of bicycling activities not normally considered to be racing might be construed to constitute "racing" under § 11-808. Bicyclists frequently undertake "century" rides, a 100 mile ride which is supposed to be completed within 12 hours. Such a century ride might be considered to be a "test of the physical stamina or endurance of drivers over long distance driving routes," defined by § 11-808 to constitute racing. If a commuting bicyclist times his ride from home to office, and if he attempts to better his best time, is that a race prohibited by § 11-808? One advantage of making § 11-808 apply only to motor vehicles is the resolution of these problems. UVC § 11-808 would be revised as follows:
§ 11-808—Racing on highways

(a) No person shall drive any vehicle in any race, speed competition or contest, drag race or acceleration contest, test of physical endurance, exhibition of speed or acceleration, or for the purpose of making a speed record, and no person shall in any manner participate in any such race, competition, contest, test, or exhibition.

(b) Drag race is defined as the operation of two or more vehicles from a point side by side at accelerating speeds in a competitive attempt to outdistance each other, or the operation of one or more vehicles over a common selected course, from the same point to the same point, for the purpose of comparing the relative speeds or power of acceleration of such vehicle or vehicles within a certain distance or time limit.

(c) Racing is defined as the use of one or more vehicles in an attempt to outgain, outdistance, or prevent another vehicle from passing, to arrive at a given destination ahead of another vehicle or vehicles, or to test the physical stamina or endurance of drivers over long distance driving routes.

(d) Any person convicted of violating this section shall be punished as provided in § 17-101(c).

If this is the only change made in the Code, it would then be silent on the subject of bicycle racing on the highways. The following provision could be added in article 12 of chapter 11 to regulate highway bicycle racing:

§ 11-12xx — Bicycle racing

(a) Bicycle racing on the highways is prohibited except as authorized in this section.

(b) Bicycle racing on a highway shall not be unlawful when part of a racing event which has been approved by the (state police) on any State highway, or by local authorities on any highways under their respective jurisdictions. Such 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.

This draft does not address the problem of traffic law violations. Certain rules of the road which would normally apply to bicycle riding may be inconsistent with racing, such
as speed limits, rules on lane usage and turning course, and signal requirements. Enforcement officers will be required to ignore these violations, and they will have a potential impact in any civil litigation arising out of the racing event, unless they are made inapplicable. The following addition to the draft could serve that purpose:

(c) 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.

Cross Reference: First Report, Item 47.

Staff Report: Provisions relating specifically to bicycle racing or other competitive bicycle events were located in six states. One of the state laws (Massachusetts) specifically authorizes sanctioned bicycle racing on the highways. Another (New Hampshire) authorizes one-day speed limit exemptions for bicycles. The other four deal with bicycle marathons. The six states and their laws are:

Massachusetts -- The law provides as follows:

Competitive bicycle races may be held on public ways, provided that such races are sponsored by or in cooperation with recognized bicycle organizations and, provided further, that the sponsoring organization shall have obtained the approval of the appropriate police department or departments. Special regulations regarding the movement of bicycles during such races, or in training for such races, including, but not limited to, permission to ride abreast, may be established by agreement between the police department and the sponsoring organization.

Minnesota -- Bicycle riding contests lasting no longer than six days are exempted from the general prohibition of marathons.

New Hampshire -- A mayor may issue a permit allowing a person to ride a bicycle at any rate of speed for a period of one day.
New York -- The law prohibits promotion of, or participation in, an exhibition in which a person competes continuously for more than eight hours in a bicycle race.

Virginia -- The law forbids any promotion of, or participation in, any bikathon. However, "bona fide athletic contests" are excluded from the prohibition.

Wisconsin -- Bicycle races or contests which do not last more than 150 hours are exempted from the general ban on endurance contests.

Another two states have laws which deal with the highway racing of all vehicles, rather than just bicycles:

New Mexico -- The law provides as follows in relevant part:

A. Unless written permission setting out pertinent conditions is obtained from the chief of the New Mexico state police, and then only in accordance with such conditions, no person shall drive a vehicle on a highway in any race, speed competition or contest, drag race or acceleration contest, test of physical endurance, exhibition of speed or acceleration, or for the purpose of making a speed record, whether or not the speed is in excess of the maximum speed prescribed by law, and no person shall in any manner participate in any such race, drag race, competition, contest, test or exhibition.

B. . . .

C. No official or agency of the state of New Mexico shall be held liable in any civil action in connection with the permission which is authorized in this section.

D. . . .

New York -- The law applies only to motor vehicle races and provides as follows:

No races or contests for speed shall be held and no person shall engage in or aid or abet in any motor vehicle speed contest or exhibition of speed on a highway without the permission of the authorities of the state, city,
town or village having jurisdiction and unless the same is fully and efficiently patrolled for the entire distance over which such race or contest for speed is to be held. Written permission must be produced by the driver in such a race or contest. A violation of any of the provisions of this section shall constitute a misdemeanor.
25. OPENING MOTOR VEHICLE DOORS

Panel Recommendation: Revise UVC § 11-1105 to make it applicable to opening a door into traffic on either side of the vehicle.

Summary of Deliberations: UVC § 11-1105 now refers to opening a door of a motor vehicle on the side available to moving traffic. It was noted that bicycles or pedestrians may pass vehicles on the left or right, thus moving traffic may be on either side.

Draft: UVC § 11-1105 would be revised as follows:

§ 11-1105—Opening and closing vehicle doors

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, and can be done without interfering with the movement of other traffic, 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.

Staff Report: Of the 24 jurisdictions with laws comparable to UVC § 11-1105, all refer to the side available to moving traffic, like the current Code section.
26. BICYCLES -- RIGHT TO USE OF ENTIRE LANE

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: Motorcyclists are entitled to the use of a full lane and can't lawfully be passed within that lane. Shouldn't bicycles have the same right? The difference, of course, is potential speed -- the motorcycle can keep up with traffic while the bicycle often cannot. One Panel member nevertheless favored the motorcycle rule for bicycles. Where speed differential is high there is even greater need for vehicles to leave the lane to pass a bicycle. When they pass too close it creates a vacuum which makes control of the bicycle difficult. Others noted that the Code requires passing at a safe distance, and that there are lots of conditions under which cars can pass bicycles safely in the same lane, such as where the car is small and the lane is wide. The Panel decided to recommend no change.


Staff Report: Only Massachusetts has a law specifically applicable to motor vehicles passing bicycles. The law requires the driver of a motor vehicle approaching or passing a person on a bicycle to slow down and pass at a safe distance at a reasonable and proper speed. All states have laws requiring an overtaking driver to pass a safe distance to the left of an overtaken vehicle, but none of these laws specifically deals with bicycles. No state has a law which gives bicycles the full use of a lane like motorcycles.
27. RIGHT TURN CONFLICT

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: It was noted that the conflict between bicyclists proceeding straight through an intersection and drivers of other vehicles making right turns is one of the bicyclists biggest problems. The problem occurs in two situations. The first is where a bicycle is passing on the right of a vehicle which is moving slowly, and the driver suddenly turns right into the bicycle. The second situation is where the bicyclist is passed by a rapidly moving vehicle which then cuts in front of the bicyclist to make a right turn. Conflicts of the first type generally result because the bicyclist is not seen by the motorist and the motorist may not anticipate being passed on the right when he is in a position to make a right turn, as close as practicable to the curb or edge of the roadway. The bicyclist may be better able to avoid this accident since he can see the other vehicle and also the bicyclist should use care because he is passing. The bicyclist probably should anticipate a right turn and avoid passing on the right at intersections. Unfortunately, however, such right turns are not limited to intersections but can be made at driveways or into any available parking space. The bicyclist should be able to rely upon the driver to give a signal before turning. All too often, however, such turns are made without signaling and not necessarily from as close as practicable to the curb. The Panel concluded that existing law is adequate to resolve this conflict. The motorist must signal and move as close as practicable to the curb or edge of the roadway. Any bicyclist passing on the right has a duty to determine that he can make the maneuver in safety. Application of these rules should resolve the conflict fairly.

The second type of conflict may be more easily guarded against by the motorist. This conflict usually results when the motorist misjudges the bicycle's speed and tries to pass before making his turn. The motorist instead should wait behind the bicyclist and turn after the bicycle has proceeded out of the way. Again existing law is probably adequate. The motorist must use due care in passing, and violates this requirement if he causes this conflict after passing.

