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January 12, 1977

Mr. Edward G. Novak
Commissioner of Public Safety
211 Highway Building
St. Paul, Minnesota 55155

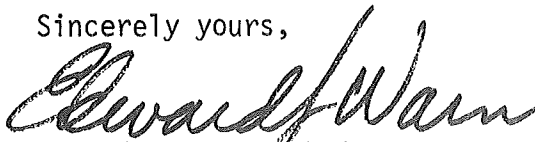
RE: Report of State Bicycle Committee

Dear Commissioner Novak:

Attached is the final report of the Minnesota State Bicycle Committee established pursuant to Chapter 199, Section 14, Subdivision 1 of Minnesota Laws 1976. The Committee, composed of state-wide representatives directly or indirectly involved with the subject of bicycling, concentrated on the development of recommendations to resolve the "problems relating to the operation of bicycles on the public roads and ways".

We respectfully request that you transmit this report along with any comments you may have to the appropriate legislative committees for action.

Sincerely yours,


Edward J. Warn, Chairman
State Bicycle Committee

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MINNESOTA STATE BICYCLE COMMITTEE REPORT

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SUMMARY OF FINDINGS

PREMISE

As with all other vehicles, the use of bicycles on public roads and ways can result in conflicts and accidents. The safety of cycling can be increased through greater education of highway users, improved access and facilities, and uniform legislation. This report summarizes needs throughout Minnesota and suggests proposals to meet those needs.

MAIN POINTS

Encouraging bicycling as transportation, recreation and exercise makes economic and environmental sense. However, bicycle drivers currently face significant problems in the State of Minnesota.

.Lack of proper operational instruction for bicyclists and safety education for everyone using the public roadways is hazardous to bicyclists and non-bicyclists alike.

.Lack of clear legal requirements governing the use of bicycles on the public roads is confusing.

.Lack of uniform enforcement of laws against bicycle and motor vehicle traffic violations perpetuates the bicycle safety problem.

.Lack of proper facilities to cross barriers such as rivers and freeways forces bicyclists into fast, heavy traffic at crossings.

RECOMMENDATIONS

State Bicycle Committee Report emphasizes education, enforcement, and changes to the State Motor Vehicle Code.

1. Enact legislation to require the establishment of an advisory committee to detail specific programs to educate, formally and informally, all bicycle riders, other roadway users, and the community at large on the proper rules of the road and operation of bicycles.

2. Amend Chapter 169 to be in conformity with the Uniform Vehicle Code's bicycle provisions, including defining bicycles as vehicles and clarifying bicycle/motor vehicle relationships.

3. Amend Chapter 199 to include a paragraph requiring the Minnesota Department of Transportation to include bicycles as an integral part of the transportation planning process.

TABLE OF CONTENTS

INTRODUCTION	1
BACKGROUND	1
SCOPE	3
PURPOSE	3
PREVIEW	3
<hr/>	
STATE BICYCLE COMMITTEE SUBCOMMITTEE ON SAFETY EDUCATION	4
RECOMMENDATIONS	4
RATIONALE	5
PRE-SCHOOL	5
KINDERGARTEN THROUGH 12TH GRADE	6
ADULT BICYCLISTS	6
MOTORISTS	7
LAW ENFORCEMENT OFFICERS	7
THE JUDICIAL SYSTEM	8
PARENTS	8
THE COMMUNITY AT LARGE	9
CERTIFICATE OF COMPETENCE	10
<hr/>	
MINNESOTA STATE BICYCLE COMMITTEE SUBCOMMITTEE ON THE MOTOR VEHICLE CODE	11
INTRODUCTION	11
RECOMMENDATIONS	14
AMEND 169.01, SUBD. 31 AND SUBD. 51	14
AMEND 169.01 BY ADDING SUBD. 61 AND SUBD. 62	14
AMEND 169.18 BY ADDING TO SUBD. 7 (d)	15
AMEND 169.19 BY ADDING TO SUBD. 1 (7)	15
AMEND 169.19 SUBD. 8 HAND SIGNALS, PARAGRAPH (2)	15
AMEND 169.20 SUBD. 4	15
AMEND 169.21 SUBD. 3, PARAGRAPH 4	15
AMEND 169.31 STOP AT SIDEWALKS	16
REWRITE 169.221	16
RATIONALE	20
DEFINITIONS-VEHICLES	20
DEFINITIONS-BICYCLES	20
BICYCLE LANES	20
SIGNALING	20
WHERE TO RIDE	21
TWO ABREAST	21
EQUIPMENT	22
PARKING	22
BICYCLE EVENTS	22
PARENTAL RESPONSIBILITY AND PENALTIES	22

STATE BICYCLE COMMITTEE	23
SUBCOMMITTEE ON ENGINEERING	
RECOMMENDATION	23
RATIONALE	23

INTRODUCTION

Increasing numbers of bicycle accidents affecting both children and adults have been noted in recent years. Bicycle accidents are now the major cause of trips to hospital emergency rooms. Therefore, A MAJOR BICYCLE SAFETY PROBLEM EXISTS concerning the existing and increasing use of bicycles on the public roads. It is reasonable to believe that these incidents can be reduced so that the operation of bicycles may become more safe, enjoyable and convenient. As a result, the advantages and efficiencies of cycling in Minnesota may be promoted and enhanced for all citizens.

