LEGISLATIVE FINANCE-HOUSE/SENATE FINANCE COMM. FILES 8879

HB 105 cont., HB 106 456 47

Although Representative Gruenberg continues to refer to the report Safety Belt Use and Automobile Insurance, the fact is that it is very difficult to project either before or after the fact the effect of seat belt laws on insurance premiums. The Hawaii study is perhaps the best attempt to do this which I have seen. As you can see from that study, the personal injury protection data "indicates that the frequency of claims is decreasing, however the severity of claims is increasing at a rate higher than the medical consumer price index." The conclusion of the Hawaii study was that the personal injury protection claim and severity data did not indicate a reduction in personal injury protection insurance rates. Of course since Hawaii is a no-fault state, the personal injury protection coverage tells us whether the cost of bodily injury coverage is increasing or decreasing. This data needs to be qualified because these losses include all injured persons such as all occupants, pedestrians, and non-collision related losses.

If you look at the National Highway Traffic Administration Report to Congress, what you will find is in the instances analyzed, the estimated savings was less than what had been originally anticipated and that it is difficult if not impossible to measure the impact on the question of severity of injury. As I have stated above, the most recent Hawaii study did not indicate that personal injury protection rates should be reduced. According to the NHTSA report, Iowa experienced a 1.5 percentage point drop in bodily injury loss payments made to injured persons by insurers of motorists at fault, for each 10 percentage point increase and a 3% for each 10 percentage point increase drop in medical payments paid to motorists by their own insurers. It is unclear from this report how the conclusion was drawn that the decrease was due to seat belt use as opposed to other factors. Furthermore, even according to this report, the Iowa insurance department noted the difficulty of separating the "impacts of the law from variations in medical costs, crash frequency, and other factors." The Massachusetts law was repealed and the Texas law does not appear to consider the impact on severity of injuries.

I have previously forwarded to the Transportation Committee data measuring the impact of seat belt use by comparing the incurred claim frequency of the bodily injury liability or personal injury protection coverages to property damage liability coverage, which is not affected by the seat belt law. Enclosed for your review is a copy of that data. This technique is intended to remove the influence of other factors that may produce changes in claim frequency. For example, the ratio of PIP claims to property damage liability claims in Florida has been quite stable over the last four years, even though a mandatory seat belt use law became effective July 1, 1986 and was enforced on January 1, 1987. The statistics for New York, Texas,

and Illinois show similar patterns. We certainly hope that increased seat belt usage will hold down bodily injury losses and ultimately automobile insurance rates, however, the specific effect of a law cannot be predicted. Only experience will prove its effectiveness. This is especially true for seat belt laws, since usage rates vary considerably and tend to drop off after an initial peak.

We have not seen any attempt to mandate rate reduction with other safety measures, such as the 55 mph speed limit, higher tail lights, user friendly interiors in vehicles, or increased enforcement of driving while drinking laws. Given the safeguards present in the system already, we see no reason to mandate such a reduction with this legislation. If the legislation achieves savings, the savings will either be reflected directly in the rates, or used to reduce a rate increase which would otherwise occur. If such reductions do not occur as a result of market pressures, they will occur as a result of the direction by the Director of Insurance. We strongly believe that the rate making authority should remain with the Director and the legislature should not become involved on a piece-meal basis of setting rates in the manner proposed.

I expect to receive further information from Allstate as to their methods of rating on Monday and will provide that information to you as soon as I do receive it. If either you or other members of your committee have further questions, please let me know and I will do my very best to obtain the answers for you as quickly as I am able. I do thank you for the opportunity you gave me this morning to comment and for the opportunity to provide further information through this letter.

Sincerely,

HUGHES, THORSNESS, GANTZ,
POWELL & BRUNDIN

By: Michael L. Lessmeier
Michael L. Lessmeier

MLL:srs/0148L

cc: Senate Finance Committee Members

REPORT TO THE FIFTEENTH LEGISLATURE

OF THE STATE OF HAWAII

REGULAR SESSION OF 1989

ON

SECTION 5 OF ACT 235
SESSION LAWS OF HAWAII 1985

SUBJECT: EFFECTIVENESS OF THE MANDATORY SEAT BELT USE LAW

STATE OF HAWAII
Department of Transportation
Department of Commerce and Consumer Affairs
December, 1988

REPORT TO THE LEGISLATURE
REGULAR SESSION OF 1989
ON
SECTION 5 OF ACT 235 SLH 1985

Section 5 of Act 235 SLH 1985 requires the State Director of Transportation and the State Insurance Commissioner to submit five annual reports to the Legislature beginning with the 1987 session. The reports are to address the effectiveness of the state's mandatory seat belt use law (MUL) and include information about public compliance, traffic accidents and their resultant injuries and the law's effect on insurance rates. This is the third report.

PUBLIC COMPLIANCE:

Statewide public compliance with the law was at 73% in January of 1986, but it subsequently dropped to a low of 63.5% in October of 1987. In January, 1988, through a combination of public education and enforcement, we reversed the downward trend; use went up to 66.5% and increased again in June to 68.5%.

Two methods of measuring compliance are: (1) conduct belt use observational surveys; and (2) review accident report belt use data. The accident data has questionable reliability, because most of the time the information comes from the occupants themselves. This makes it easy for people to report that they were using a belt, when in fact they were not. Other disadvantages of this data are: (1) it takes a long time to accumulate, compile and analyze; and (2) Hawaii's pre-1986 automated data relates only to drivers. The user rates for drivers in accidents during the period of 1983 through 1985 are presented in Table I. The data indicate that belt use was low but improving.

TABLE I
Seat Belt Use Rates for Drivers in Accidents

C.Y.	Honolulu	Hawaii	Maui	Kauai	State
1983	20.7%	12.8%	7.6%	9.6%	17.8%
1984	27.1%	13.1%	12.6%	11.5%	23.0%
1985	42.0%	25.9%	21.1%	23.8%	36.7%

Observational surveys offer an expedient and reliable indication of belt use. When Hawaii's MUL was passed, two surveys specific to front seat outboard occupants were scheduled. One was taken in November-December, just before the law's December 16, 1985 effective date and the other was taken in January, 1986. Subsequently, two surveys per year at

six-month intervals were scheduled. The results thus far are presented in Table II. The data indicate that the law was an effective means of increasing belt use. Although belt use decreased for two years, the downward trend was reversed.

TABLE II
1985-87 Observed Use of Seat Belts
by Front Seat Occupants

Date	State	Oahu	Hawaii	Maui	Kauai
Dec. 1985	33%	37%	26%	26%	29%
Jan. 1986	73%	77%	64%	67%	71%
June 1986	67%	72%	60%	58%	65%
Jan. 1987	66%	70%	63%	55%	66%
June 1987	64%	71%	59%	45%	67%
Oct. 1987	64%	71%	55%	44%	65%
Jan. 1988	67%	71%	70%	50%	65%
June 1988	69%	73%	66%	59%	69%

ACCIDENT DATA:

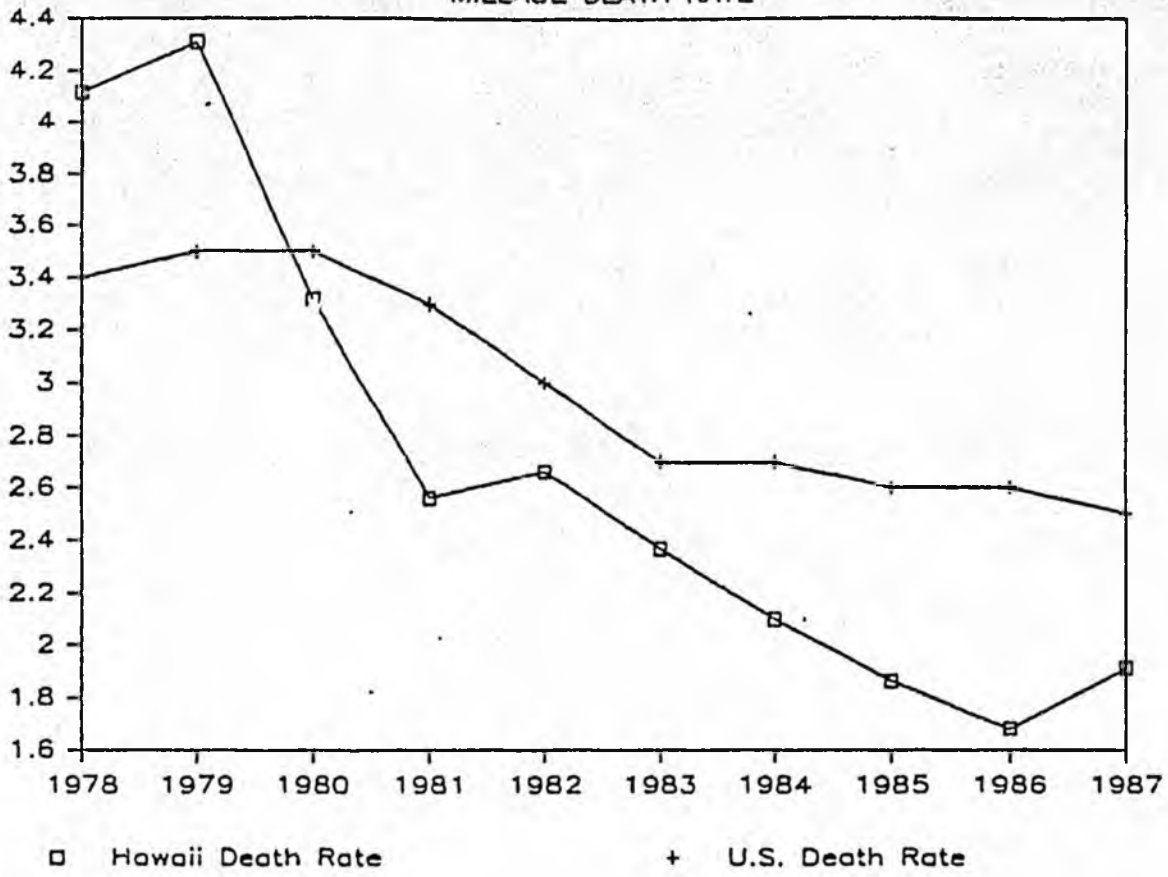
There are several items to consider when evaluating accident data. One of the more important is the number of vehicle miles driven. Generally, if there is an increase in the number of miles driven, all other things being equal, there will also be an increase in the number of accidents that occur. One means of compensating for this variable is to calculate an accident rate per miles travelled.

In CY 1987 there were 138 traffic fatalities; the death rate (Graph I) was 1.91 per 100 million miles of travel (the national rate was 2.5). In 1986 Hawaii's death rate was 1.68. The death rate includes all fatalities associated with motor vehicle accidents, not just occupants under the purview of the mandatory use law (MUL). Two examples of non-motor vehicle occupants included in the death rate are pedestrians and bicyclists. Examples of motor vehicle occupants unaffected by the MUL but included in the death rate are motorcyclists and rear seat occupants of passenger vehicles. Because the death rate is so general, its utility is limited. It can be used to determine the fatality trend, but unless a rate is computed with the nonoccupant numbers taken out, it is not a good means of evaluating MUL effectiveness.

Table III provides data that is specific to motor vehicle occupants. The numbers in parentheses are rates per 100 million vehicle miles of travel. There were significant improvements in 1986 compared to the averages of the previous four-year period. There was a 32% decrease in the occupant

STATE OF HAWAII

MILEAGE DEATH RATE



fatality rate, a 58% decrease in the fatality rate for unbelted occupants and the 356% increase in the belted occupant fatality rate.

The 1987 fatal accident data seem to reflect the continual decrease in belt use in that there were increases across the board compared to 1986. However, even with the increases the 1987 data were better than the pre-law data. The number of fatalities was down 10% and the fatality rate was down 21%.

TABLE III
Occupant Fatality Numbers & (Rates)

C.Y.	Occupant Fatalities	Unbelted Occupant Fatalities	Belted Occupant Fatalities	Use Not Known	Unbelted Occ's In Fat. Accs
1982	107 (1.77)	103 (1.70)	1 (.017)	3	233
1983	92 (1.56)	85 (1.45)	3 (.051)	4	217
1984	89 (1.37)	81 (1.25)	3 (.046)	5	205
1985	91 (1.35)	78 (1.15)	8 (.118)	5	203
4-Yr Ave.	95 (1.51)	87 (1.39)	4 (0.58)	4	215
1986	72 (1.03)	41 (0.59)	26 (.373)	5	79
1987	86 (1.19)	52 (0.72)	29 (.402)	5	118
2-Yr Ave.	79 (1.11)	47 (0.66)	28 (.388)	5	99
Difference	17% (27%)				

A comparison of the post-law two-year average occupant fatality rate with the four-year pre-law average shows a 27% improvement. The annual average number of occupant fatalities was reduced by about 16 (17%). However, before we can determine whether the MUL is related to this reduction and whether this reduction represents the effectiveness of the MUL, we must eliminate the data for occupants who were not riding in the front seat.

EFFECT OF BELT USE ON FRONT SEAT OCCUPANTS IN FATAL ACCIDENTS:

On the basis of fatal accident data, it appears that the MUL has improved the front seat occupant fatality record significantly. Table IV allows us to evaluate the effects of the changes that occurred in the fatality rates (per 100 million miles of travel) over the years. The projected fatalities show what would have happened had there been no change in the fatality rates. The projections for the two years before the law are based on the previous year's record. The post-law projections are based on the pre-law three-year average fatality rate.