The Panel concluded that the primary duty to avoid this conflict is on the vehicle which is passing, and that no further laws are required.
Staff Report: No state has a law specifically dealing with the right of way conflict between right-turning motor vehicle drivers and straight-through bicyclists.
28. MINIMUM SPEED LIMITS

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: It was noted that UVC § 11-804(b) allows minimum speed limits to be posted and provides that no person may drive slower than the posted minimum "except when necessary for safe operation or in compliance with law." If a bicycle is being driven as fast as it is possible for that bicycle to go, and if its speed is still less than the posted minimum, is the bicyclist in violation of the minimum limit, or does he fall within the exception for lower speeds "when necessary for safe operation." If the bicyclist does not fall within the exception then he is effectively excluded from the highway, including the shoulders and sidewalks. If it is intended to exclude bicyclists wouldn't it be better to erect signs specifically excluding them? The Panel considered these matters and saw no need to revise the Code. The Panel concluded that the minimum limit does apply to the bicyclist, he does not fall within the exception for slower speeds when necessary for safe operation, and the limit does exclude bicyclists from such highways.

Staff Report: Of the 37 states with laws comparable to UVC § 11-804(b), only three include exceptions which would cover bicycles. The California law applies only to vehicles of a type required to be registered. The North Carolina and Ohio laws apply only to motor vehicles. The North Carolina law additionally exempts "farm tractors and other motor vehicles operating at reasonable speeds for the type and nature of such vehicles."

Two other states have laws which, although not comparable to UVC § 11-804(b), are relevant to the discussion. Maryland prohibits bicycles on any dual lane highway where the maximum limit is greater than 35 mph. Nebraska prohibits bicycles on any roadway for which a minimum limit of 20 mph or more is posted. Thus even if a bicyclist could maintain a speed in excess of the posted minimum he would be excluded from such roadways in Nebraska.
29. BICYCLES ON CONTROLLED-ACCESS HIGHWAYS

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: UVC § 11-313 allows the state highway commission or local authorities, within their respective jurisdictions, to regulate or prohibit the use of any controlled-access roadway (or highway) by any class of traffic found to be incompatible with the normal and safe movement of traffic. It was noted that if a state adopts the section with the word roadway, omitting the parenthetical alternative, there would be no authority to prohibit bicycles on the shoulder or anywhere on the highway except on the roadway itself. If the parenthetical language were adopted, however, bicycles could be prohibited anywhere on the highway. The question was posed whether any revision should be made in the Code language.

The Panel noted that here bicycles and motor vehicles must be treated differently because of the difference in speed capability. As a general rule bicycles should not be allowed on the roadway, and under some circumstances anywhere on the highway, on a high-speed, controlled-access highway. In some areas, however, controlled-access highways may be the only reasonable link between two points. Also, motor vehicle traffic volumes are very low on some controlled-access highways. In such circumstances it may be desirable to allow use of the highway or roadway by bicyclists. States should decide this in terms of local conditions. The Panel decided that no change in the Uniform Vehicle Code is necessary or desirable.

Staff Report: Ten states have laws which, like the Code, authorize the exclusion of any kind of traffic which is found incompatible with normal, safe movement of traffic. Two of these 10 states have laws which specifically authorize the exclusion of bicycles in addition to authorizing the exclusion of any incompatible traffic, and two more of these states have additional laws which directly prohibit bicycles on limited-access highways rather than merely authorizing their exclusion.

Twenty-four states have laws which, like the earlier versions of the Code, authorize the exclusion of bicycles specifically, and one of these states also prohibits bicycles on all turnpikes.
Seven states have laws which directly prohibit bicycle traffic on controlled access highways or roadways; and one state prohibits traffic which is incapable of attaining and maintaining a speed of forty miles per hour on its interstate system.

The remaining eight states have no comparable law.

Of the 42 states which have laws prohibiting or authorizing the prohibition of bicycles on controlled-access roadways or highways, 18 apply the prohibition only to the roadway and not to the entire highway. Twelve states apply their prohibitory laws to controlled-access highways and thus exclude or authorize the exclusion of bicycles from the entire width of the right of way. Twelve other states probably achieve the same result by referring to "freeways," "expressways," "controlled-access facilities," or "interstate highways."

Thirty-one of the states with laws prohibiting or authorizing the prohibition of bicycles on controlled-access roadways or highways require that signs indicating the prohibition be posted.
30. PEDESTRIANS ON BICYCLE PATHS

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: Where bicyclists and pedestrians share a bicycle path, who should yield the right of way? The Panel concluded that a bicycle path is a highway and a roadway. Pedestrians walking along the roadway should comply with UVC § 11-506, keeping to the left edge and yielding to bicycles. Where a special area is designated for pedestrians on the path, that would be a sidewalk and bicyclists would yield to pedestrians if riding on that part of the path, but most paths probably do not have such an area designated.

Where a path is primarily designed for pedestrians but is also open to bicycles the problem is more difficult. It would seem fair and reasonable that bicyclists should yield to pedestrians on such a path, but this would be the case only if the path is a "sidewalk," a specifically delineated portion of a highway. If the path is independent of a highway, it nevertheless becomes a highway when it is opened to bicycles. Pedestrians must then yield to bicycles unless the path is divided into roadway and sidewalk portions, in which case each would have the right of way in their respective area. Another solution would be to erect signs directing bicycles to yield to pedestrians.

The Panel concluded that whether on a particular path bicycles should yield to pedestrians or vice versa should be determined by local authorities. If it is not a sidewalk and if no contrary signs are erected, pedestrians would generally be required to yield to bicyclists on any path which is open to bicycle traffic.

Staff Report: One state (Alaska) has a law relating to bicycles on bicycle paths. The law requires bicyclists on a path or trail used by pedestrians or by other vehicles to use due care to avoid colliding with any such pedestrian or vehicle.

None of the other states has any comparable law.
31. BICYCLE PATHS CROSSING HIGHWAYS

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: If a bicycle is a vehicle then a bicycle path is a highway. Where that path crosses another highway, it is an intersection. Unless signs or signals are erected, the uncontrolled intersection right of way rule would apply (UVC § 11-401). This would require motor vehicles on one highway to yield to bicycles approaching from the right on the bike path (the other highway). Should the bicycle always be required to yield? The Panel concluded that bicycles should not always be required to yield, and that there are too many local factors which need to be considered to justify any general rule. Right of way should be designated by signs or signals at all such intersections. There may be intersections where bicycle volume is high and motor vehicle volume is low, or where it would be more difficult for the bicycle to yield than the motor vehicle, or other circumstances where the motor vehicle should be required to yield.

One other problem is that there may be a sidewalk at the intersection. Delineation between various parts of the "highway" is not generally very clear on a bicycle path. While it is clear that there is a roadway, it is not real clear just where it is. Is there a sidewalk? A sidewalk (§ 1-164) is the portion of the highway between the lateral lines of the roadway and the adjacent property line intended for use by pedestrians. Probably no such area is defined on most bicycle paths, but if such an area is defined, then there is an unmarked crosswalk at the intersection. And if the bicyclist crosses within that unmarked crosswalk, his right of way would be governed by pedestrian rules rather than vehicle rules. This could shift the right of way. The same problem exists where cross hatch lines on the roadway are used to indicate the intersection. We have no way to know whether the lines are intended to show a bicycle crossing or a pedestrian crossing or both. Probably such lines constitute a marked crosswalk under § 1-111(b). Again this would shift the bicyclist from vehicular to pedestrian rules, and could shift the right of way.

The Panel concluded that these are really technical problems which may not be of great practical concern. Where a bicycle path is used by pedestrians, it is the same as pedestrians walking on any roadway. No sidewalk exists unless such
an area is clearly delineated, it was suggested that road markings which constitute a crosswalk should not be used to mark a bicycle crossing anymore than they are used to designate any other intersection. If special markings are desirable something clearly distinct from the crosswalk marking should be developed.

**Cross Reference:** First Report, Item 48.

**Staff Report:** No relevant state laws have been located.
32. BICYCLE-ONLY LANES

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: UVC § 11-309(c) authorizes erection of official traffic-control devices to direct specified traffic to use a designated lane. This would appear adequate to allow designation of bicycle-only lanes.

The Panel discussed the nature of such lanes. Are bicycles required to stay in the lane? Are other vehicles excluded? There are times when the bicyclist should not be required to be in the lane, such as when making a left turn, or when the lane is obstructed by other vehicles, debris, etc. There are also circumstances where other vehicles should be allowed to enter the lane, such as when turning right, when stopping to pick up or discharge passengers or goods, when disabled, when entering or exiting a parking space, etc.

