S B
59

Offered: 2/9/89 6-0357E
Referred: Transportation

Original sponsors: Sturgulewski, Uehling, and Duncan

IN THE SENATE BY THE STATE AFFAIRS COMMITTEE

CS FOR SENATE BILL NO. 59 (State Affairs)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to mandatory use of safety devices in motor vehicles."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 28.05.095 is repealed and reenacted to read:

Sec. 28.05.095. USE OF SAFETY DEVICES REQUIRED. (a) Except as provided in (c) of this section a person

(1) 16 years of age or older may not occupy a motor vehicle while being driven unless restrained by a safety belt; and

(2) may not operate a motor vehicle unless restrained by a safety belt.

(b) Except as provided in (c) of this section, a driver may not transport a child under the age of 16 in a motor vehicle unless the driver has provided and properly secured each child as described in this subsection. If the child is less than four years of age, the child shall be properly secured in a child safety device meeting the standards of the United States Department of Transportation for a child safety device for infants. If the child is four but not yet 16 years of age, the child shall be properly secured in a child safety device approved for a child of that age and size by the United States Department of Transportation or in a safety belt, whichever is appropriate for the particular child.

(c) Subsections (a) and (b) do not apply to

(1) passengers in an emergency vehicle;

(2) a vehicle operator acting in the course of employment

delivering mail or newspapers from inside the vehicle to roadside mail or newspaper boxes;

(3) a person or class of persons exempted by regulation under AS 28.05.096; or

(4) a person required to be restrained by safety belts under (a) or (b) of this section if the motor vehicle is not equipped with safety belts.

(d) A person may not remove a safety belt from a vehicle solely to be exempted under (c)(4) of this section.

(e) Notwithstanding any other provision of law, a peace officer may not stop or detain a motor vehicle to determine compliance with (a) of this section, or issue a citation for a violation of (a) of this section, unless the peace officer has probable cause to stop or detain the motor vehicle other than for a violation of (a) of this section.

* Sec. 2. AS 28.05.096(a) is amended to read:

(a) The commissioner of public safety may adopt regulations to exempt a <u>person</u> [CHILD] or a class of <u>persons</u> [CHILDREN] from the requirements of AS 28.05.095 if the commissioner determines that the use of a <u>safety belt or</u> child safety device is impractical because of physical or medical conditions of the <u>person or class of persons</u> [CHILD].

* Sec. 3. AS 28.05.099 is amended to read:

Sec. 28.05.099. PENALTY. (a) A person convicted of a violation of AS 28.05.095(a) or <u>(d)</u> [(c)] is guilty of an infraction and may be <u>fined up to $15 or the court may waive the fine if the person convicted donates $15 to the Emergency Medical Services entity providing services in the area in which the violation occurred</u> [ASSESSED DEMERIT POINTS AS DETERMINED BY REGULATIONS OF THE DEPARTMENT, NOTWITHSTANDING

THE PROVISIONS OF AS 28.15.231(b)].

(b) A person convicted of a violation of AS 28.05.095(b) is guilty of an infraction, and may be fined up to $50. The person may also be assessed demerit points as determined by regulations of the department, notwithstanding the provisions of AS 28.15.231(b). A person who violates AS 28.05.095(b) [AS 28.05.095(a)] by failing to provide a child safety device or safety belt [SEATBELT] may provide a peace officer, including a village safety officer, proof of purchase or acquisition, and installation, of an approved child safety device or safety belt [SEATBELT]. If the proof is provided within 30 days after the issuance of a citation for the infraction, the court shall dismiss the citation and no points shall be assessed under this subsection [(a) OF THIS SECTION] unless the person has

(1) been convicted previously for violating AS 28.05.095 [THAT SECTION] by failing to provide a child safety device or safety belt [SEATBELT];

(2) been cited for failure to provide a child safety device or safety belt [SEATBELT] and has forfeited the bail required by the citation; or

(3) provided [THE] proof under [REQUIRED BY] this subsection on a prior occasion.

Introduced: 1/9/89
Referred: State Affairs and Transportation

6-0357A

IN THE SENATE

BY STURGULEWSKI, UEHLING AND DUNCAN

SENATE BILL NO. 59

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

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(3) provided [THE] proof under [REQUIRED BY] this subsection on a prior occasion.

RF

Copy

15.02 / person

09 February 1989

The Honorable Warren W. Matthews
Chief Justice, Supreme Court
303 K Street
Anchorage, Alaska 99501

Dear Justice Matthews:

It is my understanding that the Supreme Court sets the amounts of fine and the schedule for appearances of various offenses. Among those offenses is the infraction incurred by not complying with the requirement to have a child in a motor vehicle ride in a child safety device (AS 28.05.095).

Senate Bill 59 would remove the exemption in current AS 28.05.095 (b)(4). That exemption applies to areas of the state not connected to the land-connected highway system or a highway or vehicular way with an average daily traffic volume greater than 499. [AS 28.10.011 (11)(A)-(B)]

It is the opinion of some legislators that a mandatory court appearance would be of hardship to persons in those communities formerly exempted (see attached list) and I concur with that opinion. May I respectfully suggest that in your review of such options that you provide for mail-in payment of fines paid under AS 28.05.099 should Senate Bill 59 become law.

I would appreciate your advising me as to your opinion on this matter.

Sincerely yours,

Arliss Sturgulewski
Alaska State Senator

DRAFT
LETTER OF INTENT

It is the intent of the Legislature that Senate Bill 59 exempt schoolbuses from the provisions of AS 28.05.095 until such time as the United States Department of Transportation, National Transportation Safety Board issues its report on the crash performance of small schoolbuses.

At that time, AS 28.05.095 will be reviewed to determine what, if any, changes must be made to conform Alaska law to recommendations of the National Transportation Safety Board.

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

POUCH Y · STATE CAPITOL
JUNEAU, ALASKA 99811
907 465-3800

M E M O R A N D U M February 17, 1989

SUBJECT: Mandatory safety devices - CSSB 59(SA)

TO: Senator Arliss Sturgulewski

FROM: Michael Ford MF
Legislative Counsel

You have asked whether the legislature can, without changing a rule of court, require the supreme court to establish a scheduled amount of bail allowing for disposition of a violation of AS 28.05.095 without a court appearance. In short, the answer is yes. The authority to establish scheduled bailable offenses is given to the supreme court under AS 28.05.151, therefore the legislature can amend this authority directly, and without the necessity of amending a rule of court established under AS 28.05.151.

Please contact me if you have further questions.

MF:kb
wkk2/021

303 K STREET
ANCHORAGE, ALASKA 99501
(907) 264-0618

Supreme Court
State of Alaska

February 21, 1989

Senator Arliss Sturgulewski
Room 427, Capitol Building
P.O. Box V
Juneau, Alaska 99811

Re: Mail In Bail

Dear Senator Sturgulewski:

I endorse the views expressed in the letter authored by Bill Cotton, Court Rules Attorney, regarding mail in bail with respect to proposed legislation pertaining to mandatory child restraint systems in rural areas of the State. In addition, those views may be considered applicable to proposed legislation concerning mandatory seat belt usage.

Very truly yours,

Warren W. Matthews
Chief Justice

WWM:pz

Alaska Court System
State of Alaska

OFFICE OF ADMINISTRATIVE DIRECTOR

WILLIAM T. COTTON
Court Rules Attorney

303 K Street
Anchorage, Alaska 99501

(907) 264-8239

February 21, 1989

Senator Arliss Sturgulewski
Alaska State Legislature
P.O. Box V
Juneau, Alaska 99811

RE: Mail-in Bail

Dear Senator Sturgulewski:

Your office requested the court system's response to a proposal to establish a mail-in bail (really a fine) for the failure to use a child safety device assuming that the legislature extends this offense to many communities that do not have courts in the community. I have checked with the chief justice and administrative director of the court system on this issue.

We believe that establishing a bail amount for this offense appears to make sense if the offense is made applicable in small communities without court facilities. The court's purpose in passing a bail schedule is the reasonable convenience of the citizens of this state. Under the present law, a person can go to court in the community in which they are cited and either pay a fine or show that they have acquired a restraining device. If application of the law is broadened as you propose, someone charged with the offense would, in addition, quite possibly have to spend hundreds of dollars and several days to travel to a community with a court. Such a differentiation between urban and rural citizens does not make sense.

Sincerely,

William T. Cotton

William T. Cotton
Court Rules Attorney

cc: Chief Justice Matthews
Arthur H. Snowden, II

ALASKA STATE LEGISLATURE

Sen. Lloyd Jones, Chairman
Sen. Bettye Fahrenkamp, Vice Chairman
Sen. John B. "Jack" Coghill
Sen. Paul Fischer
Sen. Pat Pourchot

P.O. Box V
Juneau, AK 99811

907-465-4921

Senate Transportation Committee

Letter of intent

It is the intent of the Legislature that Senate Bill 59 exempt schoolbuses from the provisions of AS 28.05.095 until such time as the United States Department of Transportation, Naticnal Transportation Safety Board issues its report on the crash performance on small schoolbuses.

At that time, AS 28.05.095 will be reviewed to determine what, if any, changes must be made to conform Alaska law to recommendations of the National Transportation Safety Board.

RESOLUTION

MANDATORY SAFETY BELT USE LEGISLATION

WHEREAS, THE EFFECTIVENESS OF SAFETY BELTS IN REDUCING DEATHS AND INJURY SEVERITY IN MOTOR VEHICLE CRASHES HAS BEEN DOCUMENTED IN NUMEROUS STUDIES, AND

WHEREAS, IN JURISDICTION WHERE MANDATORY SAFETY BELT LAWS HAVE BEEN IN EFFECT, THERE HAS BEEN A SIGNIFICANT REDUCTION IN INJURIES, DEATHS AND ECONOMIC LOSSES, AND

WHEREAS, PUBLIC HEALTH AND SAFETY LEGISLATION HAS BEEN ENACTED AT THE STATE AND FEDERAL LEVELS: BE IT THEREFORE RESOLVED

THAT Kodiak Crimestoppers Inc. (name)
Box 1329 (address)
Kodiak, AK 99615 (city,zip)
486-3113 work 486-3113 home (phone)
1/24/89 date

STRONGLY SUPPORTS STATE MANDATORY SAFETY BELT USE LAWS TO REDUCE HUMAN SUFFERING AND IMPAIRMENTS DUE TO MOTOR VEHICLE CRASHES.

Edward J. Nelson, President

Please return this resolution to:

Alaska Safety Belt Use Coalition
360 W. Benson, Suite 101
Anchorage, AK 99503
(907) 561-7525

KODIAK CHAMBER OF COMMERCE
01-01-89

RESOLUTION SUPPORTING MANDATORY SAFETY BELT USE LEGISLATION

WHEREAS, the BOARD OF DIRECTORS OF THE KODIAK CHAMBER OF COMMERCE believes the State should enact a mandatory seat belt law; and

WHEREAS, the effectiveness of safety belts in reducing deaths and injury severity in motor vehicle crashes has been documented in numerous studies; and

WHEREAS, in jurisdiction where mandatory safety belt laws have been in effect, there has been a significant reduction in injuries, deaths and economic losses; and

WHEREAS, public health and safety legislation has been enacted at the state and federal levels;

NOW, THEREFORE BE IT RESOLVED that the BOARD OF DIRECTORS OF THE KODIAK CHAMBER OF COMMERCE strongly supports state mandatory safety belt use laws to reduce human suffering and impairments due to motor vehicle crashes.

Signed this 24th day of January, 1989

KODIAK CHAMBER OF COMMERCE

Edward F Randolph

Jeri J Jensen
Secretary to the Board

STEVE COWPER, GOVERNOR

DEPARTMENT OF PUBLIC SAFETY

P.O. BOX N
JUNEAU, ALASKA 99811-1200
PHONE: 465-4322

OFFICE OF THE COMMISSIONER

February 7, 1989

The Honorable Arliss Sturgulewski
Alaska State Senator
P.O. Box V
Juneau, Alaska 99811

Dear Senator Sturgulewski:

It has been brought to my attention that you are concerned that the Department of Public Safety has submitted a zero fiscal note for Senate Bill 59. It is our position that SB 59, as it is now written, does not require any new funding. As we interpret the bill, there is no requirement that the State provide child restraints to the prospective users. Existing statute calls for the Highway Safety Planning Agency to "...work in conjunction with private and federal programs...[to] provide to every hospital and birthing center in the state, subject to the availability of funds, child safety devices for infants and children to be loaned to the public at nominal fees..." Certainly, if SB 59 does become law, the Highway Safety Planning Agency will take steps to secure federal funding to establish child restraint loan programs in rural communities similar to those that were implemented in some highway-system communities prior to 1985, when the original child restraint law took effect.

Loan/rental programs may not be as cost effective for remote locations as for urban areas. If this were the case, an alternative might be to purchase seats for outright distribution through hospitals and birthing centers that service rural populations. Unfortunately, federal funds cannot be used for outright purchase and distribution; appropriation from the general fund would be necessary. We estimate that $10.0 per year for each of the next four years (FY 1990 - FY 1993) would fund the purchase of approximately 200 seats each year. These seats would be suitable for children from birth through approximately 30-35 pounds.

After the initial distribution, it is likely that the seats purchased with these funds will be circulated, on an informal basis, much like those purchased with federal funds for the loaner programs were circulated.

Sincerely,

Arthur English
Commissioner

CASEY COMMUNICATIONS MANAGEMENT, INC.
Counselors in Public Relations • Public Affairs

February 2, 1989

TO: Joe Hayes

FROM: Ray Carson

SUBJECT: 1986/1987 Fatality Data

Chuck Busse requested we send you the attached information comparing urban and rural fatality rates. Please note, the data contained in this release and chart is based on 1986 figures.

We have contacted the National Highway Traffic Safety Administration (NHTSA) to obtain the most up-to-date information regarding urban and rural fatalities. Following is a synopsis of these figures:

1987 National Data

• Total Deaths	46,386	
- Rate per 100 million miles driven	2.40	
• Total Rural Deaths	27,147	(59%)
- Rate per 100 million miles driven	3.50	
• Total Urban Deaths	19,179	(41%)
- Rate per 100 million miles driven	1.10	

1987 Alaska Data

• Total Deaths	76	
- Rate per 100 million miles driven	1.90	
• Total Rural Deaths	56	(74%)
- Rate per 100 million miles driven	2.60	
• Total Urban Deaths	20	(26%)
- Rate per 100 million miles driven	1.10	

Please contact me if you have any questions. My card is enclosed for your convenience.

cc: Chuck Busse

17117 NINE MILE RD. • SUITE 700 • SOUTHFIELD, MI 48075 • (313) 423-4600

February 8, 1989

Senator Arliss Sturgulewski
P.O. Box V
Juneau, AK 99811

Dear Senator Sturgulewski,

Enclosed is draft work plan put together by the Alaska Safety Belt Use Coalition. Since the legislation SB59 removes the rural exemption for child safety devices, the Alaska Safety Belt Use Coalition is prepared to incorporate into it's work plan an educational program to include insofar as needed for safety belts and child safety devices.

The Alaska Department of Public Safety will also have an educational and fund-raising program and we are prepared to assist them in their efforts.

I received indication of support from the National Highway Traffic Safety Administration's regional office located in Seattle for additional funds to the Alaska Department of Public Safety for child safety device loaner programs.

The Alaska Safety Belt Use Coalition is proud to say that we are going to provide the amount of $10,000 seed money for infant child seats in the rural areas.

Sincerely,

ALASKA SAFETY BELT USE COALITION

Frank Bickford
Executive Director

FB:tp

EDUCATIONAL CAMPAIGN
BY
ALASKA SAFETY BELT USE COALITION
FOR
ALASKA'S SAFETY BELT USE LAW

The Alaska Safety Belt Use Coalition will help implement a 12 month public relations campaign, consisting of:

1) Travel throughout the state to coordinate public awareness meetings.
2) Direct mail campaign, TV and radio PSA's.
3) Educational forums held throughout the state through school districts, organizations and special interest groups to inform the public of the new law.

This project is committed to a $70,000 budget. The Alaska Safety Belt Use Coalition is already operating and will continue to do so until 12/31/89 on it's own resources. When the law goes into effect, the Coalition will then convert it's remaining budget allowances entirely into the safety belt use law educational campaign. This could result in approximately $10,000 per month in addition to the $70,000 budget already mentioned for educational purposes.

The Alaska Safety Belt Use Coalition has the assistance of coordinators already placed in key communities throughout the state, including Fairbanks, Kodiak, Sitka, Juneau, Anchorage, Sand Point and the Mat-Su Valley.

A preliminary outline of the educational campaign we will implement is attached.

For purposes of discussion, we have divided our preliminary thoughts into four main segments:

General Adult

Youth

Corporate/Coalition Development

Law Enforcement

General Adult

1) News Conference - Organize a kick-off news conference within 2-4 weeks after legislative approval of the seat belt use law. If possible, "Buckle Up Alaska" proclamations by the governor and key mayors throughout the state would coincide with the news conference. A press kit with fact sheets, coalition goals, personal seat belt stories and other collateral materials would be distibuted to the media.

2) Television PSA's - Two Alaskan oriented television PSA's would be produced. One targeted at adults age 30 and up would revolve around the notion of "Buckle Up the Ones You Love." The spot would be light in nature and would show various types of people being asked to buckle up by family and/or friends. We might try to get the rights to the music for the song entitled "Button Up Your Overcoat" and write lyrics specific to our subject. A nostalgic television spot incoporating family themes would target the 30 plus adult perfectly.

The second PSA would target late teens/young adults. The spot would revolve around the theme of "Some Mistakes You Don't Live To Regret." Young adults have been raised on rapidly changing video technology and are regularly exposed to a barrage of powerful media messages. For this reason a harder and more direct sell would be necessary to effectively reach this target group.

3) Radio PSA's - Two radio PSA's will be developed for this public information effort. Following the thoughts expressed above, the first PSA would be targeted toward adults over 30. It would communicate the need for seat belt use by using messages provided by victim's parents. Our attempt would be to sway parents to think about their family and the reprocussions that would follow a death or major injury. The other PSA, directed at young adults/late teens, would revolve around discussions of other teens and survivors. We would incorporate a dramatic approach to both PSA's.

4) Media Promotions

A. We will approach drive time disc jockeys around the state to promote the seat belt themes and encourage their listeners to "Buckle Up." Also, airborne traffic reporters will be encouraged to sign off their transmissions with the "Buckle Up Alaska" theme.

B. We will attempt to get key radio stations in various Alaskan communities to sponsor either essays or poster contests based on seat belt use themes. Local merchants such as auto dealers would be asked to contribute to a scholorship fund that would go to the winner.

C. We will negotiate with community newspapers to include a monthly update column that communicates number of lives saved by seat belt use, new coalition members, etc.

5) Logo - develop a clear and descriptive logo that can be used in all media and collateral materials. Focus will be on instant communication of benefits derived by seat belt use.

6) Poster - Two posters for distribution at post offices, grocery stores, clinics and hospitals, government buildings and school facilities will be produced. The theme of "Buckle Up The One You Love" would be used for the general purpose poster. Visual would follow from the television PSA. Ideas include having a nun buckling up a priest, a child buckling up a teddy bear, or a child putting a seat belt on his/her father. The young adult poster would focus on what might happen in an accident if the seat belt isn't used.

7) Print Ads - A series of humorous yet informative print ads will be developed for placement during key holidays. Ideas include Lincoln with a seatbelt and Cupid with same during Valentines Day. A format print ad for heavy traffic holidays such as Memorial Day, Fourth of July and Labor Day will be developed also.

8) Media Relations - will attempt to place between two and three media stories in key Alaskan publications or broadcast outlets each month of our contract. A number of different possibilities exist for media stories, including "Saved By The Belt" stories, contests, corporate assistance, and statistical goals met by seat belt coalition. We will work with key native media people to insure that this very important segment of the population is given information in a manner relevant to their lifestyle.

9) Misc. Collateral - Ideas for collateral materials include bumper stickers to be placed on on state and municipal vehicles and to be used in corporate promotions. We will also investigate having our message imprinted on Carrs Supermarkets' grocery bags, Matanuska Maid milk cartons, and various utilities monthly statments. We would also develop a road sign to mechanical stage with your logo and theme for use by municipalities and the state.

Youth Segment

We feel that children in elementary and junior high school should be given special emphasis during this effort. The birth rate in Alaska has grown tremendously over the past ten years and children, if the subject matter is communicated clearly, can have tremendous influence on both their peers and parents. For our in-school effort, we would create an uniquely Alaskan character which would entertain the children while also teaching them about seat belt use and other safety matters. We might have our character escorted by the state trooper who went to Washington D.C. on behalf of the coalition. Other elements of our in-school program include:

Teachers Guide - Would provide outlines and background information necessary for ongoing education in this area.

Coloring Book - Would provide an element for the teachers to use in follow-up work with the students. The book would incorporate scenes from the "Buckle Up The Ones You Love" television spot and other collateral materials.

Poster - An inexpensive poster utilizing our Alaskan character would be developed to reemphasize the basic safety belt message.

Buttons - A cartoon button incorporating our character would be produced and provided to school children.

Video - As part of the in-school presentation, a short video incorporating both national footage and local shots would be developed to clearly communicate the the reasons for using seat belts. Video might close with "Buckle Up The Ones You Love" television spot with music.

