

TRANSPORTATION COMMITTEE - MINUTES
February 8, 1977
3:30 P.M.

MEMBERS PRESENT: Chairman Hayes Mr. May
Mr. Demers Mrs. Westall
Mr. Glover

MEMBERS ABSENT: Mr. Jacobsen
Mr. Harmon

GUESTS PRESENT: Donald R. Olson, M.D., Nev. Neurosurgical Soc.
Judi Lemen, Nevada PTA
Darrell Taylor, Nevada PTA
Mr. Lewis Kattenhorn
Bonnie Parnell, Nevada PTA
Pearl O'Boyle, First Nevada Unit N.A.P.
Frances Gest, First Nevada Unit N.A.P.
Mary E. Murray, First Nevada Unit N.A.P.
Julia B. Pangborn, First Nevada Unit N.A.P.
John Borda, Office of Traffic Safety
Dennis Tatum, Office of Traffic Safety
Donald J. Crosby, Nevada Highway Department
Brent Howerton, Nevada Highway Department
Ed Sutherland, NSOAA
Allen Frenzel, National Rehabilitation
Chris Lanphere, Rehabilitation
Barbara Guzman, Developmental Disabilities Council
Jim Niclos, UPI
- Sue Morrow, Nevada Appeal
Charles Lobell, Review-Journal
Virgil P. Anderson, AAA
Shirlee A. Wedow, State Parliamentarian
William Kissam, Assemblyman
Bill Kissam, Jr.
John Medue
Mel Stenninger, Elko Daily Free Press
Mrs. M. Stenninger
Steven Coulter, Assemblyman

AB 7

Donald R. Olson, M.D., Nevada Neurosurgical Society, was the first speaker this date, continuation of hearing from February 1. Speaking for all neurosurgical surgeons in Nevada, Dr. Olson stated the group was inalterably opposed to anything that would dilute or negate headgear requirements. There is at least one victim of motorcycle accident in hospital daily, nearly all with some form of head injury, most very serious. Many survive accidents that would be fatal had a helmet not been worn. The continuation of headgear is a must. Assembly

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Mr. Demers asked if most accidents were the result of excessive speed.

Dr. Olson said no, that most accidents occurred in the dirt, and speed was not the factor.

There are various types of helmets and the safety features should be more strictly controlled. Many of them were substandard but often do mean the difference between life and death.

Mr. May asked the chances of complete recovery for victims of head injuries and was told the chances were "very slim". The victims could live functional, useful lives, but would not achieve their previous potential.

Mr. Demers asked if helmets were recommended by the doctors for any specific age group and was told that helmets should be worn by all persons who ride motorcycles.

Judi Lemen, representing 23,000 PTA members, introduced Darrell Taylor, from Battle Mountain, who sustained serious and permanent injuries as a result of a motorcycle accident. (For Ms. Lemen's testimony see EXHIBIT A)

Darrell Taylor, of Battle Mountain, was involved in a motorcycle accident at the age of 17. Mr. Taylor had been a member of the high school track team. He is now 27 and permanently disabled with defects of speech, sight and muscle control. Injuries sustained, other than to the head and neck, were not of a serious nature. (For Mr. Taylor's testimony see EXHIBIT B).

Mr. Lewis Kattinhorn, Mr. Taylor's uncle, stated the average motorcycle rider did not know how easily he could be hurt, that it was the nature of the fall and not the force of impact, or speed, that resulted in the permanent damage in motorcycle accidents.

Mr. Allen Frenzel, National Rehabilitation, Special Program Coordinator for the Bureau of Vocational Rehabilitation, was opposed to passage of AB 7. In 1976 the national average cost to rehabilitate the severely disabled was \$4000. Most victims of motorcycle accidents are so severely damaged they are unfeasible for rehabilitation services, which are very expensive. At the present time there is a case in Reno, victim of a motorcycle accident, with permanent visual damage, the cost of which so far,

exceeds \$70,000. Many become recipients of multiple benefits-- Rehabilitation Services, N.I.C., Social Security Program. Persons injured in motorcycle accidents are one of the most damaged groups they work with.

Mr. John Borda, Nevada Office of Traffic Safety, presented three documents: one, a position paper on effectiveness of helmets - EXHIBIT C; two, "cause of Death---", EXHIBIT D; and three, evidence refuting statistics quoted at hearing on February 1, --EXHIBIT E.

Mr. James Lambert, Cheif of the Nevada Highway Patrol, also opposed AB 7. The enactment of the helmet law was to reduce injuries and death. It is a proven safety factor. From a law enforcement viewpoint, it is an impossibility to enforce this law, because of the segregation by ages. The State should require everyone or no one to wear helmts. The Federal Government would not invoke any penalties for two years and then, if pressured, may remove the helmet requirement entirely. If we are going exert our state rights, don't go half way. Repeal the entire measure.

Assembly Coulter, sponsor of AB 7 defended the bill. This was not passed in the State of Nevada with the intent of saving lives but because the Federal Government would withhold highway funds. It should be left up to the individual as to whether or not he wears a helmet. The removing of the requirement will not eliminate the use of helmets.

From a safety point of view, 91 out of 93 helmets tested were proven to be faulty but the Department of Transportation declined to say which helmets passed the test.

Steve Scheerer, Legislative Intern, supplied literature referred to by Mr. Dennis Tatum--hearing of February 1. (EXHIBIT F)

AB 223

Mr. Donald Crosby, Nevada Highway Department, stated he was not opposed to AB 223 but could see no purpose for the act.

Chairman Hayes commented the bill came from Judiciary and Mr. Crosby stated it only restricted them a little more, by changing the effective date to February 20 from March 15.

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Mr. Ed Sutherland, President of Nevada State Outdoor Advertisers Association, stated he did not understand the purpose of the bill, except perhaps to clean up the language. He had the same objection to the added restriction brought on by the change of dates as Mr. Crosby. They see no reason why it should or should not be passed.