The problem of vehicles turning right is particularly important. Some jurisdictions have apparently required motor vehicles to make a right turn from the left side of the bike lane, crossing the bike lane while turning. This really exacerbates the conflict between right-turning motor vehicles and straight-through bicyclists discussed in item 27. Some other jurisdictions have allowed right-turning vehicles to enter the bike lane to prepare for a right turn, but some drivers apparently do not understand and are reluctant to do so. Even when signs are erected telling them to enter the lane, some drivers make their turn from the left of the bike lane. Drivers seem reluctant to enter a lane which is not large enough for their vehicle since they must then straddle the lane line. The only acceptable solution has been to stop the bike lane line about 100 feet prior to an intersection. This ends confusion as to the proper course for the turn, and it moves the point of bicycle-motor vehicle conflict back away from the intersection where it is better tolerated. Most of the Panel members agreed, however, that an even better solution would be to not put down the bike lane line to begin with.

The Panel concluded that there should not be any exclusive bicycle-only lanes. Any lanes for bicycles must be open to use of other vehicles when it is necessary for those vehicles to reach the curb, as described above. Bicyclists also should not be required to stay in such lanes, but should be free to
leave them whenever necessary. Any attempt to keep bicycles in, and motor vehicles out of, a particular lane causes serious problems for traffic flow.

The Panel concluded that existing Code provisions give adequate authority to establish bicycle lanes, just as bus lanes and slow moving vehicle lanes can now be established. If other restrictions are desirable (to prohibit stopping to pick up passengers in the lane, for example) signs can be erected just as they can be now to keep traffic moving in the right-hand lane.

Cross Reference: First Report, Item 43.

Staff Report: Only Oregon has a relevant law dealing with bicycle lanes. The law provides as follows:

No driver of a vehicle shall drive upon a bicycle lane except when passing another vehicle on the right as provided in paragraph (a) of subsection (3) of ORS 483.310 and until he has first ascertained that such movement can be made with safety. The driver of a vehicle shall give right of way to bicycles being operated upon the bicycle lane.
33. HEADLIGHTS

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: The Code now requires a lamp on the front emitting a white light visible from at least 500 feet to the front on every bicycle used at night. The Panel decided that this requirement should be retained unchanged. The light must be on the bicycle rather than on the rider because one important function is illumination, and for this function a light attached to the bicycle rather than moving on the person would be better. There was some discussion of the lights-on-in-day campaign for motorcycles which has reduced accidents. The same could not be expected for bicycles because of the much lower light output of the headlight. Also daytime bicycle use would be very expensive because batteries would quickly burn out. If generators were used, riders would quickly burn out. It was also suggested that a bicycle headlight should be required to comply with an illumination standard rather than a visibility standard. While many Panel members agreed, they also agreed that no adequate light is available to meet even a minimal illumination standard.

Staff Comment: One problem not discussed by the Panel is posed by the generator lamp, which is not lighted unless the bicycle is moving. When the bicycle is standing still, it has no front light. Does a generator lamp comply with the Code requirement or does it mandate a battery light? If a generator light is allowed, should some other device such as a front reflector be required so that some front visibility of a stopped bicycle will be assured? The Code provision could be revised to apply only to a bicycle in motion?

Cross Reference: First Report, Item 56.

Staff Report: Thirty-seven states have laws which are in substantial conformity with UVC § 11-1207(a). Twelve other jurisdictions have comparable laws which differ somewhat. Five of the 12 do not specify the color of the lamp. Nine of the 12 specify a different visibility distance, ranging from 100 feet to 300 feet. One of the 12 imposes an illumination requirement (50 feet) rather than a visibility requirement. One of the 12 allows a reflector instead of a light. One of the 12 allows a light worn on the bicyclist's person in lieu of a light attached to the bicycle.
34. SIDE REFLECTORS

Panel Recommendation: Require all bicycles at night to display reflective material or a light visible to the sides of the bicycle.

Summary of Deliberations: There is considerable dispute as to the effectiveness of side reflectors. On the one hand it is noted that most bicycle accidents involving motor vehicles result from cross traffic. There is a substantial need to improve the cyclists visibility to the sides. On the other hand it is argued that reflectors are of little or no value in improving side visibility. Once a bicycle enters the headlight pattern of the vehicle approaching from the side it is too late. If the vehicle is close enough, it will hit the bicycle. If the vehicle is not that close, the bicycle will pass out of the way before the motor vehicle reaches it. In either case the bicycle's added visibility due to reflectors will have no impact. The bicycle needs greater side visibility before he enters the headlight pattern, and reflectors will not meet this need. Nevertheless, the burden of carrying some reflective material visible to the sides is small, and there are some circumstances where this added visibility might prevent an accident. The majority of the Panel concluded that side reflective material should be required, but only on a bicycle operated at night. If required on all bicycles regardless whether ever operated at night, the market probably could not handle the demand for reflective material which would be created.

The Panel discussed the color of the reflective material, noting that new bikes have white, red or amber reflectors displayed to the sides. The Panel concluded that the Code section should be silent as to color. While the requirement for the rear refers to a "reflector," the Panel concluded that the requirement for the sides should refer only to reflective material of such size and reflectivity as to meet the visibility standards. This would permit greater flexibility in terms of what is used. Reflective tires for example, could comply but would not be required. Spoke reflectors could be used, or reflective tape on the frame could be used. The reflective material would be required on the bicycle rather than on the rider, however.

It was noted that if the bicycle has lights visible to the sides, this would be superior to reflective material and should be allowed in lieu of it. Some headlights and tail lights have lenses which produce side light as well. The
Panel concluded that if such lights meet the Code's visibility standards they should be allowed in lieu of the reflective material.

Draft: A new section could be added as follows:

§ 11-12xxx -- Side reflectors

Every bicycle when in use at nighttime shall be equipped with reflective material of sufficient size and reflectivity to be visible from both sides at all distances from 100 to 600 feet when directly in front of lawful lower beams of headlamps 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.

One problem not discussed by the Panel is posed by the generator operated lamp which is not lighted unless the bicycle is moving. Is such a lamp, assuming it meets the side visibility requirements when lighted, allowed in lieu of reflective material? The requirement could be revised to apply only to a bicycle while in motion, or the bicycle equipped with a generator light could additionally be required to have the side reflective material.


Staff Report: The laws of four states require bicycles to be equipped with side reflectors or reflective material visible from both sides of the bicycle. California requires new bikes sold after January 1, 1974, and all bikes used after January 1, 1975, to be so equipped. Illinois prohibits the sale of new bicycles not so equipped. Massachusetts requires all bikes in use to have the required reflectors. Rhode Island prohibits the purchase or sale at retail of a noncomplying bicycle after January 1, 1975.

Two of these laws (California and Illinois) require amber reflectors to the front of the center of the bicycle and red reflectors to the rear of the center of the bicycle. The California law provides that side reflectors are not required if amber reflectors are mounted on the outside end of each pedal of the bicycle. The Illinois law requires that the reflectors be visible from a distance of 500 feet, and that they conform to Department specifications. The Massachusetts law requires
reflective material either on the bicycle or "on the person of the operator," which is visible from a distance of 200 feet. The Rhode Island law requires a minimum of 200 square inches on each side of the bicycle of white reflective material on the wheels or tires to indicate the "shape and size of the wheels or tires." The Rhode Island law specifies that such reflective materials must be visible from a distance of 500 feet when viewed under lawful low beam head lamps, and must meet the requirements of the registry of motor vehicles.
35. PEDAL REFLECTORS

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: Under Consumer Product Safety Commission regulations all new bicycles will have pedal reflectors. These reflectors may be effective, but they are also somewhat controversial. The CPSC regulations apparently require reflectors that are permanently attached to the pedals. Thus if the reflectors need to be replaced the whole pedal would have to be replaced. Any requirement to replace these reflectors will be widely violated. The Panel agreed unanimously that the Code should stay out of this area of controversy.


Staff Report: Eight states have laws requiring bicycles to be equipped with pedal reflectors. Two of the eight require such reflectors on all bicycles in use. The other six require only that new bicycles or pedals purchased after the effective date of the law must have reflectors. All require visibility for 200 feet to front and rear.
36. OPTIONAL TAIL LIGHT

Panel Recommendation: Delete the last sentence of UVC § 11-1207(a) which allows optional use of a red tail light.

Summary of Deliberations: It was noted that nothing in the Code would prohibit the use of one or more tail lights so this provision is unnecessary. The existing provision may even suggest that only one tail light can be used. The Panel agreed that it should be deleted. Any light to the rear, without regard to its color or visibility, would be in addition to the reflector and would help make the bike more visible and should be allowed.

One Panel member urged that a tail light should be required instead of a reflector. Other Panel members noted that no good tail light is available for use on a bicycle. Battery lights are expensive to operate due to the need for frequent battery replacement. Generator lights are not adequate because they go out whenever the bicycle stops. None of the available lights is sturdy enough to take any prolonged abuse such as bicycle components are frequently subjected to.