We would also organize and coordinate an in-school poster contest where children in different age groups would be able to compete for prizes such as free movie passes, ski weekends, dinners and trips. Corporate sponsors would be obtained, and in so doing, develop corporate awareness of coalition efforts.

Other efforts would focus on organizing awareness efforts in scouting and other group activities.

Corporate/Coalition

The key to the success of the awareness program will rest in large part upon our ability to involve diverse segments of the population. No segment of the population is more crucial to this outcome than the business community. Involvement at all levels will carry the program on well after general public attention has shifted.

1) A group such as Rotary might sponsor an automobile safety event for teenage drivers. Such a contest might allow young drivers to compete for scholarship money or prizes. A format similiar to the television game show Jeopardy might be appropriate for high-school aged young adults statewide. It could be orchestrated in such a way as to allow the final tournament to be broadcast statewide.

2) Publication of statistical information concerning automobile accidents and seatbelt usage in business/corporate newsletters or periodicals would be helpful in promoting awareness. A theme such as "We Do It For Life" might be adopted to promote support of the law by individuals within the business community.

3) Round robin promotions in support of safety belt use will be encouraged, especially by companies related to the auto industry such as auto dealers and parts stores. We might also print up litter bags that are included with each car or part sold.

4) As stated earlier, Alaskan products such as Matanuska Maid milk cartons and Carrs shopping bags would be targeted for promotion of coalition themes.

5) institute a means of recognizing individuals or groups that contribute to the coalition efforts to increase seat belt use. A "Golden Buckle Award" could perhaps be awarded at a yearly banquet.

6) We would develop a brochure targeted for general information dissemination. It would also be an important tool for informing potential business supporters of your efforts.

Law Enforcement

1) Within the first month after the law is passed, we will develop a newsletter for distribution to law enforcement officials. We would then attempt to set up meetings/speaking engagements to explain the new law and its importance.

2) We will develop buttons for law enforcement officers to wear and distribute to offenders of the new law. We propose that only warnings and button distribution take place for a short period after the law is implemented. Button might say "Get It Together Alaska."

3) We propose to develop a print ad designed to cast law enforcement officials as concerned citizens - not in the usual "its the law, obey it or else" manner. The ad would show a police officer and a doctor together in an emergency room. The tone would communicate that the new law was designed to save lives...your life.

STATE OF ALASKA

DEPT. OF HEALTH AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH
EMERGENCY MEDICAL SERVICES SECTION

STEVE COWPER, GOVERNOR

P.O. BOX H-06C
JUNEAU, ALASKA 99811-0600
(907) 465-3027

February 7, 1989

The Honorable Senator
Arliss Sturgulewski
Alaska State Senate
Pouch V, Capitol 447
Juneau, AK 99811

Dear Senator Sturgulewski,

In response to your request, I am sending you statistics on motor vehicle related injuries in rural communities not connected with the major state highway system. Tables 1 and 2, enclosed, show total ambulance calls in remote rural communities and the numbers and percentages of calls related to motor vehicle accidents for calendar years 1987 and 1986 respectively. This data is incomplete because many smaller villages do not have formally organized ambulance services.

Table 3 shows data on off-highway motor vehicle related trauma from our pilot trauma registry study involving seven hospitals in southcentral Alaska for a six month period in 1988- April through October. Participating hospitals include Kanakanak Hospital in Dillingham; South Peninsula Hospital in Homer; Central Peninsula Hospital in Soldotna; Providence, Humana, and ANMC Hospitals in Anchorage; and Valley Hospital in Palmer.

To be included in the trauma registry, an injured person must be admitted to a hospital, die in a hospital emergency department, or be transferred to another hospital for admission. From this incomplete data source, there were seven off-highway, rural, motor vehicle related trauma victims.

Finally, Table 4 shows the number of motor vehicle related deaths in off-highway, rural communities in 1987.

Hopefully, some day we will have a statewide trauma registry involving all hospitals, and we will be able to provide complete data on serious traumatic injuries throughout Alaska.

Please let me know if you need any additional information.

Sincerely,

Mark S Johnson

Mark S. Johnson
EMS Coordinator
Emergency Medical Services Section

Enclosure(s)

cc: Jay Livey
Acting Deputy Commissioner
Dept. of Health & Social Services

Elizabeth Ward, MN
Director
Division of Public Health

Table 1

Ambulance Runs in Bush Communities - 1987

Community	Total Patients	Motor Vehicle Accidents	Per Cent
St. Paul	19	4	21.05
Tyonek	58	0	0.00
Sand Point	17	0	0.00
Barrow	254	9	16.13
Naknek	62	10	16.13
Cordova	103	10	9.71
Metlakatla	11	3	27.27
Fort Yukon	1	0	0.00
Edna Bay	7	1	14.29
Port Alexander	8	0	0.00
Whale Pass	1	1	100.00
Chignik	27	0	00.00
Port Graham	31	0	00.00
Dillingham	78	11	14.10
Kotzebue	268	10	3.73
TOTAL	940	59	6.28

Table 2

Ambulance Runs in Bush Communities - 1986

Community	Total Patients	Motor Vehicle Accidents	Per Cent
Tyonek	40	4	10.00
Aniak	4	0	0.00
Naknek	62	10	16.13
Port Graham	10	0	0.00
Cordova	53	4	7.55
Chignik	46	0	0.00
Sand Point	21	0	0.00
Dillingham	165	16	9.70
Cold Bay	9	2	22.22
Kotzebue	114	0	0.00
Ruby	9	2	22.22
Fort Yukon	8	0	0.00
Galena	21	1	4.76
McGrath	29	0	0.00
Barrow	160	9	5.63
TOTAL	751	48	6.39

Table 3

Off-Highway, Rural, Motor Vehicle Trauma Victims
April, 1988 - October, 1988

Community	No. of Trauma Victims	Summary Data
Kotzebue	one	C-spine fracture
Kodiak	one	Broken arm
Nome	three	Jeep rollover-multiple, one person thrown from vehicle - another had serious head injuries.
Dutch Harbor	one	Fell out of moving car - broken arm
Cordova	one	Vehicle went off road into the water - neck injury

NOTE: None of the above persons was wearing a safety belt.
Participating Hospitals: Kanakanak (Dillingham), South Peninsula (Homer), Central Peninsula (Soldotna), Providence (Anchorage), Humana (Anchorage), ANMC (Anchorage), and Valley (Palmer.
N = 1200 records.

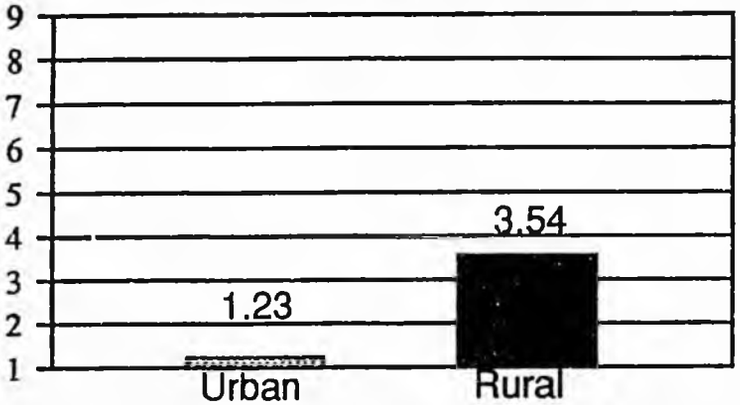
Table 4

Off-Highway, Rural, Motor Vehicle Fatalities
(excluding ATV's, motorcycles, and snow machines & pedestrians)
1987

Community	Fatal Age	Seat Belts	Related Factors
Nome	39	No	Passenger jumped from vehicle
Craig	18	No	Unsafe speed - lost control
Craig	19	No	Unsafe speed - lost control

ALASKA

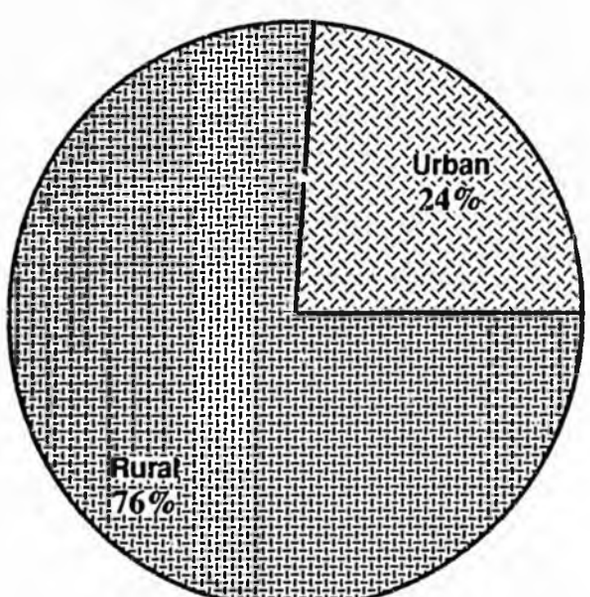
NUMBER OF DEATHS PER 100 MILLION MILES DRIVEN



National Highway Traffic Safety Administration Statistics

ALASKA

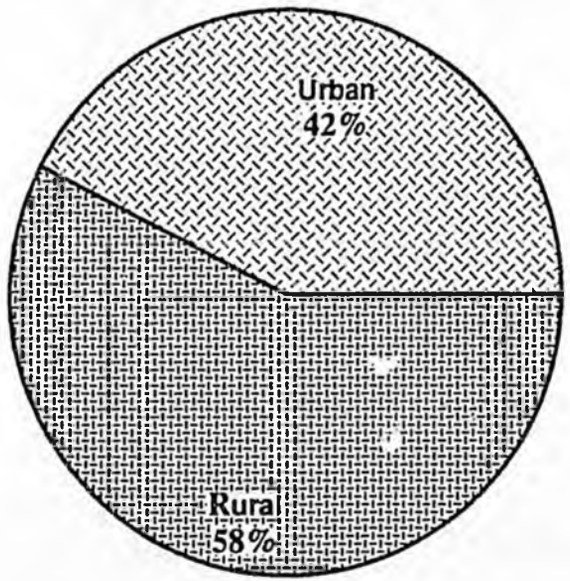
101 MOTOR VEHICLE DEATHS IN 1986



National Highway Traffic Safety Administration Statistics

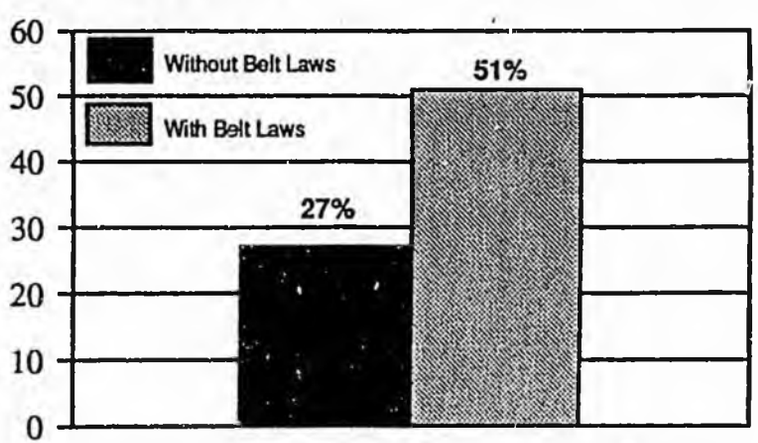
NATIONALLY

46,020 MOTOR VEHICLE DEATHS IN 1986



National Highway Traffic Safety Administration Statistics

BELT-USE NATIONALLY



NHTSA 19 City Survey Conducted During First Half of 1987

By: Senator Adams

Amendment to SB 59:

add under subsection (c)

(3) a motor vehicle exempt under AS 28.10.011 (11).

Sec. 28.10.011. Vehicles subject to registration. Every vehicle driven, moved, or parked upon a highway or other public parking place in the state shall be registered under this chapter except when the vehicle is

(1) driven or moved on a highway only for the purpose of crossing the highway from one private property to another, including an implement of husbandry as defined by regulation;

(2) driven or moved on a highway under a dealer's plate or temporary permit as provided for in AS 28.10.031 and 28.10.181(j);

(3) special mobile equipment as defined by regulation;

(4) owned by the United States;

(5) moved by human or animal power;

(6) exempt under 50 U.S.C. App. 501-591 (Soldiers' and Sailors' Civil Relief Act);

(7) driven or parked only on private property;

(8) the vehicle of a nonresident as provided under AS 28.10.121;

(9) a commercial interstate vehicle under AS 28.10.141;

(10) transported under a special permit under AS 28.10.151;

(11) being driven or moved on a highway, vehicular way, or a public parking place in the state that is not connected by a land highway or vehicular way to

(A) the land-connected state highway system, or

(B) a highway or vehicular way with an average daily traffic volume greater than 499;

(12) a mobile home as defined by regulation;

(13) an implement of husbandry operated in accordance with the provisions of AS 19.10.065. (§ 7 ch 178 SLA 1978; am § 1 ch 54 SLA 1979; am § 1 ch 99 SLA 1983; am § 3 ch 60 SLA 1986; am § 3 ch 26 SLA 1987)

Effect of amendments. — The 1987 amendment added paragraph (13).

Sec. 28.10.021. Application for registration. (a) The owner of a vehicle subject to registration shall apply for registration under this chapter by properly completing the form prescribed by the commissioner under AS 28.05.041. Before the issuance of a certificate of registration by the department, the owner shall pay all registration fees and taxes required under this chapter and federal heavy vehicle use taxes required under 26 U.S.C. 4481 (Internal Revenue Code of 1954) and shall comply with any other applicable statutes and regulations.

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Effect of amend
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Sec. 28.10.04
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(9) the vehicle
AS 28.32.010;

As required by AS 28.22.200(b), following is a list of areas that are exempt from the mandatory insurance law. As of 9/01/86 these areas are also exempt from vehicle registration per AS 28.10.011(11) amended in 1986 legislature. and mandatory child safety devices.

June 10, 1986

Adak
Afognak
Akhiok
Akiachak
Akiak
Akolmiut
Akulurak
Akutan
Alakanuk
Alatna
Allakaket
Amakdedori
Ambler
Amchitka
Angoon
Aniak
Annette
Anvik
Arctic Village
Atka
Atkasuk
Attu

Baranof
Barrow
Beaver
Bell Is. Hot Spgs.
Belkofski
Belmezok
Bettles
Bettles Field
Biorka
Birch Creek
Brevig Mission
Buckland

Candle
Canyon
Cape Pole
Cape Yakataga
Chalkyitsik
Chandalar
Chaniliut
Chakaktolik
Chase
Chatham
Checching
Chenik
Chefornak
Chernofski
Chevak
Chichagof
Chignik
Chignik Lagoon

Chignik Lake
Chisana
Christian
Chuathbaluk
Clark's Point
Cold Bay
Crooked Creek

Deering
Diomede

Edna Bay
Eek
Egavik
Egegik
Ekuk
Ekwok
Elfin Cove
Elim
Emanguk
Emmonak
English Bay
Excursion Inlet

False Pass
Flat
Fort Yukon
Fortuna Ledge

Galena
Gambell
Golovin
Goodnews Bay
Grayling
Gustavus

Hawk Inlet
Haycock
Holy Cross
Hooper Bay
Hughes
Huslia
Hyder

Iditarod
Iguigig
Igushik
Iliamna
Ivanoff Bay

Kachemak
Kaguyak
Kake
Kakhonak

Kaktovik
Kalskag
Kaltag
Kanatak
Karluk
Kasaan
Kashegelok
Kasigluk
Katalla
Kiana
King Cove
King Island
Kipnuk
Kivalina
Kiwalik
Kobuk
Kokhanok
Kokrines
Koliganek
Kongiganak
Kotlik
Kotzebue
Koyuk
Koyukuk
Kvichak
Kwethluk
Kwigillingok
Kwiguk
Kwinhagak

Lake Minchumina
Larsen Bay
Latouche
Levelock
Lime Village
Little Diomede
Long
Lower Kalskag

Manokatak
Marshall
Mary's Igloo
McGrath
Medfra
Makoryuk
Meshik
Metlakatla
Meyoryuk
Meyers Chuck
Moses Point
Mountain Village
Mumtrak

Napaimiut
Napaiskak
Napakiak
Nelson Lagoon
New Stuyahok
Newhalen
Newtok
Nightmute
Nikolai
Nikolski
Noatak
Nolan
Nondalton
Noorvik
Nuiqsut
Nulato
Nunachuak
Nunapitchuk
Nushagak
Nyac

Old Harbor
Ophir
Oscarville
Ouzinkie
Owl Village

Pavlof Harbor
Pedro Bay
Pelican
Pennock Island
Perryville
Pikmiktalik
Pile Bay
Pilot Point
Pilot Station
Pitka's Point
Platinum
Pt. Baker
Pt. Hope
Pt. Lay
Poorman
Port Alexander
Port Alsworth
Port Ashton
Port Graham
Port Heiden
Port Lions
Port Moller
Port Wakefield

Quinhagak

Rampart
Red Devil
Ruby
Russian Mission

St. George
St. Mary's
St. Michael
St. Paul
Sanak
Sand Point
Savoonga
Scammon Bay
Selawik
Shageluk
Shaktoolik
Sheldon Point
Shemya
Shismaref
Shungnak
Shungnak Village
Skwentna
Sleetmute
Snettisham
South Naknek
Squaw Harbor
Stebbins
Stevens Village
Stony River
Stuyahok

Takotna
Taku Harbor
Tanana
Tanunak
Tatitlek
Tenakee Springs
Tetlin
Tin City
Todd
Togiak
Tokeen
Toksook Bay
Tuluksak
Tuntutuliak
Tununak
Twin Hills
Tyonek

Ugashik
Umiat
Unalakleet
Unga

Venetie

Wainwright
Wales
White Mountain
Whittier
Wiseman
Woody Island

Compiled by DMV, Driver Services

SENATE COMMITTEE REPORT

FURTHER

2/9/89 DATE TURNED INTO OFFICE ______________

Mr. President:

TRSP Committee considered SB 59

mandatory use of safety devices in motor vehicles

and recommended

[X] replace with ___ CS SB 59 (Trsp)) [X] same title
[ ] or adopt _______ CS ______________) [ ] new title
[ ] technical title change (HB only)

[ ] attached amendment(s) and

[X] Trsp letter of intent adopted

[ ] do pass

[ ] do not pass

[ ] no recommendation

[X] individual recommendations

[ ] further referral to ______________

FISCAL NOTE(S) [X] zero [ ] fiscal impact [ ] appropriation no FN
[ ] new [ ] updated [ ] previous
[ ] same as previous fiscal note(s) published ______________

MEMBERS SIGNING DO PASS	OTHER RECOMMENDATIONS
[redacted]	Bettye Fahrenkamp Do Not Pass
Pat Pourchot	Paul Fischer (No Rec)
	Jay Kerttula (No Rec)

Lloyd Jones (Do Pass)

Chairman signature and recommendation

[ ] Committee Backup attached

Alaska State Legislature

SENATOR
ARLISS STURGULEWSKI
Senate President Pro Tempore
Chairman, Senate Rules Committee

2957 SHELDON JACKSON STREET
ANCHORAGE, ALASKA 99508

While in Juneau
P.O. BOX V
JUNEAU, ALASKA 99811
(907) 465-3818

Senate

M E M O R A N D U M

16 February 1989

TO: Senator Lloyd Jones

FROM: Senator Arliss Sturgulewski

Attached is a committee substitute for Senate Bill 59 which incorporates the change requested by the Department of Education.

AS 28.05.095 (c)(1) is changed from:

(1) passengers in an emergency vehicle;

to read:

(1) passengers in a school bus or an emergency vehicle.

Although the term "schoolbus" was deleted from current law by Senate Bill 59, there remained an exemption for vehicles without safety belts. It was our understanding that this exemption would include schoolbuses. The Department of Education feels that since some schoolbuses are equipped with safety belts that the exemption is not broad enough.

This change will add to the list of those exempted from wearing safety belts. The Department of Education has sent a letter (attached) explaining its request for this change. In addition there are materials from other states discussing safety belts on school buses.

STATE OF ALASKA

DEPARTMENT OF EDUCATION

OFFICE OF THE COMMISSIONER

STEVE COWPER, GOVERNOR

GOLDBELT PLACE
801 WEST 10TH STREET
P.O. BOX F
JUNEAU, ALASKA 99811-0500

February 8, 1989

The Honorable Arliss Sturgulewski
Alaska State Senator
P. O. Box V
Juneau, Alaska 99811

Dear Senator Sturgulewski:

The Department of Education requests an amendment to SB 59, "An Act Relating to Mandatory Use of Safety Devices in Motor Vehicles," to exempt school buses. Our specific request is that Sec. 28.05.095 (c)(1) be amended to read:

(c) Subsections (a) and (b) do not apply to
(1) passengers in a school bus or an emergency vehicle;

The reasons for our request are as follows:

1. Safety belts are not required in large school buses - The U.S. Department of Transportation has concluded in a report titled Safety Belts in School Buses (June, 1985) that the current construction of school buses referred to as "compartmentalization" (high back, close together, well padded, energy absorbing seats) provides adequate occupant protection, and that a Federal requirement for safety belts in large school buses is not warranted.