TABLE IV
Front Seat Occupant Fatality Data

Year	Mil.Miles Travelled	Actual Fats./Rate	Projected Fatalities	Difference
1983	5,872.5	85 (1.45)	N/A	N/A
1984	6,486.3	85 (1.31)	94	-9(10%)
1985	6,761.5	76 (1.12)	89	-13(15%)
3-Yr Ave	6,373.4	82 (1.29)	82	N/A
1986	6,970.8	58 (0.83)	90	-32(36%)
1987	7,212.2	73 (1.01)	93	-20(22%)
2-Yr Ave	7,091.5	66 (0.92)	91	-25(28%)
Ave's Diff.	+718.1 11%	-16 (0.37) -20% (29%)	+ 9 11%	

There was a 29% improvement in the fatality rate and a 20% decrease in the average number of fatalities. On the basis of miles travelled, had the post-law fatality rate stayed the same as the three-year pre-law average rate, there would have been an 11% increase in the number of persons killed. This correlates with the 11% increase in the number of miles travelled. As it turned out, there was a 20% annual average decrease. Comparing the differences between the projected fatalities for 1986 & 1987 with the actual fatalities shows that there were 52 fewer front seat occupant fatalities during that two-year period than would have been expected on the basis of past experience. This is evidence that the MUL has been very effective.

Naturally, there were concomitant savings associated with nonfatal injuries and occupants with no injuries. Table V shows an 11% reduction in the nonfatal injury rate and a 27% reduction in the rate for uninjured persons. The latter reduction is an enigma, because if belts are effective against injury and more people use belts, then the number of uninjured persons should increase rather than decrease. One possible explanation for this anomaly is that it may somehow be associated with the 12% reduction in the total number of occupants involved in fatal accidents. Another possibility is that it is the result of seat belts being less effective against minor injuries than more serious injuries.

TABLE V
Front Seat Nonfatally Injured And Uninjured Occupants
Before & After The MUL

CY Ave.	Total Injured	Total Not Injured
3-Yr Before	81 (1.28)	28 (0.433)
2-Yr After	81 (1.14)	23 (0.319)
% Change	0% (-11%)	18% (-27%)

The MUL appears not to have had a positive effect on nonfront seat occupant injuries. Although there was a 10% reduction in the average nonfatal injury rate and a 9% reduction in the no injury rate, the fatality rate increased 54%.

As noted earlier, nonfatal accident data for CY 1986 and 1987 are not yet available for analyses. The data in Table VI is intended to set the ground work for future comparisons. Although this data shows a 106% increase in belt use by drivers, the rate began at such a low level that significant changes in injury experience would not be expected. The injury rate decreased only 7%.

TABLE VI
Driver Injury Rates vs. Belt Use Percents
(per million miles of travel)

C.Y.	Belt Use Percents	Possible Injury	Noninca-pacitating	Incapaci-tating	Fatal	Total
1983	17.8%	57.56	38.01	24.98	1.00	121.55
1984	23.0%	55.49	33.47	24.95	1.03	114.94
1985	36.7%	54.06	37.73	19.99	1.02	112.80

The relatively minor change in the rates for the Possible Injury category may be due to reporting problems. Many people do not report minor injuries or do not know they are injured until the next day after the accident. Thus, the injuries may not appear on the police accident reports, the source of this injury data.

COST BENEFITS OF THE MUL:

Using national Fatal Accident Reporting System (FARS) data, the NHTSA has estimated that the average cost to society for a fatality is $353,380. Multiplying this by the estimated

52 lives that were saved by the MUL equals $18,375,760 for two years. It is also possible to make a more comprehensive estimate of the financial benefit of the MUL with FARS data. This additional data indicate that there are about 78 police-reported motor vehicle injuries for each fatality. The average percent of these by seriousness (AS-5 = critical and AS-1 = minor) is shown in Table VII. Also shown is the cost per injury by classification and the computed cost of nonfatal injuries to society per fatality. The total cost of nonfatal injuries per fatality is $436,342. Adding this to the cost of a fatality, makes a sum of $789,722.

When computing the savings that are accrued due to seat belt use, the effectiveness of belts against the injury classifications must be considered. NHTSA estimates that belts are about 50% effective against all injury classifications except AS-1; they are only 10% effective against them. Therefore, when estimating savings, only 10% of the AS-1 $208,566 cost per fatality can be used. There is, therefore, a theoretical savings of $602,103 (353,380 + 36,432 - 87,709) for every fatality that is saved. Multiplying this by 52 produces a product of $31,309,356 saved during the first two years of the MUL.

TABLE VII
Cost of Injuries to Society

Injury Type	Percent of All Injuries	Number Per Fatality	Cost Per Injury	Computed Cost/Fatality
AS-5	0.3	.23	$284,752	$ 65,493
AS-4	0.9	.70	64,812	45,368
AS-3	5.0	3.90	14,742	57,494
AS-4	11.4	8.89	6,684	59,421
AS-1	82.4	64.27	3,245	208,566
Totals	100.0	78	374,217	436,432

EFFECT OF BELT USE ON NO-FAULT INSURANCE:

The ten quarters of loss experience which is currently available under Hawaii's seat belt law still does not represent a fully credible data base for insurance ratemaking purposes. Insurance ratemaking for Personal Injury Protection (PIP) coverage is normally based upon a minimum of two accident years of loss experience evaluated as of 24 and 36 months.

The following comparative loss data, as reported to the Insurance Commissioner, for the pre-MUL accident years

1983-1985 and for the post-MUL accident years 1986-1988 are evaluated as of 12 months except for 1988 which is evaluated as of 6 months.

Acc. Year	Incurred Claims	Frequency[1]	Sevrty[2]	Annual Chng In Sevrty	CIP-Medical	Annual Change In CIP-Medical
1983	14,059	3.44%	1,500	17.3%	357.6	10.3%
1984	12,096	2.93%	1,836	22.4%	379.7	6.2%
1985	13,736	2.86%	1,959	6.7%	400.6	5.5%
1986	13,137	2.57%	2,101	7.2%	432.8	8.0%
1987	14,368	2.51%	2,303	9.6%	452.6	4.6%
1988	6,685	2.05%	2,357	9.9%	461.6	3.0%[3]

[1]Frequency = $\frac{\text{Incurred Claims}}{\text{Vehicle Exposure}}$

[2]Severity = $\frac{\text{Incurred Losses}}{\text{Incurred Claims}}$

[3]Annual Change from June, 1987

The PIP data indicates that the frequency of claims is decreasing, however, the severity of claims is increasing at a rate higher than the medical consumer price index. The reduction in the frequency of claims parallels insurance studies done in several other states which have also enacted seat belt laws. Those studies indicate that seat belt laws have reduced the frequency of serious and fatal injuries by 5-10%. However, those studies suggest that seat belts do not actually reduce the number of minor accident injuries that often result in expensive insurance claims.

With respect to Hawaii's PIP data, there are several limitations to consider: (1) the claims and losses are for all injured persons (i.e. all occupants, pedestrians, and non-collision related PIP losses); (2) PIP coverage includes medical and rehabilitative expense, wage loss, substitute service expenses, funeral expenses, survivor's benefits and other economic losses necessarily incurred as a result of injuries sustained in an automobile accident; (3) insurers are required to provide the same statutory benefits regardless of an injured persons compliance/non-compliance with Hawaii's MUL. Given the multitude of payment types, any changes in the frequency and severity of PIP claims would not be solely attributable to Hawaii's MUL.

However, while the current Hawaii PIP data does not indicate that PIP insurance should be reduced, the declining frequency of claims will serve to temper any rate increases resulting from the higher claims severity.

SUMMARY:

On the basis of fatal accident data, the MUL appears to be an effective means of saving lives and money. The post-law 2-year average fatal accident rate per 100 million vehicle miles of travel was 29% lower than the 3-year pre-law averge. We estimate that 52 front seat occupant lives have been saved during the first two years of the law. The estimated savings in total front seat occupant injury cost to society is $31,304,676. On the basis of ten quarters of loss experience, which does not represent a fully credible data base for rate making purposes, the Personal Injury Protection claim and severity data do not indicate that PIP insurance rates should be reduced.

Exhibit I

Ratio of Personal Injury Protection or Bodily Injury Liability Claim Frequency to Property Damage Liability Claim Frequency

Year	Florida Effective 7/1/86 Enforced 1/1/87 (PIP/PD)	Year	New York Effective 12/1/84 (PIP/PD)	Year	Texas Effective 9/1/85 (BI/PD)	Year	Illinois Effective 7/1/85 (BI/PD)
1985	.467	1983	.387	1983	.179	1983	.248
1986	.486	1984	.386	1984	.187	1984	.247
1987	.473	1985	.358	1985	.183	1985	.252
1988	.469	1986	.377	1986	.187	1986	.246
		1987	.386	1987	.213	1987	.268
		1988	.379	1988	.229	1988	.269

John L. George And Associates
9515 Moraine Way
Juneau Alaska 99801
(907) 789-0172

APR 4 1989

April 4, 1989

The Honorable Johne Binkley
Co-Chairman
Senate Finance Committee
Pouch V
Juneau, Ak. 99811

The Honorable Rick Uehling
Co-Chairman
Senate Finance Committee
Pouch V
Juneau, Ak. 99811

RE: Senate CS for CSHB 105 Transportation

Dear Senators Binkley and Uehling:

The National Association of Independent Insurers, a trade organization of property and casualty insurers, supports legislation to improve safety for motor vehicle occupants. The bill that you currently have before the Finance Committee as amended in the Senate Transportation Committee, is a very positive step to save lives.

During a hearing on Senate CS for CSHB 105 in your committee last week, considerable thought was given to amending the bill to provide for a 5% automobile bodily injury rate reduction. The amendment would create the rebuttable presumption that use of seatbelts in combination with all other rating factors, such as medical costs, accident frequency, and litigation costs, would by the end of the first year warrant the 5% rate cut.

Loss statistics in other states confirm that while the accident death rate will be reduced through the use of seatbelts, these accidents will still result in injuries which require payment of insurance policy limits. Some people already use seatbelts. Some people never will use seatbelts regardless of the law. Medical costs increase faster than inflation and accident frequency may increase as less money is spent on highway maintenance during budget cutting.

We believe that it is unrealistic to presume that severe injury and death cases will have sufficiently matured, by the time the filing is due, to provide any meaningful

statistics for rate filing purposes. Meaningful loss data may be available two to three years after the end of the year for which the data is collected.

The Hawaii report that was referred to in a recent committee hearing supported mandatory seatbelt use because it saved "society" thirty-one million dollars. The report further said that the statistics did not support any insurance cost reduction. Society can benefit from lower fatalities even though insurers do not realize bodily injury cost reduction.

The principle of State insurance regulation in Alaska relies on the Director of Insurance and his responsibility to continually review auto insurance rates. The state of Alaska has a very competitive auto insurance market which keeps insurance rates down. It is our contention that insurers should always be required to statistic justify their rates as is currently provided by law. They should not be required to rebut presumptions that are not supported by the facts.

The NAII urges the Senate Finance Committee to promptly pass on the Senate Transportation Committee version of CSHB 105. Passage of this version of the bill will save Alaskan lives and will require that insurance rate filings reflect the actual Alaskan experience.

Sincerely,

John L. George
Alaska Representative
NAII

FLUOR DANIEL

Fluor Daniel Alaska, Inc.
900 West 5th Avenue, Suite 300, P.O. Box 196680
Anchorage, Alaska 99519-6680
(907) 276-2636

April 24, 1989

Senate Finance Committee
Pouch V
Juneau, Ak 99811

Attention: Senator Rick Uehling, Co-Chairman
Senator Johne Binkley, Co-Chairman

Gentlemen:

PROPOSED SENATE BILL 119
An Act Relating to Corporate Income Taxes

Fluor Daniel Alaska, Inc. is Alaska's largest engineering and construction company. It is a wholly owned subsidiary of the world wide Fluor Corporation which has a long history of work in Alaska.

Senate bill 119 proposes to change the basis of income taxes for foreign companies from worldwide unitary taxation to water's edge taxation. This action would discriminate against domestic corporations in competing both in Alaska and overseas.

In your deliberation of tax legislation, we strongly urge you to maintain a level hand in regards to treating foreign and domestic companies equally. If water's edge taxation is to be used for foreign companies, it should, at a minimum, be available for domestic companies as a discretionary option to worldwide unitary taxation in a manner such as that used by the State of California.

Fluor Daniel Alaska is proud to be Alaskan but should not be forced to pay a premium over our foreign competitors.

Very truly yours,

George P. Wueroh
President and Regional Manager

GPW:jnr

9114A.115

(2)

STATE OF ALASKA

STEVE COWPER, GOVERNOR

DEPARTMENT OF EDUCATION

OFFICE OF THE COMMISSIONER

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

April 20, 1989

The Honorable Rick Uehling
The Honorable Johne Binkley
Co-Chairmen, Senate Finance Committee
P. O. Box V
Juneau, Alaska 99811

Dear Senators Uehling and Binkley:

The purpose of this letter is to provide information on why Senate CSCS HB 105(Transportation) "An Act Relating to Mandatory Use of Safety Devices in Motor Vehicles; and Motor Vehicle Bodily Injury Liability Insurance Rates," exempts passengers in school buses from requirements of the bill.

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.

05-E1LH

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; or

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 they want to mandate the use of belts on school buses. Senate CSCS HB 105(Transportation) allows local school districts to make this decision.

If you have questions, feel free to contact Romayne Kareen, the Department's Administrator of Pupil Transportation Services at 465-2890.