BACKGROUND

In response to this problem, the Minnesota State Legislature enacted in 1976 Chapter 199, Section 14, Subdivision 1 of which required the Commissioner of Public Safety "with the cooperation of representatives of regional and local units of government and law enforcement agencies, the State Trail Council, the Governor's Trail Advisory Committee, the Commissioner of Highways, highway user groups and associations, and cycling groups and associations" to "review and analyze problems relating to the operation of bicycles on the public roads and ways". Specifically to be included in this report was a "review (of) the Minnesota Motor Vehicle Code to identify provisions which give motorists and bicyclists inadequate guidelines where such traffic conflicts or which may be inconsistent or ambiguous when applied to traffic situations involving special bicycle facilities within or adjacent to public streets and highways".

On September 10, 1976, Tom Boerner of the Department of Public Safety met with Representative Phyllis Kahn, author of Chapter 199; David Braslau, chairman of the Governor's Trail Advisory Committee and member of the State Trail Council; and Kate Gregg, staff to the Governor's Trail Advisory Committee and State Trail Council, to make preliminary nominations for membership on the Committee which would undertake the study and write the report. It was agreed to ask Ed Warn, of St. Paul Planning to chair the committee. Warn accepted the position and had further input into committee membership, which remained open throughout the study.

The following persons served on the State Bicycle Committee:

Tom and Jean Bondhus, users, parents, and manufacturers.
David Braslau, State Trail Council
Bob Cartford, Department of Transportation, Governor's Trail Advisory Committee
Chester Christy, St. Paul Police Department
Don Clough, Bloomington Police Department
Jake Crandall, Minnesota Triple A
Fred and Gretchen Dush, St. Paul Parent/Teacher/Student Association.
Al Edstrom, Duluth Bike Commissions
Shirley Hoakanson, State Legislature
Ronald Holt, Richfield Police Department
Phyllis Kahn, State Legislature
Jerry Keenan, Region Nine Development Commission
Wes Kelber, User
June Kelly, Governor's Trail Advisory Committee, parent.
Bob Knochke, Minnesota State Patrol
Connie Kozlak, Metropolitan Council
Chris Kvale, User
Nancy Mahle, DNR Bike Program Planner
Joe Meyerring, Department of Education
Paul J. Rooney, St. Cloud Public Schools
Leonz Schooley, Minnesota Safety Council
Lou Schroth, St. Paul Municipal Court Violations Bureau
Leigh Schulze, Handicapped three-wheeled bicycle user
Sanders Sweeney, Duluth Bike Coordinator
Phil Voxland, United States Cycling Federation
Joel Watne, Attorney General's Office
Laurie Young, Assistant DNR Bicycle Program Planner

The committee was chaired by Ed Warn. Staff work was provided by Kate Gregg. Tom Boerner served in an ex-officio advisory capacity.

The Committee held its first meeting on October 19, 1976, at which time it was decided that bicycle related problems fell into three general areas: educational, legal, and provisional. Accordingly, the Committee divided into three working subcommittees, one to study Safety Education (chaired by Leonz Schooley), one to study the Motor Vehicle Code (chaired by Phil Voxland), and one to study engineering problems (chaired by Nancy Mahle).

SCOPE The scope of each subcommittee varied with the area under study.

The Safety Education Subcommittee recognized the need for a comprehensive education program. Since the scope of developing such a program exceeded what the Subcommittee could do by January, 1977, they developed a statement of needs and a recommendation of how to meet them.

The Motor Vehicle Code Subcommittee considered the entire Minnesota Motor Vehicle Code, consulting the Uniform Vehicle Code and other national and state studies in making its report.

The Engineering Subcommittee began looking at all possible geometric design standards from many individual state and federal sources, but resolved that time, experience, and expertise were not sufficient to make specific recommendations at this time. However, problems exist in this area, and the full committee made policy recommendations to address them.

PURPOSE To develop a report that recognizes problem areas relating to bicycle use and recommends appropriate programs and legislative actions.

PREVIEW This report will present the recommendations of each subcommittee, followed by the rationale behind the recommendations. The report of each subcommittee has been approved by the entire committee.

STATE BICYCLE COMMITTEE SUBCOMMITTEE ON SAFETY EDUCATION

RECOMMENDATIONS

A need exists for formal and informal education of traffic laws and operation of bicycles for:

- .Pre-schoolers
- .Kindergarten through 12th graders
- .Adult bicyclists
- .Motorists
- .Law enforcement officers
- .The judicial system
- .Parents
- .The community at large

Therefore:

- 1.The State Department of Education shall establish an advisory committee to establish a specific program for each element above and present their recommendations to the Legislature by January 16, 1978.
- 2.This committee should include, but not be limited to, teachers, riders, law enforcement officers, and representatives from the parochial schools, the Minnesota Safety Council, the Jaycees, the Departments of Transportation, Public Safety, Education, and the State Legislature.
- 3.The committee shall utilize appropriate state funds and seek additional federal funding.
- 4.The Department of Public Safety shall revise the Driver Education Manual to include a comprehensive section on bicycles, and shall prepare questions relating to bicycles to be included in the driving test. The section and questions shall be reviewed by the advisory committee.
- 5.Each person operating a bicycle on the public roads shall have a valid motor vehicle operator's license or a bicycle operator's certificate of competence obtained upon the successful completion of a recognized bicycle safety course or standardized examination by 1980.