2. There are no standards for installation of safety belts in large school buses - The Federal government has not issued standards for installation of safety belts in large school buses. Seat strength, floor strength, anchorage requirements, belt type and size, etc. have not been specified.

3. Some large school buses in Alaska are nevertheless partially equipped with safety belts - The fact that safety belts are not required in large school buses, and that no installation standards exist, does not preclude a local school district, private school or bus operator from installing belts if it so desires. Many belts serve only as restraining devices for special education students and are not intended to protect students in the event of an accident.

The Department of Education does not maintain statistics on the age, size and number of buses equipped with safety belts, nor how the belts were installed. It is conceivable that some belts have not been adequately installed and that the following situations may exist:

a. buses with belts on seats not well anchored to the floor and, in some cases, which have no padding to cover the metal seat frame.

b. buses with seat construction inadequate to withstand the forces generated by safety belts which could collapse with pupils belted to them.

c. buses with floor strength that has deteriorated due to severe weather conditions and varied maintenance making the floor less capable of withstanding the forces of the bus seat with belted passengers in a crash situation.

d. buses with inoperable safety belts.

e. buses with safety belts at some seating positions and not at other seating positions.

4. Possibly more injuries to belted passengers in school buses - Crash testing conducted by the Canadian government and reported in the publication School Bus Safety Study issued January, 1985, by Transport Canada (an agency equivalent to the U.S. Department of Transportation) indicates that the use of lap seat belts in various sizes of school buses may result in more severe head and neck injuries for a belted occupant than for an unbelted one in a severe frontal collision. On smaller buses, the heads of all the restrained dummies experienced forces that were judged to be life threatening or fatal.

Based on the above factors, we believe that the State of Alaska should leave the decision to local school districts as to whether or not they want to mandate use of belts on school buses.

Your support of our requested amendment to SB 59 to exempt school buses will be appreciated. If you have questions, feel free to contact Romayne Kareen, the Department's Administrator of Pupil Transportation Services at 465-2890.

Sincerely,

William G. Demmert
Commissioner

cc: Steve Hole, Deputy Commissioner
Department of Education
Romayne Kareen, Administrator
Pupil Transportation Services
Department of Education

AMENDMENT 2

OFFERED IN THE SENATE BY ADAMS

TO: CSSB 59 (State Affairs)

Page 3, after line 21:

Insert a new bill section to read:

"* Sec 4. AS 28.05.151 is amended by adding a new subsection to read:

(b) The supreme court shall establish a scheduled amount of bail allowing disposition of a citation for a violation of AS 28.05.095 without court appearance."

Original sponsors: Sturgulewski, Uehling, and Duncan

IN THE SENATE BY THE TRANSPORTATION COMMITTEE

CS FOR SENATE BILL NO. 59 (Transportation)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to mandatory use of safety devices in motor vehicles."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 28.05.095 is repealed and reenacted to read:

Sec. 28.05.095. USE OF SAFETY DEVICES REQUIRED. (a) Except as provided in (c) of this section a person

(1) 16 years of age or older may not occupy a motor vehicle while being driven unless restrained by a safety belt; and

(2) may not operate a motor vehicle unless restrained by a safety belt.

(b) Except as provided in (c) of this section, a driver may not transport a child under the age of 16 in a motor vehicle unless the driver has provided and properly secured each child as described in this subsection. If the child is less than four years of age, the child shall be properly secured in a child safety device meeting the standards of the United States Department of Transportation for a child safety device for infants. If the child is four but not yet 16 years of age, the child shall be properly secured in a child safety device approved for a child of that age and size by the United States Department of Transportation or in a safety belt, whichever is appropriate for the particular child.

(c) Subsections (a) and (b) do not apply to

(1) passengers in a school bus or an emergency vehicle;

(2) a vehicle operator acting in the course of employment

delivering mail or newspapers from inside the vehicle to roadside mail or newspaper boxes;

(3) a person or class of persons exempted by regulation under AS 28.05.096; or

(4) a person required to be restrained by safety belts under (a) or (b) of this section if the motor vehicle is not equipped with safety belts.

(d) A person may not remove a safety belt from a vehicle solely to be exempted under (c)(4) of this section.

(e) Notwithstanding any other provision of law, a peace officer may not stop or detain a motor vehicle to determine compliance with (a) of this section, or issue a citation for a violation of (a) of this section, unless the peace officer has probable cause to stop or detain the motor vehicle other than for a violation of (a) of this section.

* Sec. 2. AS 28.05.096(a) is amended to read:

(a) The commissioner of public safety may adopt regulations to exempt a <u>person</u> [CHILD] or a class of <u>persons</u> [CHILDREN] from the requirements of AS 28.05.095 if the commissioner determines that the use of a <u>safety belt or</u> child safety device is impractical because of physical or medical conditions of the <u>person or class of persons</u> [CHILD].

* Sec. 3. AS 28.05.099 is amended to read:

Sec. 28.05.099. PENALTY. (a) A person convicted of a violation of AS 28.05.095(a) or <u>(d)</u> [(c)] is guilty of an infraction and may be <u>fined up to $15 or the court may waive the fine if the person convicted donates $15 to the Emergency Medical Services entity providing services in the area in which the violation occurred</u> [ASSESSED DEMERIT POINTS AS DETERMINED BY REGULATIONS OF THE DEPARTMENT, NOTWITHSTANDING

THE PROVISIONS OF AS 28.15.231(b)].

(b) A person convicted of a violation of AS 28.05.095(b) is guilty of an infraction, and may be fined up to $50. The person may also be assessed demerit points as determined by regulations of the department, notwithstanding the provisions of AS 28.15.231(b). A person who violates AS 28.05.095(b) [AS 28.05.095(a)] by failing to provide a child safety device or safety belt [SEATBELT] may provide a peace officer, including a village safety officer, proof of purchase or acquisition, and installation, of an approved child safety device or safety belt [SEATBELT]. If the proof is provided within 30 days after the issuance of a citation for the infraction, the court shall dismiss the citation and no points shall be assessed under this subsection [(a) OF THIS SECTION] unless the person has

(1) been convicted previously for violating AS 28.05.095 [THAT SECTION] by failing to provide a child safety device or safety belt [SEATBELT];

(2) been cited for failure to provide a child safety device or safety belt [SEATBELT] and has forfeited the bail required by the citation; or

(3) provided [THE] proof under [REQUIRED BY] this subsection on a prior occasion.

* Sec. 4. AS 28.05.151 is amended by adding a new subsection to read:

(b) The supreme court shall establish a scheduled amount of bail allowing disposition of a citation for a violation of AS 28.05.095 without court appearance.

6-0357J
Ford
2/15/89

Original sponsors: Sturgulewski, Uehling, and Duncan

IN THE SENATE

CS FOR SENATE BILL NO. 59 ( )

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

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THE PROVISIONS OF AS 28 15.231(b)].

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6-0357J
Ford
2/15/89

Original sponsors: Sturgulewski, Uehling, and Duncan

IN THE SENATE

CS FOR SENATE BILL NO. 59 (Trans)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

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(1) 16 years of age or older may not occupy a motor vehicle while being driven unless restrained by a safety belt; and

(2) may not operate a motor vehicle unless restrained by a safety belt.

(b) Except as provided in (c) of this section, a driver may not transport a child under the age of 16 in a motor vehicle unless the driver has provided and properly secured each child as described in this subsection. If the child is less than four years of age, the child shall be properly secured in a child safety device meeting the standards of the United States Department of Transportation for a child safety device for infants. If the child is four but not yet 16 years of age, the child shall be properly secured in a child safety device approved for a child of that age and size by the United States Department of Transportation or in a safety belt, whichever is appropriate for the particular child.

(c) Subsections (a) and (b) do not apply to

(1) passengers in a school bus or an emergency vehicle;

(2) a vehicle operator acting in the course of employment

delivering mail or newspapers from inside the vehicle to roadside mail or newspaper boxes;

(3) a person or class of persons exempted by regulation under AS 28.05.096; or

(4) a person required to be restrained by safety belts under (a) or (b) of this section if the motor vehicle is not equipped with safety belts.

(d) A person may not remove a safety belt from a vehicle solely to be exempted under (c)(4) of this section.

(e) Notwithstanding any other provision of law, a peace officer may not stop or detain a motor vehicle to determine compliance with (a) of this section, or issue a citation for a violation of (a) of this section, unless the peace officer has probable cause to stop or detain the motor vehicle other than for a violation of (a) of this section.

* Sec. 2. AS 28.05.096(a) is amended to read:

(a) The commissioner of public safety may adopt regulations to exempt a <u>person</u> [CHILD] or a class of <u>persons</u> [CHILDREN] from the requirements of AS 28.05.095 if the commissioner determines that the use of a <u>safety belt or</u> child safety device is impractical because of physical or medical conditions of the <u>person or class of persons</u> [CHILD].

* Sec. 3. AS 28.05.099 is amended to read:

Sec. 28.05.099. PENALTY. (a) A person convicted of a violation of AS 28.05.095(a) or <u>(d)</u> [(c)] is guilty of an infraction and may be <u>fined up to $15 or the court may waive the fine if the person convicted donates $15 to the Emergency Medical Services entity providing services in the area in which the violation occurred</u> [ASSESSED DEMERIT POINTS AS DETERMINED BY REGULATIONS OF THE DEPARTMENT, NOTWITHSTANDING

THE PROVISIONS OF AS 28.15.231(b)].

(b) A person convicted of a violation of AS 28.05.095(b) is guilty of an infraction, and may be fined up to $50. The person may also be assessed demerit points as determined by regulations of the department, notwithstanding the provisions of AS 28.15.231(b). A person who violates AS 28.05.095(b) [AS 28.05.095(a)] by failing to provide a child safety device or safety belt [SEATBELT] may provide a peace officer, including a village safety officer, proof of purchase or acquisition, and installation, of an approved child safety device or safety belt [SEATBELT]. If the proof is provided within 30 days after the issuance of a citation for the infraction, the court shall dismiss the citation and no points shall be assessed under this subsection [(a) OF THIS SECTION] unless the person has

(1) been convicted previously for violating AS 28.05.095 [THAT SECTION] by failing to provide a child safety device or safety belt [SEATBELT];

(2) been cited for failure to provide a child safety device or safety belt [SEATBELT] and has forfeited the bail required by the citation; or

(3) provided [THE] proof under [REQUIRED BY] this subsection on a prior occasion.

Alaska State Legislature

SENATOR
ARLISS STURGULEWSKI
Senate President Pro Tempore
Chairman, Senate Rules Committee

2957 SHELDON JACKSON STREET
ANCHORAGE, ALASKA 99508

P.O. BOX V
JUNEAU, ALASKA 99811
(907) 465-3818

Senate

M E M O R A N D U M 08 February 1989

TO: Senator Lloyd Jones
Chairman, Senate Transportation Committee

FROM: Senator Arliss Sturgulewski

RE: Senate Bill 59

I respectfully request that Senate Bill 59 be scheduled for a hearing before the Senate Transportation Committee as soon as is practicable.

It has been conclusively demonstrated that seatbelt use results in a savings of both lives and money. Study after study shows that persons injured in automobile accidents have less severe injuries and spend far less on health care if they are using a seat belt at the time of the accident. It has been estimated that on a national basis, each 10 percent increase in safety-belt use results in 30,000 less serious and moderate injuries and a savings of $800 million in direct costs to society.

Without question, Alaskans can be healthier and safer if strongly encouraged to use safety devices in motor vehicles. This proposed law is designed to encourage compliance rather than punish those who don't wear safety belts. That is the reason behind making non-compliance a secondary offense.

In addition to making safety belts mandatory, this legislation removes the rural exemption to the current child safety device statute [see AS 28.05.095 (b)(4)]. Information is included which discusses the role of Department of Public Safety and the Alaska Safety Belt Use Coalition in education and provision of child safety device loaner programs.

The Department of Education has contacted this office with a request that the schoolbus exemption (as is in current law) be replaced in the legislation. I support that change and would request that a committee substitute be developed to

reflect the schoolbus exemption. The Department will be sending a letter explaining its reasons for the request.

Attached are a number of editorials from newspapers statewide encouraging us to pass this legislation. In addition, I have attached a sectional analysis, extracts of studies done, and statistical information about accident and compliance rates.

Zero fiscal notes and position papers of support have been received from the Department of Public Safety, the Alaska Court System, and the Department of Health and Social Services.

SECTIONAL ANALYSIS
COMMITTEE SUBSTITUTE FOR SENATE BILL 59 (State Affairs)
08 February 1989

SECTION ONE:

Repeals and reenacts AS 28.05.095, adding a new (a) requiring a person 16 years of age or older to be restrained by a safety belt in a motor vehicle when either a passenger or the driver.

Subsection (b) is current language [of old (a)] with the exception of line 22, after "is" [BETWEEN FOUR AND SIX] is deleted and "is four but not yet 16" is added.

Subsection (c) is current (b), exceptions:
(1) [A SCHOOL BUS OR AN EMERGENCY VEHICLE] is changed to (1) passengers in an emergency vehicle.

(2) new exeption for mail or newspaper carriers.

(3) "child" is changed to "person". Section is old (2).

(4) "child is changed to "person" and "or (b)" is added after "(a). Section is old (3).

Current (4) is an exemption for rural areas. The bill removes that exemption.

Subsection (d) is the old subsection (c)

Subsection (e) is new. This section provides that a peace officer may not stop a motor vehicle to determine if the passenger or driver is wearing a safety device, nor may a peace officer issue a citation unless the peace officer stopped the motor vehicle for another reason. This section makes the violation a secondary offence.

SECTION 2:

This is a technical change - "child" is changed to "person" and "safety belt" is added.

SECTION 3:

Subsection (a) allows the court to fine a person who is not wearing a safety belt in a motor vehicle or who removes a safety belt from a motor vehicle so as to be exempted from the requirement to wear a safety belt. The $15 fine may be waived by the court if $15 is donated to the Emergency Medical Services entity in the area where the violation occured.

Sectional

Subsection (b) adds the penalty for violating the requirement that a child be in a child safety device that was deleted from subsection (a). The Committee Substitute adds language limiting the fine for this infraction to $50.

Collateral references. — 7A Am. Jur. 2d, Automobiles and Highway Traffic, §§ 185 to 203.
60 C.J.S. Motor Vehicles, § 26.

Sec. 28.05.090. Citation form. [Repealed, § 6 ch 178 SLA 1978.]

Sec. 28.05.091. Seizure of unsafe or defectively equipped vehicle. A motor vehicle which is driven on a highway or vehicular way or area, and which has been determined to be defective in equipment so as to be unsafe for driving, is an unlawful vehicle and may be impounded by a peace officer or an employee of the department officially designated for that purpose. The owner or person in lawful possession of the vehicle shall pay the necessary costs of impounding and storing the vehicle. The impounding of a vehicle is in addition to any other penalty. Nothing in this section prevents the driving or moving of a defective vehicle in the manner directed by the peace officer or employee to a place for

(1) the correction of a defect in the equipment;
(2) dismantling or wrecking; or
(3) storage without repair. (§ 6 ch 178 SLA 1978)

Sec. 28.05.095. Child safety devices. [Effective June 8, 1985.] (a) Except as provided in (b) of this section, a driver may not transport a child under the age of seven in a motor vehicle unless the driver has provided and properly secured each child as described in this subsection. If the child is less than four years of age, the child shall be properly secured in a child safety device meeting the standards of the United States Department of Transportation for a child safety device for infants. If the child is between four and six years of age, the child shall be properly secured in a child safety device approved for a child of that age and size by the United States Department of Transportation or in a seatbelt, whichever is appropriate for the particular child.

(b) Subsection (a) does not apply to

(1) a school bus or an emergency vehicle;
(2) a child or class of children exempted by regulation under AS 28.05.096;
(3) a child required to be restrained by seatbelts under (a) of this section if the motor vehicle is not equipped with seatbelts; or
(4) a motor vehicle exempt under AS 28.10.011(11).

(c) A person may not remove a seatbelt from a vehicle solely to be exempted under (b)(3) of this section. (§ 1 ch 99 SLA 1984)

Effective dates. — Section 3, ch. 99, SLA 1984, makes this section effective one year after enactment. Chapter 99 was approved by the governor on June 8, 1984.

Sec. 28.05.096. Exemptions and alternative safety devices. [Effective June 8, 1985.] (a) The commissioner of public safety may

Related statutes

adopt regulations to exempt a child or a class of children from the requirements of AS 28.05.095 if the commissioner determines that the use of a child safety device is impractical because of physical or medical conditions of the child.

(b) The commissioner of public safety shall specify alternative means of protection for children exempted under this section. (§ 1 ch 99 SLA 1984)

Effective dates. — Section 3, ch. 99, SLA 1984, makes this section effective one year after enactment. Chapter 99 was approved by the governor on June 8, 1984.

Sec. 28.05.097. Child safety device loan program. [Effective June 8, 1985.] (a) There is established a child safety device loan program in the Department of Public Safety, highway safety planning agency.

(b) The director of the highway safety planning agency shall design the child safety device loan program to work in conjunction with private and federal programs operating in the state and shall

(1) provide to every hospital and birthing center in the state, subject to the availability of funds, child safety devices for infants and children to be loaned to the public at nominal fees;

(2) disseminate materials, printed advertisements, and radio and television messages to educate the public about the risks of injury to and death of unrestrained infants and children in motor vehicles and to explain to the public the provisions of AS 28.05.095.

(c) A peace officer who stops a driver for an alleged violation of AS 28.05.095 shall inform the driver about the loan program. (§ 1 ch 99 SLA 1984)

Effective dates. — Section 3, ch. 99, SLA 1984, makes this section effective one year after enactment. Chapter 99 was approved by the governor on June 8, 1984.

Sec. 28.05.098. Sale of child safety devices. [Effective June 8, 1985.] A person may not sell, offer for sale, or install in any motor vehicle a child safety device that does not conform to all applicable federal standards for the device on the date of the sale, offering, or installation. (§ 1 ch 99 SLA 1984)

Effective dates. — Section 3, ch. 99, SLA 1984, makes this section effective one year after enactment. Chapter 99 was approved by the governor on June 8, 1984.

Sec. 28.05.099. Penalty. [Effective June 8, 1985.] (a) A person convicted of a violation of AS 28.05.095(a) or (c) is guilty of an infraction and may be assessed demerit points as determined by regulations of the department, notwithstanding the provisions of AS 28.15.231(b).

(b) A person who violates AS 28.05.095(a) by failing to provide a child safety device or seatbelt may provide a peace officer, including a

village safety officer, proof of purchase or acquisition, and installation, of an approved child safety device or seatbelt. If the proof is provided within 30 days after the issuance of a citation for the infraction, the court shall dismiss the citation and no points shall be assessed under (a) of this section unless the person has

(1) been convicted previously for violating that section by failing to provide a child safety device or seatbelt;

(2) been cited for failure to provide a child safety device or seatbelt and has forfeited the bail required by the citation; or

(3) provided the proof required by this subsection on a prior occasion. (§ 1 ch 99 SLA 1984)

Effective dates. — Section 3, ch. 99, SLA 1984, makes this section effective one year after enactment. Chapter 99 was approved by the governor on June 8, 1984.

Article 3. Subpoenas, Notices and Hearings.

Collateral references. — Necessity and sufficiency of notice and hearing before revocation of driver's license, 10 ALR2d 833, 60 ALR3d 361, 60 ALR3d 427

Sec. 28.05.111. Subpoenas; witnesses and documents. (a) The commissioner and officers and employees of the department designated by the commissioner may, for good cause, subpoena witnesses to give testimony under oath or to give written deposition upon a matter under the jurisdiction of the department with respect to this title, and regulations adopted under this title. A subpoena issued under this section may require the production of relevant books, papers, documents, records or other tangible things designated in the subpoena.

(b) A subpoena issued under this section shall be served at least five days before the return date, either by personal service made by a peace officer or another person who is not less than 18 years of age or by registered or certified mail. Return acknowledgment is required to prove service by mail. The fees for the attendance and travel of witnesses are the same as for witnesses appearing before the district court.

(c) A subpoena issued under this section may be enforced by the district court. (§ 6 ch 178 SLA 1978)

Sec. 28.05.121. Giving of notice. When the department is authorized or required to give notice under this title or regulations adopted under this title, unless a different method of giving notice is otherwise expressly provided, notice shall be given by a qualified person, either by personal delivery to the person to be notified or by registered or

STATE OF ALASKA
1989 LEGISLATIVE SESSION

BILL VERSION: CSSB 59 (SA)
PUBLISH DATE:

FISCAL NOTE

REQUEST:

Revision Date: 2/9/89
Title: Mandatory use of safety devices in motor vehicles
Sponsor: Senator Sturgulewski, et al
Requestor: Senate State Affairs

Agency Affected: Public Safety
BRU: Highway Safety Planning Agency
Component:

EXPENDITURES/REVENUES: (Thousands of Dollars) (Inflation not included)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

ANALYSIS: (Attach a separate page if necessary)

No fiscal impact is anticipated. Revenue generated will be negligible. Section 3 provides for judicial waiving of the $15.00 fine if a donation is made to the Emergency Medical Services entity serving the locale where the violation occurred.