Sincerely,

for Steve Hole

William G. Demmert
Commissioner

cc: Steve Hole
Romayne Kareen

STATE OF ALASKA
THE LEGISLATURE

LEGISLATIVE AFFAIRS AGENCY

POUCH Y . STATE CAPITOL
JUNEAU, ALASKA 99811
907 465 3800

MEMORANDUM May 2, 1989

SUBJECT: Mandatory seatbelts - SCS CSHB 105(Finance)

TO: Senator Johne Binkley

FROM: Michael F. Ford
Legislative Counsel

You have asked if requiring that seatbelts be used in school buses would increase the potential civil liability of a driver. Assuming that the driver acts reasonably to make sure that school bus passengers are properly buckled in, I do not think that requiring seatbelts be used in certain school buses will increase or decrease the civil liability of the driver. In the absence of a specific situation it is not possible to predict liability; however the fact that seatbelts are required by law in certain school buses does not automatically increase the liability of the school bus driver.

Please contact me if you have further questions.

MFF:mi
wkmi3/104

Enclosure

Alaska State Legislature

Official Business

Pouch V
State Capitol
Juneau, Alaska 99811

March 30, 1989

MEMORANDUM

TO: Senator Johne Binkley
Senator Rick Uehling
Co-Chairs, Senate Finance Committee

FROM: Representative Max Gruenberg

RE: Proposed Amendment to SCS CS HB 105 (Trans)

My proposed amendment to SCS CSHB 105 (Trans) creates a presumptive 5 percent reduction in personal injury insurance premiums, subject to adjustment if insurers show that a higher or lower reduction is appropriate.

Enclosed is a copy of the National Highway Traffic Safety Administration's Report to Congress on Safety Belt Use and Automotive Insurance (1988). The report points out that insurance regulatory agencies in four states with mandatory seat belt laws "have analyzed the impacts of rising seat belt use on insurance claims and incorporated this information into their decisions on pricing." The states' studies showed reductions in all categories of injuries (p. 20, table 4), as well as in the dollar amount of payouts. In all four states, insurance reductions were ordered.

The report concludes that rising seat belt usage should reduce injury coverage prices about 5 to 10 percent." (p. 23)

The presumption that seat belt usage will reduce insurance payouts, and that insurance premiums should be reduced, is most strongly supported by the fact that many insurers themselves offer premium reductions for cars with automatic belts (p. 23). These insurers would not offer this discount unless they believed that seat belts reduced their payouts.

My proposed amendment would guarantee that all Alaska consumers share in the savings related to increased seat belt usage. I urge the committee to adopt the amendment when it marks up the bill.

TESTIMONY IN SUPPORT OF CSHB105
SAFETY BELT USE LAW

BY

FRANK BICKFORD, EXECUTIVE DIRECTOR
ALASKA SAFETY BELT USE COALITION

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THE ALASKA SAFETY BELT USE COALITION STRONGLY ENDORSES CSHB105--SAFETY BELT USE LAW. THE COALITION, FORMED IN 1985, ADVOCATES THE PASSAGE OF A SAFETY BELT USE LAW AND PROMOTES THE USE OF SAFETY BELTS.

SAFETY BELT USE LAWS THAT HAVE BEEN PASSED IN 32 STATES AND D.C. MOTIVATE PEOPLE TO BUCKLE UP. THOSE STATES FOUND THAT VOLUNTARY USE WAS LOW AND THROUGH LEGISLATING THE USE OF SAFETY BELTS THE INCENTIVES TO USE THEM HAVE RESULTED IN SIGNIFICANT NUMBERS OF LIVES SAVED AND COSTS REDUCED.

THE COALITION IS A GRASS ROOTS MOVEMENT COMPRISED OF OVER 8,000 INDIVIDUALS AND 90 ORGANIZATIONS REPRESENTING A WIDE RANGE OF INTERESTS, INCLUDING HEALTH CARE DELIVERY SYSTEMS, BUSINESS AND INDUSTRY, EDUCATION, FRATERNAL, SERVICE AND CIVIC ORGANIZATIONS WHO BELIEVE THAT A SAFETY BELT USE LAW WILL SAVE LIVES, DECREASE INJURIES AND SAVE THE STATE OF ALASKA MILLIONS OF DOLLARS IN EXPENDITURES EACH YEAR.

THE LATEST HIGHWAY USERS FEDERATION REPORT ESTIMATES THAT A MANDATORY SEAT BELT USE LAW CAN SAVE 35 LIVES A YEAR, REDUCE THE HARDSHIP AND COST OF OVER 600 INJURIES AND SAVE $18 MILLION A YEAR TO THE STATE OF ALASKA IN MEDICAL COSTS, INSURANCE EXPENSES, LEGAL COSTS, LOSS OF PRODUCTIVITY AND OTHER COSTS SUCH AS POLICE, FIRE DEPARTMENT AND EMERGENCY SERVICE COSTS.

EDUCATIONAL CAMPAIGNS PROMOTING SAFETY BELT USE HAVE BEEN LAUNCHED HERE AND ACROSS THE COUNTRY. SAFETY BELT USAGE 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 AGRESSIVE EDUCATIONAL CAMPAIGN MUST BE COMBINED TO ACHIEVE MAXIMUM USE. IN THE ABSENCE OF A LAW EVEN WITH AN EDUCATIONAL CAMPAIGN, LESS THAT 32% OF THE POPULATION WILL BUCKLE UP. HOWEVER, A STATEWIDE POLL (ALASKA) LAST SHOWED THAT 81% 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 WOULD NOT 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.

UNBELTED OCCUPANTS CAUSE INJURIES TO OTHER OCCUPANTS BY BECOMING "UNGUIDED MISSILES." THUS, THE "FREEDOM TO CHOOSE" TO WEAR THE BELT DOES AFFECT OTHERS DIRECTLY.

SIMILAR TRAFFIC-SAFETY LAWS PROTECT MOTORISTS AND OTHERS, SUCH AS: SPEED LIMITS, DWI, AND DRIVER LICENSING. SAFETY BELT USE LAWS ARE CONSISTENT WITH THESE AND OTHER LAWS.

TRAFFIC ACCIDENTS DO NOT HAPPEN ON PERSONAL HIGHWAYS AND STREETS. THE COSTS TO SOCIETY IN TERMS OF MEDICAL, REHABILITATION, UNEMPLOYMENT AND WELFARE SERVICES SUPERCEDE THE "RIGHT" OF PEOPLE TO SERIOUSLY OR FATALLY INJURE THEMSELVES OR OTHERS BY NOT BUCKLING UP. IN 1985, 1986 AND 1987, 201 OUT OF 231 ALASKANS KILLED IN MOTOR VEHICLE ACCIDENTS WERE NOT "BUCKLED UP." THIS TRAGEDY COULD HAVE BEEN PREVENTED. STATISTICS FROM SAFETY EXPERTS SHOW THAT THERE IS A BETTER THAT 50 PERCENT PROBABILITY THAT THE DEATHS WOULD HAVE BEEN AVOIDED IF ALASKA HAD A SAFETY BELT USE LAW.

THE PROPOSED SAFETY BELT USE LAW IN ALASKA IS A SECONDARY OFFENSE, REQUIRING THAT A MOTORIST BE STOPPED FOR ANOTHER OFFENSE BEFORE A $15 TICKET (WHICH MAY BE DONATED TO THE EMERGENCY MEDICAL SERVICES) CAN BE ISSUED FOR NOT USING SAFETY BELTS.

SECONDARY ENFORCEMENT WILL NOT IMPOSE ADDITIONAL BURDENS ON LAW ENFORCEMENT OFFICERS RESPONSIBLE FOR CITING MOTORISTS UNDER THIS ACT. SAFETY BELTS REDUCE TRAFFIC FATALITIES, WHICH ARE EIGHT TIMES AS EXPENSIVE TO INVESTIGATE AS NON-INJURY ACCIDENTS. IN FACT, OFFICERS WOULD HAVE MORE TIME TO CONCENTRATE ON OTHER TRAFFIC ENFORCEMENT PROGRAMS WITH A MANDATORY BELT USE LAW IN PLACE.

ON 2/23/89, CONSERVATIVES AND LIBERALS, REPUBLICANS AND DEMOCRATS JOINED FORCES IN THE (STATE) HOUSE TO PASS CSHB105 BY AN IMPRESSIVE 27 TO 12 VOTE.

ONCE CSHB105 PASSES THE LEGISLATURE AND IS SIGNED BY THE GOVERNOR, THE ALASKA SAFETY BELT USE COALITION PAYS FOR A ONE YEAR EDUCATIONAL CAMPAIGN (T.V., RADIO, NEWSPAPER, DIRECT MAIL, PUBLIC SERVICE ANNOUNCEMENTS, AS WELL AS PRESENTATIONS TO INTERESTED ORGANIZATIONS, SCHOOLS AND COMMUNITIES) PROMOTING THE LAW. THIS SERVICE PROVIDED BY THE COALITION WILL MEAN THE STATE WILL NOT HAVE TO SPEND MONEY TO IMPLEMENT THE LAW.

THE STATISTICS, THE PUBLIC SUPPORT, THE EDITORIAL SUPPORT (ANCHORAGE TIMES, ANCHORAGE DAILY NEWS, FRONTIERSMAN, VALLEY SUN, JUNEAU EMPIRE AND FAIRBANKS DAILY NEWS MINER), AND LEGISLATIVE SUPPORT SHOWS THAT THE PROPOSED SAFETY BELT USE LAW IS ONE THAT ALASKA CAN LIVE WITH.

To: Sen. Uehling
From: Frank Bickford FB

LEGISLATIVE UPDATE
April 14, 1989

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201 OUT OF 231 ALASKANS KILLED IN MOTOR VEHICLE ACCIDENTS IN 1985, 1986 & 1987 WERE NOT BUCKLED UP.

▪Statistics from safety experts show that half of these deaths would have been avoided if Alaska had a safety belt use law in place.
(National Highways Users Federation, 1987

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▪TWO MORE STATES PASS SAFETY BELT USE LAWS!

✓The 32nd state to pass a safety belt use law was **Wyoming** in March.

✓**North Dakota** became the 33rd state when their safety belt bill was signed into law on April 11, 1989.

ALASKA SAFETY BELT USE COALITION

"SAFETY BELT USE" SUPPORT ORGANIZATIONS

APRIL 10, 1089

The list of organizational support continues to growll
Here is an updated listing of all resolution support groups and those issuing letters of support for the passage of a safety belt use law (HB105) in Alas.

3M
AAA ALASKA
A CLAIRE RENN, MD
ADVISORY BOARD ON DRUG ABUSE
AK ACADEMY OF PHYSICIAN ASSISTANTS
AK CH AMERICAN SOCIETY OF SAFETY ENGINEERS
AK CHIEFS OF POLICE ASSOCIATION
AK COUNCIL ON PREVENTION OF DRUG & ALCOHOL ABUSE, INC.
AK DENTAL SOCIETY
AK SAFETY ADVISORY COUNCIL
AK HEALTH EDUCATION CONSORTIUM
AK LUNG ASSOCIATION
AK NURSES ASSOCIATION
AK PEACE OFFICERS ASSOCIATION
AK REGIONAL EMS COORDINATORS
AK STATE FIREFIGHTERS ASSOC/PORT OF VALDEZ CH
AK STATE MEDICAL ASSOCIATION
AK STATE MEDICAL ASSOC AUXILLIARY
AK TREATMENT CENTER
ALPINE ASSOCIATES
ANCHORAGE GYMNASTICS
ANCHORAGE MEDICAL & SURGICAL CLINIC
ANCHORAGE OBSTETRICS & GYNECOLOGY
ANCHORAGE SAND & GRAVEL
ARCO ALASKA/SAFETY DIVISION
AVIS RENT-A-CAR
B & C SUPPLY
BLUE CROSS OF WASHINGTON & ALASKA
CHEVRON USA
CHUGACH ELECTRIC, INC.
CLINTON E. CUDDY, MD
CONSOLIDATED FREIGHTWAYS
CORROON & BLACK, INC
DAWSON SUBARU
DECLAN NOLAN, MD
DENALI TRANSPORTATION dba PACIFIC MOVERS
EASTWIND, INC.
ELIZABETH DESCHWEINITZ, MD
ERNEST MEINHARDT, MD
FBI NATIONAL ACADEMY ASSOCIATES
FEDERAL SAFETY & HEALTH COUNCIL
FIRESTONE STORES
GEORGE STRANSKY, MD
GOODYEAR TIRE & RUBBER CO.
HAROLD'S RENT-A-TRUCK
HEALTH ASSOCIATION OF ALASKA
HEALTH CARE COALITON OF ALASKA
HEDLAND, FLEISCHER, FRIEDMAN, BRENNAN & COOKE
HIGHWAY USERS FEDERATION OF ALASKA
HUMANA HOSPITAL/EXECUTIVE COMMITTEE
JACKOVICH INDUSTRIAL & CONSTRUCTION SUPPLY
JAMES BERTELSON, MD
JEFF BRAND, MD
JOHN FROST, MD
JOHN SMITH, MD
JON LYON, MD
JOY-ROSSTON ZIMMERMAN, RNC, ANP
JUNEAU RETIRED TEACHERS ASSOCIATION
JUNIOR TOWNE
KASMAR & SLONE, ATTORNEYS-AT-LAW
KENNETH BEHYMER, MD
KODIAK CHAMBER OF COMMERCE
KODIAK CRIMESTOPPPERS, INC.
MADD/ANCHORAGE & JUNEAU CHAPTERS
MAMMOTH OF ALASKA
MARK ZIMMERMAN, MD, FACOG
MORRISON-KNUDSEN CO
NHP REAL ESTATE & MANAGEMENT
NATIONAL ASSOCIATION OF EMS DIRECTORS
NATIONAL CAR RENTAL
NATIONAL HEAD INJURY FOUNDATION
NATIONAL LEAGUE OF CITIES
NELL LUFTIN, MD
NORTHSTAR COUNCIL ON AGING, INC.
PATRICK BRADY, MD
PERATROVICH, NOTTINGHAM & DRAGE, INC.
PHYLLIS KIEHL, MD
PIONEER HONDA
POOL ARCTIC, INC
REVIEW BOARD ON ALCOHOLISM
ROTARY CLUB OF KODIAK
ROY GREENWARD, MD
SAM [illegible] ALATIS, MD
SEA-LAND SERVICE, INC.
SHERMAN BEACHAM, MD
SHEARSON LEHMAN HUTTON/ALASKA
SKURLA'S CASH REGISTER CO.
SONIC CABLE TELEVISION OF ALASKA
SPENARD AUTO SUPPLY, INC.
STATE ADVISORY COUNCIL ON EMS
STEPHEN KULIN, MD
THE FAMILY PRACTICE ASSOCIATION
TRYON WEILAND, MD
UNIVERSAL MOTORS, INC.
WILLIAM FITTS, MD
WILLIAM BROWNER, MD
WILSYK ALASKA, INC.