Chairman Hayes stated the Committee would hold the bill for clarification.

A five minute recess was declared.

Chairman said there were two matters for Committee discussion but needed a full committee; therefore the measures under question would be held until Thursday, February 10.

The meeting was adjourned at 4:10 P.M.

Respectfully submitted

Marjorie Robertson

Exhibit A

NAME IS JUDI LEMEN --- REPRESENT 23,000 members of NEVADA PTA

1. Since 1969 the Nevada PTA has supported the Helmet Law and reaffirmed that position in 1971, 1973, and 1975.
2. Again, we support the law as it presently stands and oppose AB-7.
3. First of all, I will not repeat all the statistics from the office of Traffic Safety which have already been given at the pastg hearing, but will emphasize the fact that most all people who did testify in favor of the bill said even tho they felt there should not be a law requiring people to wear helmets, they themselves would because of their good judgment wear them . Furthermore, they would require their children to wear them also.
4. The U.S. Supreme Court has upheld the Constitutionality of mandatory helmet laws as a legitimate exercise of the police powers of a state for the general promotion of the Health, Safety, and Welfare of Citizens.
5. The NEvada PTA feels it is the duty of our legislators to make kaws to protect the citizens of our state who do not have good judgment.
6. Furthermore, we find it hard to believe that AB-7 would be enforceable. It would be very hard for a hiway patrolman driving 40 to 55 mph to determine the age of a motorcyclist.
7. One statistic which we find to be very significant was not mentioned at the last hearing. The first year helmets were required, motorcycle fatalities decreased from 19 in 1971 to 9 in 1972---a ~~saving~~ of 10 lives.
8. We feel also, that this law does not only affect the safety factors to our citizens and children, but affects each taxpayer of this state when the lack of a helmet causes serious injuries requiring large amounts of financial involvement to the injured.
9. As further testimony of our apposition to a change in the present law, I would like for you to hear a personal story. This young man came to me and asked to be heard regarding this law. He lives in Battle Mountain and has returned here so that you could hear his story. ~~MixxxxxxxxixxDaxxxixxTaylxxx~~ It is easy for us to recite statistics today and we think things like his problem can never happan to us or our children. If we can save one person from this or save one life, the present law is certainly keeping on the books. His name is Darrell Taylor.

Ward

Injured in 1967 -

1. Week after Hi School Grad.
2. Next day was to pick up helmet
3. Hit you on speedometer + ~~my~~ broke collar bone in soft dirt + injured end of spinal column - twisting skull damaged that area.
4. Hospital - Unconscious 8 mos.
4 mos. Regaining full awareness
Last 1 year
Bills approx \$80,000
Small muscles died + left him
fully disabled -
This costs the State
\$ under N.I.C.
5. ~~27~~ Years Old
27
6. Muscle Control is
Impaired in his eyes.



STATE OF NEVADA

OFFICE OF TRAFFIC SAFETY

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RAC (3) ~~12~~

MIKE O'CALLAGHAN
Governor

JOHN W. BORDA
Director

MOTORCYCLE HELMET TESTIMONY

For your information, I would like to introduce a position paper on motorcycle helmets which the Office of Traffic Safety just received. It is quite a comprehensive summary of the literature available on motorcycle helmet effectiveness and discusses some of the arguments which have been brought up against helmet usage. Among other things, the position paper points out and documents that:

1. The majority of motorcycle fatalities are caused by head injuries, and the use of approved helmets significantly reduces the occurrence of serious and fatal head injuries.
2. The U.S. Supreme Court has held that the motorcycle helmet law is constitutional.
3. Motorcycle helmets do not increase neck injuries.
4. Helmet use does not reduce hearing.
5. Helmet use does not restrict vision substantially.



7-25-76

COMMONWEALTH of VIRGINIA

Highway Safety Division
300 Turner Road

RICHMOND, VA. 23225
(804) 276-9500

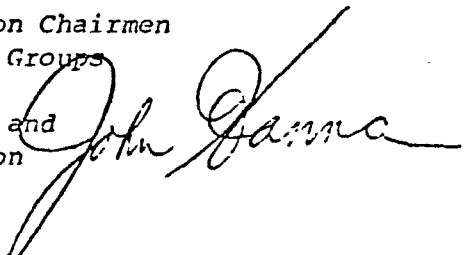
JOHN T. HANNA
DIRECTOR

December 6, 1976

TO: Highway Safety Coordinating Committee
 Chiefs of Police
 Highway Safety Commission Chairmen
 Highway Safety Interest Groups

FROM: Highway Safety Division and
 Highway Safety Commission

SUBJECT: Motorcycle Helmet Law



Virginia has had a motorcycle helmet law since 1970. The fatality rate, based on motorcycle registrations, has decreased significantly.

The Virginia Highway Safety Division and the Commission have received information that a bill to repeal the helmet law may be introduced during a future session of the General Assembly. The Division and the Commission plan to oppose the repeal of this law for the reasons contained in our attached position paper. Your observations, pro or con, on this law would aid our efforts. We would appreciate a statement from you or your organization.

The Highway Safety Division is looking for a limited number of helmets that have been damaged in motorcycle accidents and have probably resulted in saving a life. These will be used for display purposes and the Division will replace these helmets with new ones. However, the case will have to be certified or authenticated by the treating physician or the investigating police officer. Arrangements can be made for the helmet pick-up by notifying the office of Mr. John T. Hanna, Director, Highway Safety Division, 300 Turner Road, Richmond, Virginia 23225, telephone (804) 276-9600.