RATIONALE

Early meetings held by the safety education subcommittee focused on looking at existing successful bicycle education efforts. The subcommittee viewed the AAA film "Only One Road", heard presentations outlining the Bloomington, Richfield, and Willmar programs, and briefly reviewed the curricula adopted by Mankato and Iowa. The members immediately recognized that they could not recommend one program over another or develop a synthesis of the programs at this point. However, it became clear from their brief study that bicycle education must be far reaching to be effective. Therefore, the safety education subcommittee recommends that a comprehensive program be established with the assistance of an advisory committee to reach the groups listed below.

PRE-SCHOOL

Some of the subcommittee members were reluctant to have a program directed at children below the third grade. Studies show that children this age may lack the necessary muscle coordination to operate a bicycle safely. Further, individual schools often do not want to have young children riding to school. This is why the Department of Public Safety has no recommended curriculum for under third grade. However, after due consideration, the subcommittee agreed that these children are riding anyway and that an education program directed at pre-schoolers would not necessarily encourage use, but rather improve the quality of existing use.

KINDERGARTEN THROUGH 12TH GRADE

Successful safety education programs have been implemented through the public school system, particularly at the grade school level. The subcommittee agreed that a program must be extended to private and parochial schools. However, members were unable to reach a consensus as to whether the best program would make bicycle education an integral component of the regular school curriculum, to be taught by the teacher (similar to the Iowa program) or to take a special "bike day" approach, wherein outside speakers, law enforcement officers, team teachers, etc., would come into a school and conduct concentrated seminars or assemblies (currently done in Richfield and Willmar), or to combine the two (as in Bloomington). Some of the members felt that outsiders could generate more excitement and enthusiasm, and would be better qualified. Others argued that an ongoing, integrated curriculum would be more effective. Patrolman Dick Morelan who works in the Willmar area schools spoke to the subcommittee and indicated that there might be a problem with community acceptance of non-certified people teaching in the schools.

The members were able to agree about the scope of such an educational program. They felt that it should encompass both classroom education in traffic laws and outside bicycle proficiency or "behind-the-handlebars" training. Knowledge of the law may be rendered moot if the rider cannot properly control the bicycle. Bloomington now has academic legal training in the third grade and practical on the road training in the fifth. After successfully completing a riding test, Bloomington students are awarded a certificate of competence. Subcommittee members also felt that instruction to improve the maintenance of bicycles and to increase rider understanding of their mechanics would be valuable.

ADULT BICYCLISTS

A steadily increasing portion of the bicyclists on the road would not be reached by the type of program outlined above. A separate program must be developed to reach adult bicyclists who often hold the same misconceptions we see reflected in children. Adult bicyclists often do not observe traffic laws, thinking they only apply to their cars. The Department of Transportation National Highway Traffic Safety Administration reported that in 1975 adults were the fastest growing category of bicycle fatalities in the United States.

MOTORISTS

"Would you feel any better knowing it wasn't your fault if you killed a kid on a bike?" The bicyclists is at fault in the majority of bicycle/motor vehicle accidents, yet the above slogan, adopted by the Department of Public Safety, accurately illustrates how unimportant is the question of blame. Motorists need to extend their "defensive driving" techniques to include an awareness of bicyclists and the potential hazards that may arise. The AAA film "Only One Road" addressed the adult bicyclist and the motorist, clearly demonstrating that both users must be educated to share the road wisely. Further confusion exists in motorists as to the correct procedure for turning through bicycle lanes, questions of right-of-way, etc. An expanded bicycle section in the Driver Education Manual and the inclusion of bicycle/motor vehicle questions on the drivers' test will help to educate new drivers. Methods still must be found to reach the experienced motorist.

LAW ENFORCEMENT OFFICERS

From the presentations heard by the subcommittee, it became clear that a key element in any successful program is enforcement. Currently the police are generally unwilling to enforce traffic laws as they apply to bicycles. Too often they are greeted with a "Why aren't you out solving crime?" attitude by both irate parents and irritated judges. Further, they hold this attitude themselves. The Richfield program recognized this last problem as virtually insurmountable. Therefore, they circumvented it, placing civil defense volunteers and paid non-professionals on ten speed bicycles exclusively to write tickets for bicycle traffic violations. They have enjoyed great success and national notoriety, culminating in a write-up in "Time" Magazine. Other officers on the subcommittee felt that the police would enforce the law if they were supported by parents and particularly by the courts.

THE JUDICIAL SYSTEM

Any enforcement program hinges on judicial support. To receive that support, the subcommittee recommends that judges be educated to change their prevalent attitude that the bicycle is a toy. This attitude is not limited to the judiciary; it is widespread and everywhere dangerous. But it is perhaps most dangerous when held by judges, for without their backing the police will not enforce the law. Judicial support has been won in some communities using bicycle accident statistics and photographs, and as a last resort, the law itself. "Bicycles: Traffic laws apply."

However, a change in attitude will not reduce the court calendar. The subcommittee recommends that an alternative system be developed in lieu of court appearances. Richfield has a program whereby juvenile offenders are sent to educational seminars, held on Saturdays, for the first two offenses. Richfield police approached the judiciary with this plan, hoping that they would consent to see third offenders in groups, once a month or so. The judges refused, saying they would see third offenders individually, at any time. To date Richfield has had no third offenders, but this type of judicial support is imperative to a successful program.