JM 2/9/89

Prepared by: Ellen Moore, Program Coordinator
Division: Highway Safety Planning Agency
Phone: 465-4375
Date: 2/9/89

Approved by Commissioner: D.A.H. for Arthur English
Agency: Department of Public Safety
Date:

Fiscal Notes + position papers

BILL NO: Senate Bill 59 DATE: January 19, 1989

TITLE: "An act relating to mandatory use of safety devices in motor vehicles." CONTACT: Ellen Moore

DEPARTMENT OF PUBLIC SAFETY

The intent of this legislation is to reduce deaths and serious injuries to occupants of motor vehicles by promoting the greater use of safety belts by the motoring public.

Thirty-two states have enacted bills requiring the use of safety belts. Jurisdictions that have had the longest experience with their laws have found that the greater the level of increase in seatbelt use, the greater the reduction in fatalities and serious injuries.

Senate Bill 59 has the potential to save as many as 35 lives in Alaska each year. This figure assumes a 70% compliance rate and a 50% effectiveness rate. Because the bill allows only "secondary" enforcement, it may be difficult to achieve this level of use; however, surveys conducted since 1985 by Hellenthal and Associates indicate that approximately 80% of the Alaskans surveyed will wear safety belts simply because such a law exists.

We recommend passage of SB 59 as written.

Arthur English
Commissioner

STATE OF ALASKA
1988 LEGISLATIVE SESSION

BILL VERSION: SB 59
PUBLISH DATE: _____

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: "An act relating to the mandatory use of safety devices in motor vehicles."
Sponsor: Sturgelewski
Requestor: Sturgelewski

Agency Affected: PUBLIC SAFETY
BRU: Highway Safety Planning Agency
Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS						
OTHER						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

ANALYSIS: (Attach a separate page if necessary)

No fiscal impact is anticipated. Revenue generated will be negligible. Sec. 3 provides for judicial waiving of the $15.00 fine if a donation is made to the Emergency Medical Services entity serving the locale where the violation occurred.

Prepared by: Ellen Moore, Program Coordinator — Phone: 465-4375
Division: Highway Safety Planning Agency — Date: January 19, 1989
1/20/89

Approved by Commissioner: Arthur English — Date: 1-24-89
Agency: Department of Public Safety

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management and Budget
Impacted Agency(ies)

BILL NO: Senate Bill 59 DATE: January 19, 1989

TITLE: "An act relating to mandatory use of safety devices in motor vehicles." CONTACT: Ellen Moore

DEPARTMENT OF PUBLIC SAFETY / DIVISION OF MOTOR VEHICLES

The intent of this legislation is to reduce deaths and serious injuries to occupants of motor vehicles by promoting the greater use of safety belts by the motoring public.

Thirty-two states have enacted bills requiring the use of safety belts. Jurisdictions that have had the longest experience with their laws have found that the greater the level of increase in seatbelt use, the greater the reduction in fatalities and serious injuries.

Senate Bill 59 has the potential to save as many as 35 lives in Alaska each year. This figure assumes a 70% compliance rate and a 50% effectiveness rate. Because the bill allows only "secondary" enforcement, it may be difficult to achieve this level of use; however, surveys conducted since 1985 by Hellenthal and Associates indicate that approximately 80% of the Alaskans surveyed will wear safety belts simply because such a law exists.

We recommend passage of SB 59 as written.

STATE OF ALASKA

OFFICE OF THE GOVERNOR

BILL ANALYSIS

DEPARTMENT	DIVISION	BILL NUMBER	SPONSOR
Public Safety	Highway Safety	SB 59	Sturgulewski

SHORT TITLE OF BILL
Safety Devices

DEPARTMENT POSITION
Support

PREPARED BY	DATE	COMMISSIONER'S SIGNATURE	DATE
Ellen Moore	01/19/89		

SUMMARY

OTHER AGENCIES AFFECTED BY BILL	CONSTITUENT GROUP(S) AFFECTED BY BILL
Alaska Court System Alaska State Troopers Emergency Medical Services (H&SS)	
ORGANIZATIONAL SUPPORT FOR BILL	**ORGANIZATIONAL OPPOSITION TO BILL**
Highway User's Federation; North Star Council on Aging; AK Safety Belt Use Coalition; AK Dental Society; AK Council on EMS; Society of Safety Engr's; MADD (JNU)	

FISCAL IMPACT: ☒ NONE ☐ FISCAL NOTE ATTACHED

BACKGROUND/LEGISLATIVE INTENT

The intent of this legislation is to reduce the frequency and severity of injuries sustained in motor vehicle collisions by increasing the use of safety belts by motorists in this State.

ANALYSIS OF BILL/PROGRAM EFFECTS

Passage of safety belt use legislation would have an immediate and significant impact on automobile accident-induced injuries and fatalities. The degree of success of this legislation will depend upon the quality of the educational and enforcement efforts surrounding its implementation.

AMENDMENTS PROPOSED

PLEASE ATTACH A SEPARATE SHEET FOR ADDITIONAL COMMENTS OR ANALYSIS

STATE OF ALASKA
1988 LEGISLATIVE SESSION

BILL VERSION: SB 59
PUBLISH DATE: _____

FISCAL NOTE

REQUEST:

Revision Date: _____
Title: "An act relating to the mandatory use of safety devices in motor vehicles."
Sponsor: Sturgelewski
Requestor: Sturgelewski

Agency Affected: PUBLIC SAFETY
BRU: Highway Safety Planning Agency
Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS						
OTHER						
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

No fiscal impact is anticipated. Revenue generated will be negligible. Sec. 3 provides for judicial waiving of the $15.00 fine if a donation is made to the Emergency Medical Services entity serving the locale where the violation occurred.

Prepared by: Ellen Moore, Program Coordinator
Phone: 465-4375
Division: Highway Safety Planning Agency
Date: January 19, 1989

Approved by Commissioner: _____
Date: _____
Agency: Department of Public Safety

Distribution (by preparer):
- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

STATE OF ALASKA 1989 LEGISLATIVE SESSION
FISCAL NOTE

REQUEST:

Bill Version: SB 59
Publish Date: 1/9/89

Revision Date:
Title: An act relating to mandatory use of safety devices in motor vehicles
Sponsor: Sturgulewski, Uehling, Duncan
Requestor:

Agency Affected: Alaska Court System
BRU: Trial Courts
Components:

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
Personal Services	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Travel	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Contractual	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Supplies	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Equipment	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Land & Structures	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Grants & Claims	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
REVENUE	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .

FUNDING: (Thousands of Dollars)						
General Funds	0.0	0.0	0.0	0.0	0.0	0.0
Federal Funds	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Other	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS:						
Full-time	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Part-time	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .
Temporary	. . . .	. . . .	. . . .	. . . .	. . . .	. . . .

ANALYSIS: (Attach a separate page if necessary)

No fiscal impact.

Prepared by: Jan Strandberg, General Counsel Phone: 264-8228
Division: Alaska Court System Date: 01/24/89

Approved by: Arthur H. Snowden, II, Administrative Director Date: 01/24/89
Agency: Alaska Court System

Distribution (by preparer):
Legislative Finance
Legislative Sponsor
Requestor
Office of Management & Budget
Impacted Agency(ies)
Senate Secretary

MEMORANDUM

State of Alaska

DEPARTMENT OF PUBLIC SAFETY

TO: Senator Arliss Sturgulewski
Sixteenth Alaska State Legislature

DATE: February 2, 1989

FILE NO:

TELEPHONE NO: 465-4371

FROM: T. Michael Lewis
Governor's Highway Safety Representative
Highway Safety Planning Agency

SUBJECT: Determination of Mandatory Seatbelt Law Compliance

In response to questions concerning the determination of compliance by the Secretary of Transportation on the criteria of the State mandatory seatbelt laws, I offer the following information:

Section 4.1.5.1 of Motor Vehicle Safety Standard No. 208 (copy attached) requires that the Secretary of Transportation shall determine, no later than April 1, 1989, that state mandatory safety belt use laws have been enacted that meet the criteria specified in S4.1.5.2 and are applicable to not less than two-thirds of the total population of the fifty states and the District of Columbia.

In order to ascertain the current status of this determination, I called the Regional Office of the National Highway Traffic Safety Administration, Department of Transportation. I was told by that office that:

1. The due date of that determination is not until April 1, 1989, and that no determination has been made at this time.

2. Because of the common knowledge that only one, of the thirty-one states that have enacted mandatory seatbelt laws, is in full compliance with S4.1.5.2, it is highly doubtful if the Secretary will issue a determination of compliance statement.

3. As a result of the failure of the states to fully comply with the criteria of S4.1.5.2, all passenger vehicles manufactured after September 1, 1989 must be equipped with approved passive restraint systems.

If you require any additional information, please do not hesitate to give me a call at 465-4374.

cc: Arthur A. English, Commissioner
Department of Public Safety

Attachment

TML:cg

Backup

S4.1.3.1.2 Subject to S4.1.5, an amount of the cars specified in S4.1.3.1.1 equal to not less than 10 percent of the average annual production of passenger cars manufactured on or after September 1, 1983, and before September 1, 1986, by each manufacturer, shall comply with the requirements of S4.1.2.1.

S4.1.3.2 Passenger cars manufactured on or after September 1, 1987, and before September 1, 1988.

S4.1.3.2.1 Subject to S4.1.3.2.2 and S4.1.3.4, each passenger car manufactured on or after September 1, 1987, and before September 1, 1988, shall comply with the requirements of S4.1.2.1, S4.1.2.2 or S4.1.2.3.

S4.1.3.2.2 Subject to S4.1.5, an amount of the cars specified in S4.1.3.2.1 equal to not less than 25 percent of the average production of passenger cars manufactured on or after September 1, 1984, and before September 1, 1987, by each manufacturer, shall comply with the requirements of S4.1.2.1.

S4.1.3.3 Passenger cars manufactured on or after September 1, 1988, and before September 1, 1989.

S4.1.3.3.1 Subject to S4.1.3.3.2 and S4.1.3.4, each passenger car manufactured on or after September 1, 1988, and before September 1, 1989, shall comply with the requirements of S4.1.2.1, S4.1.2.2 or S4.1.2.3.

S4.1.3.3.2 Subject to S4.1.5, an amount of the cars specified in S4.1.3.3.1 equal to not less than 40 percent of the average annual production of passenger cars manufactured on or after September 1, 1985, and before September 1, 1988, by each manufacturer, shall comply with the requirements of S4.1.2.1.

S4.1.3.4 For the purposes of calculating the numbers of cars manufactured under S4.1.3.1.2, S4.1.3.2.2 or S4.1.3.3.2 to comply with S4.1.2.1, each car whose driver's seating position will comply with these requirements by means other than any type of seat belt is counted as 1.5 vehicles.

3. Standard No. 208 is amended by adding the following new sections:

S4.1.4 Passenger cars manufactured on or after September 1, 1989. Except as provided in S4.1.5, each passenger car manufactured on or after September 1, 1989, shall comply with the requirements of S4.1.2.1.

S4.1.5 Mandatory seatbelt use laws.

S4.1.5.1 If the Secretary of Transportation determines, by not later than April 1, 1989, that state mandatory safety belt usage laws have been enacted that meet the criteria specified in S4.1.5.2 and that are applicable to not less than two-thirds of the total population of the 50 states and the District of Columbia (based on the most recent Estimates of the Resident Population of States, by Age, Current Population Reports, Series P-25, Bureau of the Census), each passenger car manufactured under S4.1.3 or S4.1.4 on or after the date of that determination shall comply with the requirements of S4.1.2.1, S4.1.2.2, or S4.1.2.3.

S4.1.5.2 The minimum criteria for state mandatory safety belt usage laws are:

(a) Require that each front seat occupant of a passenger car equipped with safety belts under Standard No. 208 has a safety belt properly fastened about his or her body at all times when the vehicle is in forward motion.

(b) If waivers from the safety belt usage requirement are to be provided, permit them for medical reasons only.

(c) Provide for the following enforcement measures:

(1) A penalty of not less than $25.00 (which may include court costs) for each occupant of a car who violates the belt usage requirement.

(2) A provision specifying that the violation of the belt usage requirement may be used to mitigate damages with respect to any person who is involved in a passenger car accident while violating the belt usage requirement and who seeks in any subsequent litigation to recover damages for injuries resulting from the accident. This requirement is satisfied if there is a rule of law in the State permitting such mitigation..

(3) A program to encourage compliance with the belt usage requirement.

(d) An effective date of not later than September 1, 1989. (49 F.R. 28962—July 17, 1984. Effective: August 16, 1984)]

S4.2 Trucks and multipurpose passenger vehicles with GVWR of 10,000 pounds or less.

S4.2.1 Trucks and multipurpose passenger vehicles, with GVWR of 10,000 pounds or less, manufactured from January 1, 1972, to December 31, 1975. Each truck and multipurpose passenger vehicle with a gross vehicle weight rating of 10,000 pounds or less, manufactured from January 1,

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BEFORE DEC 2, 1988

REPORT TO THE WASHINGTON STATE LEGISLATURE:

THE IMPACT OF THE 1986 MANDATORY SAFETY BELT USE LAW

December 1988

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Director

REPORT TO THE WASHINGTON STATE LEGISLATURE

THE IMPACT OF THE 1986 MANDATORY SAFETY BELT USE LAW

EXECUTIVE SUMMARY

THE MUL: Key Provisions

On June 11, 1986, the State of Washington put into effect the Mandatory Safety Belt Use Law of 1986 (MUL). Along with the majority of other states in the union, the State of Washington has declared that the failure to use a safety belt while a passenger or operator of a motor vehicle is a violation of the law. The MUL requires persons driving or riding in any vehicle in which federal law required the manufacturers to install safety belts to wear them. The law requires all persons 16 years old or older driving or riding in a motor vehicle, whether in front or in the back, to use safety belts. Children under the age of 16 are to use a safety belt, or must be restrained in an approved child safety seat if the child is young enough for the child restraint law to apply. Automobiles, trucks and vans are covered by the law. Persons riding in or driving a vehicle which did not have safety belts installed when manufactured are not subject to enforcement action.

The MUL provisions became fully active on January 1, 1987. During the interim "grace period" between June 11, 1986, and January 1, 1987, no citations were issued, although warnings were given to motorists. As of January 1, 1987, a penalty, which, when combined with the statutory assessment, could total $47, may be imposed for violation of the MUL. The MUL is a secondary

enforcement law exclusively. This means that a vehicle may not be stopped just for an MUL violation. Once a vehicle is stopped for reasons related to a primary enforcement offense, such as speeding or failure to yield the right of way, an officer may issue an MUL citation if the operator and/or passengers of detained vehicles are in violation of the MUL.

MAIN QUESTIONS OF INTEREST: MUL Effect on Safety Belt Use; Level of Public Support for the MUL; Support for the MUL Among Law Enforcement and Court Agencies; and Evidence of Societal Benefit (Monetary) of the MUL

This report submitted to the Washington State Legislature contains a wide range of findings of interest, but the major concerns at this early point in the implementation of the MUL necessarily relate to the essential matters of DESIRED OUTCOMES and public and professional ACCEPTANCE. With regard to outcomes, the immediate concerns are: 1) Has the MUL increased the level of use of safety belts by the vehicle operators and passengers of motor vehicles traveling on the state's highways, roads and streets? AND 2) Has the MUL led to monetary savings attributable to the reduction of fatal and non-fatal disabling injury collisions? On the subject of acceptance of the MUL, again there are two essential questions: 1) Does the public accept the MUL as being a PROPER LAW and one that is EFFECTIVE in its stated purposes? AND 2) Do those charged with the responsibility of enforcement -- the police agencies and the courts -- accept the MUL as a proper and effective measure for promoting traffic safety on the state's roadways?

In addition to these fundamental concerns, this report also contains some exploratory analyses of the correlates of safety belt use, of the impact of differing levels of enforcement activity on aggregate and individual level safety belt use, and of the sources for cues received by the public for the encouragement of seatbelt use. These several analyses were undertaken to provide the Washington Traffic Safety Commission with information required to plan the most proper use of its resources in future efforts to increase the level of compliance with the MUL across the state.

FINDINGS ON MUL OUTCOMES AND ACCEPTANCE

On the matter of rates of safety belt use, a combination of three distinct methods of analysis were employed: 1) direct observation of vehicles in the field; 2) analysis of collision reports; and 3) self-reports of safety belt use obtained in a state-wide survey of the public. All three methods of analysis indicate the same outcome -- namely, the MUL has indeed resulted in a higher rate of use of safety belts than obtained prior to the enactment of the law.

With respect to the level of acceptance of the MUL among those who are charged with the law's enforcement, surveys of the Troopers and administrative officers of the law enforcement agency that writes the vast majority of citations for violation of the MUL -- the Washington State Patrol -- indicate clearly that the MUL is supported and enforced with vigor. Similarly, county and municipal law enforcement officers who enforce traffic

laws and their administrative leadership also report a high level of support and enforcement within their jurisdictions. On balance, the law enforcement agencies contacted report that they view the MUL as an effective tool in the on-going fight to enhance traffic safety and reduce roadway fatalities in Washington. Much the same sentiment, moreover, is voiced by the judges surveyed; they too tend to share the view that the MUL represents an important tool for the state in its effort to promote a safer driving environment for the people of Washington.

As for the level of acceptance of the MUL among the public, there is clear evidence from a state-wide survey of the general adult citizenry that public support for the MUL is high -- on the order of nearly eight in ten citizens expressing the opinion that they favored the MUL. The public tends to view the law as both a proper enactment, and one which is quite effective in accomplishing its stated purpose.

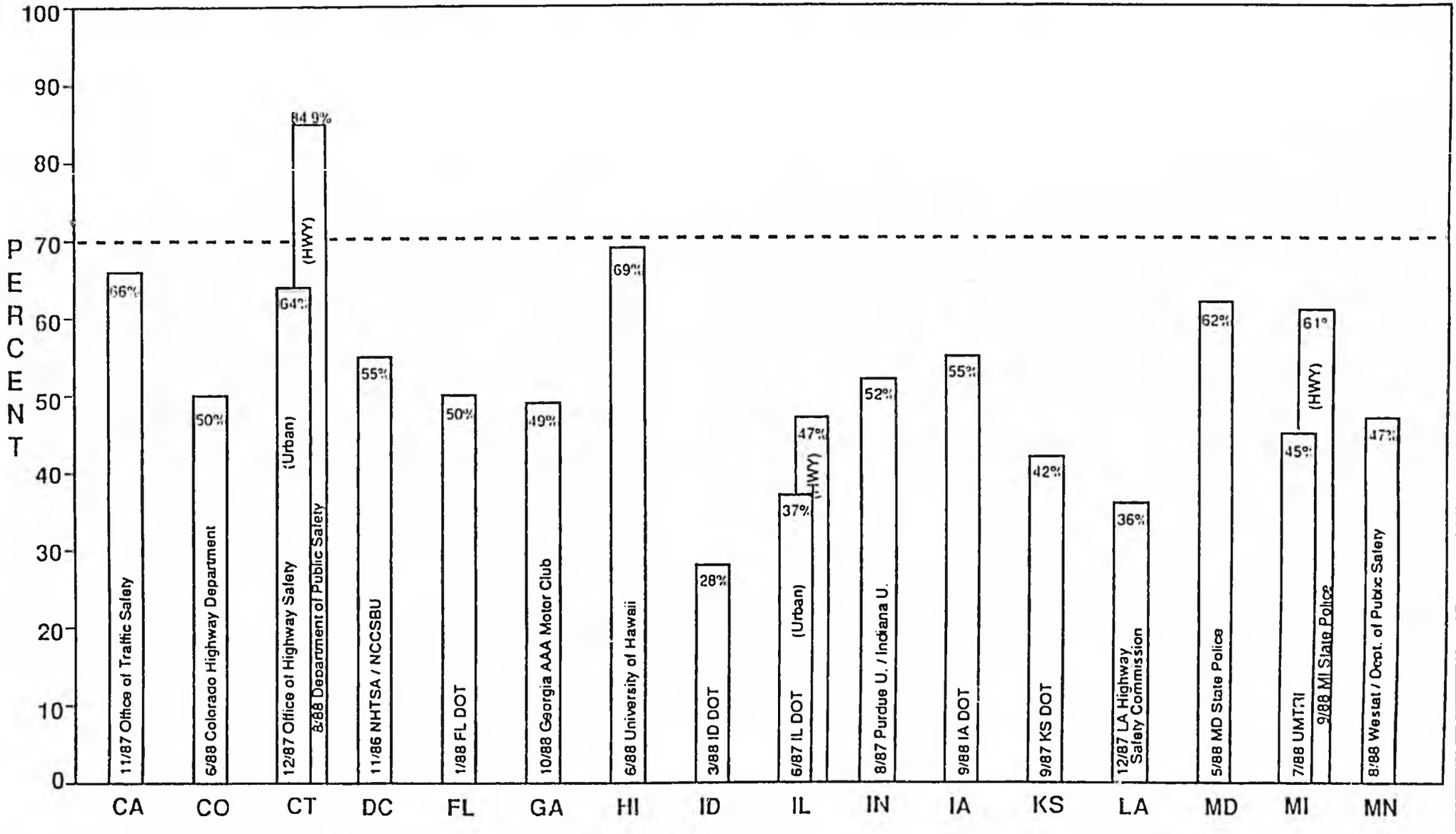
Finally, as to the outcome of societal benefits to be attributed to the impact of the MUL, the analyses presented in this report document the savings in lives and severe injuries, and the concomitant savings in monetary terms, which have accrued to the state as a result of the implementation of the MUL. Using time series analyses and trend line extrapolation, it is estimated that, during 1986 and 1987, some 35 fewer fatalities, 822 fewer non-fatal disabling injuries and 1,745 fewer minor injuries than were predicted in the absence of the MUL actually occurred. These figures translate into a savings in the range of $16 to $24 million. These figures represent savings calculated on the basis of standardized formulae developed by the National

Safety Council and the National Highway Traffic Safety Administration with respect to losses resulting from fatal or non-fatal disabling injury collisions such as lost wages, medical expenses, property damage, insurance administrative costs, etc.