JTH:pb

Attachment



COMMONWEALTH of VIRGINIA

Highway Safety Commission

HIGHWAY SAFETY COMMISSIONERS
SHEARER C. BOWMAN, JR., CHMN., RICHMOND
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CHARLES H. KETCHAM, JR., MARSHALL
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KENNETH W. SMITH, ALEXANDRIA
S. STROTHER SMITH, JR., RICHMOND
DR. ROBERT W. WADDELL, VIRGINIA BEACH
JUDGE RUTH O. WILLIAMS, STUART

December 6, 1976

300 TURNER ROAD
RICHMOND, VA. 23225
(804) 276 9600

You may or may not be aware that Virginia has had a motorcycle helmet law since 1970. As a result of this law, motorcycle fatalities have been reduced in Virginia by 50% in spite of the fact that motorcycle registrations have increased 63% since 1970.

The Virginia Highway Safety Commission has received information that a bill to repeal the helmet law may be introduced in the January 1977 General Assembly. Those of us who manage trauma cases are well aware of the benefit of helmets and need not be reminded of their effectiveness.

You can be of great service to the Commonwealth of Virginia by contacting your legislators at your earliest convenience and expressing your opposition to the repeal of this law.

The Highway Safety Division is looking for a limited number of helmets that have been damaged in motorcycle accidents and have resulted in probably saving a life. These will be used for display purposes and the Highway Safety Division will replace these helmets with new ones. However, the case will have to be certified or authenticated by the treating physician or the investigating police officer. Arrangements can be made for the helmet pick-up by notifying Mr. John T. Hanna, Director, Highway Safety Division, 300 Turner Road, Richmond, Va. 23225, telephone (804) 276-9600.

The Virginia Highway Safety Commission will vigorously oppose the repeal of the helmet law and your opposition to repeal of this law would aid our efforts. Please send your statements of opposition to Mr. Hanna at the above address.

Sincerely yours,

Robert W. Waddell, M.D., F.A.C.S.

RWD r

MANDATORY MOTORCYCLE HELMET LAW
Position Paper of the
VIRGINIA HIGHWAY SAFETY DIVISION

November 15, 1976

EXECUTIVE SUMMARY FOR MANDATORY MOTORCYCLE HELMET LAW POSITION PAPER

The Virginia Highway Safety Division considers the Virginia mandatory motorcycle helmet law useful and effective in promoting highway safety and encourage its retention and enforcement. The preponderance of evidence indicates that safety helmets significantly reduce the extent of injury and the number of fatalities incurred in motorcycle-related accidents and do not pose major adverse effects to their wearers.

Contrary to the claims generated by advocates of helmet law repeal, helmets do not reduce auditory capacity, as they in no way alter the signal-to-noise ratio inherent in the driving situation. This ratio is the primary factor involved in whether or not a given traffic noise is perceived. In addition, helmets have not been found to significantly impair general visual capacity and contribute only minimally to reduction of peripheral vision. Although proponents to repeal the law assert that helmets cause serious neck injuries, research has not upheld this allegation. The U. S. Supreme Court has held that the helmet law is constitutional.

In studies undertaken on state and national levels, it was found that the use of helmets undeniably reduces the occurrence of serious and fatal head injuries sustained by those motorcyclists involved in accidents. In states where helmet law has been enforced, motorcycle fatalities have dropped dramatically. On this basis, the Virginia Highway Safety Division designates this law as beneficial and in the safety interests of the individual motorcyclist and the general public of the Commonwealth.

The Highway Safety Division feels that the law can and should reasonably require usage while operating a motorcycle on public highways as a public safety measure which benefits society in many ways.

MANDATORY MOTORCYCLE HELMET LAW

POSITION PAPER

In June, 1967, the National Highway Traffic Safety Administration included a motorcycle safety standard as one of thirteen such Highway Safety Program standards. According to their proposal, individual states were designated as responsible for requiring the use of safety helmets among motorcycle riders. The legislative body of the Commonwealth of Virginia, in April, 1970, established a statewide law requiring the use of safety helmets for all motorcycle operators and passengers on Virginia's highways and roads.

Although many groups composed of vocal motorcycle enthusiasts deny the effectiveness and utility of this law and favor its repeal, the Virginia Highway Safety Division advocates its support by all those agencies and individual citizens concerned with motorcycle safety. On the basis of the evidence reviewed, the Highway Safety Division endorses the mandatory motorcycle helmet law and encourages its continual enforcement, as well as public education campaigns designed to promote its advantages.

The Motorcycle Safety Foundation states that head injuries account for the majority of motorcycle fatalities and that the preponderance of research indicates that the use of approved helmets significantly reduces the occurrence of serious and fatal head injuries (9). Another source asserts that the risk of death to motorcyclists and their accompanying riders, as compared to automobile occupants, is 7 to 8 times greater per mile of travel. Of all possible occurring injuries, head injury poses the most serious threat (6).

In Washington state, before their establishment of a mandatory helmet law, a two year study revealed that two-thirds of all motorcycle fatalities resulted from trauma to the head (2). California, which currently requires no helmet while operating a motorcycle, attributed half of all occurring motorcycle injuries to the head area (3). The vulnerability of the motorcyclist was further emphasized by the fact that 90% of the motorcycle-related crashes that were examined in this study resulted in injury or death, as compared with only 10% for a comparable number of automobile accidents (8). It is apparent that the individual on a motorcycle is more prone to fatal or more serious injury (especially to the head) if involved in an accident than his or her counterpart in an automobile. The enforcement of a mandatory motorcycle helmet law would serve to greatly minimize this crucial safety problem.

Australia was the first country to initiate legislation requiring the use of protective helmets. Through a successfully enforced program, motorcycle fatalities in that country were reduced by half two years after the law went into effect (3). An analysis of all the factors that could have been involved in the decrease indicated that the use of helmets was primarily responsible and that the risk of fatality in an accident involving a helmet user was one-third that of an accident with a helmet non-user.