PARENTS

Some parents tell their children, "I don't care what anybody says, ride facing the oncoming traffic". Other parents hope to save money by purchasing a bicycle several sizes too large for the child who is to ride it. Most parents think teaching a child how to ride a bicycle means no more than how to balance and pedal at the same time. Bicycle behavior is rarely considered. Further, police officers are often confronted by hostile parents who do not believe it possible for bicycle traffic violations to be against the law.

Out of sheer ignorance, many parents are placing their children's lives in unnecessary danger. The subcommittee agreed that these parents must be reached. A curriculum for formal education to be offered through adult education, community park and recreation departments, etc., should be developed, along with informal "public information" programs. Without parental support there is little that can be done to teach young bicyclists to obey traffic laws and ride responsibly.

THE COMMUNITY AT LARGE

The Chief of Police in Willmar, Minnesota was tired of seeing children injured and killed on their bicycles. He decided he would prefer to see them ticketed. But before the department began a major bicycle ticketing effort, it conducted a massive appeal for public support. The community was told repeatedly that in two weeks bicyclists were going to receive tickets for traffic violations. They were also told why. When the Richfield Police decided to begin enforcing the law as applies to bicycles they waged a similar preliminary campaign for community support, only they spent an entire year preparing the public.

Most communities do not recognize the serious nature of the bicycle safety problem. Many people still regard the bicycle as a toy and are unaware of the dangers involved. They do not realize that what caused only a minor scrape could as easily have resulted in death. The chance of how a first developing a broad base of community support, a vigorous program of bicycle safety enforcement is likely to fail. However, once communities have come to understand the bicycle safety situation, they have been tremendously supportive of efforts to improve it.

After months of study the safety education subcommittee concluded that an immediate, multi-lateral effort must be made to educate all facets of society as to the hazards associated with bicycles and ways to avoid them. The subcommittee is acutely aware of the depth of this proposal, and, therefore, requests that it form the core of the recommended advisory committee which will determine methods to implement these findings.

CERTIFICATE OF COMPETENCE

The subcommittee is fully aware of the political problems associated with requiring a minimal proficiency level by all persons using the public roads. However, every bicycle problem or solution considered seems to apply only to one category of bicyclists. Recommendations which are both consistent and fair for children or recreational bicyclists are often overly restrictive for adult commuters.

The school curriculum which the subcommittee hopes to develop will result in the awarding of a certificate of competence to passing students, as is now done in Bloomington. The subcommittee was impressed with this merit system, which instills in students a desire to do the right thing. If such certificates were awarded on an informal basis throughout Minnesota in both public and private schools, a future move to require them, or a drivers license, for bicyclists riding in the streets would not be unreasonable.

As a long term recommendation the subcommittee asks that by 1980 bicycle operators certificates take on a legal status and that they, or a drivers license, be required by all persons operating vehicles on the public roads. The subcommittee further recommends that the advisory committee consider establishing a bicycle operator's classification system, whereby restrictions, if necessary, could be placed upon younger riders without infringing upon the right currently enjoyed by adults.

Committee agreement on this recommendation was not unanimous. One member feared that handicapped people might not be able to pass such a test and would lose a valuable transportation and recreation option. The subcommittee does not wish to deny the bicycle to handicapped individuals, and would recommend that special provisions be made for them, as well as for adults without drivers licenses. However, these individuals should not be excluded altogether from certification requirements if we are serious about insuring that all persons using the public roads have demonstrated some degree of capability.

The subcommittee stresses that it is recommending only a certification of competence, and not a license. It does not wish to make bicycle use a rescindable privilege, but only to insure that all persons operating vehicles on the public roads have a minimum knowledge of traffic laws and vehicle operation.

MINNESOTA STATE BICYCLE COMMITTEE
SUBCOMMITTEE ON THE MOTOR VEHICLE CODE

INTRODUCTION

The traffic laws commentary, published by the National Highway Traffic Safety Administration accurately reflects the complex situation pertaining to bicycle laws. The Motor Vehicle Code Subcommittee concurs with their findings and includes a paraphrased summary of the traffic laws commentary observations as a preliminary policy statement.

Existing and proposed laws to regulate the ownership or use of bicycles need to be evaluated in terms of recent changes in the volume of bicycle traffic and attitudes about bicycle use. Many existing laws were written at a time when the bicycle was thought of as a child's toy, used on sidewalks and quiet residential streets. But the child's toy also is an adult vehicle, used in most places where motor vehicles are used. Concern about energy consumption, pollution, physical fitness, and the increasing inefficiency and cost of other forms of transportation, has thrust the bicycle forward as a viable means of transportation, exercise and recreation. The volume of bicycle traffic alone would require reevaluation of existing laws to assure that bicycles and other forms of traffic continue to move efficiently and safely. Because use of bicycles helps to alleviate some serious problems facing contemporary society, public policy considerations would suggest that laws regulating bicycles should not merely facilitate existing uses but should encourage bicycle riding as means of transportation. The existing laws should be reevaluated with these considerations in mind.