"SAFETY BELT USE" SUPPORT ORGANIZATIONS

APRIL 10, 1989

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WILSYK ALASKA, INC.

HOUSTON POST

February 22, 1989

ALASKA SAFETY BELT USE COALITION
P.O. Box 1337
Anchorage, AK 99509-1337
(907) 561-7525

High court upholds Texas seat belt law

FROM STAFF AND WIRE REPORTS

The U.S. Supreme Court told a retired Houston attorney Tuesday he and the other drivers in Texas will have to stay buckled up when they are behind the wheel.

The court tossed out the 2½-year-old effort by Raymond D. Richards Jr. to have Texas' seat belt law declared unconstitutional.

The justices refused to consider the appeal from his 1986 conviction for driving without a seat belt. He was fined $35 and ordered to pay court costs.

The high court's ruling affirmed the constitutionality of the 1985 state law requiring front-seat occupants of virtually all vehicles to wear seat belts.

"It's been 2½ years all right, and I'm disappointed," Richards said.

"That's what all the courts have been doing to me, so I can't say I'm surprised. But I am disappointed," he said.

The justices found no "substantial federal question" in Richards' arguments and refused to consider the case. No other explanation was offered.

After being fined in traffic court of Southside Place in June 1986, Richards began a series of appeals that wound up before the nation's highest court. Although he declined to say how much the effort has cost, Richards said he spent a "lot of time and effort looking into the legal questions."

The retired attorney based his appeal on a belief the law violates his fundamental right to be free of bodily restraints. But his appeals were rejected by the Harris County Criminal Court-At-Law No. 11 and by the state First Court of Appeals before the Texas Court of Criminal Appeals declined to review the case.

☐ Tough stance on pornography/A-19

Richards then headed for the U.S. Supreme Court.

The friendliest ruling he ever received came from the First Court of Appeals, which held 2-1 against him. In his dissent, Justice Ben G. Levy held that allowing the state to punish someone for not wearing a seat belt might lead to punishment "for smoking cigarettes, for not brushing one's teeth or for being foolish."

Richards now has the option of asking the Supreme Court for a rehearing. Whether he will is a "down-the-road decision."

State Sen. Ted Lyon, D-Mesquite, author of the seat belt legislation, hailed the court's decision as "a victory for those of us concerned about safety."

"I am heartened by the Supreme Court's finding that it is a states' rights issue," Lyon said. "The law will stay on the books."

Richards, 70, said he began wearing his seat belt when the law took effect in December 1985.

"I was stopped because I failed to buckle up on that particular occasion shortly after that law took effect," he recalled.

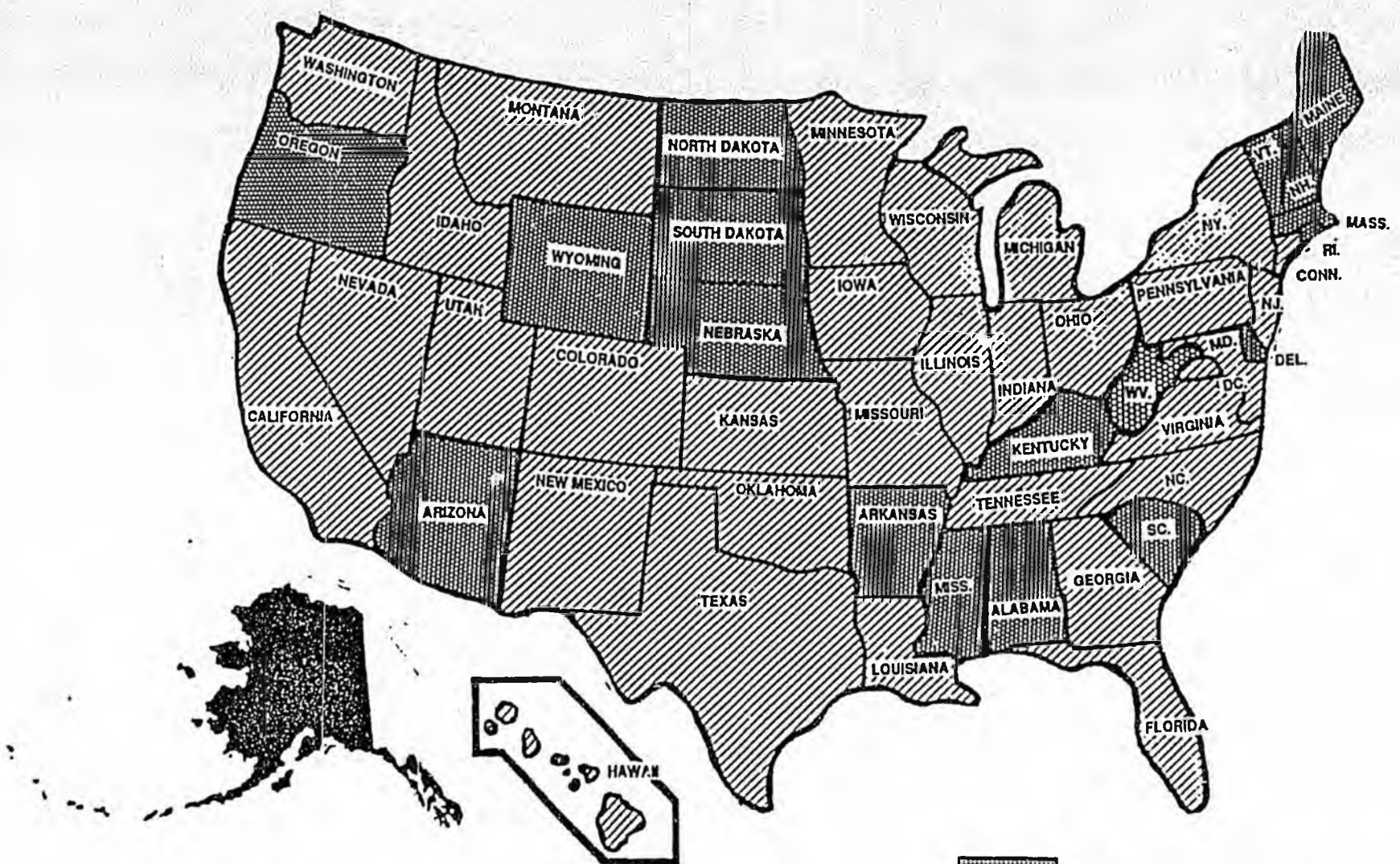
"It's the old story about it being hard to teach an old dog new tricks. That would certainly apply to me."

Has he been wearing his seat belt since then?

"Sure," he said. "It's the law."

"Similar articles appear in Atlanta Constitution, Dallas Times Herald, Dallas Morning News, USA Today (Statesline)"