Subsequent programs in the United States support the conclusions reached by the pioneer Australian investigators. A study published in 1975 compared eight states with mandatory helmet legislation and eight states that had no such requirement. The states with helmet laws (Arizona, Colorado, Idaho, Kansas, Kentucky, Louisiana, Maryland and Minnesota) were observed between 1967 and 1969, with the exception of Kansas, studied in 1972. For the states without the protective law, (California, New Mexico, Montana, Iowa, Virginia, Mississippi, West Virginia and Iowa, two years later) the observations ranged in years from 1967-1970, with Iowa examined again between 1971 and 1973. In states with helmet legislation, the death rate declined from 10 deaths per 10,000 registered motorcyclists to approximately 7 per 10,000 during the years the law initially went into effect. The remaining states maintained a steady average of 10 fatalities per 10,000 motorcyclists throughout the duration of the study (10).

In Ohio, the motorcycle fatality rate dropped 31% after its mandatory motorcycle helmet law was put into effect. An equally radical effect was noted in the State of Virginia following the initiation of its helmet law. In 1968 and 1969, two years prior to the law's establishment, Virginia reported 50,860 registered motorcycles, 2,807 motorcycle-related accidents and 59 motorcycle deaths. In the years 1974 and 1975, following the law's institution, Virginia claimed 180,531 registered motorcycles. Out of all the state's filed accident reports in those years, 6,504 involved motorcycles and 112 motorcycle riders were killed. Although the actual quantitative figures for accidents and fatalities increased somewhat, their ratio to the number of motorcyclists in the state decreased dramatically. Specifically, the ratio of accidents to number of registered motorcycles was reduced by one-third and fatalities were cut in half. Between 1968 and 1975, although the actual number of accidents involving motorcycles rose from 1,486 to 2,786, fatalities showed only a small increment from 36 to 51.

Proponents of helmet law repeal attack the law on the basis of several presuppositions. One of these is the alleged "unconstitutionality" of mandatory helmet laws. Although, the U. S. Supreme Court officially declared that the law was not in violation of constitutional rights, advocates of repeal assert that helmet use is a private matter and should not be subject to governmental dictate. This argument holds several inherent weaknesses.

The roadways on which motorcycles are operated are public domain, over which the state has been ascribed powers of regulation for the safety and benefit of all citizens. A motorcyclist struck on an unprotected head, whether in a vehicular accident or contact with a roadside object, could lose control of the motorcycle and become a potential threat to other citizens on the road.

In response to the claim that it is an individual's personal right to decide whether or not to use a helmet, the Wisconsin Supreme Court said that "No one has the right to use public highways for risking or courting self-destruction. Protection of people, even from themselves is proper use of police powers." It is fairly obvious that helmet laws are designed to serve the general public. The Federal District Court in Massachusetts ruled that the helmet law promoted public welfare by reducing insurance costs, medical and hospital costs, loss of wages, cost of employment benefits and welfare payments and loss of work time. As the law was of benefit to the majority of the state's citizens, it was therefore to be considered constitutional.

In addition, many states have laws prohibiting self-maiming and self-destructive behavior. Laws requiring hard hats for construction workers and eye protection for welders pose little controversy and are accepted as useful and fair laws which enhance the safety of the individual. Motorcycle helmet laws follow the same rationale as these regulations, aiming to preserve individual lives, as well as to benefit the general public (1).

Opponents of the mandatory motorcycle law state that the use of safety helmets increases the risk of neck injury. Current scientific investigation does not support this allegation. Although motorcyclists have been wearing helmets for approximately 30 years, in that span of time no significant patterns of injury have emerged (7). In fact, research in Nebraska, Canada, and Australia revealed that neck injuries occur in only 2% of all motorcycle crashes (7). Reports from coroners and multi-disciplinary accident investigation teams in a variety of locations, including New York, Texas, Michigan, Illinois, Washington and Japan, show that helmets cause no significant adverse effects to the neck (7). In contrast, 9% of all motor vehicle related spinal cord trauma occurred to motorcycle riders in California, which does not have a mandatory helmet law (7).

In a survey sent to 562 motorcycle riders involved in crashes, the self-report of neck injuries did not figure prominently. Of the 36% who responded, 71% favored a helmet law, 19% were mildly opposed and 9% were strongly opposed. Of those wearing helmets at the time of the accident, 86% indicated that helmet use reduced the severity of their injuries while 8 respondents claimed it saved their lives. Of the 15 respondents who did suffer some degree of neck injury, all stated that helmet use reduced the extent of their total injuries.

Motorcycle helmets have been reported by some riders as reducing auditory capacity. However, it has been established that whether or not a given sound can be heard is contingent upon the intensity and frequency of a given sound at the driver's ear and the intensity and frequency of any extraneous ambient noise that might mask or hide the given sound (i.e. the signal-to-noise ratio). The motorcycle itself, in conjunction with wind noises, produces sound ranging in level from 85 to 110 decibels. For a given traffic noise to be perceived, it must be louder than this level. Even without a helmet, the chances of this are unlikely. When a helmet is worn, it reduces both the given traffic sounds that the driver wants to attend to and the superfluous masking noise caused by the motorcycle. The signal-to-noise ratio, the major determiner of sound perception, is not altered or distorted in any way. Because this ratio is equal, with or without a helmet, it can be concluded that the reduction of hearing capacity as a result of wearing a helmet is inconsequential in the driving situation (5).

A similar concern is the possibility that helmets may obscure their users' vision, especially from side to side. The evidence suggests that motorcycle helmets have only negligible detrimental effects on visual capacity. Full coverage helmets, the most common type found on the road, provide only minor sight restrictions with a reduction in peripheral vision of 3%, as compared with un-helmeted persons (4).

The worst restriction of vision (21.9%) is found in helmets that are used for racing and are not regularly used on public roadways (4). All helmets which meet state licensing requirements provide at least a 140 degree peripheral view horizontally (4).