CONCLUSIONS

Washington's MUL would appear to have been generally successful in accomplishing its express purpose of motivating citizens to make use of their safety belts. The public is supportive of the law, the agencies of law enforcement and the judicial authorities judge the law to be proper and efficacious, and the indicators of public compliance and amount of losses resulting from fatal and non-fatal disabling injury collisions suggest that positive outcomes are attributable to the MUL. While this generally positive outlook on the MUL is clearly appropriate, it is also necessary to note that higher levels of compliance are being reported in other countries with similar laws. It is also likely that the rate of use of safety belts and the level of societal benefits might be greater yet if more youth-oriented, school-age programs were initiated and the MUL was a primary enforcement offense as opposed to a secondary enforcement offense. In sum, the results and findings reported herein indicate a positive start for the MUL, and they also indicate that more progress yet is to be expected in this important area of public policy.

COMPLIANCE RATES IN POST-LAW STATES



December 1988

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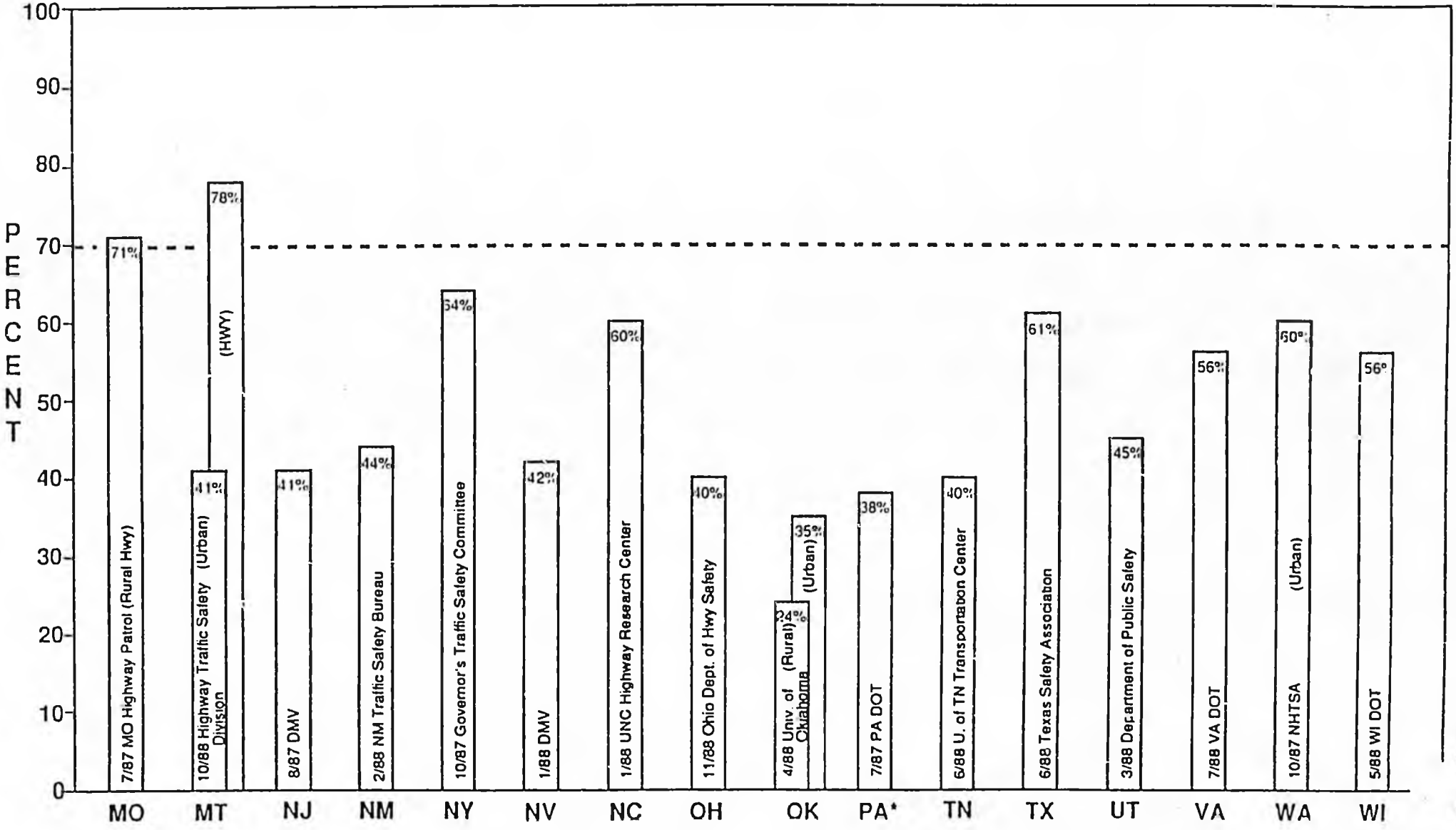
COMPLIANCE RATES IN POST-LAW STATES

Page 2



* Use rates prior to law taking effect

FACT SHEET:

UNIVERSITY OF MICHIGAN

"Effects Of Mandatory Safety Belt Use On Hospital Admissions"

August 1988

This study assessed the effects of Michigan's safety-belt-use law on more than 8,000 motor-vehicle injuries which resulted in hospitalizations at 14 area hospitals.

It was conducted by the University of Michigan School of Public Health from data collected through the Michigan Inpatient Database from January 1980 through October 1986. Major findings of this study include:

- The Michigan safety-belt-use law passed in July 1985 has resulted in a 19-percent reduction in hospitalizations due to automobile accidents.
- There were 20 percent fewer injuries to body extremities following the passage of Michigan's belt-use law.
- Hospitalizations lasting more than one week decreased nearly 25 percent after the law went into effect.
- After the state safety-belt-use law went into effect, minorities experienced 22 percent fewer injuries.
- A 32-percent decline in injuries occurred among patients using public-health insurance after passage of the state law.
- With regard to the contention that safety belts may cause injuries, researchers concluded "the benefits of restraints far exceed the risks associated with them."

* * *

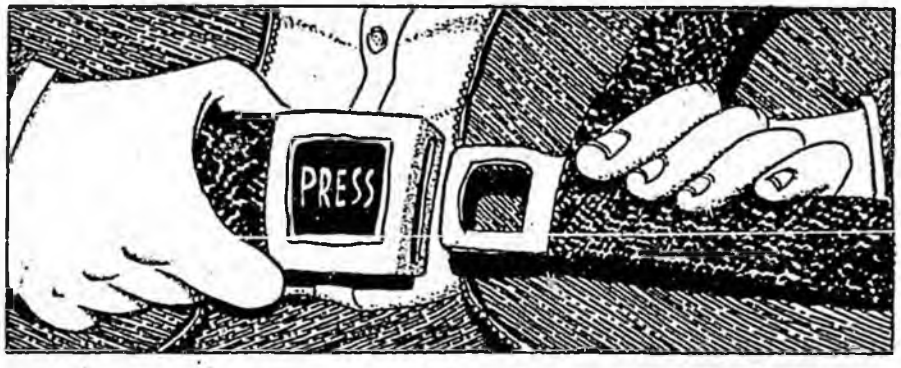
FORUM

Alaskans can live with proposed safety belt law

By FRANK BICKFORD

One thing alone can save 35 Alaskan lives a year, reduce the hardship and costs of over 600 injuries, save $5 million worth of lost labor, and decrease economic losses associated with highway death and injury alone by

COMPASS
POINTS OF VIEW FROM OUR COMMUNITY



as much as $13 million, according to estimates from The Alaska Highway Users Study. That one thing is wearing the safety belts already in our cars.

These facts are just four of the reasons Alaska needs a law requiring safety belt use. Although a major purpose of the Alaska Safety Belt Use Law would be to promote the safety of drivers and passengers using their safety belts, such a law would also promote the safety of other street and highway travelers, and promote the public welfare by reducing public expenditures.

In other words, if Alaska requires safety belts to be worn — everyone can benefit!

Belt-use laws that have been passed in 31 states and D.C. motivate people to buckle up. Those states found that voluntary use is low. Legislating the use of safety belts saved significant numbers of lives and reduced costs.

Educational campaigns promoting safety belt use have been launched here and across the country. Use of safety belts increases temporarily during the campaign and then returns to a low percentage. The amount of money spent is great and the residual impact slight.

Safety belt use laws and an aggressive educational campaign must be combined to achieve maximum use. In the absence of a law even with an educational campaign, less than 32 percent of the population will buckle up. However, a Hellenthal statewide poll last year showed that 81 percent of Alaskans would wear safety belts if required by law.

A safety belt use law is the incentive to establish the safety habit in those who otherwise wouldn't buckle up.

If a person is killed or injured, it affects more people than the victim. Persons are not allowed a "freedom to choose" to pay the health care costs of those who "choose" not to wear their safety belts.

The cost of needless fatalities and serious injuries are paid by all persons — not simply the victim. Taxes, insurance premiums and health care costs increase for us all. Unbelted occupants cause injuries to other occupants by becoming "unguided missiles." Thus, the "freedom to choose' to wear the belt does affect others directly.

The costs to society for medical care, rehabilitation, unemployment and welfare services supercede the "right" of people to seriously or fatally injure themselves or others by not buckling up. As a citizen and taxpayer, your rights are infringed upon by those who aren't responsible enough to buckle-up voluntarily; they leave you to pick up the tab for increased costs.

Other similar traffic-safety laws protect motorists and others, such as speed limits, drinking and driving and driver licensing. Safety belt use laws are consistent with these and other laws.

Ninety percent of those persons killed in motor vehicle accidents in Alaska during 1985, 1986, and 1987 were not wearing safety belts.

The proposed safety belt use law Alaska is a secondary offense-requiring t a motorist be stopped for another offe before a $15 ticket (which may be donate emergency medical services) can be iss for not using safety belts.

Secondary enforcement will not imp additional burdens on law enforcement ficers responsible for citing motorists un this act. Safety belts reduce traffic fat ties, which are eight times as expensive investigate as non-injury accidents. In f officers would have more time to conc trate on other traffic enforcement progra

In the past three years Hellenthal Associates has conducted extensive st wide and local polls that show more thar percent of Alaskans supporting a safety b use law.

In the past three years more than 8, Alaskans have signed letters of support the proposed safety belt use law and over businesses have passed supportive reso tions.

The Alaska State House in 1987 pas the safety belt use law with bipartis support. The Senate in 1988 failed to act the legislation but 1989 looks more fav able for passage. Supporters of the i include Speaker of the House, Sam Cott Senate President Tim Kelly, and the Gov nor Steve Cowper.

The statistics, the public support, editorial support of many newspapers a legislative support show that the propo safety belt use law is one that Alaska c live with.

□ Frank Bickford is executive director of Alaska Safety Belt Use Coalition.

Anchorage Daily News

Winner, 1976 Pulitzer Prize Gold Medal for Public Service

Gerald E. Grilly, Publisher
Howard Weaver, Managing Editor
Michael Carey, Editorial Page Editor

Katherine Fanning, Editor and Publisher 1971 to 1983
Lawrence Fanning, Editor and Publisher 1967 to 1971

Founded in 1946 by Norman C. Brown

A way to prevent needless deaths

This year, the legislature has a chance to help fight one of the most serious health problems in the state — and it can do so with very little money or effort.

The health problem is accidental injuries. They are the second leading cause of death for all Alaskans — and the leading cause among young Alaskans. Too many of these deaths come in motor vehicle accidents — some 231 over the past three years.

AGENDA 89

There's a simple way to cut this carnage on the state's highways: Require people to wear seat belts. Of those 231 victims, 201 were not belted in.

A bill to mandate seat belt use passed the state House last year but never made it to the Senate floor for a vote. This year, with new legislative leadership, prospects for a seat belt law look much better.

In the past, some people have resisted a seat belt law because they see it as an infringement on their personal freedom. Why they object is a mystery. The resulting "intrusion" into people's lives is on a par with a parking ticket — and has considerably more justification. When a parked car overstays its welcome, there's just one less parking space available. When car passengers fail to buckle up, they invite serious injury and death, and increase the costs we all pay for emergency services, insurance and health care.

Alaska's proposed seat belt law offers us all a gentle reminder to do what's good for everyone. The violation would be a secondary offense, meaning that drivers cannot be cited unless they are stopped for some other violation. The fine would be a mere $15. If violators don't want to send their checks to the government, they can donate the $15 to emergency medical services.

Seat belts save lives — but only if people wear them. A mandatory seat belt law is a reasonable way to get more people to buckle up.

Tuesday, January 17, 1989

Make it mandatory

The Legislature could do a simple thing that would save lives, reduce injuries and save money. It could pass a law making the use of safety belts in vehicles mandatory.

Many people don't like the idea of mandatory safety belt laws. The use of safety belts should be a personal choice, they say. The government has no business dictating personal choices.

It's a compelling argument, but not so compelling as the harm that is done by not wearing safety belts. According to a 1987 study, mandatory use of safety belts in Alaska would save 35 lives a year, reduce injuries to more than 600 persons, save $5 million worth of lost labor and decrease other economic losses associated with highway death and injury by $13 million. Not just the victims, but everyone pays the cost of not wearing safety belts in terms of increased taxes, insurance premiums and health care costs.

Thirty-one states and the District of Columbia have passed mandatory safety belt laws. In every state, use of safety belts has increased substantially.

Educational programs promoting safety belt use fail to provide the incentive to buckle up that a law requiring it does. We reluctantly move from a position of advocating voluntary compliances to urging the Legislature to make safety belts mandatory. They should, however, avoid some of the problems that Washington state encountered when they initially failed to provide for exemptions for certain types of delivery vehicles.

FAIRBANKS
Daily News-Miner

Robert B. Atwood
President and Publisher

Elaine Atwood
Assistant Publisher

William J. Tobin
Vice-President, Editor-in-Chief

Editorials

You buckle up in Canada

IN THE for-what-it's-worth department, all the provinces of Canada now have laws making mandatory the use of seat belts by motorists.

Prince Edward Island was the last to join the national movement, putting its mandatory seat belt law into effect this past January.

British Columbia was an early member of the buckle-up brigade, enacting its mandatory law in October 1977. Alberta, among the Western provinces, joined the flock last July.

The reason, of course, is that seat belts save lives — even though their use is a habit that many motorists find hard to adopt.

Arguments that it infringes on personal rights to make it illegal to drive without seat belts are no more valid than saying that requiring a motorist to have a driver's license is an attack on one's liberties.

A bill to make it illegal to drive in Alaska without seat belts snapped into place was killed in the last legislative session. It died in committee, despite indications that it would have passed given the chance to reach the floor.

ONCE AGAIN, the argument was that it's none of the state's business whether a person buckles up — and that without the requirement, independent Alaskans will do what's right and they don't need the state telling them what to do.

The same Alaskans, however, apparently have no reluctance to fasten their seat belts when they board an airplane — something that also is mandated by the long arm of the law.

And the fact remains that there is more danger of a fatal accident on the highway than there is in the air.

So what's the problem, anyway?

Robert B. Atwood
President and Publisher

Elaine Atwood
Assistant Publisher

William J. Tobin
Vice-President, Editor-in-Chief

Editorials

The Anchorage Times

May 3, 1988

Buckle up, and do it now

IN THESE closing days of the lawmaking session, it would be good if the ladies and gentlemen of the legislature would quit fiddling around with lives and buckle up — and make the rest of us do it, too.

None of us complain about wearing seat belts when in airplanes. We're required to do it there.

So what's the big deal about requiring us to do the same when we drive around town or on the highway?

More people are killed on the roads than in airplane crashes. And a lot of those who are weren't wearing safety belts.

For three years now the legislature has had before it bills to make it illegal for drivers and passengers to ride without safety belts fashioned. Each year the effort has died on the sword of individual rights and arguments that the state shouldn't legislate against the risks a person is willing to take with his or her own life.

Baloney.

SEAT BELTS save lives when properly used. It's as simple as that.

And no big felony charge would be involved for those who don't, under this proposed legislation.

All that would be involved is a $15 fine for offenders.

And even that can be donated to a good cause. At the option of the guilty driver, the fine would go to emergency medical service units — the ambulance drivers and crews who speed to the scene and try to keep alive those injured in accidents.

Enough talk is enough. Pass it and let's get on with adopting a simple new habit.

Anchorage Daily News

Winner, 1976 Pulitzer Prize Gold Medal for Public Service

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Publisher

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Founded in 1946 by Norman C. Brown

A reasonable request

Have you ever stopped to think what happens in a high-speed car accident when you're not wearing a seat belt?

As the impact propels you from your seat, the first thing you hit is the steering wheel. As it crushes your chest, ribs break, tissue rips, and blood seeps inside your body. Next the windshield delivers a knockout blow to your head. The shattering glass slices your scalp and body as you are thrown from the car.

That grim scenario ought to be enough to persuade every automobile passenger to use seat belts. Unfortunately, it's not.

If the harm from not wearing seat belts were limited to the individual victim, wearing one might be strictly a personal decision. But the consequences of that choice inflict a toll on society too. Fellow citizens help pay the bills through higher costs for health care, insurance, and emergency services.

Given those costs, a coalition of health groups and safety-conscious citizens have proposed a bill to make seat belt use mandatory in Alaska. It's hardly a draconian measure. Passengers could be cited only if the car were stopped for other violations. The fine is a mere $15, which could be donated to emergency medical services.

But the bill, which has already passed the House, is locked in the crypt known as the Senate State Affairs Committee. The bill is a prisoner of those who say Alaskans have the right to ruin their lives without state interference.

It's true the measure can be considered paternalistic, because it tries to force Alaskans to do what's good for them. But driving public roads is a privilege, not some sacred individual right. A mandatory seat belt law is a reasonable way for the state to make its highways safer and cut the cost of not-so-inevitable bloodshed.

JUNEAU EMPIRE

5-4-88

Seatbelt bill should be passed

Lodged within the bowels of the Alaska Legislature is a bill that, plain and simple, would save lives. It is the seatbelt bill.

Opponents say any law requiring Alaskans to buckle their seatbelt is an infringement on their "civil liberties." They say that if they want to increase the likelihood of being injured or killed in an automobile accident by 15 to 25 percent, then that's their business.

Wrong. In fact, all of us pay the price of those individuals who cherish their "civil liberties" more than their lives. According to U.S. Secretary of Transportation Jim Burnley, seatbelt laws save more than the human suffering a serious traffic accident leaves in its wake.

ISSUE: Should Alaska have a seatbelt use law?

"Belt laws are helping to reduce the staggering societal costs of motor vehicle crashes, currently estimated to be $74 billion a year," he wrote in USA Today. That includes medical, municipal and state services, increased insurance expenses and other public expenditures.

The cost of not having a seatbelt law can be estimated in blood, too. If all 50 states had seatbelt laws, Secretary Burnley estimates 3,100 lives would have been saved last year alone. That is more than the population of Wrangell killed because of the lack of seatbelt laws.

What is this "threat" to our "civil liberties" that the Alaska Senate is protecting us from? The bill now bottled up in the Senate State Affairs Committee would make driving without wearing a seatbelt an secondary offense. That means you could not be stopped by a police officer solely for not wearing a seatbelt. But if you were stopped for another traffic offense and didn't have your seatbelt fastened, you would have to pay a $15 fine or donate that amount to emergency medical services.

Pardon us, but that is hardly an infringement on anyone's civil liberties. All it would do is heighten public awareness of the need to wear seatbelts.

Thirty-two states and Washington, D.C., have seatbelt laws. Obviously, those lawmakers know that any law that saves so many lives makes good sense.

Hopefully, Alaska's lawmakers would agree – if they ever got a chance to vote on the bill.

What happens if Alaska's legislators don't pass a seatbelt law this year? More people will die, more people will be injured, and the next legislature will have to do what this one refused to.

Pass a seatbelt law.

Please.

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THOMAS P. VASILEFF, M.D.
ORTHOPAEDIC SURGERY
RICHARD D. McEVOY, M.D.
ORTHOPAEDIC SURGERY

December 23, 1988

Senator Arliss Sturgulewski
Alaska State Senate
Capitol Room 427
P. O. Box V
Juneau, Alaska 99811

Dear Senator Sturgulewski:

Please find enclosed articles about safety belt usage in automobiles. These articles appeared in the latest "Journal of the American Medical Association".

I hope these are helpful to you in your campaign to legislate for mandatory seat belts.

In addition, there was one article on minimal age drinking that you might find of interest.

Best Wishes to you for a Happy New Year.

Sincerely,

TPV

Thomas P. Vasileff, M.D.

TPV:bj
enc.