Draft: UVC § 11-1207(a) would be revised as follows:

§ 11-1207—Lamps and other equipment on bicycles

(a) Every bicycle when in use at nighttime shall be equipped with a lamp on the front which shall emit a white light visible from a distance of at least 500 feet to the front and with a red reflector on the rear of a type approved by the department which shall be visible from all distances from 100 feet to 600 feet to the rear when directly in front of lawful lower beams of head lamps on a motor vehicle. A lamp emitting a red light visible from a distance of 500 feet to the rear may be used in addition to the red reflector.

Cross Reference: First Report, Item 73.

Staff Report: Twenty-seven jurisdictions have laws which conform substantially with UVC § 11-1207(a), allowing a red tail light in addition to the required reflector. Another eight states have similar laws which differ only as to the specified visibility distance. Ten other states allow a red tail light to be used instead of a reflector. Only one state (New Jersey) requires a red tail light regardless of whether a reflector is used. Five states have no comparable law.
37. **REAR REFLECTOR**

**Panel Recommendation:** Revise UVC § 11-1207(a) to require a red rear reflector at all times, not just at night, and by deleting the requirement that the reflector must be mounted on the rear of the bicycle.

**Summary of Deliberations:** The Code now requires every bicycle used at night to be equipped with a red reflector on the rear of a type approved by the department and visible from all distances from 100 feet to 600 feet to the rear when directly in front of lower beam headlamps on a motor vehicle.

It was noted that some bicycles have no fenders or luggage rack upon which the reflector can be mounted. It is not reasonably possible on these bikes to mount the reflector "on the rear" of the bicycle. Since the reflector must be visible to the rear from specified distances why should it matter where on the bicycle the reflector is mounted? The Panel agreed that the requirement for mounting on the rear of the bicycle should be deleted to allow the reflectors to be mounted in any convenient location on the bicycle so long as it meets the rear visibility requirements.

The question of whether a reflector worn on the riders person could be used in lieu of one mounted on the bicycle itself provoked substantial discussion. Some Panel members felt it should be required to be on the bicycle, noting that riders are not the same size and shape, and we could not be sure that a reflector worn by a rider would always be as effective. It is relatively easy to develop a standard for reflectors on bicycles since bicycles are fairly uniform in size and construction. But it would not be easy for riders. If the reflector is worn on the riders back, for example, and he bends over his dropped handlebars, will the angle of the reflector then impair its effective visibility? Also, it is unlikely that children would be faithful about always wearing a reflective device, but if it is required to be on the bicycle, it won't depend so much on their constant exercise of good judgment. The same would be true for many adults. Of course no law would prohibit wearing reflective material as accessory equipment, but the minimum requirement of one red rear reflector should be on the bicycle itself.
Other Panel members disagreed sharply, noting that in most cases the reflector will be on the bicycle itself, because it is put there by the manufacturer and will generally not be removed. But bicyclists who have a good reason for not wanting a reflector on the bicycle (such as because there is no convenient mounting location) should certainly have the option of wearing a reflector on their person. They noted that a reflector worn by a rider would have to meet the same visibility standards as one mounted on the bicycle, and if it failed to do so (such as because the rider bent over) that would constitute a violation just as a bicycle mounted reflector caked with mud would constitute a violation. The law should give the bicyclist the option of how to provide the visibility, so long as he meets the standard. They pointed out that a bicyclist could be decked out like a moving house of ill repute with lights and substantial amounts of reflective material on his person clearly visible for the required distance to the rear, and yet could be ticketed for failing to have a rear reflector on the bicycle itself. Such a bicyclist could be justifiably incensed at the law. They noted that the bicyclist is larger than his bicycle and thus can support a larger area of reflective material than can the bicycle.

It was also observed that the mounting height of reflectors can affect their visibility. If mounted too high or too low, visibility may be impaired. Although the Code does not specify a mounting height for reflectors on bicycles, UVC § 12-205 specifies that reflectors on motor vehicles, trailers, semitrailers and pole trailers must be mounted not less than 15 inches nor more than 60 inches from the ground. Reflectors mounted at axle height on a bicycle would be less than 15 inches from the ground. Most fender mounted reflectors are somewhat above axle height and probably are about 15 inches above ground on most adult bikes. Reflectors mounted on the fenders of small children's bicycles may be somewhat lower. Reflectors mounted on the rider, on the other hand, could easily be too high. On some riders a reflector mounted at head level might be as high as 90 inches.

It was observed that if the reflector is on the rider rather than on the bicycle, the bicycle may not be visible if left parked near the road at night. The rider walking along the road without his bicycle might be more visible, however.
The majority of the Panel (3 to 2) concluded that the reflector should be required on the bicycle itself, rather than on the rider. The primary reason for this decision is their perceived greater probability that a reflector on the bicycle as opposed to one worn by the rider will actually be there when needed.

The question of whether the reflector should be required only at night (as under the current Code) or at all times also provoked substantial discussion. It was noted that if required at all times we will be requiring the consumer to purchase equipment that may never be used. There may be many bicycles that are never ridden at night. Why should they be required to have reflectors? Also, while reflectors do not weigh very much, many bicyclists go to extremes to cut down on bicycle weight, to make the bicycle faster for racing purposes. These people expend great amounts of money (in the range of $100 per pound) and use exotic techniques (such as drilling holes in components) in order to shave a few ounces off the bicycle weight. Such bicycles may be used only in daytime racing events where there is no risk of being out after dark (anyone with bike trouble would get picked up by the sag wagon, a truck that follows the race). Why should such bicycles be required to carry reflectors in the daytime?

Most bicycles are not ultra light weight racing bicycles, however, and for most bicycles the burden of complying with a daytime reflector requirement will be very slight. The bicycle comes equipped with the reflector; its just a matter of maintaining it. On overcast days when drivers turn their headlights on, and on those unexpected occasions when the bicyclist gets caught out after dark (perhaps due to a flat tire) the reflector should be there to provide visibility. The best intentions to never ride in darkness may not prevent such riding on occasion. The Panel concluded (3 to 2) that the Code should be revised to require a rear reflector on the bicycle at all times rather than just at night.

There was also some discussion as to the color of the reflector. Would amber pedal reflectors meet the rear reflector requirement? Reflectors to the rear have been and should be red. The pedal reflectors are amber because they may show either to the front or rear. The Panel concluded that the rear reflector should be red.
Draft: UVC § 11-1207 would be revised as follows:

§ 11-1207—Lamps and other equipment on bicycles

(a) Every bicycle when in use at nighttime shall be equipped with a lamp on the front which shall emit a white light visible from a distance of at least 500 feet to the front and with a red reflector on the rear of a type approved by the department which shall be visible from all distances from 100 feet to 600 feet to the rear when directly in front of lawful lower beams of head lamps on a motor vehicle. A lamp emitting a red light visible from a distance of 500 feet to the rear may be used in addition to the red reflector.

(b) Every bicycle shall be equipped with a red reflector of a type approved by the department which shall be visible from all distances from 100 feet to 600 feet to the rear when directly in front of lawful lower beams of head lamps on a motor vehicle.

(remaining subsections are renumbered)

Staff Report: Forty-eight jurisdictions have laws comparable to UVC § 11-1207(a) requiring a red reflector visible to the rear. None requires the reflector at all times; all conform with the current Code by requiring it only on bicycles operated at night time or other times of darkness.
38. AUDIBLE DEVICES

**Panel Recommendation:** Delete UVC § 11-1207(b) and impose no requirements or restrictions on audible warning devices for bicycles.

**Summary of Deliberations:** It was noted that typical bicycle audible warning devices such as horns and bells are useless in an emergency. They are not loud enough to be heard by drivers. They are even dangerous because in order to use them the bicyclist must take his hand away from the brake lever. Bells and horns may be of some benefit in warning pedestrians on a sidewalk, especially bells because their sound is readily identified with a bicycle. Bicyclists can also communicate with pedestrians by voice, and this is even more effective than a bell because the bicyclist can tell the pedestrian where he is, such as "bike on your left!" to tell the pedestrian he should move to the right.

It was noted that a bicyclist on a sidewalk is required to give an audible warning before passing a pedestrian. This warning could be given by voice, bell or horn. The Panel concluded that this is a sufficient requirement, and that no particular device should be required on a bicycle to give an audible warning.