Finally, anti-helmet crusaders argue that motorcycle deaths are not a result of non-helmet use, but of accidents. To eliminate motorcycle deaths it is necessary to eradicate motorcycle-involved crashes. This idea is, of course, true and is wholeheartedly supported by highway safety oriented individuals. However, it cannot be considered a valid argument for repeal of helmet laws. Motorcycle helmets do not save lives in every motorcycle-related accident, but are proven to reduce injuries and fatalities. Realistically, accidents will continue to occur and as long as they do, the use of protective helmets will serve the ameliorative function of reducing the consequences of these accidents.

It is interesting to note that helmets may possibly serve to deter certain roadway accidents from occurring. The motorcycle helmet serves to identify the motorcycle rider to surrounding traffic. It's distinctive size, shape and bright color make the motorcyclist increasingly visible. Because of the reduced size and stability of the motorcycle, in comparison to automobiles, the extra visibility afforded by the use of a helmet is an important, if seldom mentioned advantage.

In conclusion, the Virginia Highway Safety Division feels that the bulk of evidence suggests that the mandatory use of motorcycle helmets upholds the better interests of the individual rider and the public at large. As helmets reduce the severity of accident-related injuries and exhibit no truly adverse effects, their use should be not only encouraged but, required by law.

The duly elected legislators, as representatives of the people, have the right to require by law, that certain safety conditions be met for public benefit while operating motor vehicles on public highways. Driver licenses, safety belts for school bus operators, safety equipment on vehicles, eyeglasses for operators, lights on bicycles, insurance or financial responsibility and motorcycle helmets are a few of these requirements. These are fair, reasonable, proper and in the public interest. The mandatory helmet law should be retained for betterment of the public and it's safety.

John T. Hanna, Director
Virginia Highway Safety Division

RESOLUTION

RESOLUTION SPONSORED BY THE PATRICK HENRY MEDICAL SOCIETY
AND THE HIGHWAY SAFETY COMMITTEE

RE: Repeal of the Motorcycle Helmet Law In Virginia

WHEREAS, Statistical surveys have shown that 40-50% of all motorcycle fatalities are due to head injuries, and

WHEREAS, States having helmet laws have been able to show, without question, a reduction in fatalities due to head injuries, and

WHEREAS, Many non-fatal head injuries result in permanent brain damage, now be it therefore

RESOLVED, That The Medical Society of Virginia strongly oppose repeal of the helmet law in Virginia, and be it further

RESOLVED, That The Society strongly endorse even greater public education about motorcycle-automobile safety, and be it further

RESOLVED, That it strongly support increased safety training and be it further

RESOLVED, That it also support more stringent licensing requirements for motorcycle drivers.

ADOPTED BY THE HOUSE OF DELEGATES - November 5, 1976

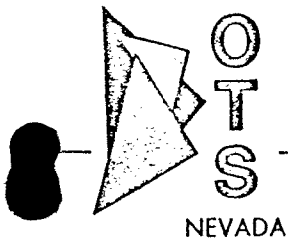
RESOLUTION

BE IT RESOLVED that the Virginia Association of Chiefs of Police supports the Highway Safety Commission's resolution in their opposition of the repeal of the motorcycle helmet law in Virginia

Clarence H. Benson
Chairman

References

- 1) California Office of Traffic Safety, Mandatory Motorcycle Helmet Statistical Analysis and Safety Study. State of California Business and Transportation Agency, January 15, 1974.
- 2) Crancer, A., Motorcycle fatality study (1965 and 1966 data). Washington State Department of Motor Vehicles, January, 1967.
- 3) Foldvary, L.A. & J.C. Lane, The effect of compulsory safety helmets on motorcycle accident fatalities. Australian Road Research, 2, 1, pp. 7-14, September, 1964.
- 4) Gordon, S. & J. Prince, Field of view with and without motorcycle helmets. NHTSA Technical Report DOT HS-801,758, U. S. Department of Transportation, October, 1975.
- 5) Henderson, R.L., Effect of safety helmets on auditory capacity. NHTSA Technical Note DOT HS-801,759, U. S. Department of Transportation, September, 1975.
- 6) Injury Control and Emergency Health Services Section Council, American Public Health Association, Fact Sheet--Motorcycle Helmet Usage Laws.
- 7) Johnson, P., L. Buchanan & P. Levy, Motorcycle safety--the case for helmet use. NHTSA Technical Note DOT HS -801, 836, U. S. Department of Transportation, February, 1976.
- 8) Kraus, J.F., R. S. Riggins, W. Drysdale & C. E. Franti, Some epidemiological features of motorcycle injury in a California community (A preliminary report). Presented to the Epidemiology Section of the American Public Health Association at the 100th Annual Meeting, Atlantic City, N.J., November 14, 1974, (Unpublished).
- 9) Motorcycle Safety Council, Motorcycle Safety Council Position on Mandatory Motorcycle Helmet Usage Laws, April 24, 1975.
- 10) Robertson, L.S., Motorcycle helmet and daytime headlamp use laws: Effects on use and fatalities. Insurance Institute for Highway Safety, Washington, D.C., November, 1975.



MIKE O'CALLAGHAN
Governor

STATE OF NEVADA

OFFICE OF TRAFFIC SAFETY

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Exhibit D

②

JOHN W. BORDA
Director

Cause of Death for Motorcycle Fatalities in Nevada 1972-76

The following information was obtained from death certificates of all persons killed in motorcycle accidents in Nevada for the period 1972 through 1976:

- (1) Out of a total of 70 persons killed, 56 (80%) were wearing helmets and 14 (20%) were not.
- (2) Out of the 56 who were wearing helmets, 29 (52%) the primary cause of death was listed as severe head injury.
- (3) Out of the 14 who were not wearing helmets, 11 (79%) the primary cause of death was listed as severe head injury.
- (4) Out of the 56 who were wearing helmets, 5 (9%) the primary cause of death was listed as severe neck injury.





STATE OF NEVADA

OFFICE OF TRAFFIC SAFETY

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MOTORCYCLE TESTIMONY

MIKE O'CALLAGHAN
Governor

JOHN W. BORDA
Director

1. Motorcycle riders are only at fault in about 20% of all motorcycle accidents.

Not true. Some studies have shown that automobile drivers are at fault in up to 60% of all auto/motorcycle collisions, however, this is only multiple-vehicle collisions.