Editorial

The Case for Safety Belt Use

Safety belts have been required equipment for automobiles in the United States for 20 years. But it has been only recently that Americans have made extensive use of these effective devices. As recently as 1982, only 11% of American motorists were "buckling up." Today, 31 states and the District of Columbia have safety belt use laws on the books, and overall belt use is estimated to be at an all-time high of 46%.

See also pp 3593 and 3598.

The primary reason for this turnabout has been a refocusing of highway safety efforts, to concentrate more on drivers themselves rather than just on regulating manufacturers. Former Secretary of Transportation Elizabeth Dole settled a 15-year-long battle over air bags in 1984. Her solution: if states representing more than two thirds of the population enacted safety belt laws, manufacturers would not be required to install air bags or automatic safety belts. The auto industry has since lobbied intensively for safety belt laws in the state legislatures. The Department of Transportation and other groups, such as Traffic Safety Now and the American Coalition for Traffic Safety, have also waged a large-scale public information campaign promoting safety belt use.

The results are clear. Increased safety belt use has saved an estimated 11 000 lives since 1984, and tens of thousands of serious injuries have been prevented. The National Highway Traffic Safety Administration estimates that front-seat lap-shoulder belts are highly effective in protecting occupants in a crash, reducing the risk of death by 40% to 50% and the risk of moderate to serious injury by 45% to 55%.[1] These estimates were based on extensive data on crash and injury experience over the past decade.

Physicians and other professionals in the medical and public health fields can also play a key role in increasing safety belt usage. According to national health statistics, not only are motor vehicle crashes the leading cause of death among 5- to 34-year-olds, they account for the greatest number of productive years of life lost and are the most costly source of disability in the United States. Yet, a survey[2] of 209 Texas family physicians revealed that only 5% said they routinely ask their patients about safety belts. Fifty-eight percent neither advise nor discuss the risk, even when they are aware of nonuse. These physicians ranked nonuse of safety belts as less of a risk factor than smoking, obesity, excessive use of alcohol, high blood pressure, stress, lack of exercise, and a high-fat diet.

However, the American Academy of Family Physicians plans to introduce a continuing medical education course for physicians next year on how motor vehicle trauma can be reduced through patient education on the importance of using safety belts, child safety seats, and the extra protection provided by air bags. There is no doubt that increased safety belt education, especially among school-age children, will prove beneficial. Recent observations of 242 school-age children at a pediatric clinic dramatically demonstrated the influence of a physician's message to his or her young patients and parents on the importance of using safety belts.[3] It was found that 38% of the young patients who received counseling were then observed wearing their belts, compared with 5% of those who did not receive counseling.

Much more remains to be done to increase safety belt use across the country. Currently, surveys indicate that belt use in states with belt laws averages about 50%, but also varies widely from state to state, from 68% in Hawaii to only 27% in Tennessee.[4] The most dramatic, sustained increases in safety belt use appear to have been in those communities where there is a combination of intensive law enforcement and public information and education. Not surprisingly, belt use is generally lower in states without belt laws, but those states also show substantial variance. And we know that many countries have attained very high safety belt use rates—such as 80% in Australia and parts of Canada and 95% in Great Britain and West Germany. We are therefore convinced that there are great opportunities for further increases in belt use all across America.

Our goal at the Department of Transportation and the goal of a wide spectrum of safety groups across America is to attain a national safety belt usage rate of 70% by 1990.

There has never been any question that safety belts and child safety seats are extremely effective in saving lives and reducing injuries. The problem has been convincing motorists to use them every time they get into their cars and trucks. When the National Transportation Safety Board reported in a 1986 study[5] that use of rear-seat lap belts could cause injury in some crashes, some people mistakenly assumed that they were safer not wearing a belt at all. Nothing could be further from the truth. Our crash data conclusively show that lap-only safety belts are quite effective in reducing the risk of death and injury to occupants compared with wearing no belt at all. Furthermore, car manufacturers are now voluntarily taking the initiative to improve protection for rear-seat occupants even further by installing lap-shoulder belts as standard equipment in virtually all new cars by 1990.

The outlook on safety belt use is encouraging. More and more Americans are buckling up for safety, and each year more lives are being saved on our highways. But more than half of America's motorists are still unprotected. There is still much work for all of us—in government, in the private sector, and for health professionals—in spreading the important life-saving message of safety belt use.

As administrator of the National Highway Traffic Safety Administration, I urge physicians and major health care providers, as part of their daily routine, to advise patients about the importance of safety belts and the use of child safety seats to prevent injuries from motor vehicle crashes.

Diane Steed
National Highway Traffic
Safety Administration
Washington, DC

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Efficacy of Mandatory Seat-Belt Use Legislation

The North Carolina Experience From 1983 Through 1987

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The North Carolina General Assembly approved a law effective in October 1985 that mandated seat-belt use by front-seat occupants of passenger vehicles. In January 1987, a $25 fine for infractions of this law went into effect. This study examined numbers of car occupants with severe and fatal injuries in crashes in North Carolina, controlling for the amount of vehicle damage as a measure of crash severity. After the law, significant decreasing trends were seen in the percentages of front-seat occupants who had severe or fatal injuries in crashes, although the involvement of alcohol in crashes was still associated with an increased risk of such injury. Projections indicate that a reduction of approximately 1100 severe or fatal injuries per year can be attributed to the seat-belt law in North Carolina. This study supports the hypothesis that the societal burden of crash-associated injury can be reduced by mandating seat-belt use.

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AN ACT to Make the Use of Seat Belts in Motor Vehicles Mandatory, North Carolina Senate bill 39, went into effect on Oct 1, 1985. The act mandated seat-belt use by front-seat occupants of passenger cars, allowed for a 15-month period during which warning tickets would be issued for violations, and provided for a $25 fine for infractions that occurred after Jan 1, 1987. The act permitted vehicles to be stopped for a seat-belt law violation alone (primary enforcement) rather than requiring that a vehicle must first be stopped for some other traffic violation (secondary enforcement).

See also pp 3598 and 3651.

Because it is important for legislators and voters to know whether a law mandating seat-belt use and imposing a fine can achieve its legislative intent, in this study we attempted to determine if there were reductions in severe and fatal injury that resulted from mandating seat-belt use by front-seat occupants in North Carolina. If so, it would be expected that there would be reductions in morbidity and mortality among targeted front-seat passenger car occupants, and that such reductions would be in excess of those among occupants not covered by the law. This report presents analyses of numbers of persons with severe and fatal injuries by occupant position in car crashes, controlling for the amount of vehicle damage as a measure of crash severity.

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EXPERIMENTAL DESIGN AND METHODS

Subjects and Definitions

The study subjects were the drivers and other motor vehicle occupants in North Carolina crashes from January 1983 through September 1987.

The two classes of vehicles principally covered by North Carolina Senate bill 39 are passenger cars and station wagons. *Targeted* vehicles were defined as passenger cars and station wagons, and *nontargeted* vehicles as all other motor vehicles. *Targeted* occupants were persons to whom the act pertained (in targeted vehicles), viz, drivers and front-seat occupants 6 years of age or older. Car occupants 5 years of age or younger were covered by the North Carolina child-restraint law, not by Senate bill 39, and, hence, they were not a targeted group. *Nontargeted* occupants were persons to whom the act did not pertain; eg, rear-seat occupants of passenger cars, all occupants 5 years of age or younger, and occupants of motor vehicles other than passenger cars or station wagons.

Study Design and Statistical Methodology

The study design was a separate-sample pretest-posttest design' that examined crash data over three periods:

(1) before the belt law was in effect; (2) after the law was in effect but before implementation of a $25 fine for violations, ie, during the warning period; and (3) after implementation of the $25 fine. Included were analyses of belt use during the three periods and analyses of morbidity and mortality data from crashes by period and by quarter-year, stratified for various factors, including use and nonuse of seat belts, degree of vehicle damage, and alcohol involvement. Because data for only the first nine months of 1987 were available at the time of this study and because of the possibility that seasonality affected the data, data were also compared for the first nine months of 1983 through 1987.

Pearson χ^2 analysis[2] was used to examine aggregated vehicle damage data with respect to severe and fatal injuries. For drivers and passengers in the right front seat, 2×2 tables were constructed to compare the numbers of occupants with or without severe or fatal injuries in crashes by aggregated levels of vehicle damage (levels 1 and 2, mild crash; levels 3 and 4, moderate crash; and levels 5 through 7, severe crash). For each aggregated level of vehicle damage, occupants before the seat-belt law were compared with occupants during the warning period and after the $25 fine.

For targeted and nontargeted vehicle occupants, the relation of severe and fatal injuries to year or to quarter-year was evaluated using the test for linear trends in proportions.[3] To examine vehicle damage and driver injury data with respect to driver alcohol involvement, we used ridit analysis.[4,5] To evaluate the statistical significance of ridit scores across several intervals, we used Mantel-Haenszel χ^2 analysis.[6]

The significance level for all statistical analyses was $P<.05$.

Data Sources, Collection Procedures, and Analysis

The University of North Carolina Highway Safety Research Center (HSRC) crash data tapes were created from tapes of the North Carolina Division of Motor Vehicles and were produced in Raleigh, NC. We used HSRC tapes that included all reportable motor vehicle crashes that occurred in North Carolina from January 1983 through September 1987, and from these we created a 10% systematic sample, choosing every tenth report in chronologic order. Crashes were defined as any collision involving a motor vehicle(s) resulting in injury to or death of any person or in total apparent property damage equivalent to or in excess of $500. Crash report forms were filled out by an investigating officer (highway patrolman, municipal police officer, etc), not by persons involved in the crash. All reporting agencies used the same standard report form. For this study, data from these tapes were used for assessments of injury, vehicle damage, and alcohol involvement. These assessments were performed as follows.

Injury Assessment.—The severity of personal injury and vehicular damage was scored by the investigating officer at the scene of the crash. Personal injury categories included the following: (1) fatality, (2) severe (incapacitating—obviously serious enough to prevent carrying on normal activities for at least 24 hours, eg, massive loss of blood or broken bone), (3) moderate (not incapacitating—injury other than severe injury or fatality evident at the scene), (4) mild (no visible sign of injury but complaint of pain or momentary unconsciousness), and (5) no injury. The validity of these assessments has been measured[7]; an overall rate of 74.7% agreement was found when injury judgments (severe or fatal vs not severe) of police were compared with those of emergency medical service personnel.

Vehicle Damage Assessment.—Damage sustained by moter vehicles was assessed in terms of a seven-point damage severity rating scale from least severe (level 1) to most severe (level 7) that has been standardized using photographs of damaged automobiles. These photographs were published in a small booklet[8] and were provided to all reporting agencies for dissemination to all investigating officers in North Carolina.

Alcohol Involvement Assessment.—Analyses of alcohol involvement were based only on cases for which the investigating officer made a definite judgment of drinking or not drinking; ie, drivers classified as "unknown" or "not stated" were omitted. Drivers with involvement of alcohol included those classified as either "drinking—impaired" or "drinking—impairment unknown." The accuracy of such judgments of driver alcohol involvement in these reports has been measured by Waller et al[7]; 79.1% of arrested drivers classified by the investigating officer as drinking had measured blood alcohol concentrations (BACs) of 0.10% or higher, 90.5% had BACs of 0.05% or higher, and only 2.05% had BACs of 0.00%.

Data from the HSRC tapes were also used to quantify reported restraint use or nonuse.

For different periods, the numbers of severely or fatally injured occupants were compared with the total numbers of occupants involved in crashes for all occupants of motor vehicles, front-seat and rear-seat occupants, targeted occupants, and nontargeted occupants of targeted and nontargeted motor vehicles. For drivers and occupants of the right front seat, injuries among persons wearing lap and shoulder belts and unrestrained persons were examined by the degree of vehicle damage in crashes with front-end impacts and non–front-end impacts during the three periods to determine the relative distributions of injury among occupants by reported belt use. Injuries among drivers involved and not involved with alcohol were also examined by the degree of vehicle damage.

Observed belt-use data in the population at risk were obtained by the HSRC under a grant from the Governor's Highway Safety Program; general seat-belt use was measured at 72 intersections around the state by four trained observers. Frequencies of observed use on the highway and reported use of restraints by drivers and other front-seat occupants involved in crashes were compared, as were the frequencies of different levels of injury associated with the reported use or nonuse of belts for vehicle occupants involved in crashes in each of the three periods: (1) before the belt law (January 1983 through September 1985), (2) during the warning period (October 1985 through December 1986), and (3) after implementation of the fine (January through September 1987).

RESULTS

Crash investigators submitted crash reports on 203 000 passenger cars or station wagons for 1983, 207 000 for 1984, 211 000 for 1985, 227 000 for 1986, and 172 000 for the first nine months of 1987. Of these reports, 62.7% were submitted by municipal police; 36.6% by the state highway patrol; and 0.7% by local sheriffs, rural or county police, and other traffic investigating agencies. From January 1983 through September 1987, approximately 55% of drivers involved in crashes were male, 74% were white, and 53% were 30 years old or younger. Forty-five percent of the crashes occurred on local streets, 52% occurred on primary or secondary roads, and less than 3% occurred on interstate highways. Of passenger vehicles involved in crashes, 61% had mild damage (level 1 or 2), 29% had moderate damage (level 3 or 4), and 10% had severe damage (levels 5 through 7). The distributions of these characteristics and measures of driver alcohol involvement showed no appreciable trends over the periods studied.

In examining the severity of injury for drivers and occupants of the right front seat in front-end and non–front-end crashes, lack of belt use was consis-

tently associated with distributions of injury skewed toward more severe degrees of injury. Data for drivers in front-end crashes are presented in Table 1. Drivers in crashes reportedly wore seat belts more frequently than did occupants of the right front seat (Table 2); this is consistent with observations of the population at risk.

Decreases were observed in the percentages of targeted occupants who had severe injuries and deaths in crashes in 1986 compared with 1985 and in 1987 compared with each of the four previous years (Table 3). When examined by quarter-year from the first quarter of 1983 through the first quarter of 1985, a significant increasing trend in the proportions of severe injuries and deaths was observed for targeted occupants ($R^2 = 0.47$, $P = .019$). When examined by quarter-year from the third quarter of 1985 (just before the warning period) through the third quarter of 1987, a significant decreasing trend was observed in the percentages of targeted occupants who had severe injuries and deaths in crashes ($R^2 = 0.38$, $P = .044$). In the first quarter of 1987 (just after implementation of the fine), a marked decrease was found in the percentage (3.50%) of targeted occupants of passenger vehicles who had severe or fatal injuries compared with data (5.06%) for the first quarter of 1985 (odds ratio [OR] = 1.47 [95% confidence interval (CI), 1.23 to 1.76], $P < .0001$).

There was a decrease in the percentages of both drivers and occupants of the right front seat who had severe or fatal injuries in the first nine months of the year in 1986 compared with 1985 and in 1987 compared with each of the previous three years (Table 4). These decreases in percentages were principally observed among targeted front-seat occupants (Table 3). When examined by quarter-year from the first quarter of 1983 through the first quarter of 1985, a significant increasing trend in the proportions of severe injuries and deaths was observed for drivers of targeted vehicles ($R^2 = 0.58$, $P = .007$). Although an increasing trend in proportions was also observed among occupants of the right front seat who were severely injured or killed during the same time, the trend was not statistically significant. However, when examined by quarter-year from the third quarter of 1985 through the third quarter of 1987, significant decreasing trends in the proportions of severe injuries and deaths were observed for drivers of targeted vehicles ($R^2 = 0.52$, $P = .029$) and for occupants of the right front seat of targeted vehicles ($R^2 = 0.48$, $P = .038$). No discernible trends in the proportions of severe injuries and deaths were observed for rear-seat occupants.

Table 1.—Distribution of Injury for Drivers of Targeted Vehicles in Front-End Crashes by Injury Severity, Time Period, and Reported Seat-Belt Use*

	Distribution of Injury, %					
	Belt Use Before Law (1/83-9/85)		Belt Use During Warning Period (10/85-12/86)		Belt Use After $25 Fine (1/87-9/87)	
Injury	Yes (N = 2605)	No (N = 13 581)	Yes (N = 5030)	No (N = 2920)	Yes (N = 4289)	No (N = 474)
None	84.1	75.6	80.7	65.5	79.7	58.7
Mild	10.0	10.9	11.3	14.8	12.0	12.2
Moderate	4.5	8.7	5.9	12.3	5.8	17.5
Severe	1.4	4.5	2.1	6.6	2.4	9.1
Fatal	0.0	0.3	0.1	0.7	0.1	2.5

*10% sample; data are aggregated for drivers who wore shoulder and lap belts and those who wore only lap belts.

Table 2.—Observed and Reported Use of Seat Belts by Drivers and Occupants of Right Front Seat by Time Period and Seat Position

			Observed Use		Reported Use*	
Time Period	Month	Seat Position	No. Observed	% Belted	No. Reported	% Belted
Before the law	9/85	Driver	18212	25.4	1518	32.7
		Right front	6872	20.6	570	29.8
During warning period	11/86	Driver	21859	43.8	2048	65.2
		Right front	8123	37.2	719	60.5
After $25 fine	1/87	Driver	15847	77.7	1689	91.2
		Right front	5828	70.6	531	89.3

*Persons in crashes.

Table 3.—Motor-Vehicle Occupants in Crashes in Targeted Vehicles With Severe or Fatal Injuries by Seat Position*

	Year				
Motor-Vehicle Occupants	1983	1984	1985	1986	1987
Targeted front-seat occupants					
All					
No. in crashes	18834	19289	19385	20603	21752
% severely or fatally injured	3.94	4.51	4.67	4.39	3.78
Drivers					
No. in crashes	13849	14306	14404	15318	16371
% severely or fatally injured	3.87	4.34	4.58	4.20	3.63
Occupants of right front seat					
No. in crashes	4711	4697	4749	5086	5224
% severely or fatally injured	4.14	4.94	4.88	4.76	4.19
Rear-seat occupants					
No. in crashes	2008	2169	2233	2313	2490
% severely or fatally injured	3.14	3.41	2.78	3.50	2.49

*10% sample during first 9 mo of year. Persons <6 years old were covered by the child-restraint law and are excluded from these data.

Ridit analyses revealed the persistence over all three periods of significant differences between distributions of injury for drivers involved and not involved with alcohol for all levels of vehicle damage; this is consistent with the hypothesis that the risk of death or severe injury in a crash is increased by alcohol involvement.[1] Even for mild crashes in the first nine months of 1987, drivers who had been drinking sustained more severe injuries than those who had not been drinking (ridit = 0.560, Mantel-Haenszel $\chi^2 = 32.1$, $P < .001$). For severe crashes in the same period, the odds were almost 2:1 that drivers who had been drinking sustained more severe injuries than those who had notbeen drinking (ridit = 0.652, Mantel-Haenszel $\chi^2 = 55.5$, $P < .001$).

Table 4.—Motor-Vehicle Occupants in Crashes With Severe or Fatal Injuries by Seat Position*

Motor-Vehicle Occupants	Year				
	1983	1984	1985	1986	1987
Front-seat occupants					
All					
No. in crashes	24 157	24 672	25 204	26 729	28 850
% severely or fatally injured	4.06	4.70	4.96	4.64	3.95
Drivers					
No. in crashes	17 539	18 151	18 491	19 757	21 318
% severely or fatally injured	4.17	4.62	4.99	4.59	3.91
Occupants of right front seat					
No. in crashes	58[illegible]3	5829	6078	6413	6773
% severely or fatally injured	3.80	4.79	4.59	4.55	4.10
Nontargeted occupants					
All					
No. in crashes	8077	8231	8868	9207	10 194
% severely or fatally injured	3.76	4.59	4.72	4.61	3.90
Rear-seat occupants					
No. in crashes	2904	2848	3049	3101	3303
% severely or fatally injured	2.55	3.05	2.49	2.90	2.39

*10% sample during first 9 mo of year. Nontargeted occupants are persons to whom the seat-belt law did not pertain, viz, occupants of nontargeted vehicles, rear-seat occupants, and persons <6 years old.

Table 5.—Drivers Severely Injured or Killed in Targeted Vehicles in Front-End Crashes by Time Period and Level of Vehicle Damage*

Time Period	% (No.) of Drivers Severely Injured or Killed by Level of Vehicle Damage		
	Mild	Moderate	Severe
Before the Law (1/83-9/85)	1.09 (113/10 336)	5.53 (256/4627)	22.05 (344/1560)
During warning period (10/85-12/86)	1.18 (60/5086)	5.22 (121/2320)	20.42 (164/803)
After $25 fine (1/87-9/87)	0.92 (29/3140)	4.10† (54/1316)	20.79 (95/457)

*10% sample.
†$P<.05$ (derived from 2x2 tables comparing the number of drivers with or without severe or fatal injuries; drivers before the law were compared with drivers during warning period and after $25 fine).

Table 5 includes χ^2 analyses of severe and fatal injuries for drivers of targeted vehicles in front-end crashes by the severity of vehicle damage for the three periods. Data for drivers in non–front-end crashes and for other occupants are not shown. When data before the law and during the warning period were compared, significant decreases in the proportions of persons with severe and fatal injuries were noted for drivers in moderate non–front-end crashes (OR = 1.23 [95% CI, 1.03 to 1.47], $\chi^2 = 5.7$, $P = .017$) and for occupants of the right front seat in moderate front-end crashes (OR = 1.56 [95% CI, 1.06 to 2.31], $\chi^2 = 5.6$, $P = .018$).