In determining how bicycles should be regulated, it is extremely important to recognize that bicyclists differ substantially in terms of their physical ability, judgment, riding experience and riding purpose. The population of bicyclists includes children, some riding only for play and some for transportation such as to and from school. The population includes adult novice riders, persons who lack experience and who ride only occasionally for recreation or commuting, and experienced adult riders who use their bicycle to commute to work daily or who tour by bicycle over long distances. The population also includes racing and touring bicyclists who are exceptionally skillful, strong, and experienced, and who ride substantial distances at speeds averaging over 20 miles per hour for training and conditioning.

Laws which fail to take cognizance of this diversity will be unsatisfactory for one or more elements of bicycle users, and may unreasonably restrict that element, or may endanger it. Laws regulating bicycles should either be written broadly so as to allow different options for different elements of the bicycle population, or should very specifically regulate particular elements of the population in the most optimal manner. This latter suggestion, that different bicyclists should be subjected to different rules on the basis of the bicyclist's level of experience or skill needs to be studied. Licensing of some sort would probably be a necessary element in any attempt to subject bicyclists to different rules on the basis of the bicyclist's level of experience (see recommendations from the safety education subcommittee).

The widest diversity is between the child and the adult cyclist. Rules which adequately protect the child cyclist may unreasonably burden the adult. Rules appropriate for adults, however, may be hazardous to the child.

Increased use of the bicycle as a means of transportation, along with recognition that the bicyclist is extremely vulnerable to injury or death resulting from collision with vehicles, has resulted in a move to construct or establish separate facilities for bicycle traffic. The movement appears to be grounded in the belief that separate bicycle facilities will provide greater safety for the bicyclist. Whether this belief is in fact correct should be determined before any extensive network of separate bicycle facilities is provided for the use of bicyclists.

Separate bicycle facilities which are placed on or alongside an existing roadway present some new and rather difficult problems involving right-of-way, position of vehicles on the roadway, and passing, and the proper course or making turns. Although such separate bicycle facilities are being established in many areas of the country, the review of laws and ordinances reveals that very few jurisdictions have attempted to address these problems in their bicycle regulations, and none has done so in a comprehensive manner which resolves the important problems.

Unless these problems can be resolved in a satisfactory manner, bicyclists may encounter greater danger on separate facilities than would be encountered riding on the roadway with the other traffic. If these problems cannot be resolved in a manner which will promote the safe and efficient flow of bicycles and all other forms of traffic on the highway, then the desirability of separate bicycle facilities on or alongside a roadway would clearly be questionable.

Whatever is done to revise and upgrade the bicycle laws to meet contemporary traffic conditions, a substantial degree of uniformity remains desirable. Uniformity for laws regulating bicycles is just as desirable as it is for laws regulating motor vehicular traffic. It would be a serious error to assume that uniformity is less important for bicycle laws because bicycles are less mobile or less likely to cross jurisdictional lines. Of course, many bicyclists do cross jurisdictional lines, and such bicyclists need and deserve uniform laws regulating their operation. It is unsafe, unreasonable, and illogical to require a bicyclist to follow different rules and change his manner of operation just because he has crossed a political boundary line.

Of equal importance is the fact that the vehicle driver who comes all the way across the country needs to know the bicyclists in New York will follow the same laws and ride in the same manner as the bicyclists he encounters in California. It is certainly not in the best interests of highway safety or efficiency to have a driver and a bicyclist with different perceptions of what the other is likely to do.

RECOMMENDATIONS

AMEND 169.01, SUBD. 2, SUBD. 31, AND SUBD. 51 TO READ:
Subd. 2. Vehicle. "Vehicle" means 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.

Subd. 3. Motor Vehicle. "Motor Vehicle" means every vehicle which is self-propelled and-not-deriving-its power-from-overhead-wires and every vehicle which is propelled by electric power obtained from overhead trolley wires but not operated upon rails, except vehicles moved solely by human power.

Subd. 31. Roadway. "Roadway" means that portion of a highway improved, designed, or ordinarily used for vehicular travel, exclusive of the sidewalk, berm, or shoulder even though such sidewalk, berm or shoulder is used by persons riding bicycles or other human powered vehicles. In the event a highway includes two or more separate roadways the term "roadway" as used herein shall refer to any such roadway separately but not to all such roadways collectively.

Subd. 51. Bicycle. "Bicycle" means every device propelled solely by human power upon which any person may ride, having two tandem wheels either-or-which-is-ever-14 inches-in-diameter, except scooters and similar devices and including any device generally recognized as a bicycle though equipped with two front or rear wheels.

AMEND 169.01 BY ADDING SUBD. 61. AND SUBD. 62 TO READ:
Subd. 61. Bicycle Lane. "Bicycle Lane" means that portion of a roadway set aside by the governing body of a political subdivision having jurisdiction over the roadway for the exclusive use of bicycle or other non-motorized vehicles, and so designated by appropriate signs and markings.

Subd. 62. Bicycle Path. "Bicycle Path" means any way, path, or sidewalk or portion thereof separate from a roadway and designated for the use of bicycles or other non-motorized vehicles by the governing body of a political subdivision.

AMEND 169.18 BY ADDING TO SUBD. 7 (d) A NEW SECTION:

(d) Whenever a bicycle lane has been established on a roadway, any person operating a motor vehicle on such a roadway shall not drive in the bicycle lane except to park where parking is permitted, to enter or leave the highway, or to prepare for a turn.