The existing Code section also prohibits sirens and whistles. Whistles are probably prohibited due to interference and confusion with police whistles used in traffic direction. The problem is not that it is a whistle but the particular kind of whistle being used. Because whistles interfere with breathing if carried in the mouth, and are almost useless as a warning device if carried elsewhere, it is unlikely that use of whistles by bicyclists will ever constitute a serious problem. There also does not appear to be any serious problem with sirens. We are dealing here with problems of noise pollution. If a law is needed to regulate these devices it does not need to be in the vehicle code. The Panel concluded that the Code should not impose any restrictions on audible devices used on bicycles.
Draft: UVC § 11-1207(b) would be deleted:

(b) No person shall operate a bicycle unless it is equipped with a bell or other device capable of giving a signal audible for a distance of at least 100 feet, except that a bicycle shall not be equipped with nor shall any person use upon a bicycle any siren or whistle.


Staff Report: Twenty-four states have a law requiring an audible warning device on a bicycle. Twenty-five states (including 20 of the 24 which require an audible warning device) prohibit the use of a siren or whistle on a bicycle.
39. BRAKES

Panel Recommendation: Require bicycles to be equipped with brakes which will stop the bicycle within 25 feet from an initial speed of 10 mph.

Summary of Deliberations: UVC § 11-1207(c) now requires brakes which will enable the rider to make the braked wheels skid on dry, level, clean pavement. Several persons suggested that this standard bears no relationship to the stopping ability of the brakes and that the Code should be revised to include a performance standard for bicycle brakes.

The Consumer Product Safety Commission regulations for new bicycles will require brakes which will stop a bicycle with a 150 lb. rider from an initial speed of 15 mph or greater within 15 feet. (For bicycles which cannot attain 15 mph in highest gear at a rate of 60 crank rpm, the standard requires a stop within 15 feet from an initial speed of 10 mph or greater.)

The difficulty of checking brakes when a specific performance standard is specified was extensively discussed. Where do the police come up with a 150 lb. rider to check the brakes? It's easy to measure out a specified number of feet, but how will they determine the initial speed without setting up their radar? It seems likely that such a specific standard will be so much trouble that it will be ignored.

It was noted that the standard for used bicycles should be more lenient since the brakes are not new and the testing procedures are likely to be much more informal. The Code should specify a minimum safety standard rather than an optimal standard for new equipment at time of manufacture. We just want to assure that the bicycle retains adequate brakes to assure stops within a reasonable distance.

Because the Code standard can be quite lenient, the problems of checking for compliance are diminished. It should not be necessary to specify any particular weight for the rider since the standard will be loose enough to apply to a rider of any weight. (In checking after the Panel meeting the staff found that the CPSC standards allow an additional foot for every 10 lbs. of rider weight over 150 lbs. Thus the standard would require a bicycle with a 250 lb. rider to stop from an initial
speed of 15 mph within 25 feet.) It would not be necessary
to measure the initial speed precisely; an estimate would be
adequate. The purpose is to assure that bicycles in use
have some adequate stopping ability. It was suggested that
a requirement of stopping within 25 feet from an initial
speed of 10 mph would be a good standard.

Others urged that if the standard is too loose, then why
have a standard at all? They suggested that no one at the
Panel meeting was competent to do any more than make a guess
as to what the standard should be. The National Committee
might be making itself look absurd proposing a standard which
is based on unqualified conjecture rather than on facts. It
may be that a bicycle with very poor brakes can be stopped
from 10 mph within 25 feet. It may be that you can do better
than this by dragging your foot. A standard which is too
loose may encourage a bicyclist to continue riding with bad
brakes because they meet the legal standard. In the absence
of the loose legal standard his own judgment might tell him
he should have the brakes repaired. To avoid these problems,
the Code should only require "adequate" or "operable" brakes.
The law should be general. It should require the brakes to
be there, and to not be visibly defective or clearly inade­
quate. Such a legal standard comports with the kind of brake
inspection which is likely to in fact occur, if anything at
all is inspected. A specific performance standard, on the
other hand, makes any inspection more difficult and thus less
likely to occur.

The majority of the Panel was convinced that the specific
performance standard has merit. A standard requiring only
"adequate" brakes would not be helpful in keeping unsafe bikes
off the road because it would be too vague.

It was also noted that while hand brakes are generally
better than foot brakes, children sometimes lack the hand
size and hand strength necessary to operate such brakes.
Should the Code include standards for brake hand lever reach?
The Panel concluded that it should not since there are not
readily available alternatives. There are auxilIary brake
levers but many argue that they are very inefficient and ac­
tually reduce the safety of the braking system. This is a
problem which the Consumer Product Safety Commission should
deal with.
Draft: UVC § 11-1207(c) would be revised as follows:

(c) Every bicycle shall be equipped with a brake or brakes which will enable the operator [to make the braked wheels skid] to stop the bicycle within 25 feet from an initial speed of 10 mph or more on dry, level, clean pavement.

Cross Reference: First Report, Item 60.

Staff Report: Thirty-six states have laws which conform substantially with the current Code's brake requirements. Two states require "adequate" brakes, or brakes which will stop the bicycle within a "reasonable distance." Only Massachusetts has a requirement like the proposal. The law requires brakes capable of stopping a bicycle from an initial speed of 15 mph within 30 feet on a dry, clean, hard, level surface. (The proposed Code standard would be equivalent to 38 feet from 15 mph.)
40. QUALIFICATIONS OF BICYCLISTS

Panel Recommendation: No revision of the Code is recommended.

Summary of Deliberations: The Panel discussed whether bicyclists should be licensed, whether some riding instructions should be required even if a license is not required, whether such restrictions should apply to some age group but not others, and whether some operational restrictions should be imposed on young riders. There was general consensus that it would be desirable to do something to improve the qualifications of people who are riding bicycles on the roadway. But the majority decided that licensing and similar legal restrictions involve too many problems. While it would probably help in terms of safety to require riders to demonstrate at least a minimal level of riding skill, it would be very difficult to enforce restrictions on those who do not demonstrate such skills. There is no precedent and there would be little public acceptance for such a program. It could be that an optional training program sponsored by the schools or by bicycle clubs could offer all the same benefits without the problems. Such a voluntary approach should certainly be tried first. We have no clear evidence that a licensing requirement, or operational restrictions for less skilled riders, would have a worthwhile impact on safety. No one can really prove that driver education for motor vehicle drivers has resulted in greater safety. Another problem is that a well developed curriculum is not available. We really don't know just what to teach since skillful riders can often disagree as to what the safest procedures are. The majority of the Panel (3 to 2) decided to recommend no revision of the Code. The other Panel members although not sure what should be done felt that some steps should be taken to promote greater rider proficiency.

Staff Report: No directly relevant state law has been located. One state (Washington) has a law which specifically provides that a driver's license is not required to operate a bicycle, and that no driver's license may be suspended or revoked, and no points may be assessed under a driver's license point system, due to violations committed while operating a bicycle. While no other state has a comparable specific provision, no state would require a driver's license to operate a bicycle, and no state assesses points against a driver's license for violations committed while operating a bicycle.
New York law requires prescribed courses of instruction in highway safety and traffic regulation, including bicycle safety, in all schools of the state. In addition, local school boards are authorized to establish a school safety patrol for the purpose of encouraging the safe use of highways, highway crossings, and bicycles.

While no state law imposes a minimum age for riding a bicycle in the roadway, one municipality (Rochester, New York) has such an ordinance. The minimum age is 12.
41. ACCIDENTS AND ACCIDENT REPORTS

Panel Recommendation: All of the Code's provisions on accidents and accident reports should apply to bicycles except that no immediate notice to the police should be required where the only vehicle disabled by an accident is a bicycle.

Summary of Deliberations: If a bicycle is a vehicle, then all the provisions of chapter 10 of the Code apply. This is not a significant change, however, since these provisions already apply to a bicyclist when on the roadway, under the provisions of UVC § 11-1202. The Panel looked at each of the provisions of chapter 10 to determine whether it should apply to bicycles.

The Panel concluded that where a bicyclist is involved in an accident resulting in death, injury or property damage, the bicyclist should be required to stop, render aid, provide identification, and attempt to locate the owner of unattended damaged property. The bicyclist in such cases must comply with §§ 10-102, -103, -104 and -105.

The Panel then considered whether an immediate notice should be given to the police in such accidents. Where death or injury results there is no question -- immediate notice should be given. Where the accident results only in property damage, however, immediate notice may not be necessary. Action of the Subcommittee in recommending revision of § 10-106 to require immediate notice in property damage accidents only when a vehicle is disabled was noted. The reason for this recommendation is that people who have been involved in an accident out on the road are in a difficult position to estimate the dollar value of property damage, making the existing standard hard to apply. The result is that the police will be called in almost all cases. The police generally don't want to be bothered with such accidents unless they result in an obstruction of traffic because one or more vehicles is disabled. The disabled vehicle standard proposed by the Subcommittee will not work well with bicycles, however. Almost any bicycle struck by a motor vehicle will be so disabled as to prevent its normal and safe operation, yet no traffic obstruction need result since the bicycle can easily be picked up and removed from the roadway. The Panel concluded that an exception should be added to the Subcommittee recommendation so that if only a bicycle is disabled, no immediate notice would be required.
Written accident reports are required where there is death, injury or damage in excess of $100. Clearly the same standard should apply for death and injury accidents. The $100 damage level will let out a lot of bicycles even though they are completely destroyed since they are worth less than $100. But the Panel did not feel that a requirement for written reports was justified where the total property damage is less than $100 and there is no injury or death. The amount involved does not justify the paperwork burden.