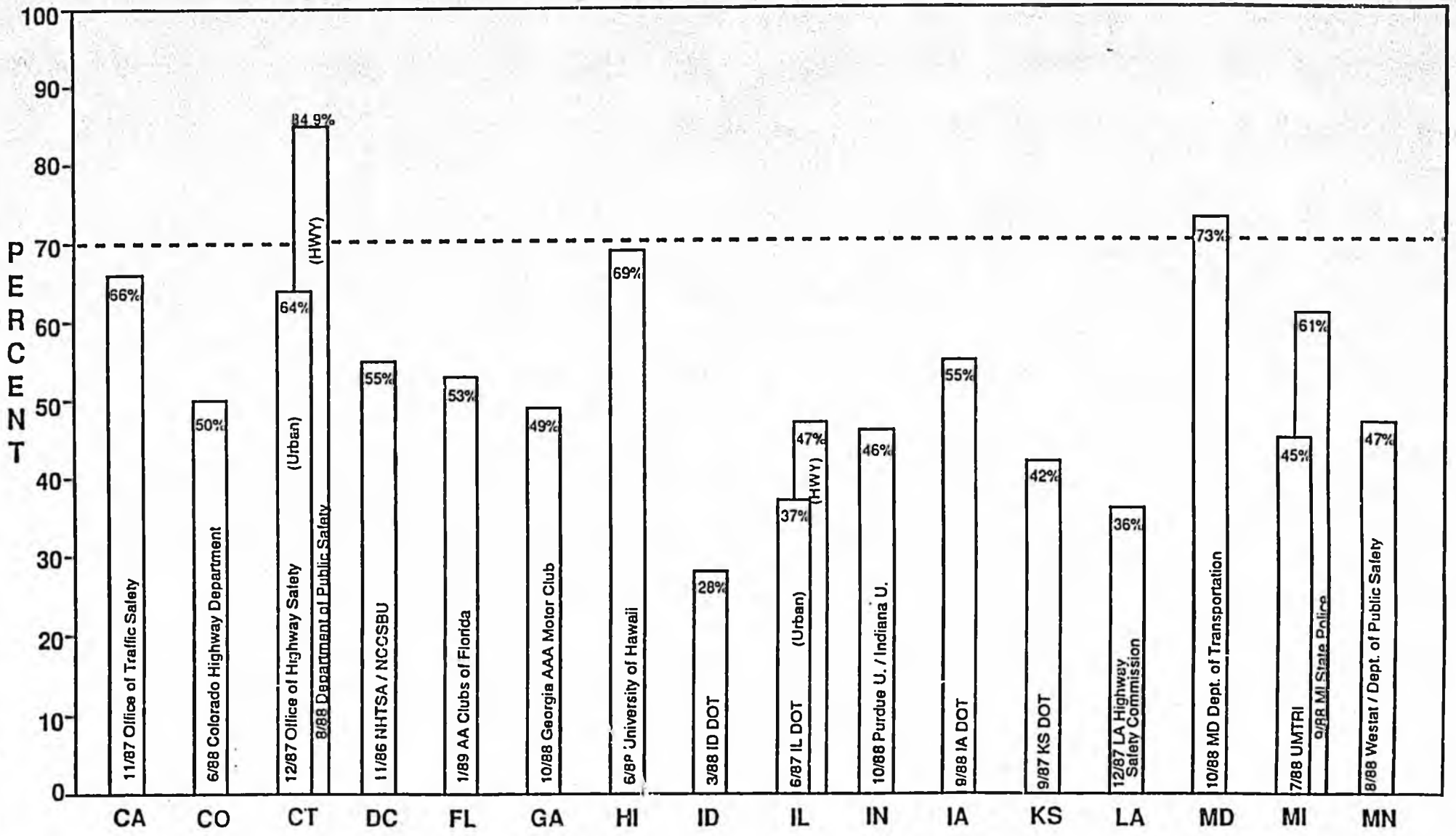
STATUS OF SAFETY BELT USE LEGISLATION



NO BELT-USE LAW ENACTED

BELT-USE LAWS PASSED

COMPLIANCE RATES IN POST-LAW STATES

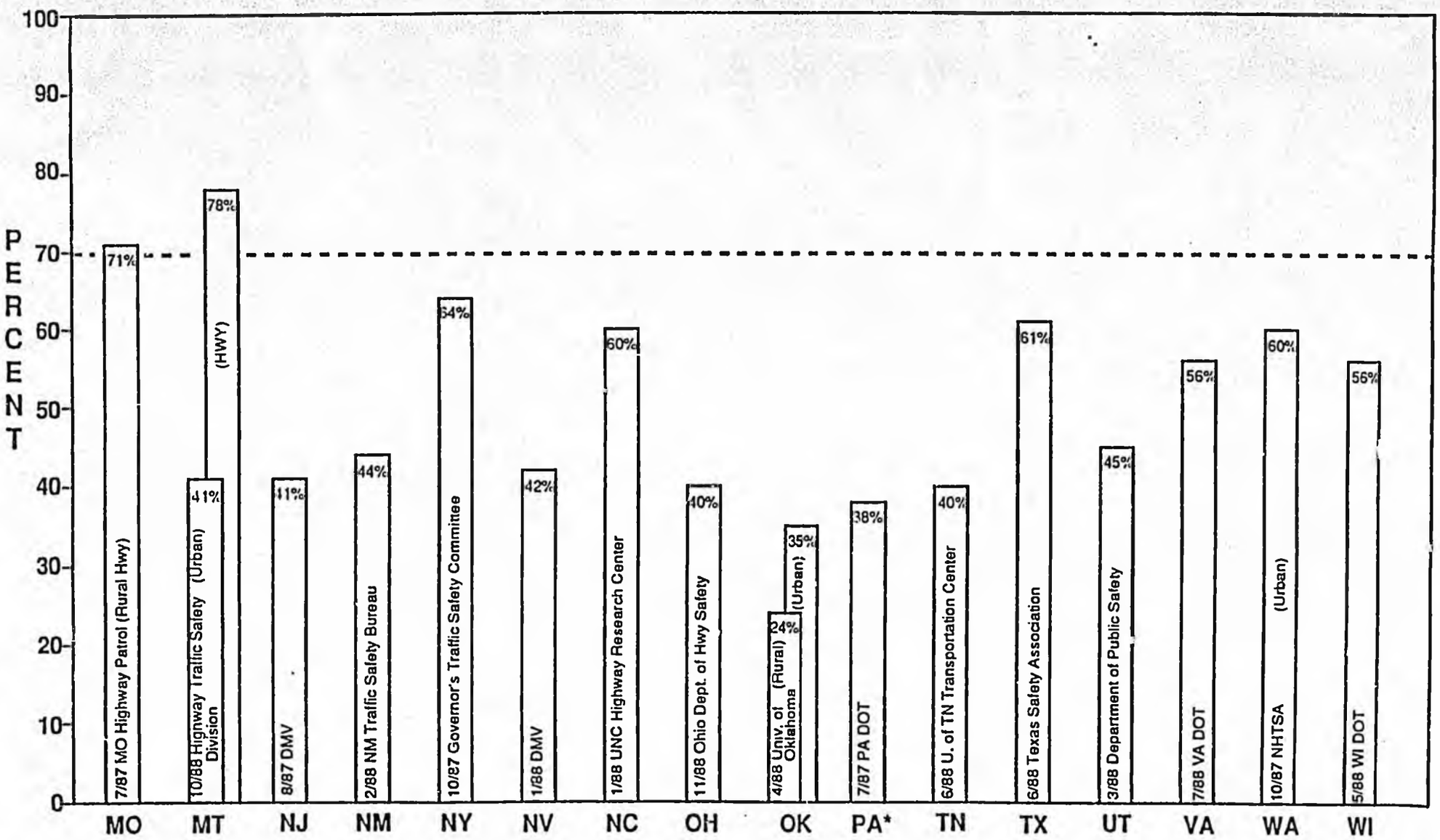


March 1989

(OVER)

COMPLIANCE RATES IN POST-LAW STATES

Page 2



* Use rates prior to law taking effect

THE FOLLOWING DOCUMENT HAS

NOT BEEN FILMED BUT IS

AVAILABLE IN THE ORIGINAL

FILE

U.S. Department of Transportation

National Highway Traffic Safety Administration

Safety Belt Use and Automobile Insurance:

A Report To Congress 1988

Prepared in Response to the Committee Report Accompanying the 1988 Department of Transportation Appropriations Bill as Enacted in the Continuing Resolution for FY 1988

EXECUTIVE SUMMARY

This report was prepared in response to the Committee Report accompanying the 1988 Department of Transportation Appropriations Bill as enacted in the continuing resolution for FY 1988. It describes the relationship between rates of safety belt use and automobile insurance prices. Because reliable data on insurance claims costs for 1986 will not be available until 1989, the report presents a reasonably reliable, but preliminary, estimate of the impact of belt use.

The theory supporting a linkage of safety belt use to auto insurance prices involves a chain of causation. Belt use reduces injury incidence and severity. These reductions should decrease insurance claims payments, leading to lower prices for the injury-related portions of auto insurance.

Safety belt use laws now cover more than 80 percent of the population. They have raised use from about 15 percent nationally to about 48 percent in states with belt laws and about 43 percent overall. Most laws apply to front seat occupants of cars and light trucks, motorists who experience roughly 60 percent of all traffic fatalities, 70 percent of severe injuries, and 80 percent of moderate injuries.

In 1987 alone, the 25 percentage point rise in national belt use over 1984 levels saved about 1300 lives and prevented about 16,000 moderate to serious injuries. The resultant reduction in automobile insurance claims was roughly $1 to $2.5 billion dollars. Other public and private insurers probably saved another $0.5 to $1.25 billion.

A study by the Highway Loss Data Institute, conducted using claims data gathered from numerous insurers, shows that each 10 percentage point increase in belt use cuts injury claims frequency for covered occupants in New York and New Jersey by 1.7 to 3.3 percent. This finding is consistent with several studies of injury incidence, which reveal decreases of 2.5 to 3.7 percent in fatalities among covered occupants and 1.8 to 3.0, or perhaps even 4.0, percent in moderate to serious injuries. The drop in overall fatality and injury rates is roughly 1.2 to 2.4 percent.

Laws in Hawaii, Iowa, and Massachusetts required reductions in the price of auto personal injury insurance coverages, including bodily injury liability, personal injury protection or own-medical payments, and sometimes uninsured motorist liability. The Texas State Board of Insurance also reduced auto injury insurance prices in response to the Texas belt law. The reductions, which generally are supported by claims experience, range from 5 to 12 percent -- a 1.5 to 2.8 percent decrease in the price of personal injury coverage for each 10 percent rise in belt use. The average auto insurance bill in these states dropped approximately 2 to 6 percent, $9 to $27 per vehicle insured.

The $1 to $2.5 billion insurance claims reductions produced by increased belt use, if spread across all injury coverages, also would cut typical auto insurance bills by 2 to 6 percent. No direct evidence describes the effects of such insurance price reductions on belt use. However, it seems unlikely that price reductions of this size will have much effect. Between 1983 and 1986, auto claims costs per injury rose 17.5 percent per year. The rate of cost increase slowed to 9.7 percent in 1987, perhaps due in part to increased belt use. Unless the rate of cost increase slows substantially, the impacts of rising belt use probably will slow insurance price growth, but not reverse it.

Insurance prices may be more effective as an incentive for safety belt use if the consequences of belt use are stated as actual savings rather than a reduced rate of price increase. By structuring business-related incentives that make the savings explicit, some auto insurers have used their influence and their advertising budgets to promote belt use and traffic safety. Often, they have applied some of the savings resulting from rising belt use to offer a large discount on a relatively low-cost coverage or to provide a not overly costly add-on coverage for free, rather than spreading them thinly across a broad range of coverages. For example, discounts of 10 to 30 percent on injury coverage for vehicle occupants, which most insurers now offer purchasers of cars with automatic crash protection, typically reduce insurance bills by $5 to $20.

Transportation Secretary Jim Burnley has challenged the insurance industry "to come up with incentives to encourage car buyers to opt for air bags and other safety devices." In response, USAA, the nation's ninth largest auto insurer, offered to pay a $300 bonus to policyholders who buy or take long-term leases on cars equipped with optional air bags in 1988, negotiated creation of and helped finance incentive programs to encourage manufacturers and dealers to market air bags aggressively, and added other incentive coverages. Programs responding to Secretary Burnley's challenge appear to be more promising incentives for increased occupant protection than small reductions in standard injury coverage prices.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

I. INTRODUCTION

The National Highway Traffic Safety Administration (NHTSA) has prepared this report on the linkage between safety belt usage rates and automobile insurance price reductions[1] in response to a directive in the Committee Report accompanying the 1988 Department of Transportation Appropriations Bill as enacted in the continuing resolution for FY 1988. The Congress suggested that:

> stronger linkage of automobile insurance rates and premiums to seat belt usage rates may provide an important seat belt usage incentive.

It directed NHTSA to:

> analyze this linkage and identify ways of promoting the use of seat belt statistics for determining automobile insurance rates ....

Case studies were specifically requested "in states such as Texas" where insurance price reductions were mandated in the state's belt use law or were reduced in response to the belt use increases following the law's enactment.

THIS REPORT IS DIVIDED INTO FIVE CHAPTERS

The report was based primarily on preexisting research for two reasons. First, Congress indicated it should be submitted quickly and prepared under existing budget authority. Second, state data on insurance claims paid in 1986 generally will not be available until the end of 1989, so that the study results are necessarily very preliminary.

The report first considers how increased belt use can affect insurance claims and prices. This effect involves a chain of causation. Belt use reduces the probability of injury. A reduced injury probability means fewer injuries and fewer injury liability claims filed with and paid by insurers. Belt use also reduces the average severity of the injuries that do occur and, possibly to a lesser extent, the average cost per injury claim paid. Reduced claims, in turn, can lead to reduced insurance prices.

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[1]More formally, the charge paid for an insurance policy is called a premium. The premium amount is determined from a rate schedule that shows appropriate rates (in other words, prices) to charge classes of insurance purchasers.

Chapter II provides relevant facts about the automobile insurance industry, with emphasis on what insurance covers, the way prices are set, and the major factors other than belt use that are inducing price changes. While this background information is necessary only at the end of the chain, it is useful to keep in mind throughout.

Chapter III examines the chain's various links. It describes the trend in safety belt use and the laws promoting use. It examines how increasing belt use has reduced traffic fatalities and injuries. Finally, it discusses the aggregate and per-policy average cost savings produced by these belt use increases.

The report then discusses how these cost savings have been and could be used to encourage greater belt use. Chapter IV describes the insurance price reductions ordered in Hawaii, Iowa, Massachusetts, and Texas in response to rising belt use, as well as the analyses underlying these reductions. It summarizes relevant analyses by insurance rating bureaus and insurance claims data analysis organizations. It identifies bonus coverages that selected insurers give to belt users and price discounts for vehicles equipped with automatic restraint systems. Three case studies explore how discounts came to be offered and what makes them effective.

Chapter V concludes and summarizes the report. It also assesses effective ways to structure insurance price reductions as safety belt use incentives.

II. STRUCTURE AND OPERATION OF THE AUTO INSURANCE INDUSTRY

The insurance industry is split for regulatory purposes into three principal segments: property and casualty, life, and health. Some insurance holding companies have subsidiaries that sell policies in all three lines of business, but most restrict themselves to one or two. Auto insurance is the largest seller among property and casualty coverages, accounting for 42 percent of receipts in this segment -- over $81 billion in 1987.

More than 40 percent of auto insurance premiums are written by mutual and reciprocal insurance companies (Wish, 1988). These companies are essentially cooperatives owned by their policyholders. The remaining premiums are written by traditional stock corporations.

As this chapter explains, a wide range of auto insurance coverages is available. About 40 to 50 percent of the typical auto insurance premium is charged for injury-related coverages, with the remainder for property damage protection. Furthermore, a third of the reimbursement for auto injuries comes from other sources, primarily health insurers. Consequently, only a portion of any reduction in injury costs would affect auto insurance prices. Since premiums per registered vehicle have risen an average of 9 percent per year since 1981, a very large reduction probably would be needed to bring about an actual price drop rather than just a slower rise.

MANY AUTO INSURANCE COVERAGES ARE AVAILABLE

Auto insurance is split into physical damage and liability coverages. Physical damage coverages pay for damage to the insured's vehicle. They include:

- Collision, which pays for repair or replacement of the insured vehicle if it is involved in a crash and the driver of another vehicle is not at fault.

- Comprehensive, which, among other things, pays for repair or replacement of a vehicle that is stolen or damaged without being involved in a crash.

If the vehicle was financed, the lender normally requires physical damage and liability coverage. Rising belt use should not affect the price of this coverage since it will have minimal impact on crash frequency (O'Neill et al., 1985).

Liability coverages (loosely defined to also include coverage of the insured's own medical costs) reimburse losses resulting from injuries and from at-fault damage to the property of other people. The nature of these coverages depends on state tort law. Liability coverages include:

- Personal Injury Protection (PIP) coverage in states with no-fault laws. Under no-fault law, a crash-involved vehicle's PIP coverage reimburses the medical costs of vehicle occupants, up to a fixed limit, regardless of who is at fault in the crash. Some reimbursement, at least for serious injuries, also can be obtained by suing the person who was at fault in the crash. Lost income is compensated by auto insurers only under liability coverage of at-fault drivers.

- Medical payments or own-medical coverage, originally called first-aid coverage, in states where tort liability laws provide that injured occupants will recover their injury-related losses by suing the person at fault in the crash. This coverage pays a modest amount of the medical costs for occupants of the insured vehicle, typically $1,000, without reference to fault, in tort states. This coverage is designed to assure payment for emergency medical treatment. The insured's health insurance normally reimburses any further medical costs if the insured is at fault in the crash, although coverage against these costs can be purchased as part of the auto medical payments package. Lost income is not compensated by this coverage.

- Bodily injury coverage, which reimburses other people's medical, income, and other losses when the insured is at fault in a crash. In no-fault states, this coverage applies only to costs that legally can be recovered through tort action.

- Third-party property damage, which pays for property damage that is the insured's fault.

- Uninsured (and underinsured) motorist protection, which reimburses the insured's costs if the insured's vehicle or the insured is hit by an uninsured, at-fault motorist. This coverage applies even while the insured is a pedestrian. Again, lost income is not compensated.

In 18 states, injury coverage is written on a no-fault basis. Eighteen additional states require drivers to purchase coverage to reimburse bodily injury and property damage they inflict on others. Even the remaining states have laws requiring those involved in crashes to furnish proof of their financial responsibility (Insurance Information Institute, 1987). These laws encourage but do not ensure purchase of liability insurance.

AUTO INSURANCE PAYS ABOUT TWO-THIRDS OF REIMBURSED CRASH-RELATED INJURY COSTS

Available data suggest that auto insurance pays about two-thirds of total reimbursed crash-related injury costs. The remainder is paid by other insurance programs, which also will benefit from the cost reductions produced by higher belt use.