AMEND 169.19 BY ADDING TO SUBD. 1 (7) A NEW SECTION:

(7) Whenever it is necessary for the driver of a motor vehicle to cross a bicycle lane that is adjacent to the lane of travel to make a turn, the driver shall drive the motor vehicle into the bicycle lane prior to making the turn, and shall make the turn, yielding the right-of-way to any vehicles approaching so close thereto as to constitute an immediate hazard.

AMEND 169.19 SUBD. 8 HAND SIGNALS, PARAGRAPH (2) TO READ:

(2) Right turn. ...hand and arm extended upward, except that a bicyclist or motorcyclist may extend the right hand and arm horizontally to the right side of the bicycle or motorcycle.

AMEND 169.20 SUBD. 4. TO READ:

Subd. 4. Entering-highway-from-private-driveway Vehicle entering roadway. The driver of a vehicle entering-or crossing-a-highway-from-a-private-road-or-driveway about to enter or cross a roadway from any place other than a roadway shall yield the right-of-way to all vehicles approaching on such-highway the roadway to be entered or crossed.

AMEND 169.21 SUBD. 3. PARAGRAPH 4 TO READ:

Notwithstanding the other provisions of this section or the provision of any local ordinance, every driver of a vehicle shall exercise due care to avoid colliding with any pedestrian or any person operating a human powered vehicle upon-any-roadway-and-give-warning-by-sounding-the horn-when-necessary and shall give an audible signal when necessary and shall exercise proper precaution upon observing any child or any obviously confused, incapacitated or intoxicated person.

AMEND 169.31 STOP AT SIDEWALKS TO READ:

169.31 Stop at Sidewalks. The driver of a vehicle ~~within-a-business-or-residence-district~~ emerging from an alley, driveway, or building shall stop such vehicle immediately prior to driving onto a sidewalk or into a sidewalk area ~~extending-across-any-alleyway-or-private~~ driveway and shall yield the right-of-way to any pedestrian and all other traffic on the sidewalk.

REWRITE 169.221 TO READ:

Operation of Bicycles and Other Human Powered Vehicles.

Subd. 1. Traffic laws apply. Every person operating a vehicle by human power or riding a bicycle shall have all of the rights and duties applicable to the driver of any other vehicle by this chapter, except as to special regulations in this chapter and except as to those provisions of this chapter which by their nature can have no application.

Subd. 2. Manner and number riding. No bicycle shall be used to carry more persons at one time than the number for which it is designed and equipped, except on a baby seat attached to the bicycle, provided that such seat is equipped with a harness to hold the child securely in the seat and that protection is provided against the child's feet hitting the spokes of the wheel or in a seat attached to the bicycle operator.

Subd. 3. Clinging to vehicles. (a) No person riding upon any bicycle, coaster, roller skates, toboggan, sled, skateboard, or toy vehicle shall attach the same to any streetcar or vehicle upon a roadway. (b) This section shall not prohibit attaching a bicycle trailer or bicycle semi-trailer to a bicycle if that trailer or semi-trailer has been designed for such attachment.

Subd. 4. Riding on roadways and bicycle paths. (a) Every person operating a bicycle upon a roadway at a speed less than the speed of traffic moving in the same direction at such time shall ride as close as practicable to the right-hand curb or edge of the roadway except under any of the following situations:

a. When overtaking and passing another vehicle proceeding in the same direction.

b. When preparing for a left turn at an intersection or into a private road or driveway.

c. When reasonably necessary to avoid conditions (including, but not limited to, fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or narrow width lanes) that make it unsafe to continue along the right-hand curb or edge.

Every person operating a bicycle upon a roadway or a highway which carries traffic in one direction only and has two or more marked lanes, may ride as near the left-hand curb or edge of such roadways as practicable.

(b) Persons riding bicycles upon a roadway shall not ride more than two abreast and shall not impede the normal and reasonable movement of traffic and, on a laned roadway, shall ride within a single lane. (c) No person shall ride a bicycle upon a sidewalk within a business district. A person operating a bicycle on a sidewalk, or across a roadway on a crosswalk shall yield the right-of-way to any pedestrian and shall give audible signal before overtaking and passing such pedestrian. A person shall not ride a bicycle on a sidewalk, or across a roadway on a crosswalk, where such use of bicycles is prohibited. A person operating a vehicle by human power on a sidewalk or across a roadway on a crosswalk, shall have all the rights and duties applicable to a pedestrian under the same circumstances.

Subd. 5. Carrying 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 handle bars.

Subd. 6. Bicycle Equipment. (a) Every bicycle when in use at nighttime shall be equipped with, or its operator shall carry, 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 of Public Safety which is 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. No person may after January 1, 1976, at any other time when there is not sufficient light to render clearly discernible persons and vehicles on the highway at a distance of 500 feet ahead operate a bicycle unless the bicycle or its operator is equipped with reflective surfaced that shall be visible during the hours of darkness from 600 feet when viewed in front of lawful lower beams or head lamps on a motor vehicle.

The reflective surfaces shall include reflective materials on each side of each pedal to indicate their presence from the front or the rear and with a minimum of 20 square inches on each side of the bicycle or its operator, of white reflective material. All reflective materials used in compliance with this subdivision shall meet the requirements as prescribed by the commissioner of public safety.