The Panel also discussed the problem of accidents which result in injury or property damage to the bicyclist himself but not to any other person. Should the bicyclist be required to give immediate notice to the police or file a written accident report? If the bicyclist sticks his hand in his spokes and cuts off several fingers should he call the police? If he hits a sewer grate and injures his head? These may be the most common kinds of injury causing bicycle accidents. We need to have reports concerning them if we are ever to get a grasp on the bicycle accident picture. But regardless of what the law requires we probably won't get the reports. If someone gets his hand caught in a closing car door and cuts off several fingers, the driver is required to file a written report. Most drivers probably would not file such a report, however, and would not know that they are required to do so, and would not think such a requirement reasonable. If I drive my car through my garage door, it is not likely that I will call the police to tell them what a stupid thing I just did, even though the law requires it. Nor is it likely that I will file a written report. The Panel concluded that no exception is justified for accidents which involve injury or damage suffered only by the bicyclist himself. We need to know about such accidents and the Code's requirements are reasonable, although most people will probably not report an accident which involves no other party.

Draft: The Subcommittee's recommended revision of UVC § 10-106 could be revised as follows:

§ 10-106 -- Immediate notice of accident
   (a) The driver of a vehicle involved in an accident resulting in injury to or death of any person or any vehicle other than a bicycle becoming so disabled as to prevent its normal and safe operation [total damage to all property to an
apparent extent of $100 or more] shall imme-
diately by the quickest means of communication
give notice of such accident to the nearest
office of a duly authorized police authority.
(b) No change.

Staff Report: Like the Code, the laws of 35 jurisdictions make
the accident provisions which are applicable to the driver of
a vehicle also applicable to a person riding a bicycle. None
of the 35 expressly provide that no immediate notice to the
police is required if a bicycle is the only disabled vehicle,
as the recommendation above proposes. In 27 of these 35 juris-
dictions the accident provisions apply only to bicycles being
operated on the roadway. In three others the provisions apply
only on the highway. In the other five the accident provisions
appear to have the same application to bicycles as to other
vehicles -- they apply everywhere both on and off the highways.

In one other state the accident laws apply only if a motor
vehicle is involved in the accident. The laws would not apply
where a bicycle collides with a pedestrian or another bicycle.

In six other states, some, but not all of the accident laws
apply to bicycles. Generally this application appears inadver-
tent -- the accident laws do not specifically include or exclude
bicycles, but their application is determined by the use and
definition of terms such as vehicle and motor vehicle. One of
these states (Massachusetts), however, has an accident law
specifically applicable to bicycles as follows:

The operator of a bicycle shall report any
accident involving either personal injury or
property in excess of one hundred dollars, or
both, to the police department in the city or
town in which the accident occurred.

In the remaining nine states, accident laws are not appli-
cable to bicycles.
42. REGISTRATION

Panel Recommendation: Delete all registration provisions from the Model Traffic Ordinance.

Summary of Deliberations: The several benefits of bicycle registration were discussed. Many of these benefits are related to the bicycle theft problem. Where bicycles are registered the police are able to identify the owner of a recovered bicycle so that the return rate for stolen bicycles is improved. Also, the police are not burdened with attempting to track down the rightful owner, storing the bike and eventually auctioning it off. If registration is mandatory and is enforced the recovery rate for stolen bicycles should improve. Almost any kind of program which places a hard to remove identifier on the bicycle will help to cut theft since it increases the risk of detection. But all of these benefits are more applicable to the joyriding aspect of the bicycle theft problem than to the problem of the professional thief. Bicycle registration is usually done on a municipal basis (as under the MTO). By removing the bicycle from the area, as a professional thief is likely to do, the benefits of registration are almost completely nullified. Registration on a state-wide basis, or the state-wide or region-wide sharing of registration records would be more effective but also more expensive.

Some other benefits of registration do not involve the theft problem. A registered bicycle may be the key to identification of an injured child who needs medical attention. A registration program affords an opportunity for bicycle inspection (where else are the brakes likely to be checked, for example?). Such a program also offers an opportunity to distribute safety literature and to teach bicyclists about traffic safety. Registration also allows the government to determine who is riding, where and for what purpose, their age and sex, the kind of bicycles which make up the population, and the total number. Without such information it is not possible to accurately access accident data to determine if some part of the bicycle population is under or over represented, and it is not possible to determine where bicycling facilities should be located to best serve the users.

Balanced against these benefits, however, there are some problems. Mandatory bicycle registration imposes a rather substantial burden on the bicyclist. Generally he has to take his bicycle to some central registration point, which can be a
substantial burden, particularly if multiple bicycles are owned. He must then pay a registration fee. Such fees can be rather steep. The State of Virginia estimates that registering bicycles on a state-wide basis would cost about $2.50 per bicycle just for administrative costs. A higher fee would have to be charged in order to produce any revenue to help pay for bicycling facilities. One Panel member suggested that a registration program which would cover a large enough area to be effective against bicycle theft would cost about $5.00 per year per bicycle. This same Panel member indicated that his family owns 11 bicycles. Some are junkers -- worth $10 to $15 at most, and some are very expensive special purpose bicycles such as road or track racing bicycles which are never exposed to a theft problem. Only four of the bikes are regularly used. Yet a mandatory registration program might require this Panel member to transport each of these bikes to the registration point and pay registration fees which might total $55 or possibly more.

While bicycle registration has many theoretical benefits, the actual benefits may be much less. Many cities have mandatory registration but it is not enforced. Where there is not careful and continuous police enforcement, the program will not produce the anticipated benefits. Often the program is enforced when it is new, but then police attention is directed toward more serious crime problems and bicycle registration is no longer effectively mandated. This appears to be taking place now in the District of Columbia where enforcement was very active in the first few weeks of the new law, but is now not taking place. Some cities have mandatory registration, but it is only required once instead of every year. These cities maintain records for years which no longer reflect correct information about the status of the bicycle, whether it is still in use and the name and address of the current owner. The benefits of this kind of mandatory registration program are questionable. Another theoretical benefit of registration is bicycle inspection. Frequently bicycles are registered by clerks who are competent to fill in forms and take money but know nothing about bicycles. To provide a team of bicycle inspectors who are competent to actually inspect a bicycle and who will be available to inspect it at time of registration could add substantially to the cost of the registration program.
The Panel also noted that some of the benefits of a registration program may be obtainable in other ways. The Bicycle Manufacturers Association is apparently working on a bicycle identification number (BIN) system which would be like the VIN on an automobile. This serial number would be stamped into the frame of all bicycles and would indicate the manufacturer, date of manufacture and bicycle number. Many bicycle dealers are keeping records of new bicycle sales. These records could provide some of the information which registration records would merely duplicate. In many areas of the country an "operation identification" program is in use. Under this program engraving devices are loaned to property owners so they can mark all their valuable property (including bicycles) with an identifying number. These programs cut down on theft and improve the return rate for recovered stolen property.

The Panel concluded that while registration can be beneficial, it frequently is not, and the benefits obtained simply do not justify the substantial expense involved in the program. The Model Traffic Ordinance provisions which require registration should be deleted and the UVC-MTO should be silent on bicycle registration.

**Draft:** MTO §§ 12-2 to 12-9 would be deleted.

**Cross Reference:** First Report, Item 51.

**Staff Report:** Four states (California, Hawaii, Massachusetts and Utah) have statewide bicycle registration programs, although in two of these states (California and Massachusetts) participation in the program is a matter of local option. The Utah law requires local governments to register bicycles.

The District of Columbia has recently adopted a program of mandatory bicycle registration.

Of the 50 municipalities reviewed in the staff study of bicycle ordinances, 27 have compulsory registration, four have voluntary registration and 19 have no registration requirements.
43. SERIAL NUMBERS

Panel Recommendation: Require a frame serial number on all new bicycles sold.