In Nevada for the period 1972-76, there were 66 fatal motorcycle accidents. Thirty-one (47%) of these were single-vehicle. It stands to reason that the motorcycle rider was at fault in all of these.

In the 35 multiple-vehicle collisions during this period, the other driver was at fault in 12 (34%).

Out of the 66 fatal motorcycle accidents in this period, therefore, the other driver was indicated as being at fault in 12 (18%).

Motorcycle Fatalities
1972-76

	<u>accident</u>	<u>fatalities</u>	<u>single-vehicle</u>	<u>multiple-vehicle</u>
1972	8	9	4	4
1973	12	13	3	9
1974	12	13	6	6
1975	10	10	5	5
1976	24	25	13	11
	<u>66</u>	<u>70</u>	<u>31</u>	<u>35</u>

2. Motorcycle registrations are down from 1971-1976.

True, however, when the helmet law went into effect in 1972, the legal age for riding a motorcycle was raised from 14-16, and "powercycles" were excluded from registration requirements.

Motorcycle registrations dropped 17% from 1971-72, but have increased by 9% from 1972-76.

3. No significant study has found that motorcycle helmets cause neck injuries. Research in Nebraska, Canada, and Australia has found that neck injuries occur in only 2% of all motorcycle crashes. (1)

(1) Johnson, P., Buchanan L, and Levy, P., Motorcycle Safety--The Case for Helmet Use, NHTSA Technical Note DOT HS-801-836, U.S. DOT, February 1976.



4. Helmets reduce vision.

False. The Department of Motor Vehicles rules and regulations for helmets require 120 peripheral vision. One of the helmets displayed at the last hearing was a racing helmet which is not legal for street use.

5. Helmets reduce hearing.

False. The motorcycle itself, in conjunction with wind noises, produces sound ranging in level from 85 to 110 decibals. For a given traffic noise to be perceived, it must be above this level.

Exhibit F

Mr. Dennis Tatum
Office of Traffic Safety
Carson City, Nevada

December 20, 1975

Dear Mr. Tatum,

In response to your request for a description of an evaluation technique for your public education program, I have put together the following suggestions. These are meant to be illustrative of the kind of method that could be used and the nature of the information you are likely to receive from such a program.

A questionnaire could be designed which would ask two types of questions. First, questions could be designed to measure driver awareness of various traffic laws and regulations, such as laws concerning speed limits, school buses, safety belts, catalytic converters, etc. A second set of questions could be compiled which would attempt to measure driver preferences concerning issues which the Office of Traffic Safety has an influence on policy.

The results of the questionnaire would then serve a twofold purpose. First, the ability of specific public education programs to influence public awareness could be gauged. This would be important information in determining what kinds of public education techniques are effective and in finding where public education is needed. Second, this information could provide policy-makers with valuable feedback from the general public; this could lead to better long-term policies which would be consistent with the needs and desires of the general public.

The target population of this program would be the registered drivers in the state of Nevada. Usually, the most difficult problem of trying to design a study of this type is generating a representative sample from the target population. In this case, since Nevada law requires that all licensed drivers in the state renew their licenses once every five years, and since this occurs at the offices of the Department of Motor Vehicles, an efficient and inexpensive method of administering the questionnaire would be to have driver's license renewal applicants fill out the questionnaires at the same time they are renewing their licenses. Steps could be taken to minimize respondent bias on the questionnaire.

Mr. Dennis Tatum
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The size of the sample taken will depend on the desired accuracy of the results. For larger samples, more accurate results are generated but the cost of sampling and compiling the results is higher. For example, a sample of 500 licensed drivers will give results on "yes-no" questions accurate for the population to within 5%; a sample of 1,000 drivers would only increase the accuracy to plus or minus 3%.

If the questionnaire were administered at three different time intervals, say six months apart, then the changes in driver awareness or preferences over time could be estimated. This would probably be the best way to attempt to evaluate the impact of specific public education programs; if a program were administered between the six-month data gathering periods, "before and after" comparisons could readily be made.

TRAFFIC SAFETY PUBLIC OPINION SURVEY

Introduction

In June and December of 1976, the Office of Traffic Safety distributed a traffic safety public opinion survey to ascertain how the driving public in Nevada feel and act in regard to various traffic safety measures. One thousand thirty eight (1,038) questionnaires (Figure I) were distributed at the eight fixed drivers license issuing stations in the State according to the relative percentage of licenses issued at each station. The drivers license stations and frequency of distribution were as follows:

<u>Location</u>	<u>No. of Questionnaires Distributed</u>	<u>Percent of Total</u>
1. Winnemucca	20	1.9%
2. Fallon	30	2.9%
3. Ely	20	1.9%
4. Carson City	91	8.8%
5. North Las Vegas	159	15.3%
6. Las Vegas	412	39.7%
7. Washoe	286	27.6%
8. Elko	20	1.9%
Total	1,038	100%

All persons successfully completing the requirements for a drivers license were asked to complete the questionnaire after they had completed the requirements for a license.

All questionnaires were returned to the Office of Traffic Safety and the results are included in this report. This does not necessarily mean that every respondent answered every question. For each answer on the tabulations "no response" will indicate the number of people who failed to answer that question.

The results of the basic questionnaire are contained in Figure IA.

Cross Tabulation

In addition to the responses contained in IA, the answers to all questions were cross-tabulated against the 8 locations where the questionnaires were given, and against questions 1-3. This cross tabulation tells, for instance, how the people at the various locations answered the questions, how males answered as opposed to females, how the various age groups answered, and how the persons who drive very little as opposed to those who drive a lot answered.