(b) Every bicycle shall be equipped with a brake which will enable the operator to make the braked wheels skid on dry, level, clean pavement.

(c) No person shall operate upon the highway any bicycle equipped with handle-bars so raised that the operator must elevate his hands above the level of his shoulders in order to grasp the normal steering grip areas.

(d) No person shall operate upon a highway any bicycle which is of such a size as to prevent the operator from stopping the bicycle, supporting it in an upright position with at least one foot on the highway surface, and restarting in a safe manner.

Subd. 7. Sale with reflectors. No person may sell or offer for sale any new bicycle unless it is equipped with such reflectors as are prescribed by subdivision 6.

Subd. 8. Turning and lane changes. A signal to turn right or left when required shall be given continuously during no less than the last 100 feet travelled by the bicycle before turning, and shall be given while the bicycle is stopped waiting to turn. A signal by hand and arm need not be given continuously if the hand is needed in control or operation of the bicycle.

Subd. 9. Bicycle Parking. (a) A person may park a bicycle on a sidewalk unless prohibited or restricted by an official traffic control device. (b) A bicycle parked on a sidewalk shall not impede the normal and reasonable movement of pedestrian or other traffic. (c) A bicycle may be parked on the roadway at any angle to the curb or edge of the roadway at any location where parking is allowed. (d) A bicycle may be parked on the roadway abreast of another bicycle or bicycles near the side of the roadway at any location where parking is allowed. (e) A person shall not park a bicycle on a roadway in such a manner as to obstruct the movement of a legally parked motor vehicle. (f) In all other respects, bicycles parked anywhere on a highway shall conform with the provisions of Section 169.34 regulating the parking of vehicles.

Subd. 10. Bicycle events. (a) Bicycle events, contests, or racing on a highway are permitted when an event has been approved by state or local authorities on any highway under their respective jurisdictions. Approval of bicycle highway events shall be granted only under conditions which assure reasonable safety for all participants, spectators, and other highway users, and which prevent unreasonable interference with traffic flow which would seriously inconvenience other highway users. (b) By agreement with the approving authority, participants in an approved bicycle highway 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.

Subd. 11. Parent or guardian not to permit violations. Any parent or guardian of a child who authorizes or knowingly permits a child to violate any of the provisions of Section 169.221 is guilty of a petty misdemeanor.

Subd. 12. Penalties. Any person convicted of violating any provision of Section 169.221 is guilty of a petty misdemeanor.

RATIONALE

DEFINITIONS-VEHICLES

Amending the Motor Vehicle Code to define bicycles as vehicles solves most of the problems confronting bicyclists. Under existing law, horses and carriages are considered vehicles, but bicycles are not. Extending the definition of "vehicle" to include bicycles makes extensive revision of the Motor Vehicle Code unnecessary and is recommended by the Uniform Vehicle Code.

DEFINITIONS-BICYCLES

The recommended definition of bicycles excludes mopeds and extends to all bicycles, regardless of size, the obligation to observe traffic rules when on the public streets. The subcommittee does not recommend that children on very small bicycles be in the street, but would require them to behave responsibly if they are.

BICYCLE LANES

Motor Vehicle behavior with respect to bicycle lanes is a serious problem for both motorists and bicyclists. It is not addressed by the Uniform Vehicle Code, so the recommended sections are similar to those adopted by the California Legislature. They clarify when a motor vehicle may enter a bicycle lane and prescribe safe procedures for turning through them.

SIGNALING

Bicyclists find it extremely difficult to signal right turn in the traditional way while maintaining control of the bicycle. Many of them chose to signal a right turn simply by extending their right arm horizontally. This is a signal which is easily accomplished and readily understood by motorists. The proposed amendment to the Motor Vehicle Code accepts this signal as legal for both bicyclists and motorcyclists, and was adopted (for bicycles only) by the California Legislature. It also allows for the signal to be interrupted as necessary to operate the bicycle safely.

WHERE TO RIDE

The proposed new section on bicycles brings the law in accordance with the riding behavior of many responsible bicyclists. It allows bicyclists moving slower than the prevailing traffic to move into the center of the lane when passing, preparing to turn, or avoiding hazards, including when a lane becomes too narrow to be shared safely by a bicyclist and a motor vehicle.

On a one-way street with two or more lanes, bicyclists would be able to ride on the far left side of the road. This provision is essential for those riding in a situation similar to downtown Minneapolis, and is consistent with the concept of turning left on a red light after stopping if turning from a one-way street to another.

Bicycles, like any other vehicle, would be able to use any lane when moving at the prevailing speed of traffic. All of these provisions were adopted by the California Legislature.

TWO ABREAST

Current Minnesota state law and the Uniform Vehicle Code permit riding two abreast. In its discussion, the committee recognized that under some conditions, and for some riders, this may not be the safest way to proceed. However, it was also realized that under other conditions, especially on roads with little traffic volume, wide shoulders, or designed lanes, cyclists riding two abreast neither impede traffic nor create a hazard to themselves or other users. The Uniform Vehicle Code suggests that parallel riders should not impede the normal and reasonable movement of traffic, and shall ride within a single lane.