Summary of Deliberations: While many bicycles (probably most) have a serial number placed on the bicycle frame by the manufacturer, some bicycles are sold without a frame serial number. It is difficult for the consumer to place a permanent identifying mark or number on the bicycle. It would be much easier for a dealer to do so. If dealers are overly burdened by the requirement, they can persuade the manufacturer to do it. The Panel concluded that all bicycles sold should have a serial number permanently set in the frame in some way, and this number should be placed on the bicycle by the dealer if not by the manufacturer.

Draft: A new section could be added to the Code as follows:

§ 11-12xx -- Bicycle serial number
No person engaged in the business of selling new bicycles at retail shall sell any new bicycle unless such bicycle has a serial number permanently stamped or cast on its frame.

This draft is silent as to how a number stamped on a bicycle by a dealer should be formulated. Should a minimum number of digits be specified in order to improve the possibility that the number will be unique. Absolute uniqueness of the number would be impossible to insure unless the law (or regulations) went into great detail as to the make up of the number, and unless these provisions applied also the numbers placed on the frame by manufacturers.

The burden imposed by this law may not be too great for the bicycle dealer, but what about the drug store, discount store, supermarket or department store that sells bicycles along with a lot of other items, but is not set up to repair or work on bicycles? Many of these stores don't even assemble bicycles which they sell. Should they be required to stamp a number in the frame?

Staff Report: California requires a frame serial number on all new bicycles sold. Utah requires local governments to impose the same requirement on bicycle dealers as part of their registration ordinance.

Twenty-four of the 50 ordinances reviewed require an identifying number to be stamped on the frame of the bicycle at the time of registration. Eighteen require this only if there is no legible manufacturer's serial number, while the other six require the number in addition to any serial number.
44. BICYCLE DEALERS

Panel Recommendations: A. Retain MTO § 12-10 and revise it to require periodic reporting such as at the end of each month.

B. Do not require licensing of bicycle dealers.

Summary of Deliberations: A. It was noted that requiring dealers to keep records regarding the source and disposition of all bicycles which they handle is necessary to help prevent dealing in stolen bicycles. Also, these records could provide authorities with much of the information which a registration system would provide. They would have some idea how many bikes are in use from the number sold, and if the bikes have serial numbers they could use these records to locate at least the first owner of a recovered bicycle. A good dealer will already be keeping such records. The law merely requires him to do so, and to make a report to the police.

The Panel discussed time periods for reports. Individual sales should not be reported since this would require too many separate reports. It was the consensus that the dealer should report sales each month.

It was noted that the existing Model Traffic Ordinance provision would probably apply to a manufacturer located in any municipality adopting the provision. This application was not intended and would serve no useful purpose. It could be corrected by making the section apply only to retailers.

B. The Panel considered a licensing requirement. It was noted that this would help implement the reporting requirement. The police would know from whom to expect reports, the dealers would be advised of the reporting requirement at the time of licensing, and failure to report could result in suspension of the license. The Panel decided that the burdens of such a licensing system were too great to justify it. If bicycle dealers are licensed it should be a business license regulated under the state business code or under local ordinances. Licensing of bicycle dealers is not an appropriate concern of the Uniform Vehicle Code and Model Traffic Ordinance.
Draft: MTO § 12-10 would be revised as follows:

§ 12-10 -- Bicycle dealers

Every person engaged in the business of buying or selling new or second-hand bicycles at retail shall make a report to the (chief of police) of every bicycle purchased or sold by such dealer, giving the name and address of the person from whom purchased or to whom sold, a description of such bicycle by name or make, the frame number thereof, and the number of license plate, if any, found thereon. Such a report shall be submitted monthly, within 10 days after the end of the month.

Does this law impose an unreasonable burden on stores which sell bicycles but as only one item in their large inventory? Is it reasonable to require drug stores, discount stores, department stores and supermarkets to keep the kind of records of bicycle sales that are required of a dealer who sells only bicycles?

Is reporting absolutely necessary? Will the police actually use the reports or is this just more paper work to be stored in someone's files. Why not just require record keeping and give the police open access to the records whenever they are needed?


Staff Report: Three states require bicycle dealers to report sales or purchases of bicycles. Connecticut requires reporting the purchase of used bicycles only. Massachusetts requires reporting the purchase or sale of all bicycles. Utah requires local ordinances to require dealers to report all sales.

Two other states require record keeping but not reporting. Arkansas and Hawaii require records of all sales.

In regard to licensing, Alabama and North Carolina require a license for bicycle dealers. Connecticut requires second-hand bicycle dealers to be licensed. Louisiana authorizes local licensing of bicycle dealers. Missouri authorizes the licensing of bicycle repair shops.
Seventeen of the 50 municipalities reviewed require reports as to sales or purchases of bicycles. Six of these ordinances conform with MTO § 12-10. Of the other 11, six require reporting the sale of new bicycles, eight require reporting the sale of used bicycles, 10 require reporting the purchase of used bicycles, and none requires reporting the purchase of new bicycles.

Two other municipalities require record keeping but not reporting.

Only one of the 50 municipalities reviewed requires licensing of bicycle dealers.
45. DEFINITION OF BICYCLE

Panel Recommendation: Amend the definition of "bicycle" so that it includes only devices which are exclusively human powered.

Summary of Deliberations: The Panel discussed the problem of motor assisted bicycles and how such devices should be classified. The Panel concluded that such devices should not be considered bicycles under any circumstances, regardless of whether or not the motor is in operation. Such devices are motor vehicles and should be classified as such, although for some purposes they might be regulated more like bicycles than motor vehicles (see the next agenda item).

The Panel also discussed the need for retaining a definition of "bicycle." It no longer serves to make the defined class of vehicles subject to the traffic laws since all such devices are vehicles regardless of whether they are bicycles. But retention of the definition is necessary because some of the proposed laws apply only to bicycles rather than to all vehicles or all human-powered vehicles. The Panel specifically decided that those provisions which allow riding bicycles two abreast, and those which allow passing other vehicles in the same lane, should apply only to vehicles with two tandem wheels, and not to vehicles with three or four wheels. The wheel diameter limitation should be retained since it would be undesirable to suggest that small sidewalk bicycles can use the roadway just as full sized bicycles do.

Draft: UVC § 1-105 would be revised as follows:

§ 1-105--Bicycle.--Every vehicle [device] propelled exclusively by human power upon which any person may ride, having two tandem wheels either of which is more than 14 inches in diameter.

This definition also changes the reference to "device" to vehicle, reflecting the change in the definition of "vehicle."
Cross Reference: First Report, Items 42 and 74.

Staff Report: Thirty-eight states have a definition of "bicycle." Thirty-five of these definitions include only devices which are propelled by human power. Three of the definitions (Michigan, Ohio and South Carolina) specifically include motor assisted bicycles by adding essentially the following language to their definitions:

It includes pedal bicycles with helper motors rated less than one brake horsepower [transmitted by friction and not by gear or chain,] which produce only ordinary pedaling speeds up to a maximum of 20 miles per hour.

South Carolina amended its definition in 1974 by deleting the bracketed language relating to friction drive.
Panel Recommendations:  A. Add a definition of "motor assisted bicycles" to the Code.

B. Add provisions to regulate the use of motor assisted bicycles.

Summary of Deliberations: Motor assisted bicycles are widely used in Europe and have been so used for many years. They are essentially bicycles and can be moved by pedaling alone, but they have a motor attached which, when engaged, assists in propelling the vehicle. These motors (some use internal combustion engines, others use electric motors) are small and low in power production (less than 1 brake horsepower). The motors actually limit the vehicle speed to ordinary pedaling speeds (under 20 mph). In the United States these vehicles have not been widely used because of certain legal problems. They are generally considered to be motor vehicles but they don't have the speed capability that most motor vehicles have nor do they have all the required equipment and they lack adequate electrical systems to support some of that equipment. The proponent urged that these vehicles are more like bicycles than motor vehicles and should be so defined and regulated.

Under existing Uniform Vehicle Code provisions these vehicles are clearly motor vehicles. They are within a category of motorcycles called motor-driven cycles (§ 1-136) which specifically includes bicycles with motor attached. As such, these vehicles must comply with all the requirements for motor vehicles. They must be titled and registered. The operator must have a driver's license and must wear a helmet and eye protection. The vehicle must be equipped as required for motorcycles or motor-driven cycles. While the requirements for motor-driven cycles are less than for other motorcycles, it is conceded that the motor-assisted bicycle cannot comply with those requirements as now manufactured. Motor-assisted bicycles do not carry batteries, so the lights go out when the vehicle stops moving. A substantial improvement in the vehicles' electrical system would be required in order to comply with the Code's minimum lighting requirements for motor-driven cycles. Unfortunately, under existing Code provisions these vehicles may also be bicycles, particularly at times when they are being moved without use of the motor. Thus their status is somewhat unclear. The modification recommended in the definition of bicycle in the last agenda item is intended to help resolve this problem.
The U.S. Department of Transportation has declared certain of these vehicles to be motor vehicles which do not conform with applicable Federal Motor Vehicle Safety Standards and has banned their importation. Motors are being offered for sale separately in the United States, however, which can be affixed to a standard bicycle to produce the motor-assisted bicycle. The proponent noted his attempts to overcome the importation ban and suggested that it would certainly help if the National Committee decided that these vehicles are bicycles rather than motor vehicles.