This information is being used by the Office of Traffic Safety to identify specific target audiences upon which to concentrate public information and education efforts. An example of this is that in Winnemucca, 40% of the respondents indicated that they were "strongly opposed" to the national 55 mph speed limit. The other locations ranged between 6-16% in this category. This could indicate that special attention should be paid to public information and education efforts in Winnemucca regarding the safety benefits of the 55 mph speed limit.

Future Plans

The Office of Traffic Safety plans to distribute this same questionnaire at the same locations and in the same relative frequency each 3 months during 1977.

The results of the continuing survey will be used to guide the Office of Traffic Safety decision-making in regard to the issues surveyed and to evaluate the effectiveness of the Office of Traffic Safety Public Information and Education efforts.

TRAFFIC SAFETY SURVEY

The State Office of Traffic Safety is conducting this survey in order to determine the attitudes and resultant behavior of licensed Nevada drivers in regard to traffic laws and issues relating to traffic safety. The results of the survey will be used to guide policy and decision-making in areas in which the Office of Traffic Safety may have influence.

PLEASE DO NOT SIGN THIS FORM

1. Sex
 - Male
 - Female

2. Age
 - 15 and under
 - 16-20
 - 21-24
 - 25-34
 - 35-44
 - 45-54
 - 55-64
 - 65 and over

3. Approximately how many miles do you drive each year?
 - a. under 5,000
 - b. 5,000 - 10,000
 - c. 10,000 - 20,000
 - d. over 20,000

4. Are you aware of any traffic safety programs being conducted in this area?
 - a. yes
 - b. no
 If yes, where did you hear of this program?
 - a. radio
 - b. television
 - c. newspaper
 - d. magazine
 - e. other
 - f. Office of Traffic Safety

5. How do you feel about the national 55 mile per hour speed limit?
 - a. strongly oppose
 - b. oppose
 - c. favor
 - d. strongly favor.
 - e. no opinion

6. Do you obey the 55 mile per hour speed limit?
 - a. never
 - b. not very often
 - c. some of the time
 - d. all of the time

7. Do you believe that the 55 mile per hour speed limit saves lives or reduces injuries in automobile collisions?
 - a. not at all
 - b. a little
 - c. a lot
 - d. don't know

8. Do you believe that the 55 mile per hour speed limit saves energy?
 - a. not at all
 - b. a little
 - c. a lot
 - d. don't know

9. Which of the following methods would be most effective in getting you to observe the 55 mile per hour speed limit?
- a. increased enforcement
 - b. a major public information campaign
 - c. stiffer penalties for speeders
 - d. none of the above
10. At what speed should the police begin to give speeding tickets?
- a. any speed over 55
 - b. over 60
 - c. over 65
 - d. over 70
11. If you drive faster than 55, what do you think your chances of getting a speeding ticket are?
- a. very low
 - b. about 50/50
 - c. very high
 - d. don't know
12. Do you think that seatbelt useage saves lives or reduces the severity of injuries in automobile collisions?
- a. not at all
 - b. a little
 - c. a lot
 - d. don't know
13. Do you wear your seatbelt?
- a. never
 - b. sometimes
 - c. all the time
14. Which method do you feel would be most effective in dealing with persons convicted of driving under the influence of alcohol?
- a. stiffer penalties
 - b. increased police enforcement
 - c. alcohol educational schools
 - d. none of the above
15. Would you favor or oppose the following measures?
- | | <u>favor</u> | <u>oppose</u> |
|--|--------------------------|--------------------------|
| a. yearly automobile inspections | <input type="checkbox"/> | <input type="checkbox"/> |
| b. strict enforcement of the 55 mile per hour speed limit | <input type="checkbox"/> | <input type="checkbox"/> |
| c. alcohol educational schools for persons convicted of driving under the influence of alcohol | <input type="checkbox"/> | <input type="checkbox"/> |
| d. a law requiring all persons in a vehicle to wear seatbelts | <input type="checkbox"/> | <input type="checkbox"/> |
| e. strict enforcement of drunk driving laws | <input type="checkbox"/> | <input type="checkbox"/> |
| f. mandatory motorcycle helmet law | <input type="checkbox"/> | <input type="checkbox"/> |

FIGURE IA

Results of Combined Traffic Safety Survey

	<u>Number</u>	<u>Percent</u>
1. Sex		
Male	583	56.2%
Female	446	43.0%
No Response	9	0.9%
Total	<u>1,038</u>	<u>100%</u>
2. Age		
15-under	5	0.5%
16-20	169	16.3%
21-24	139	13.4%
25-34	292	28.1%
35-44	149	14.4%
45-54	131	12.6%
55-64	84	8.1%
65-over	62	6.0%
No Response	7	0.7%
Total	<u>1,038</u>	<u>100%</u>
3. Approximately how many miles do you drive each year?		
a. Under 5,000	262	25.2%
b. 5,000 - 10,000	387	37.3%
c. 10,000 - 20,000	277	26.7%
d. Over 20,000	95	9.2%
e. No Response	17	1.6%
Total	<u>1,038</u>	<u>100%</u>
4. Are you aware of any traffic safety programs being conducted in this area?		
a. Yes	489	47.1%
b. No	532	51.3%
c. No Response	17	1.6%
Total	<u>1,038</u>	<u>100%</u>

Number

Percent

If yes, where did you hear of this program?

a. radio	51	4.9%
b. television	65	6.3%
c. newspaper	66	6.4%
d. magazine	5	0.5%
e. other	147	14.2%
f. Office of Traffic Safety	87	8.4%
g. No Response	617	59.4%
Total	1,038	100%

5. How do you feel about the national 55 mph speed limit?

a. Strongly Oppose	126	12.1%
b. Oppose	217	20.9%
c. Favor	395	38.1%
d. Strongly Favor	202	19.5%
e. No Opinion	85	8.2%
f. No Response	13	1.3%
Total	1,038	100%