EQUIPMENT

The subcommittee recognizes that the recommended provisions on bicycle equipment may be controversial. The interests of safety are often overridden by fashion or thrift considerations. Bicycles with very high handlebars are dangerous to operate. Fortunately they are going out of style, so fewer children are riding them. The proposal would prevent a return to fashion of this dangerous equipment.

More controversial is the provision requiring the bicycle to be the proper size for the person who is to operate it. The subcommittee was in full agreement as to the need for such a provision and adopted the language proposed by the California Statewide Bicycle Committee which measures proper size in terms of stopping and restarting safely. The subcommittee hopes that the Legislature will agree that many parents, out of ignorance, are needlessly endangering the lives of their children by purchasing bicycles they can "grow into".

PARKING

The subcommittee adopted the wording of the Uniform Vehicle Code on bicycle parking, allowing it on sidewalks except where prohibited or if it impedes pedestrian traffic, and allowing it on the roadway where parking is allowed, providing it doesn't impede the movement of legally parked motor vehicles.

BICYCLE EVENTS

Bicycle racing is one of the charter Olympic sports, and Minnesota competitors have for many years been among the strongest riders in the mid-west. The Uniform Vehicle Code recognizes the importance of providing for this type of event. The proposed section clarifies the obligations of sponsors of such events, and describes conditions under which they may be approved. These procedures and arrangements reflect current practices.

PARENTAL RESPONSIBILITY AND PENALTIES

The subcommittee recognized the problems sometimes faced by police when encountered by angry parents, and, therefore, recommends the adoption of a provision which holds responsible any parent or guardian who authorizes or permits violations of traffic laws by children on bicycles. Such violation would be a petty misdemeanor.

STATE BICYCLE COMMITTEE SUBCOMMITTEE ON ENGINEERING

RECOMMENDATION

Amend Chapter 199 to include a paragraph requiring the Minnesota Department of Transportation to include bicycles as an integral part of the transportation planning process.

RATIONALE

The engineering subcommittee immediately recognized its own limitations. Subcommittee members lacked the time, expertise, and basis to recommend one set of design standards over another, or to make specific recommendations as to the location of paths, etc. The following discussion and rationale development took place at the last meeting of the full committee.

Serious bicycle problems in the engineering area remain and must be confronted. As the Traffic Laws Commentary quoted previously so aptly states, the whole subject of separate bicycle facilities needs a great deal of study. While the committee does not suggest that bike trails serve no needs, it does recognize that these needs should be carefully measured before implementing a major bicycle trail program. When such trails are built, they should be desirable to use. Some municipalities have constructed trails which, due to poor design, location, maintenance and continuity, are useless to bicyclists. Taxpayers become angry when they see bicyclists on a street adjacent to a bike path, feeling their money has been wasted. In some cases it may have been. It is not within the scope of this report to pass judgment on specific bicycle trail segments. Rather, the committee calls to the attention of the Legislature some of the problems associated with bicycle trail development.

Many bicyclists would prefer to use the highways in any event. Little travelled county roads connect almost every part of the state, and provide long distance recreational bicyclists with better facilities than could realistically be duplicated. Before constructing any separate bicycle facility, particularly outside the metropolitan area, potential use must be carefully estimated.

Similarly, commuter bicyclists within the metropolitan area are in most cases adequately served by the street system. The committee strongly supports the concept of barrier removal adopted by the Metropolitan Council. Under this theory, the limited money available for bicycle trail development is spent on building facilities to cross rivers and railroad tracks, traffic control devices to make a side street into a bicycle through street, etc. The committee recommends that the state and its local political subdivisions maximize their existing investments in public facilities by opening them to optimal bicycle use.

The committee recognizes that there is a legitimate existing and latent need for additional separate bicycle facilities, and recommends that such demand be met after careful estimation. When such facilities are built, they must be of a quality which will appeal to bicyclists. The design speed, width, radius of curvature, surface, etc., must be realistic from the perspective of the bicyclist to insure usage.

The question of multiple use must also be addressed. Pedestrians and joggers currently clog many bike trails creating a potential hazard to both themselves and bicyclists. This may be tolerable in parks or around lakes where bicyclists are only out to get some exercise and enjoy the fresh air. But it is certainly unacceptable to someone going to work or class, or who prefers more rigorous exercise.

When separate trails are built, they often overlap several jurisdictions. In such cases it becomes extremely difficult to know which of several conflicting design standards to use. The Department of Transportation and Natural Resources and the State Planning Agency all have recommended standards, as do many federal funding sources. The need for a uniform set of standards seems clear.

The needs of cyclists vary greatly according to their skills and interests. Throughout the state, facilities have been provided for riders of limited ability, but the requirements of the racing cyclists have not been met. Lack of any racing track, a velodrome, has effectively prevented Minnesota's riders from becoming nationally competitive. A velodrome is a specialized facility which can also be used for community cycling programs. Therefore, construction of a bicycle racing track should be considered an essential part of an overall program for cycling. Such a facility could be developed along with any new major metropolitan sports facility.

In 1973, Governor Wendell Anderson created a State Trail Council and charged it with the development of a state trail plan, of which bicycles are one component. The plan has never been completed. The committee recommends that the bicycle trail plan, when completed, respond to the issues raised in this report. The seriousness of the bicycle situation should not be under-estimated.