Almost all automobile insurance limits the insurer's maximum liability. In most states, drivers are required to purchase only $40,000 of liability coverage for all persons injured in a crash, subject to a limit of at least $20,000 per individual (Insurance Information Institute, 1987). Automobile policies rarely cover more than $300,000 to $500,000. PIP medical coverage typically is limited to $5,000 to $25,000, but is unlimited in a few states.

An important implication of liability limits is that auto insurance will not cover the full costs of some injuries. Two national studies (All-Industry Research Advisory Council, 1979; U.S. Department of Transportation, 1971) confirm that severe and fatal injury costs often exceed policy limits, with the public sector and the people involved in the crash typically bearing two-thirds of these costs. Severe and fatal injuries contribute about 85% of the total economic costs -- medical costs and lost earnings -- of injuries resulting from auto crashes.

Other insurance programs also pay a portion of auto injury costs. A 1977 survey of people injured in crashes showed that almost one third of their average reimbursement came from health insurance, long-term disability insurance, life insurance, and such public insurance programs as Medicaid, Medicare, unemployment compensation, and Social Security (All-Industry Research Advisory Council, 1979; Coonley and Gurvitz, May 1983; Houchens, 1985). In states without no-fault systems, these are the only sources of more than $1,000 in compensation that typically are available to at-fault drivers and their immediate families. When someone is injured while on work-related travel, most costs are paid by Workers' Compensation insurance, health insurance, sick leave, and corporate liability policies (Young, 1988).

INJURY-RELATED COVERAGES ACCOUNT FOR 40-50 PERCENT OF AUTO INSURANCE PRICES

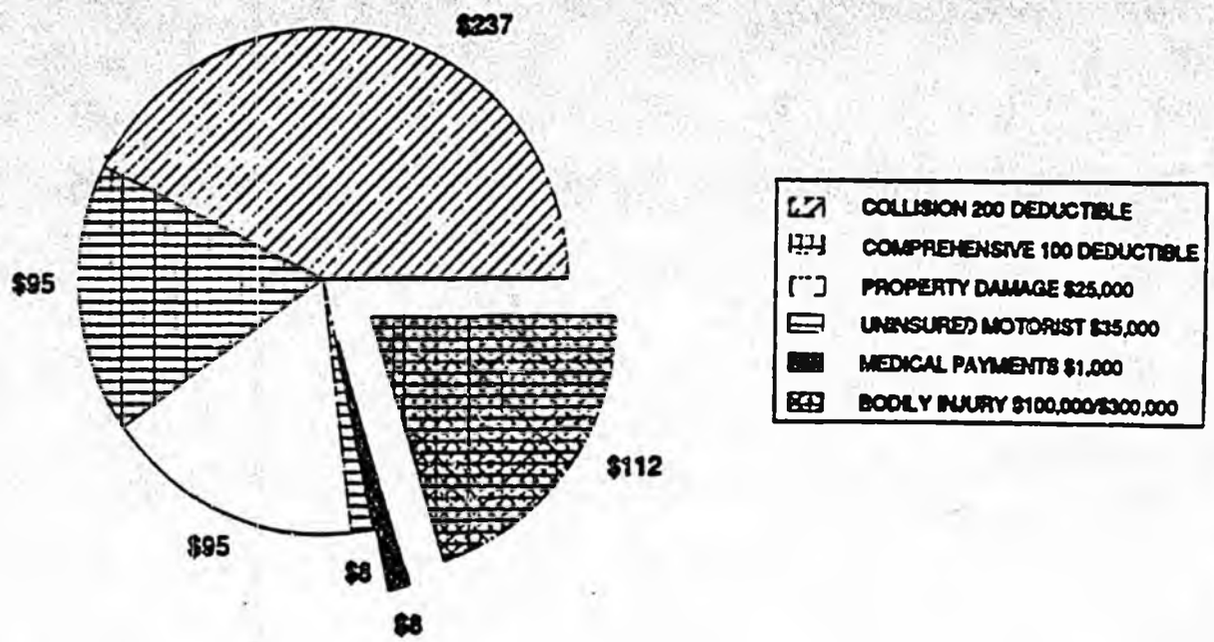
Figure 1 illustrates the price of each coverage for a young driver of a sporty car in central Philadelphia and the middle-aged drivers of a station wagon in suburban Omaha (Yezzi, 1988). The prices shown here are those presently recommended by the Insurance Services Office (ISO). ISO is a rating bureau. It pools data on insurance claims payments and provides advisory information about pricing to the insurers that supplied the data. Figure 1 suggests that drivers, whether paying modest or astronomical prices, are likely to pay less than half of their insurance premiums for bodily injury liability and medical coverage if they buy collision and comprehensive coverage, as about 70 percent do (Docket 74-14-32-6106 and 6136, 1984).

National data obtained for this report from insurers writing more than 30 percent of all auto premiums, when combined with data on total premiums from Wish (1988), indicate that the average driver pays roughly 40 to 50 percent of premiums for injury coverages. These data also show that 10 to 20 percent of the premiums cover the insured's own injury costs and the remaining 25 to 30 percent cover liability if the insured injures another person.

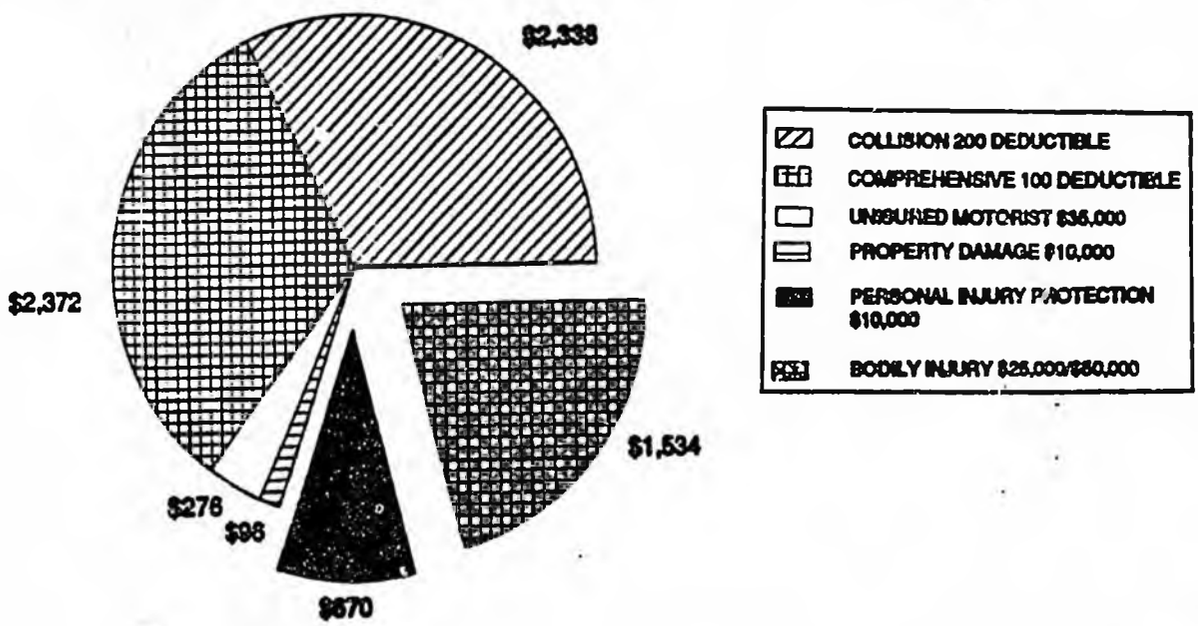
Rising belt use reduces injury, but not property damage, claims costs. Consequently, a 10 percent drop in injury claims costs reduces total claims costs, and presumably insurance prices, by 4 to 5 percent.

Automatic crash protection systems reduce the expected medical claims costs for occupants of the insured vehicle and the expected income loss costs for occupants unrelated to the insured. As Chapter IV describes, many insurers offer a 30 percent discount on PIP or own-medical coverage for vehicles equipped with these systems. Most injury and death claims payments, however, derive from third-party liability claims since lost wages are reimbursed only for these claims. Third-party claims are not reduced when the insured vehicle is equipped with automatic crash protection systems. These claims reductions will appear after enough vehicles have automatic crash protection systems to affect traffic injuries substantially. Until then, discounts for automatic crash protection systems typically will reduce insurance bills for most drivers by 3 to 6 percent (a 30 percent reduction times 10 to 20 percent own-injury).

Figure 1: Price of Auto Insurance Coverages In Low and High Risk Situations



A. Coverage for a 45-year old married couple with clean driving records who drive a 2-year old station wagon less than 15 miles per day to work from their home in suburban Omaha, Nebraska.



B. Coverage for a single, 23-year old male who has one speeding ticket and drives a 2-year old Japanese sports car more than 15 miles per day to work from his home in central city Philadelphia.

Drivers in tort liability states would receive smaller discounts than drivers in no-fault states, because medical payment coverage in a tort state is a smaller share of a typical insurance bill than PIP coverage in a no-fault state. (For example, in Figure 2 the medical payment slice of the Nebraska driver's pie is smaller than the PIP slice of the Philadelphia pie.) Most of the 27 million drivers insured by State Farm Insurance, the nation's largest auto insurer, would receive discounts of $9 to $18 (Insurance Institute, April 1988). Discounts from the ninth largest auto insurer, USAA, typically have been $15 to $20 (Insurance Institute, April 1988).

LIABILITY CLAIMS COSTS AND INSURANCE PRICES ARE RISING RAPIDLY

Rapid rises in insurance prices mask somewhat the savings possible from increased belt use. As Figure 2 indicates, liability claims payments have risen dramatically since 1983. In contrast, the annual number of police-reported injuries and the annual payments for physical damage claims were essentially stable during this time period.[2] In inflation-free dollars, payments per injury rose 13.7 percent per year between 1983 and 1986. Possibly due in part to increased belt use, liability claims costs per injury rose at a slower rate, 5.7 percent in inflation-free dollars, between 1986 and 1987. Accompanying the rise in claims, auto liability insurance prices rose an average of 12 percent per year between 1983 and 1987.

INSURANCE PRICE DETERMINATION IS A COMPLEX PROCESS

A very complex process is used to establish insurance prices. In particular, different states regulate insurers in different ways.

Insurers separate applicants into classes and territories, then use statistical data on losses, tempered by judgment, to determine the price they will offer to each territory-specific class. Auto insurance involves millions of price classes. Because many individual insurers were believed to lack enough data about claims costs to make sound statistical judgment about losses for so many price classes, insurers were permitted to share their claims data (National Commission for the Review of Anti-trust Laws and Procedures, 1979). Insurers in a state pool their loss experiences and are free to base their prices on the pooled experience data. Under the McCarran-Ferguson Act (P.L. 79-15), regulation of this process is delegated to the states (Shapiro et al., 1981).

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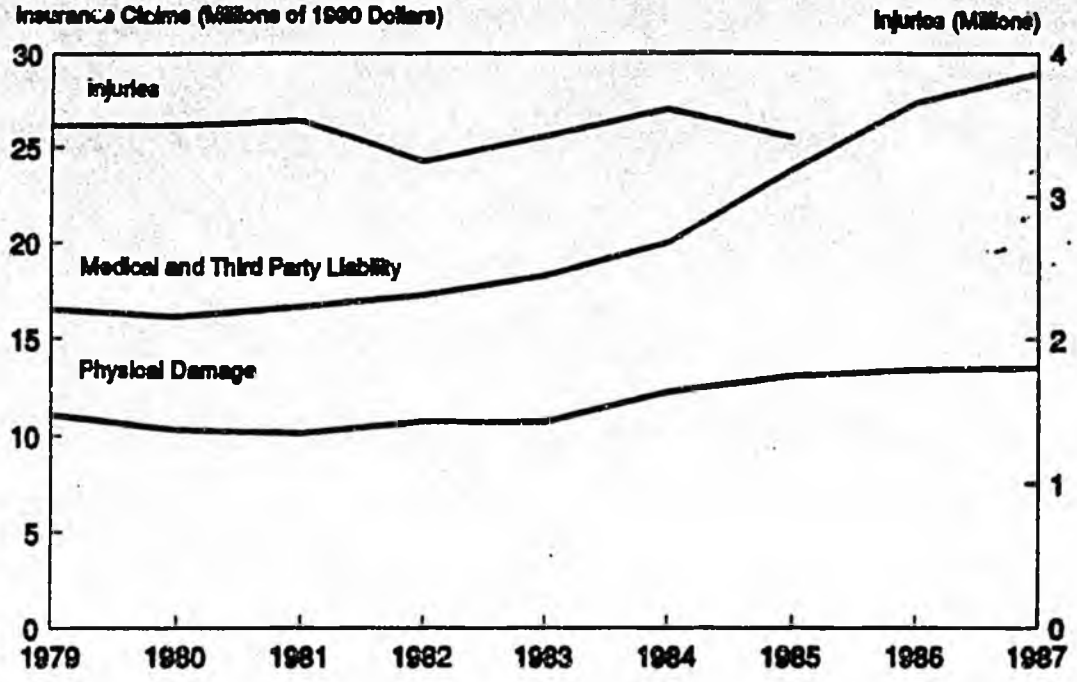
[2]Figure 2 is based on the year claims were paid, not incurred. Many injury claims payments lag injury occurrence and physical damage claims payments by a year (Hammitt, 1985).

Figure 2. Time Trends in Injuries and Auto Claims Paid



Source: Injuries from NASS, various years; claims from Best's Aggregates and Averages, 1987-88.

Texas and Massachusetts have chosen to analyze the pooled data and set maximum prices. Elsewhere, many insurers subscribe to "rating bureaus" that pool their loss data. The insurers then add an expense factor to the loss data, and possibly adjust it based on their own loss experience, to determine prices. ISO, the largest rating bureau, pools loss data in 44 states and the District of Columbia.