When data before the law and after the fine were compared, significant decreases in severe and fatal injuries were noted for drivers in moderate front-end crashes (OR = 1.37 [95% CI, 1.00 to 1.87], $\chi^2 = 4.2$, $P = .040$). A significant decrease was also noted for drivers in moderate non–front-end crashes (OR = 1.41 [95% CI, 1.13 to 1.76], $\chi^2 = 9.6$, $P = .002$). Decreases in severe and fatal injuries were also noted for occupants of the right front seat in moderate front-end crashes (OR = 1.87 [95% CI, 1.10 to 3.22], $\chi^2 = 6.0$, $P = .014$). No significant differences were noted for occupants of the right front seat in non–front-end crashes.

Comparisons of the percentages of nontargeted occupants with severe or fatal injuries in crashes for the first nine months of each year revealed a significant decrease between 1985 (4.72%) and 1987 (3.90%) (OR = 1.22 [95% CI, 1.06 to 1.41], $\chi^2 = 7.8$, $P = .005$; Table 4). Most of this decrease occurred between 1986 (4.61%) and 1987 (3.90%) (OR = 1.19 [95% CI, 1.03 to 1.37], $\chi^2 = 5.9$, $P = .016$). A significant difference in proportions was observed for 1986 (3.50%) and 1987 (2.49%) when rear-seat occupants older than 5 years of age in targeted vehicles were evaluated for severe or fatal injuries in crashes (OR = 1.42, [95% CI, 1.00 to 2.02], $\chi^2 = 4.3$, $P = .039$; Table 3). Among other nontargeted occupants, a decrease in the percentages of severe and fatal injuries was also observed (although it was not statistically significant) between 1986 (5.00%) and 1987 (4.36%). Whether these trends toward reductions in severe and fatal injuries among nontargeted persons reflect technological improvements in automotive safety or changes in seat-belt use secondary to the law could not be determined using this data set.

COMMENT

We observed significant reductions in severe and fatal injuries in crashes among front-seat car occupants who were targeted by a mandatory seat-belt law, especially after implementation of a $25 fine for infractions. These reductions were in excess of those observed among other occupants of the same vehicles. These results are consistent with reductions in morbidity and mortality observed elsewhere after mandatory belt-use legislation.[9-13]

Estimates of the frequency of belt use by persons involved in nonfatal collisions are dependent on self-reporting to the investigating officer. Where there are seat-belt laws, self-reported belt use appears to be overestimated for all but the most severely or fatally injured. This would result in underestimation of the law's effect on morbidity and mortality for that segment of the population whose belt use has changed in response to the law. Injuries not apparent at the crash would also go unreported, as would crashes that did not involve injury or significant damage. Such underreporting alters measures of seat-belt effectiveness to the extent that such injuries would be less prevalent among belted persons than among nonbelted persons. However, there is no reason to suppose an effect of belt use on the reliability, validity, or completeness of crash reports.

Significant underreporting has been reported in official statistics of injuries from motor-vehicle collisions.[14] If a differential shift in reporting occurred in favor of a given degree of injury, the results of this study would have been biased accordingly. Aside from a slowly increasing trend toward more severe and fatal injury reported for front-seat occupants before the law (Tables 3 and 4), a review of North Carolina crash data from 1979 through 1985 revealed no shift in injury distributions in crashes reported over several years before passage of the law. There is no reason to suppose that there was such a shift in underreporting in the two years after passage of the law.

Ridit analyses revealed that the seat-

belt law has not altered the relationship of driver alcohol involvement to injury outcome when one controls for crash severity. This is not surprising because alcohol is thought to reduce tolerance to impact[7,13] and because North Carolina data consistently indicate less-frequent belt use among drivers involved with alcohol.

Dramatic increases in seat-belt use that occur immediately after seat-belt legislation are generally not sustained over time[12]; the initial increase in belt use is followed by a decline, typically about four months after the law takes effect.[11] For the first nine months of 1987, the mean observed percentages of persons belted in North Carolina were 68% for drivers and 66% for occupants of the right front seat. Although these percentages decreased to 60% and 58%, respectively, in January 1988, seat-belt use has increased subsequently, with percentages of 63% for drivers and 63% for occupants of the right front seat observed in August 1988. Although present seat-belt use levels are lower than those in the nine-month period studied after implementation of the fine, the difference is small, and seat-belt use appears to be increasing again in North Carolina.

Whereas special enforcement campaigns undertaken elsewhere have resulted in dramatic increases in compliance with seat-belt laws,[16,17] no such campaign has yet occurred in North Carolina. During the first nine months of 1987, the State Highway Patrol issued 27 924 citations with fines (3103 per month) compared with 123 521 warning tickets for belt-law violations issued in 1986 (10 290 per month) by the same agency. In the absence of efforts to maximize enforcement, the decreases in morbidity and mortality presented here may not be sustained without other interventions (eg, educational efforts or installation of automatic restraints).

Impact studies are needed so that legislators and voters can determine whether mandating buckling up is worth the inconvenience and sacrifice of personal freedom. This study indicates that the North Carolina law has reasonably achieved its legislative intent. If one compares the numbers of severe and fatal injuries among targeted persons for the first nine months of 1987 (approximately 8220) with those of the first nine months of 1985 and 1986 (approximately 9040 and 9060, respectively) and extrapolates to 12 months, approximately 1100 fewer severe and fatal injuries per year would be observed among targeted persons in North Carolina after implementation of the $25 fine. If one considers the total population of North Carolina (approximately 6 000 000), these data indicate that annually as many as one in every 5400 North Carolinians could be spared a severe or fatal injury because of this intervention, provided that the belt-use levels observed in the first nine months of 1987 are again attained. Although the expected protective value of buckling up is low for the individual, the data indicate that the collective advantage is large.

When North Carolina crash data from the period before implementation of the $25 fine were compared with data from the first nine months of 1987, significant reductions were found in severe and fatal injuries for persons targeted by the law. The extent to which these reductions are directly attributable to a mandatory belt-use law remains unknown, but the law was the major automotive safety intervention introduced statewide during the periods examined. Whereas these data support the hypothesis that mandating seat-belt use results in reductions in crash-associated morbidity and mortality in targeted groups, compliance with the law and maintenance of these reductions will be a function of enforcement and educational efforts.

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Prospective Study of the Effect of Safety Belts on Morbidity and Health Care Costs in Motor-Vehicle Accidents

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To assess the impact of safety belt use on the extent of injuries sustained in motor-vehicle accidents and the incurred health care costs, 1364 patients were prospectively evaluated at four Chicago-area hospitals. Of these, 791 (58%) were wearing a safety belt whereas 573 (42%) were not. The mean injury severity score for safety belt wearers was 1.8 ± 0.07 vs 4.51 ± 0.31 in those not wearing a safety belt. Only 6.8% of safety belt wearers required admission vs 19.2% of those not wearing a safety belt. Restrained occupants incurred mean charges of $534 ± $67 compared with $1583 ± $201 in unrestrained occupants. Thus, safety belt wearers had a 60.1% reduction in severity of injury, a 64.6% decrease in hospital admissions, and a 66.3% decline in hospital charges. Our findings demonstrate the significant societal burden of nonuse of safety belts in terms of morbidity and the costs of medical care.

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TRAUMA resulting from motor-vehicle accidents (MVAs) represents a major challenge to our health care delivery system and a significant societal burden. Motor-vehicle accidents are the leading cause of death in Americans aged 5 to 34 years and the seventh leading cause of death overall.[1] In 1982, an estimated 3.2 million people were injured in MVAs, of whom approximately 1.4 million were treated in emergency departments and 350 000 required hospitalization.[2] As a result of MVA-associated injuries, 1.3 million years of potential life before age 65 years were lost in 1984.[1] The overall economic loss to the United States attributable to MVAs in 1980 has been estimated to be $57.2 billion.[4]

The Department of Transportation postulates that universal use of safety belts would reduce MVA-related fatalities by 50% and injuries by 65%.[5] Previous studies, based on police reports[6] or National Highway Traffic Safety Administration records,[7] report a reduction of serious injury of belted front-seat occupants of 43% to 52%[6] and a decline in fatalities of 43%.[7] To our knowledge, no prospective studies based on medical data have specifically attempted to assess the efficacy with which safety belt use may prevent injury from motor-vehicular trauma. We undertook the following prospective study to assess the effect of safety belt use on the extent of injuries sustained during MVAs as well as the economic impact of their use.

See also pp 3593 and 3651.

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MATERIALS AND METHODS

During the period of Jan 1 to July 1, 1986, data were collected on patients who presented after an MVA to the emergency department or trauma unit of four Chicago-area hospitals. Two of these hospitals (Mercy Hospital and Medical Center and Illinois Masonic Medical Center, Chicago) were urban community hospitals, one was a public inner-city hospital (Cook County Hospital, Chicago), and the fourth was a large suburban community hospital (Lutheran General Hospital, Park Ridge, Ill). These four hospitals were selected because they cover a wide geographic area within Cook County and a wide range of socioeconomic groups. In addition, the selected hospitals receive patients from a large assortment of urban crash settings, including expressways (high speeds) and city streets (lower speeds). Patients involved in MVAs that occurred in rural areas were not included.

All patients who presented with complaints referable to an MVA that had taken place within the previous 24 hours were eligible for inclusion. Pedestrians, bicyclists, motorcyclists, bus passengers, and those in trucks with more than two axles were excluded. Each weekday, the logs of each emergency department or trauma unit were reviewed in an attempt to identify any missed motor-vehicle injury cases. Cases thus identified were resubmitted to the examining physician with the medical record for completion and inclusion in the study.

Initial data were collected prospectively for all study subjects by the examining physician. The physician administered a structured questionnaire that included the following data: (1) de-

termination of safety belt usage, (2) position of subject in vehicle, (3) mechanism of injury (front-end, rear-end, or broadside collision), (4) posted speed limit at location of MVA, (5) mode of transport to hospital, and (6) final disposition (discharge, transfer to another facility, admission to hospital, or death in emergency department). The examining physician also noted on the questionnaire if there was evidence of alcohol use, ie, clinical intoxication, a smell of alcohol on the breath, or an alcohol level. The data were then analyzed as yes/no variables. Alcohol levels obtained for legal use were sent to state laboratories; the results were not made available for the purposes of this study and therefore are not included. For all subjective data collected, independent confirmation was sought from paramedics, police, or others whenever possible.

The medical records (emergency and inpatient, if applicable) of all subjects were subsequently reviewed by a member of the research team. Additional collected data included the time of registration, nature of injuries, and payment status. An injury severity score (ISS) was then calculated based on the *Abbreviated Injury Scale Manual* (1985 edition).[4] A numerical score (1 to 5) is assigned to the severity of injury in each region; the squares of the three highest scores are then summated to obtain the ISS. Financial records were analyzed to determine the total hospital (excluding physician fees) and emergency department charges generated as a direct result of the MVA for each subject. The costs of consultants, admitting physicians, rehospitalizations, and rehabilitation were not included.

Study subjects were divided into two groups (restrained and unrestrained by safety belts) for the purposes of data analysis. Preliminary power calculations were made for an alpha of 0.05 and a power of 0.90 to detect a difference in ISS score of at least 0.5. The principal statistical tests used were *t* tests for comparisons of means of continuous variables and χ^2 tests for drawing inferences concerning proportions. Analyses of covariance and logistic regression analyses were performed to compare safety belt users with nonusers, controlling for possible confounding variables. The SAS statistical package on an IBM mainframe at the University of Illinois at Chicago was used to perform the analyses.

RESULTS

A total of 1364 patients were entered into the study. The mean age of the patients was 33.03 ± 0.42 years (mean ± SEM); 52.5% were men, 63.6% were drivers, 24.6% were front-seat passengers, and 11.3% were back-seat passengers. There was no significant difference noted in the month patients were seen (January through June), but there was a difference noted in the time they were registered; 37.1% were registered from 7 AM to 3 PM, 42.1% from 3 to 11 PM, and 20.8% from 11 PM to 7 AM ($P > .001$).

Seven hundred ninety-one patients (58%) claimed to be wearing safety belts, and 573 (42%) did not. Of those wearing safety belts, 603 (76.2%) were wearing a shoulder harness and lap belt, 121 (15.3%) were wearing a lap belt only, and in 67 (8.5%) the safety belt type was not known. Differences were noted between the two groups with respect to age, sex, and reported mechanism of injury. Safety belt wearers were slightly older, more often female, and more likely to be involved in a rear-end collision. In addition, safety belt users were less likely to have used alcohol and less likely to require transport by ambulance. The groups were similar with respect to the posted speed limit where the accident occurred (Table 1).

Table 1.—Characteristics of Safety Belt Wearers vs Nonwearers

Characteristic	Safety Belts: Yes (n = 791)	Safety Belts: No (n = 573)	P*
Mean ± SEM age, y	35 ± 0.5	31.9 ± 0.7	.004
Male, %	49.7	55.8	.028
Reported mechanism of injury, %			
Rear-end collision	40.8	26.2	.001
Front-end collision	24.1	37.6	
Struck broadside (passenger)	20.0	20.5	
Struck broadside (driver)	12.8	9.4	
Other	1.2	1.9	
Unknown	1.2	4.4	
Alcohol use, %	5.6	19.5	.0001
Ambulance transport, %	36.4	57.6	.0001
Posted speed limit (mph), %			
<30	40.5	39.6	NS
30-45	39.6	35.1	
>55	8.5	8.6	
Unknown	11.5	16.8	

*Percentages were compared by the Pearson χ^2 test. Means were compared by the two-tailed *t* test. NS indicates not significant.

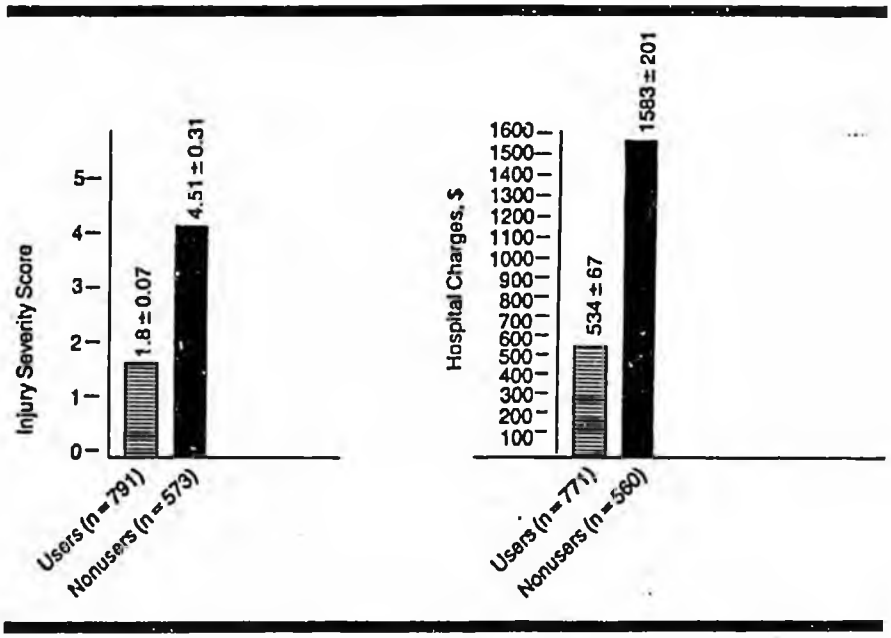

Fig 1.—Mean injury severity scores and hospital charges for safety belt users and nonusers. Patients who had worn safety belts had significantly lower injury severity scores ($P < .001$) and hospital charges ($P < .001$).

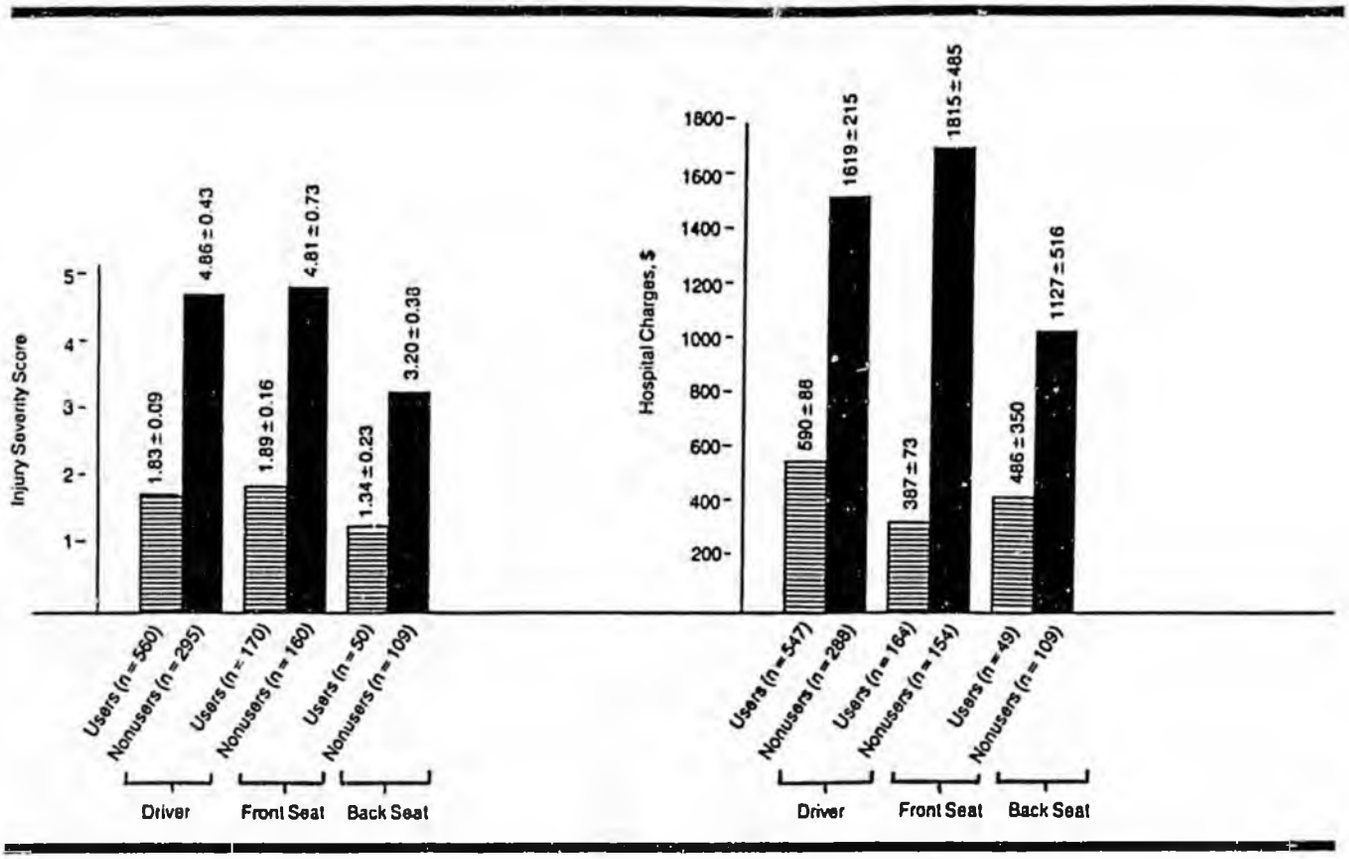

Fig 2.—Mean injury severity scores and hospital charges for safety belt users and nonusers by position in vehicle. Drivers, front-seat passengers, and back-seat passengers who had worn safety belts had significantly lower injury severity scores ($P<.001$, $P<.001$, and $P<.002$, respectively) and hospital charges ($P<.001$, $P<.004$, and $P<.031$, respectively).

Severity of Injury

The mean ISS for safety belt wearers was 1.8 ± 0.07 as opposed to 4.51 ± 0.31 for those not wearing safety belts ($P<.001$, Fig 1, left). Patients who had worn safety belts, whether they were drivers, front-seat passengers, or back-seat passengers, fared significantly better than their unrestrained counterparts (Fig 2, left).

When the reported mechanism of injury was evaluated, striking differences in ISS were noted between safety belt users and nonusers in front-end collisions (2.15 ± 0.18 vs 6.12 ± 0.64, $P<.001$). Benefit was also provided by safety belts in broadside collisions, where restrained occupants had an average ISS of 2.01 ± 0.14 as opposed to 3.6 ± 0.34 for unrestrained occupants ($P<.001$). Smaller but significant differences in ISS were noted between the groups in rear-end collisions. Safety belt wearers had a mean ISS of 1.38 ± 0.06 vs 2.47 ± 0.14 for nonusers ($P<.001$).

Admission to the hospital may be another indication of severity of injury. A significantly greater number of unrestrained subjects required admission (including those who died in the emergency department). Only 54 (6.8%) of the total 791 safety belt wearers required admission. However, 110 (19.2%) of the 573 patients who did not wear safety belts required admission ($P<.001$). Thus, two thirds of patients who required hospital admission were not wearing safety belts at the time of injury. Significant differences in ISS between the restrained and unrestrained groups remained in both the admitted and discharged groups (Fig 3, left). Regardless of admission status, unrestrained occupants utilized significantly more hospital days than restrained occupants (1.2 ± 0.2 days vs 0.4 ± 0.08 days, $P<.001$).