The proponent stressed the safety of the motor assisted bicycle because of its speed limiting features. He also noted its potential utility as a transportation mode. It gets around 200 miles on one gallon of gas (more if you pedal more) and it provides an assist in hill climbing which will make it a useful transportation mode for a larger number of people.

The Panel concluded that although the motor-assisted bicycle may have great utility, it is not a bicycle under any circumstances, and that although it may be in an uncomfortable grey area of regulation in this country, classifying it as a bicycle is not the most desirable resolution of that problem. If this is a bicycle, for example, a child of 6 or 7 years of age could ride it in the road without a license. The Panel was also concerned that while the vehicle, as manufactured, may have speed limiting factors, an owner might modify the vehicle so that it could go considerably faster than 20 mph. (The proponents denied that such modification would be possible.) The Panel also noted that 20 mph is not a slow speed. While most bicycles would be capable of this speed, it takes a relatively strong bicyclist on a good bicycle to maintain a speed of 20 mph over even a modest distance, yet the motor-assisted bicycle could maintain this speed with ease. Also many of the motor-assisted bicycles are heavier than a bicycle (the Solex weighs 60 lbs. whereas a bicycle may weigh around 30 lbs.). Thus there can be some rather significant differences between bicycles and motor-assisted bicycles. And some of the devices called mopeds in other countries have pedals which are rarely ever used.

The Panel noted that some exemptions from motor vehicle requirements such as registration, wearing a helmet, and some equipment requirements may be in order, but the motor-assisted bicycle should not be allowed to do some of the special things that bicycles can do, like riding on a sidewalk. It was concluded that a separate classification is needed for these vehicles. The definition should cover bicycles with attached motor,
which can be moved by pedaling alone, which have a motor producing less than 1 brake horsepower, and which have a top speed of 20 mph when propelled by the motor alone or level ground.

The Panel discussed only a few of the rules which should apply to such vehicles. It concluded that motor-assisted bicycles should not be used on the sidewalk for any purpose (including parking) either with or without the motor in operation. In other words, these vehicles are just like any other motor vehicle in terms of sidewalk use. The Panel decided that such vehicles should be allowed to use bicycle paths, but only when the vehicle is being propelled solely by human power and the motor is not in operation. This may present a problem because it is impossible to determine at a distance whether or not the motor is in operation, and it can be disengaged very quickly and easily. The motors make almost no noise. Nevertheless, the Panel majority decided (3 to 2) to make this distinction, allowing the vehicle on bicycle paths only when the motor is not in use. The Panel decided that such vehicles should be allowed to use bicycle-only lanes, either with or without the motor in operation.

Draft: The draft below only represents the beginning of a resolution of this problem. The Panel left many questions about the status of motor assisted bicycles unanswered. Many of these questions were beyond the scope of the Panel and may be appropriate for referral to another Subcommittee. Some unanswered questions are:

1. Are titling and registration required for a motor-assisted bicycle?

2. Should a driver's license be required to operate a motor-assisted bicycle? If a driver's license is not required, should there be a minimum age requirement?

3. Should motor vehicle insurance be required for a motor-assisted bicycle?

4. Should a person riding on a motor-assisted bicycle be required to wear a helmet and eye protection?

5. What kind of equipment should be required on a motor-assisted bicycle?

6. Should periodic motor vehicle inspection be required?
7. In terms of rules of the road, to what extent, if any, can the motor-assisted bicycle follow the rules for bicycles rather than the motorcycle rules? The Panel recommends no use of sidewalks and limited (nonmotorized) use of bicycle trails, and full use of bicycle-only lanes. Other questions which need resolution include these:

a. Should motor-assisted bicycles be entitled to the use of a whole lane like a motorcycle, or can they be passed in the same lane like a bicycle?

b. Can motor-assisted bicycles exercise bicycle passing privileges (as proposed in item 16, supra), passing on either right or left, in the same or a different lane, and by driving off the roadway if necessary, or must they comply with motorcycle passing rules?

c. Can motor-assisted bicycles make the bicycle left turn (as proposed in item 17, supra)?

d. Should persons operating motor-assisted bicycles be entitled to the protection of UVC § 11-504, directing other drivers to use care to avoid colliding with them?

e. If bicycles are prohibited by signs at a particular location, are motor-assisted bicycles also prohibited?

The following definition could be added to chapter 1 of the Code:

§ 1-134.1—Motor-assisted bicycle.—Every motorcycle with a motor which produces not to exceed 1 brake horsepower and with a maximum speed of 20 mph with the motor propelling the vehicle on level ground.

This definition does not specify that the vehicle must be capable of being pedaled. The definition of "bicycle" does not contain that criterion either. The horsepower and speed limitations should be sufficient to define the class without further specifications as to the operation of the device.

It would also be necessary to delete the specific reference to "every bicycle with motor attached" from the existing definition of "motor-driven cycle" in UVC § 1-136 as follows:

§ 1-136—Motor-driven cycle. — Every motorcycle, including every motor scooter, with a motor which produces not to exceed five brake horsepower, and every bicycle with motor attached.

Staff Report: In addition to the three states' definitions of "bicycle" discussed in item 45 which are relevant here, two states have definitions which cover motor-assisted bicycles:

Indiana -- The term "therapeutic bicycle" is defined as follows:

Any two-wheeled, foot-propelled vehicle, with a helper motor rated less than one brake horsepower and designed primarily for therapeutic purposes.

Texas -- The term "motor-assisted bicycle" is defined as follows:

A bicycle which may be propelled by human power or a motor, or by both, with a motor of a capacity of less than sixty (60) cubic centimeters piston displacement, which is capable of a maximum speed of not more than twenty (20) miles per hour on a flat surface with not more than one (1) percent grade in any direction when the motor is engaged.

The three states (Michigan, Ohio and South Carolina) which include motor-assisted bicycles in their definitions of "bicycle" apparently intend that such motor-assisted bicycles should be regulated like bicycles rather than motor vehicles. To effectively accomplish that end, however, these states should exclude motor-assisted bicycles from their definition of "motor vehicle." None of the three states does so.

Texas defines "motor-assisted bicycle" and provides that such bicycles are not motorcycles or motor driven cycles and that riders of motor-assisted bicycles should generally comply with rules for bicycles. Yet Texas does not exclude motor-assisted bicycles from the definition of motor vehicle, so such bicycles may be subject to titling, registration, driver licensing, and equipment requirements just as other motor vehicles are.

North Carolina adopted a law excluding motor assisted bicycles from the definition of "motorcycle" in 1974, but then repealed the law in the same year. North Carolina also adopted a law that exempts persons riding on bicycles with helper motors from the motorcycle helmet requirement.

Michigan imposes a minimum age of 15 for operation of a bicycle with a helper motor.
47. BICYCLE STREETS

Panel Recommendation: No revision of the Code or Ordinance is recommended.

Summary of Deliberations: It was suggested that a provision be added to the Model Traffic Ordinance to authorize "bike streets" where vehicles other than bicycles would be prohibited except for local traffic, as is now authorized for "play streets." The Panel decided that such authority is not needed, and that there is already sufficient authority under the Code and Ordinance to provide for reasonable and safe flow of bicycles and other forms of traffic.

Cross Reference: First Report, Item 52.

Staff Report: No relevant state laws have been located.
48. MOTORCYCLE PARKING

Proposal: Amend UVC § 11-1004 to allow motorcycles to park at an angle to the curb where parallel parking would otherwise be required.

Proposed by: Panel on Bicycle Laws.

Effect of Proposal: UVC § 11-1004 now requires all vehicles, including motorcycles, to park parallel with the curb except where angle parking is permitted by local ordinance. The proposal would allow motorcycles to park on an angle or perpendicular to the curb where other vehicles are required to park parallel.

Reasons Stated to Support Proposal: During Panel deliberations it was noted that it is often difficult to park a motorcycle or bicycle parallel with the curb. The slope of the crowned road often makes it impossible to keep the vehicle from falling over. Motorcycles should be allowed to park in a stable position to prevent damage to the machine if it falls over as well as possible injury to anyone who might be around.

Staff Report: No state has a comparable law.