Anyone who has shopped for auto insurance knows that insurers do not all offer the same prices. A few do quote the prices derived directly from analyses by ISO or another rating bureau, but most insurers only use them as a starting place. Based on the loss experience of their insureds, many offer prices that are a bit higher or lower than the rating bureau's across the board or for most classes of applicants. Some offer discounts from these prices for applicants who own cars with superior safety records or special features like automatic crash protection. Some also apply surcharges for those who present extra risk of loss, for example by buying optional large engines or sports cars. Some large companies base their auto insurance prices entirely on their own loss experience. Finally, some insurers specialize in coverage for high-risk drivers and charge correspondingly high prices (GAO, 1979).

State regulations vary in their details, but adhere to the basic principle that insurers have the option of deriving prices from bureau data or using prices they derive from their own loss and expense experience (Shapiro et al., 1981). Most states require insurers to demonstrate that experience justifies their pricing, either approving price changes before they go into use or within 60 days afterwards. A few states exercise minimal control over pricing (National Commission for the Review of Antitrust Laws and Procedures, 1979). Michigan requires public hearings on price increases. Chapter IV provides further information on the practices in different states.

III. IMPACTS OF BELT USE ON INJURY RATES

To control insurance costs requires slowing or reversing the rise in insurance claims payouts. This can be accomplished by reducing the incidence of injuries, and especially of severe injuries. Safety belt use is one of the most effective and least costly ways to reduce the number and severity of crash injuries.

BELT USE HAS A LONG HISTORY

Safety belts were developed in the 1880s to keep people from bouncing off horse-drawn buggies. In 1922, Barney Oldfield's racer became the first belt-equipped car. Effective January 1, 1968, all new cars were required to have lap and shoulder belts for the driver and right front seat passenger and lap belts for all other seating positions. Recent belt systems include improvements such as retracting belt pretensioners and continuous loop design (Johannessen, 1984).

The potential advantages of belts have gone largely unrealized because many people choose not to wear them. The Department of Transportation has attempted to increase use in many ways, most notably through Federal Motor Vehicle Safety Standard (FMVSS) 208. After years of debate and revision, the automatic crash protection amendment to FMVSS 208 now is taking effect and will apply to all Model Year 1990 cars.

In response to FMVSS 208, roughly 13 percent of Model Year 1987 vehicles included automatic belts or airbags, and at least 25 percent will in Model Year 1988. A few manufacturers include automatic belts or airbags on all of their vehicles.

Between December 1984 and April 1988, 34 states and the District of Columbia passed laws mandating belt use by front seat occupants. Figure 3 shows the states that had laws in April 1988. In addition to the current-law states, Massachusetts and Nebraska implemented laws that subsequently were repealed in public referendums, and the Oregon law must be approved by referendum before it becomes effective. Table 1 shows the effective dates of all the laws that have been passed.

Belt laws in force covered 82 percent of the American populace in April 1988. For the most part, the states that still lacked laws were sparsely populated. Figure 4 shows how coverage grew over time.

Figure 3. Map Showing States with Safety Belt Use Laws In Effect in April 1988

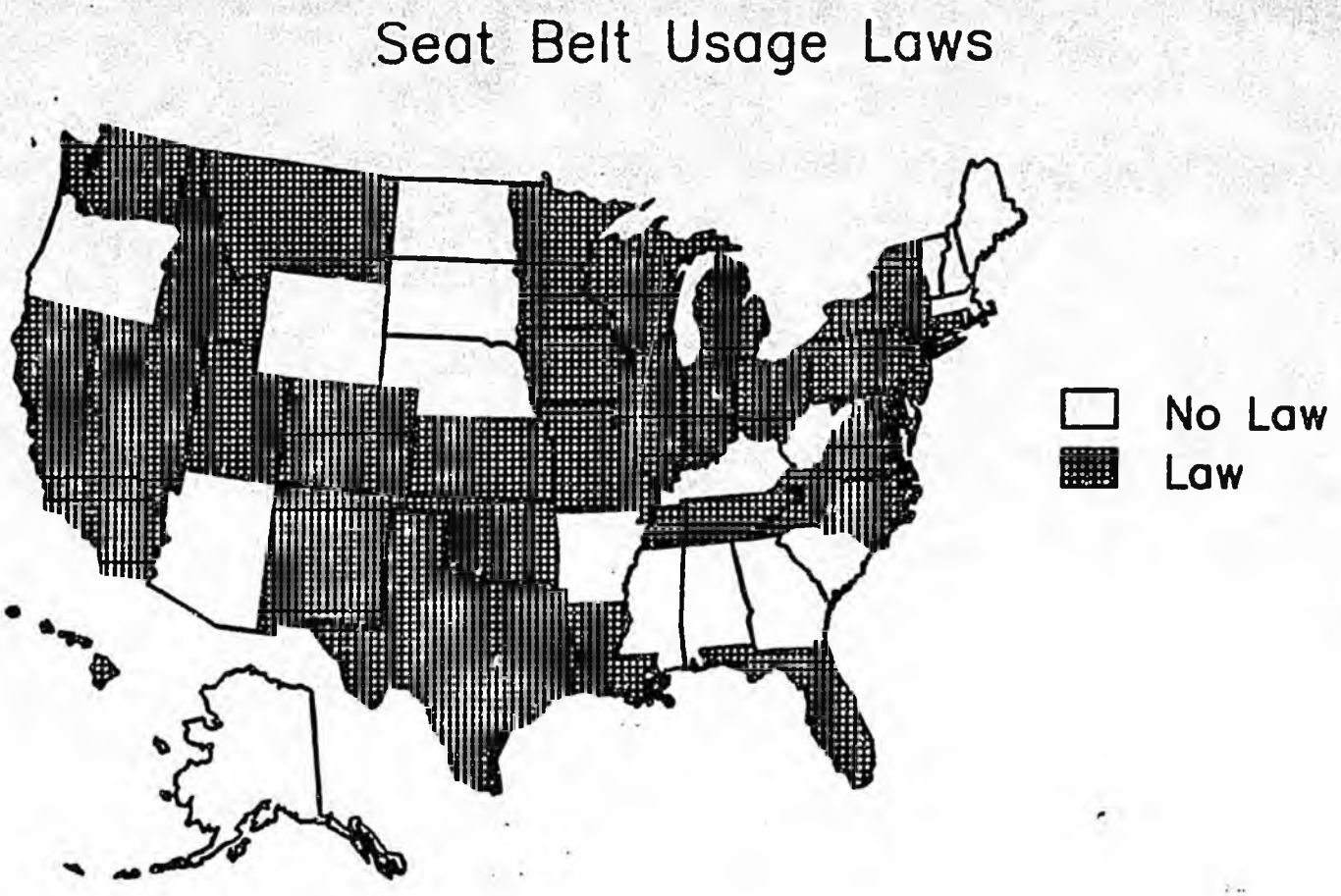
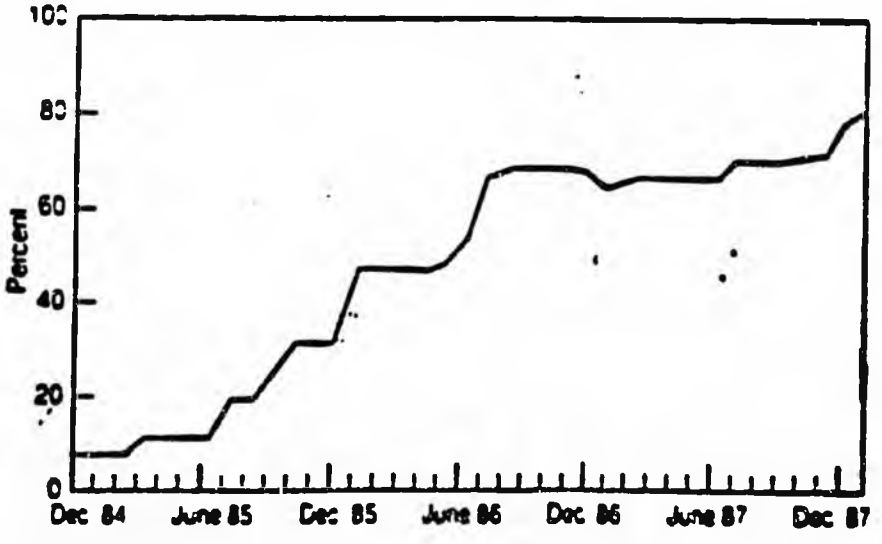


Figure 4. Percentage of Population Covered by Belt Laws, by Month



Source: Insurance Institute for Highway Safety, April 16, 1988

Table 1. Effective Dates of Safety Belt Use Laws and Most Recent Estimates of Belt Usage Rates as of April 1988

State	Effective Date	Percentage Belt Use
California	1/86	49%
Colorado	7/87	47%
Connecticut	1/86	56%
Florida	7/86 (1/87)	50%
Georgia	9/88	
Hawaii	12/85	66%
Idaho	7/86	27%
Illinois	7/85	37%
Indiana	7/87	46%
Iowa	7/86 (1/87)	56%
Kansas	7/86 (7/87)	44%
Louisiana	8/86	35%
Maryland	7/86	66%
Massachusetts	1/86-12/86	24%
Michigan	7/85	48%
Minnesota	8/86 (5/88)	32%
Missouri	9/85 (7/87)	41%
Montana	10/87 (1/88)	57%
Nebraska	9/85-11/86	29%
Nevada	7/87	47%
New Jersey	3/85	41%
New Mexico	1/86	46%
New York	12/84	64%
North Carolina	10/85 (1/87)	65%
Ohio	5/86 (7/86)	42%
Oklahoma	2/87	35%
Oregon	1/89	
Pennsylvania	11/87 (3/88)	
Tennessee	4/86 (1/87)	28%
Texas	9/85 (12/85)	54%
Utah	4/86 (10/86)	22%
Virginia	1/88	
Washington	6/86 (1/87)	52%
Wisconsin	12/87	
Dist. Columbia	12/85 (6/86)	55%

Source: Belt use from NHTSA, March 1988; effective dates from NHTSA, April 1988. Dates in parentheses are dates fines became effective if more than one month after the effective date of the law.

The belt laws and the publicity they stimulated raised belt use from about 15 percent nationally in 1984 to about 48 percent in states with belt laws and about 43 percent overall in 1988. Belt use varies considerably from state to state, and sometimes varies over time within a state. Belt use law states have reported use levels as high as 75 percent. Table 1 gives the most recent, often quite approximate, use levels reported by belt law states. Belt use is reported to be about 65 percent in Hawaii, Maryland, New York, and North Carolina. Most states with belt laws reported belt use between 35 and 55 percent. Even some states without laws now are reporting usage rates above 25 percent.

RISING BELT USE HAS REDUCED INJURIES AND FATALITIES

In 1987 alone, NHTSA estimates that the 25 percentage point rise in national belt use over 1984 levels saved about 1,300 lives and prevented about 16,000 moderate to serious injuries. From December 1984, when New York's first safety belt use law became effective, through the end of 1987, these belt use increases have saved about 2,800 lives and prevented about 33,000 moderate to serious injuries.

Since passage of the safety belt laws, several studies have examined the impacts of rising belt use on injuries. These studies address the percentage change in injuries to front seat occupants, since they are covered by all the laws. FARS and NASS data for the year before the first belt laws went into effect, 1984, show that front seat occupants of cars accounted for 48 percent of all traffic fatalities, 47 percent of serious injuries, and 71 percent of moderate and minor injuries. Front seat occupants of pickups and other light trucks, who also are covered by many belt laws, accounted for roughly another 12 percent of the fatalities and 10 percent of the injuries. These national percentages -- coverage of those experiencing roughly 60 percent of fatalities and 80 percent of moderate injuries -- are consistent with the state data.

Impact on Fatalities. Because the most timely and accurate data indicate the incidence of fatal injuries, most studies only have examined the impact on fatalities to front-seat occupants. The most comprehensive analysis of the impact of belt use on fatalities appears in Campbell et al. (1987). In this study, the number of front-seat fatalities that would have occurred without a belt use law was forecast for states grouped by the length of time since they implemented their laws. The projections considered both the previous fatality trend in the states and the current fatality experience of states without laws. Control groups included: (1) fatalities in the same state among pedestrians, rear-seat occupants, and others not covered by the belt law, and (2) front-seat occupants in states without belt laws.

Overall, belt laws were estimated to have reduced front-seat fatalities by 6.6 percent in states where they were implemented before the end of 1986, about a 2.5 percentage point drop for every 10 percentage point rise in belt use. This estimate masks substantial variation in the reductions achieved in individual states. It also underestimates the ultimate impact of some laws since it includes the partial impact in states that issued only warning tickets during a phase-in period. Furthermore, it is conservative because belt use in non-law states rose, thus reducing fatalities in the control group, possibly by as much as 1 percent.

A second comprehensive study (Skinner and Hoxie, 1988) includes a time-series analysis of fatality trends across states and more detailed analyses in nine large states that implemented belt laws by January 1986. This work is based on fatality data through September 1987. It suggests an average fatality reduction of 11.9 percent in the first three months after a belt law is implemented and 6.3 percent thereafter. This equates to about a 2.1 percentage point drop in fatalities for every 10 percentage point rise in belt use on a continuing basis and an overall 2.5 percent drop for the period studied.

Other noteworthy studies of fatality impacts in 1985 include Partyka (1987), Lund et al. (1986), Wagenaar et al. (1987), and Skinner and Hoxie (1986). As Table 2 indicates, these studies suggest a consistent 2.5 to 3.7 percentage point decrease in front-seat fatalities for each 10 percentage point increase in belt use.