When only the most severely injured patients are considered, ie, those with an ISS of 12 or greater, again, the overwhelming majority were unrestrained. Thirty-six (81.8%) were not wearing safety belts; eight (18.2%) were ($P<.001$). There were five deaths during this study, all among patients who did not wear safety belts.

Multivariate methods, including analysis of covariance and logistic regression, were used to assess the independent effect of safety belt usage on ISS scores, controlling for other variables. Since age, alcohol use, and type of accident were observed to be associated with safety belt use and also may be associated with the severity and cost of injury, they were assumed to be possible confounding variables. The posted speed limit was also included. Although there were sex differences in safety belt usage, there is no reason to believe that ISSs or costs should differ by sex, other factors being equal. Therefore, analyses of covariance were carried out comparing the ISSs of safety belt users and nonusers, with age in years, alcohol usage (yes or no), and type of accident (entered as dummy variables; front-end collision, rear-end collision, or other) as covariates. Results (Table 2) indicate that unrestrained patients had an ISS that was two points higher on average, even when all the confounding variables were controlled for. Alcohol users scored one point higher on average, as did patients who were involved in a front-end collision. Those in a rear-end collision had somewhat lower scores on average. Scores averaged higher with increasing age and slightly higher for a posted speed limit of 30 to 45 mph. Mean ISSs for restrained and unrestrained subjects were adjusted for differing values of the covariates in the two groups; safety belt wearers were observed to have a significantly lower adjusted mean ISS than nonwearers ($P=.0001$).

Logistic regression analysis was used

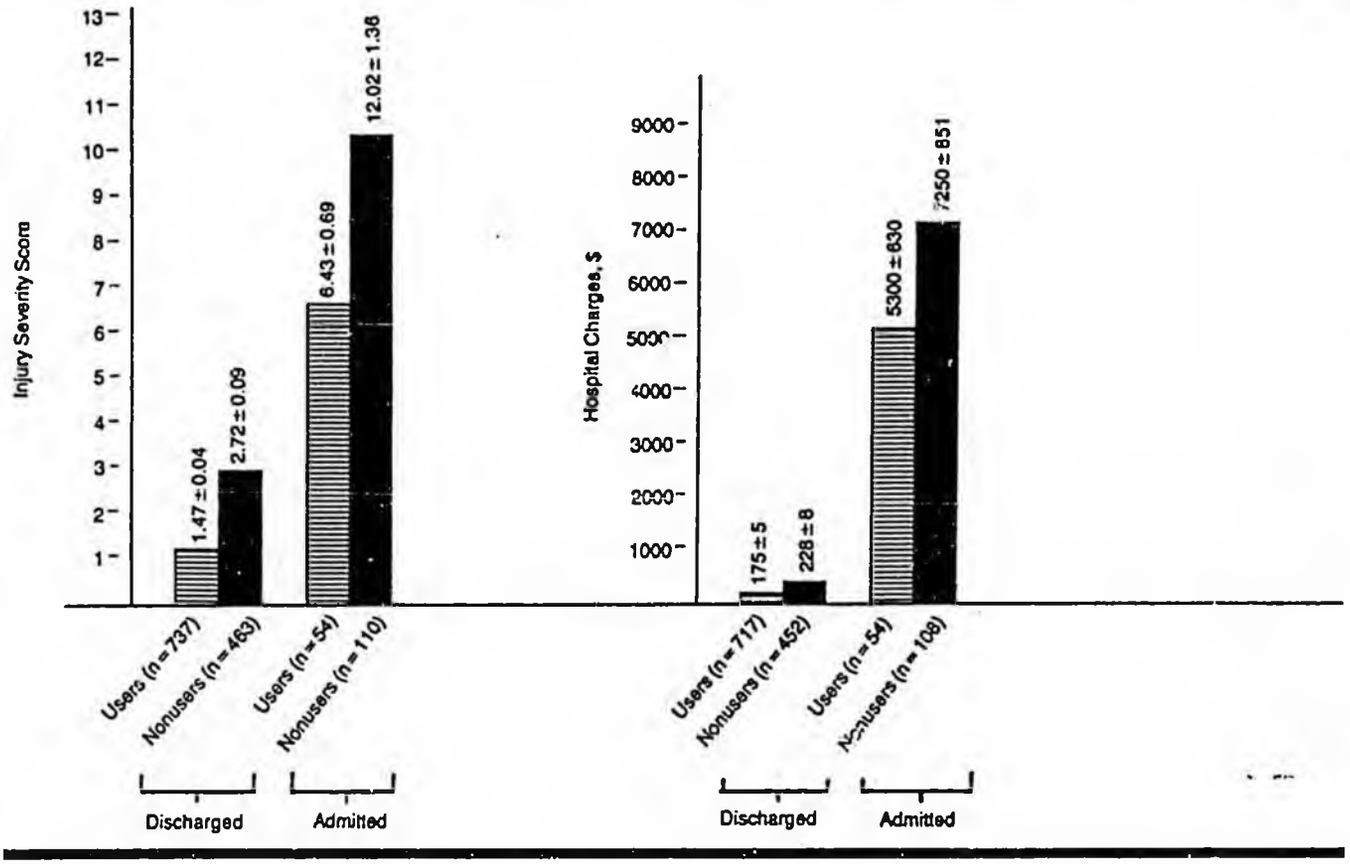

Fig 3.—Mean injury severity scores and hospital charges for safety belt users and nonusers by whether or not patients were admitted. Significantly fewer patients who had worn safety belts required admission ($P<.001$). Patients who did not require admission (includes patients transferred to other facilities) who had worn safety belts had significantly lower injury severity scores ($P<.001$) and hospital charges ($P<.001$). Patients who were admitted (includes patients who died in the emergency department) who had worn safety belts had significantly lower injury severity scores ($P< 001$) and demonstrated a trend toward lower hospital charges ($P=.076$).

to assess the association of safety belt use with severe injury, defined as an ISS of 12 or greater. Proportions of restrained and unrestrained subjects with severe injury were compared, using alcohol use and type of collision as covariates. Results (Table 3) indicate that the odds of severe injury were 4.8 times greater for nonusers of safety belts when other significant variables were controlled for. The odds ratio for front-end collisions was similarly large, while alcohol usage was not independently associated with severe injury. Since age was entered as a continuous variable, an odds ratio is not available. However, the proportion of patients with severe injury increased significantly with increasing age.

Table 2.—Comparison of Safety Belt Users and Nonusers on Injury Severity Score and Cost*

	Injury Severity Score†		Cost‡	
Variable	Coefficient	P	Coefficient	P
Safety belt nonuse	1.88	.0005	596.2	.0005
Alcohol use	1.13	.0016	730.1	.007
Front-end collision	0.79	.0039	583.0	.005
Rear-end collision	−0.71	.0048	−381.7	.047
Posted speed limit, mph				
30-45	0.74	.001	470.2	.0006
≥55	0.51	.81	394.8	.17
Age, y	0.032	.0001	22.7	.0001

*Analysis of covariance.
†Adjusted mean ± SD injury severity score was 2.42 ± 0.23 for safety belt users and 4.30 ± 0.22 for nonusers ($P=.0001$).
‡Adjusted mean ± SD cost was $912.80 ± $172.90 for safety belt users and $1508.90 ± $170.60 for nonusers ($P=.0005$).

Health Care Costs

Significant differences were also found in the health care costs of safety belt users and nonusers. Unrestrained occupants incurred mean charges of $1583 ± $201, nearly three times the charges for restrained occupants ($534 ± $67, $P<.001$; Fig 1, right).

When the patient's position in the vehicle was evaluated, nonwearers consistently incurred higher charges than safety belt wearers (Fig 2, right). This difference reached statistical significance in drivers and front-seat passengers only. However, the number of back-seat passengers for statistical comparison was small (N = 158).

Patients who did not wear safety belts who required hospital admission demonstrated a trend toward higher charges (Fig 3, right; $7250 ± $851 vs $5300 ± $630, $P=.076$), though the sample size was small (N = 162). However, in patients who were discharged or transferred from the emergency department, a significant difference was demonstrated, with restrained occupants incurring average charges of $175 ± $5 vs $228 ± $8 for unrestrained occupants ($P<.001$). This represents a 23.3% reduction in charges for safety belt wearers (Fig 3, right).

Table 3.—Logistic Regression Results Comparing Safety Belt Users and Nonusers by Injury Severity Score

Variable	Injury Severity Score ≥12		
	Odds Ratio	95% Confidence Interval	P
Safety belt nonuse	4.94	2.03-12.02	.0004
Front-end collision	4.74	2.10-10.66	.0002
Alcohol use	1.59	0.68-3.74	.29
Posted speed limit, mph			
30-45	1.94	0.91-4.15	.09
>55	1.43	0.37-5.58	.60
Age (20-year difference)	2.01	1.35-2.99	.006

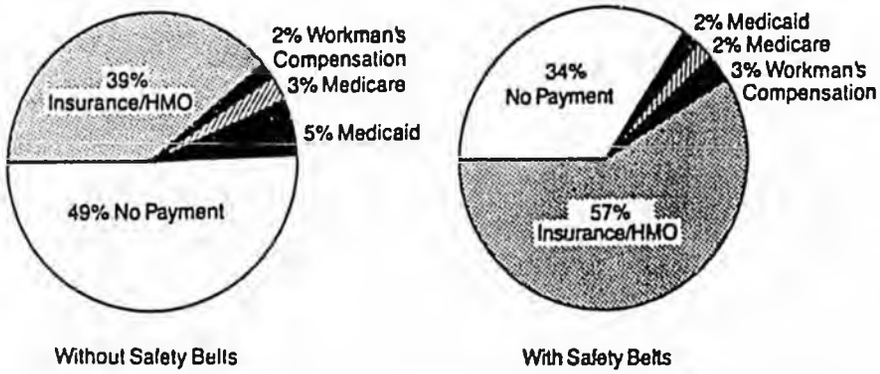

Fig 4.—Payment status for patients with and without safety belts. HMO indicates health maintenance organization.

Evaluation of payment status showed that the majority of unrestrained passengers either had no payment (49.2%) or were receiving governmental assistance (5% public aid, 3% Medicare). Of safety belt wearers, 57% had private insurance or were enrolled in a health maintenance organization, and 3% were covered by workman's compensation ($P<.001$, Fig 4).

Multivariate analyses were also conducted to assess the independent effect of safety belt use on health care costs, controlling for the covariates age, type of collision, posted speed limit, and alcohol usage (Table 2). The adjusted mean costs differed by about $600 ($P=.0008$); alcohol users incurred charges approximately $700 higher on average. Costs were higher in front-end collisions, lower in rear-end collisions, higher at 30 to 45 mph, and increased with the age of the patient.

COMMENT

This study suggests that safety belts provide a significant benefit in reducing injury and health care costs. We demonstrated a 60.1% reduction in severity of injury (51% after adjusting for other variables), a 64.6% decrease in hospital admissions, and a 66.3% decline in hospital charges (49% for adjusted means) in safety belt wearers. To our knowledge, this is the first study evaluating the efficacy of safety belt use in the United States based on medical data. By utilizing the ISS system, an objective assessment can be made of the number and severity of injuries in relation to safety belt use. Previous studies[6] and government reports[9] used police reports in assessment of injury. In this system, the police officer assigns the accident victim an injury score of A, B, C, or K (severe, moderate, minor, or fatal injury). Obviously, data obtained by this system are of questionable reliability. In addition, this study is unique in that it also assessed the hospital charges associated with the care of the injured motorist.

Actual hospital and emergency department charges were used to estimate health care costs in this analysis. These are conservative estimates, in that direct charges generated by prehospital emergency services, rehospitalizations, and rehabilitation were not included. Furthermore, indirect costs resulting from time lost from work, increased insurance premiums, and lost productivity of those who die or are permanently disabled by MVAs were not measured. Inclusion of these costs may have resulted in even greater differences in cost estimates. The cost to care for patients who required hospitalization was higher for those who did not wear safety belts, though statistical significance was not reached (Fig 3, right). However, the sample size in this subgroup was small, suggesting a beta error. Larger sample sizes may demonstrate a statistically significant difference.

The four hospitals participating in the study were geographically scattered throughout Cook County to include a variety of roadways (highways and urban and suburban roads). Only rural roads were not represented. Baker et al,[10] however, stated that mortality from MVAs may be highest in areas of low population density; this suggests that we omitted from our sample roads responsible for high mortality from MVAs. The months of January through June were chosen to cover a variety of road conditions in winter, spring, and summer in Chicago. In addition, the four hospitals admit patients from a wide variety of socioeconomic groups, with an assortment of vehicles and driving habits.

Throughout this study, we relied on patient reporting and/or paramedic reporting of safety belt use. The actual safety belt use rate in Illinois at the time of the study was 36%.[9] Actual safety belt use may be appreciably different than reported, as it may be impossible to obtain physical evidence of safety belt use. Paramedics were asked to verify the presence or absence of restraint use at the scene. However, the accident victims were often out of their vehicles when the ambulance arrived. In only 23 of the 618 cases with patients transported to the hospital by ambulance was there disagreement on safety belt usage between paramedics and patients. If we assume, however, that restraint use is only overreported, ie, unrestrained patients stated that they were wearing a safety belt and not vice versa, then there would be an even greater benefit in reducing injury and cost if the true incidence were known.

It should be noted that only those patients who presented to the hospital following an MVA were included. Patients who did not present to the hospital, who presented over 24 hours following injury, or who went directly to the morgue were not included. In Cook County, paramedics must transport all seriously (or fatally) injured MVA victims to a hospital unless the patient has dependent lividity, rigor mortis, or decapitation, all unlikely events in traffic accidents. It is therefore unlikely that any fatalities were not included in the study due to direct transport to a

morgue. The number of uninjured motorists who did not present to a hospital is unknown and is not available through the Department of Transportation.

Studies conducted in other countries, many of which assessed the effects of safety belt legislation, also demonstrate the benefit of safety belt use.[11-22] Henderson and Wood[11] reported a 25% decrease in predicted deaths in the year following safety belt legislation in New South Wales, Australia. In an evaluation of the Swedish experience, Mellbring et al[12] reported a reduction in the number of MVA victims admitted to hospitals following legislation despite a 40% increase in reported MVAs. In England, a retrospective study comparing the 12 months preceding and following the enactment of safety belt use legislation revealed a mean ISS of 4.94 before and 2.8 after the law. A 42% reduction in the number of front-seat occupants who required hospital admission and a 27% decline in the number of deaths following introduction of the law was reported.

In the United States, New York was the first state to pass a mandatory-use safety belt law. In the first nine months after the law was enforced, MVA fatalities decreased by 17%, resulting in the lowest highway fatality rate (per 100 million miles driven) in several decades.[3] In Illinois, where safety belt legislation took effect in July 1985, an estimated 55 to 60 lives were saved and 8000 serious injuries were prevented in the first year following enactment.[9] Nationwide, the National Highway Traffic Safety Administration reported that safety belt usage of fatally injured MVA victims was about half the usage of those whose injuries were less incapacitating.[23] Unrestrained occupants were 40% more likely to be injured in an MVA and twice as likely to require hospitalization as restrained occupants.[24]

Compulsory safety belt use legislation appears to be the most effective agent in increasing safety belt usage. Usage rates increased from just under 40% to 95% in England,[14] from 20% to 80% in Sweden,[12] from 15% to 90% in Australia,[13] and from 21% to 47% in New York state[25] after such legislation. Insurance incentives[26] and mass-media campaigns[27] have been ineffective in altering the rate of safety belt usage. Other efforts to promote safety belt usage, including safety belt pledge cards, incentive plans, and "awareness" programs have met with variable success.[28]

Mandatory safety belt use legislation has been a controversial topic in the United States. To date, 33 states and the District of Columbia have enacted such legislation, while two additional states had safety belt use laws and later repealed them (Massachusetts and Nebraska). Worldwide, over 30 countries have passed mandatory-use laws. The United States is virtually the only developed nation that has not passed national safety belt legislation.[29]

The Department of Transportation estimated the cost to society of injuries sustained in MVAs at about $15.3 billion in 1980.[4] Our results indicate a 66.3% decreased cost attributed to safety belt use. If this reduction is applied to the estimated $15.3 billion, universal safety belt usage would save $10.1 billion each year. In our era of rising health care costs, the safety belt may be a very efficient mechanism for saving lives and reducing costs.

Society bears the burden of MVAs, not only in direct health costs but also in lost productivity of workers (indirect costs). There were over 11 million lost workdays for survivors of MVAs in 1985.[24] The administrative and overhead cost of motor-vehicle and health insurance premiums totaled nearly $13.8 billion in 1980.[4] Furthermore, in 1980, the federal government spent an estimated $7.5 billion and state and local governments spent an estimated $3.4 billion for MVA-associated expenses.[4]

This study analyzed automobile safety belt use and subsequent severity of injury and health care costs. Our data suggest that, in an urban setting, safety belt utilization was associated with decreased severity of injury from motor-vehicle trauma and reduced the medical care costs of injured motorists. This analysis in combination with existing evidence supports a more aggressive national posture toward safety belt usage for the benefit of both the individual and the American people.

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HILTON USA

Response re: Automakers & Dot regs "conspiracy"

FRANK -

SEPT. 1989 MO ... ALL CARS WILL HAVE PASSIVE RESTRAINTS. ALL RECOGNIZED TWO YEARS AGO STATE LAWS DON'T NEARLY APPROACH NHTSA CRITERIA - BUT WE KEPT PUSHING FOR LAWS ANYWAY TO SAVE LIVES ETC. MANUFACTURERS NOW OFFERING AIRBAGS, AS SUPPLEMENT TO BELTS, NOT REPLACING. CALL ME IF QUESTIONS. 202-775-2741

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September 1, 1986, by each manufacturer, shall comply with the requirements of S4.1.2.1.

S4.1.3.2 *Passenger cars manufactured on or after September 1, 1987, and before September 1, 1988.*

S4.1.3.2.1 Subject to S4.1.3.2.2 and S4.1.3.4, each passenger car manufactured on or after September 1, 1987, and before September 1, 1988, shall comply with the requirements of S4.1.2.1, S4.1.2.2 or S4.1.2.3.

S4.1.3.2.2 Subject to S4.1.5, an amount of the cars specified in S4.1.3.2.1 equal to not less than 25 percent of the average annual production of passenger cars manufactured on or after September 1, 1984, and before September 1, 1987, by each manufacturer, shall comply with the requirements of S4.1.2.1.

S4.1.3.3 *Passenger cars manufactured on or after September 1, 1988, and before September 1, 1989.*

S4.1.3.3.1 Subject to S4.1.3.3.2 and S4.1.3.4, each passenger car manufactured on or after September 1, 1988, and before September 1, 1989, shall comply with the requirements of S4.1.2.1, S4.1.2.2 or S4.1.2.3.

S4.1.3.3.2 Subject to S4.1.5, an amount of the cars specified in S4.1.3.3.1 equal to not less than 40 percent of the average annual production of passenger cars manufactured on or after September 1, 1985, and before September 1, 1988, by each manufacturer, shall comply with the requirements of S4.1.2.1.

S4.1.3.4 For the purposes of calculating the numbers of cars manufactured under S4.1.3.1.2, S4.1.3.2.2 or S4.1.3.3.2 to comply with S4.1.2.1, each car whose driver's seating position will comply with these requirements by means other than any type of seat belt is counted as 1.5 vehicles.

5. Standard No. 208 is amended by adding the following new sections:

S4.1.4 *Passenger cars manufactured on or after September 1, 1989.* Except as provided in S4.1.5, each passenger car manufactured on or after September 1, 1989, shall comply with the requirements of S4.1.2.1.

S4.1.5 *Mandatory seatbelt use laws.*

S4.1.5.1 If the Secretary of Transportation determines, by not later than April 1, 1989, that state mandatory safety belt usage laws have been enacted that meet the criteria specified in S4.1.5.2 and that are applicable to not less than two-thirds of the total population of the 50 states and the District of Columbia (based on the most recent Estimates of the Resident Population of States, by Age, Current Population Reports, Series P-25, Bureau of the Census), each passenger car manufactured under S4.1.3 or S4.1.4 on or after the date of that determination shall comply with the requirements of S4.1.2.1, S4.1.2.2, or S4.1.2.3.

S4.1.5.2 The minimum criteria for state mandatory safety belt usage laws are:

(a) Require that each front seat occupant of a passenger car equipped with safety belts under Standard No. 208 has a safety belt properly fastened about his or her body at all times when the vehicle is in forward motion.

(b) If waivers from the safety belt usage requirement are to be provided, permit them for medical reasons only.

(c) Provide for the following enforcement measures:

(1) A penalty of not less than $25.00 (which may include court costs) for each occupant of a car who violates the belt usage requirement.

(2) A provision specifying that the violation of the belt usage requirement may be used to mitigate damages with respect to any person who is involved in a passenger car accident while violating the belt usage requirement and who seeks in any subsequent litigation to recover damages for injuries resulting from the accident. This requirement is satisfied if there is a rule of law in the State permitting such mitigation.

(3) A program to encourage compliance with the belt usage requirement.

(d) An effective date of not later than September 1, 1989.

(Sec. 103, 119, Pub. L. 89-563, 80 Stat. 718 (15 U.S.C. 1392, 1407))

Issued: July 11, 1984.

Elizabeth H. Dole,

Secretary of Transportation.

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