6. Do you obey the 55 mph speed limit?

a. Never	13	1.3%
b. Not very often	43	4.1%
c. Some of the time	424	40.8%
d. All of the time	545	52.5%
e. No Response	13	1.3%
Total	1,038	100%

7. Do you believe that the 55 mph speed limit saves lives or reduces injuries in automobile collisions?

a. Not at all	63	6.1%
b. A little	327	31.5%
c. A lot	575	55.4%
d. Don't know	69	6.6%
e. No Response	4	0.4%
Total	1,038	100%

8. Do you believe that the 55 mph speed limit saves energy?

a. Not at all	109	10.5%
b. A little	454	43.7%
c. A lot	378	36.4%
d. Don't know	92	8.9%
e. No Response	5	0.5%
Total	1,038	100%

	<u>Number</u>	<u>Percent</u>
9. Which of the following methods would be most effective in getting you to observe the 55 mph speed limit?		
a. Increased enforcement	251	24.2%
b. A major public information campaign	194	18.7%
c. Stiffer penalties for speeders	194	18.7%
d. None of the above	246	23.7%
e. No Response	153	14.7%
Total	<u>1,038</u>	<u>100%</u>
10. At which speed should the police begin to give speeding tickets?		
a. Any speed over 55	169	16.3%
b. Over 60	433	41.7%
c. Over 65	258	24.9%
d. Over 70	66	6.4%
e. No Response	112	10.8%
Total	<u>1,038</u>	<u>100%</u>
11. If you drive faster than 55, what do you think your chances of getting a speeding ticket are?		
a. Very low	145	14.0%
b. About 50/50	489	47.1%
c. Very high	176	17.0%
d. Don't know	113	10.9%
e. No Response	115	11.1%
Total	<u>1,038</u>	<u>100%</u>
12. Do you think that seat belt usage saves lives or reduces the severity of injury in automobile collisions?		
a. Not at all	58	5.6%
b. A little	278	26.8%
c. A lot	521	50.2%
d. Don't know	72	6.9%
e. No Response	109	10.5%
Total	<u>1,038</u>	<u>100%</u>
13. Do you wear your seat belt?		
a. Never	208	20.0%
b. Sometimes	510	49.1%
c. All the time	206	19.8%
d. No Response	114	11.0%
Total	<u>1,038</u>	<u>100%</u>

	<u>Number</u>	<u>Percent</u>
14. Which method do you feel would be most effective in dealing with persons convicted of driving under the influence of alcohol?		
a. Stiffer penalties	434	41.8%
b. Increased police enforcement	65	6.3%
c. Alcohol Educational School	269	25.9%
d. None of the above	65	6.3%
e. No Response	<u>205</u>	<u>19.7%</u>
Total	1,038	100%
15. Would you favor or oppose the following measures?		
a. Yearly automobile inspection		
Favor	530	51.1%
Oppose	351	33.8%
No Response	<u>157</u>	<u>15.1%</u>
Total	1,038	100%
b. Strict enforcement of 55 mph speed limit.		
Favor	487	46.9%
Oppose	394	38.0%
No Response	<u>157</u>	<u>15.1%</u>
Total	1,038	100%
c. Alcohol educational schools for persons convicted of driving under the influence of alcohol.		
Favor	775	74.7%
Oppose	109	10.5%
No Response	<u>154</u>	<u>14.8%</u>
Total	1,038	100%
d. A law requiring all persons in a vehicle to wear seat belts.		
Favor	250	24.1%
Oppose	617	59.4%
No Response	<u>171</u>	<u>16.5%</u>
Total	1,038	100%
e. Strict enforcement of drunk driving laws		
Favor	818	78.8%
Oppose	62	6.0%
No Response	<u>158</u>	<u>15.2%</u>
Total	1,038	100%
f. Mandatory motorcycle helmet law		
Favor	683	65.8%
Oppose	186	17.9%
No Response	<u>169</u>	<u>16.3%</u>
Total	1,038	100%

Discussion

Generally speaking, the major indications of the cross-tabulations were:

1. Younger (under 15) and older (over 55) age groups are more likely to be in favor of traffic safety measures.
2. Females are more likely to be in favor of traffic safety measures than males.
3. The more a person drives per year, the less they favor traffic safety measures.
4. Persons in Winnemucca, Elko, and to a lesser extent Ely, tend to be negative about traffic safety measures.

GUEST LIST

IF YOU
WISH TO SPEAK

NAME	REPRESENTING	Pro	Con
(Please print)			
Donald R. Otsu, M.D.	Nev. Neurosurgical Soc.		X 7
Jodi Lemin	Nevada PTA		X 7
David Taylor	" "		X } KOPPE
James K. Kattaban	- ✓		X }
Bonnie Parcell	P.T.A.		■
Paul O'Boyle	First Naval Unit N.A.P.		
Frances West			
Mary E. Murray	1st Nevada Unit N.A.P.		
Julia B. Pangborn	" " "		
John Bold	Office of Traffic Safety		✓ 7
Dennis Stelm	Office of Traffic Safety		
Donald J. Crosby	Nev Hwy Dept		223 ✓
Brent Howerton	Nev. Hwy Dept.		223 ✓
Ed Sutherland	NSOAA		223 ✓
Robert F. FRENZL	TOURISM RECREATION		✓ 7
CHRIS LANPHERE	REHABILITATION		
BARBARA GUZMAN	DEVELOPMENTAL DISABILITIES ^{COUNCIL}		
Pam Nelson	LPI		
Sue Morrow	Nevada Appeal		
Charles Zobell	Review - Journal		
Virgil O. Anderson	A.A.A.		
Shirley A. Wedder	State Parliamentarian		

GUEST LIST

NAME

REPRESENTING

IF YOU
WISH TO SPEAK

(Please print)

Pro Con

Way Russian

Assemblyman Pro

Bill Russian, Jr.

John Medue

Salt

Nov. 8 Mrs. Mel Starnes

Elks Daily Free Press

Assemblyman Coulter