Table 2. Decrease in Front-Seat Fatalities For a 10 Percentage Point Increase in safety belt Use

Study	Reduction
Campbell (1987)	2.5%
Skinner (1987)	2.1-2.5%
Wagenaar (May 1987)	3.2%
Campbell (1986)	3.7%
Lund (1986)	3.7%
Partyka (1987)	2.6%
Skinner (1986)	2.5%

The consensus on a 2.1 to 3.7 percentage point drop in front-seat fatalities for each 10 percentage point increase in belt use derives from the experience of states that generally were experiencing rises in belt use from a prior level of 15 to 20 percent to new levels from 35 to 65 percent. The rate of change in fatalities with respect to belt usage rate may not be linear. In particular, the rate may rise for very high use levels (for example, 80 percent and above). According to one study, when belt use was about 67 percent in Hawaii during 1986 the remaining unbelted drivers had a fatality rate 3.1 times the rate for the belted drivers (State of Hawaii, 1987).

Impact on Injuries. Estimates of the impact of belt use on injuries generally have been based on the injuries indicated in police reports on crashes. Because injury severity necessarily is coded on a rather crude scale at the scene by officers with minimal medical training, it can be relatively inaccurate, especially with respect to head injuries and internal injuries (Partyka, 1982). Nevertheless, police-reported injuries to front-seat occupants have dropped in states that have implemented belt laws.

The Campbell (1987) study provides time series analyses of the impacts on moderate and severe injuries in New York, North Carolina, and Texas, and on severe injuries in Illinois. The other detailed studies available (Wagenaar, March 1987; Hawaii, 1987) arrive at higher estimates.

Table 3. Decrease in Injuries of Front-Seat Occupants For a 10 Percentage Point Increase in Safety Belt Use

Study	State	Police-Reported Severity	Decrease
Campbell(1987)	New York	K+A+B	1.8%
	North Carolina	K+A+B	2.0%
	Texas	K+A+B	2.0%
	Illinois	K+A	3.0%
Wagenaar (March 1987)	Michigan	K+A+B+C	4.0%
Limm (1987)	Oahu	Hospitalized	4.9%

K = fatality
A = serious injury
B = moderate injury
C = minor injury

As Table 3 shows, at a minimum, a 10 percentage point rise in safety belt use seems to result in a 1.8 to 3 percentage point drop in serious and moderate injuries to front-seat occupants. At the extreme, on Oahu, hospitalizations dropped 4.9 percentage points for each 10 percentage point increase. A complete inventory of crash-related hospitalizations on Oahu showed that those not using belts were 1.8 times more likely to be hospitalized than those who were (Limm, 1987). This impressive statistic was compiled in the first half of 1986, when 74 percent of Oahu drivers were belted.

The studies suggest that a 10 percentage point rise in belt use drops fatalities of front-seat occupants by 2.1 to 3.7 percentage points and moderate and serious injuries by at least 1.8 to 3.0 percentage points. This equates to a drop in overall fatalities by 1.2 to 2.4 percentage points (55 to 65 percent of 2.1 to 3.7 percent) and in moderate and serious injuries by 1.3 to 2.5 percentage points (70 to 85 percent of 1.8 to 3.0 percent).

RISING BELT USE HAS REDUCED INJURY COSTS AND SHOULD REDUCE INSURANCE PRICES

The fatality and injury reductions produced by belt use laws have reduced auto insurance claims by roughly $1 to 2.5 billion dollars. Other public and private insurers probably saved another $0.5 to 1.25 billion.

The states with the largest belt usage gains -- about 50 percentage points -- probably have experienced a 6 to 12 percent decrease in fatalities and injuries. The probable result is a 2.4 to 6 percent drop in insurance costs (6 to 12 percent times the 40 to 50 percent of insurance costs that are injury-related). If the cost per auto insurance policy is assumed roughly equal to total premiums (from Wish, 1988) divided by the number of registered vehicles, the average cost reduction per insured vehicle in 1987 was $11 to $27 dollars in these states.

Claims costs per injury annually rose 17.5 percent between 1983 and 1986, and 9.7 percent in 1987, according to the data in Chapter II. Annual inflation of 2 to 4 percent in all costs and 6 to 7.5 percent in medical costs (Economic Report, 1988) contributed to the rise in claims costs. Unless the rate of increase in claims costs per injury drops substantially, the reduction in claims costs attributable to rising safety belt use appears likely to slow, but not reverse, the rate of increase in auto insurance prices.

IV. STATE AND INSURANCE INDUSTRY ACTIONS

The insurance industry has examined the linkage between belt use and the price of injury liability coverage. Insurance regulatory agencies in Hawaii, Iowa, Massachusetts, and Texas have analyzed the impacts of rising safety belt use on insurance claims and incorporated this information into their decisions on pricing. The Highway Loss Data Institute, a claims data analysis organization funded by the insurance industry, has examined the impact on injury claims in New York and New Jersey. ISO, the largest rating bureau, has recommended discount factors for vehicles with automatic occupant protection systems. Finally, many auto insurers have offered incentives to encourage belt use.

FOUR STATES HAVE ORDERED PRICE REDUCTIONS

PIP = personal injury protection

Hawaii's safety belt law mandated a 10 percent reduction in the price of PIP and medical payments coverages for the first three years after passage, followed by conversion to fully actuarial prices that incorporated the impacts of increased belt usage. The 10 percent figure was based on existing research, with particular weight on the Massachusetts Insurance Division's estimates (Santos, 1988).

Hawaii's Department of Commerce and Consumer Affairs is compiling extensive data on the impacts of rising belt use on injury incidence and claims. Preliminary indications are that the 40 percentage point rise in belt use in the state had even more impact than anticipated, with a 20 percent drop in overall fatalities, a 55 percent drop in fatalities to front-seat passengers, and on the order of a 12.5 percent drop in personal injury protection losses (State of Hawaii, 1988).

Iowa's legislature mandated a reduction in the price of bodily injury liability and medical payment coverage to reflect the expected savings in claims costs (Knapp, 1988). The Insurance Department found that in the first six months of the law, roughly a 30 percentage point rise in belt use was associated with a 4.4 percent drop in bodily injury loss payments made to injured persons by insurers of motorists at fault (1.5 percentage points for each 10 percentage point increase) and a 9 percent drop in medical payments paid to motorists by their own insurers (3 percent for each 10). Some insurers, however, experienced virtually no decrease, and the Department noted the difficulty of separating the impacts of the law from variations in medical costs, crash frequency, and other factors. Based on the available data, the Department ordered a 5 percent price reduction.

The Massachusetts safety belt use law required a reduction in auto insurance prices. The Massachusetts Division of Insurance estimated insurer savings on 1986 claims payouts resulting from the state's belt law. Anticipating a 43 percentage point rise in belt use, it ordered an 11.2 percent reduction in 1987 prices for bodily injury liability, PIP, and uninsured motorist coverages. This is a 2.6 percentage point drop in the price of this coverage for each 10 percentage point increase in belt use; it equates to an average drop of 0.8 percent across all types of coverage (Hosford, 1988). Despite the publicity surrounding this reduction and other belt promotion efforts, belt usage rose only 17 percentage points, less than half the amount anticipated. This low belt law acceptance, together with inadequate education and other factors, resulted in the law's repeal in a late 1986 referendum. Based on the more complete claims experience in 1986, prices for injury coverages were increased by 2.8 percent in 1988 to reflect an expected 10 percentage point decrease in belt use due to repeal of the law (Massachusetts, 1987).

The Division's work was actuarially based. Early New York data, and subsequently Massachusetts data, on the percentage reduction in injuries by severity that resulted from rising belt use were multiplied by the percentage of Massachusetts insurance claims costs attributable to each injury severity. Claims costs for injuries to non-occupants then were incorporated into the analysis (Hosford, 1988).

Though not required by the Texas belt use law, the Texas State Board of Insurance factored the law's impacts into its prices in each of 1986, 1987, and 1988 (Daniel, 1988). The 1986 analysis was based on a formula developed by the Highway Users Federation to predict the effects of safety belt use on injury rates by severity. It led to a 21 percent decrease in price for bodily injury liability, PIP, medical payments, and uninsured motorist coverages. The reduction was decreased to 15 percent in 1987, based on methodology refinements that limited the saving per fatality averted to the mean policy liability limit and applied the expected percentage decrease in injuries to front-seat occupant injuries in covered vehicles rather than all injuries.

When police-reported injury and crash rates became available for the first seven months after the law went into effect, they showed that a 45 percentage point increase in belt use in urban areas and an unknown but probably smaller increase elsewhere had caused an 11.5 percent drop in fatality rates and, the actuarial staff assumed, in injury severity. The Board adjusted prices accordingly, to a level 5 percent below the level suggested by claims incurred in the policy year ending June 30, 1986, when the law was in effect for only seven months (Daniel, 1988). The impact essentially is a 2.6 percent reduction in the price of injury coverage for each 10 percentage point rise in belt use.

Table 4 indicates the percentage decreases in injury rates observed or estimated by the insurance regulatory agencies in states where price changes have been ordered because of rising belt use. The agencies estimate that each 10 percentage point rise in belt use has resulted in a 1.7 to 2.8 percentage point drop in injury claims costs. This range is reasonably consistent with the 1.2 to 2.5 percentage point range suggested by the studies reviewed in Chapter III. It also is consistent with earlier NHTSA projections. In its July 1984 regulatory impact analysis on FMVSS 208, the agency estimated that each 10 percentage point rise in automatic belts would produce a 1.8 percentage point drop in injury claims. Adjusting for the difference in effectiveness between automatic and manual belts, this becomes a 1.9 percentage point drop. An insurance cost saving of $14 per vehicle insured was projected.

Table 4. Decrease in Injury Claims of Covered Occupants For a 10 Percentage Point Increase in Safety Belt Use

	SEVERITY OF INJURY		
State	Fatal	Fatal or Serious	Any*
Hawaii	5.0%	3.1%	2.5%
Iowa		1.5-3.0%	1.7%
Massachusetts	2.2%	4.0%	2.8%
Texas	2.6%		2.6%
NHTSA Regulatory Analysis			1.9%
Insurance Data Analysis Organizations			
Insurance Services Office (automatic restraint)			3.0%
Highway Loss Data Institute			1.7-3.3%

* Percentage of all injury costs.

In other states, the insurance regulatory agencies generally have not compiled systematic information on the impacts of belt laws on prices. To the extent that insurance is a competitive business, the impact may be reflected in the prices filed by insurers as rising belt use helps to control claims costs.[3] The impacts most probably will be comparable to those in Hawaii, Iowa, Massachusetts, and Texas: a 1.7 to 2.8 percent drop in the price of bodily injury liability and medical payments or PIP coverage for each 10 percentage point rise in belt use. The 5 to 12 percent reductions in prices for injury coverage that were achieved in these states reduced overall auto insurance prices by an estimated 2 to 6 percent (5 to 12 percent times 40 to 50 percent injury-related), about $9 to $27 per vehicle insured.

A notable relationship exists between the clarity of price reductions related to belt use and the insurance regulatory system in a state. Texas and Massachusetts were able to make central policy because they almost unilaterally set insurance prices. Twenty-seven states, including Hawaii and Iowa, review the actuarial basis for and approve price changes before they are put into use. In their belt use laws, the legislatures in Hawaii and Iowa authorized state regulators to mandate one-time insurance price reductions. Normally, they would not have the authority to impose reductions. The remaining states, which are identified in Table 5, largely allow insurers to decide what prices are appropriate (National Commission for the Review of Antitrust Laws and Procedures, 1979). These states have the strongest tradition of moderate intervention in insurance pricing. None ordered price reductions in response to rising belt use.

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[3]See GAO (1979) or Joskow (1973) for a discussion of the industry's structure.

Table 5. How States Regulate Auto Insurance Price Changes

State	Type of Filing	State	Type of Filing
Alabama	PA	Montana	FU
Alaska	PA	Nebraska	PA
Arizona	UF	Nevada	PA (FU)
Arkansas	FU	New Hampshire	PA
California	NF	New Jersey	PA
Colorado	FU	New Mexico	PA
Connecticut	PA (FU)	New York	PA
Delaware	PA (FU)	North Carolina	PA
Florida	PA (UF)	North Dakota	PA
Georgia	PA (FU)	Ohio	FU
Hawaii	PA (FU)	Oklahoma	PA
Idaho	NF	Oregon	FU
Illinois	UF	Pennsylvania	PA
Indiana	FU	Rhode Island	PA
Iowa	UF	South Carolina	PA
Kansas	PA	South Dakota	PA
Kentucky	FU (UF)	Tennessee	PA
Louisiana	PA	Texas	PA
Maine	FU	Utah	FU (UF)
Maryland	FU	Vermont	FU
Massachusetts	PA	Virginia	FU
Michigan	PAH	Washington	PA
Minnesota	FU	West Virginia	PA
Mississippi	PA	Wisconsin	UF
Missouri	UF	Wyoming	NF
Dist of Columb	PA		

Prior Approval (PA) means that new prices cannot be used until approved by the State Insurance regulatory agency. A 30 day review period generally is allowed.

Prior Approval with Public Hearing (PAH) means that the Commission holds a public hearing before approving the price change request.

File and Use (FU) means that new prices can be used as soon as they are filed with the Commission, although they have to be discontinued if the Commission disapproves of them.

Use and File (UF) means that new prices can be used for a fixed time period, generally 30 days, before they are filed with the Commission, although they have to be discontinued if the Commission disapproves of them.

No File (NF) means that price changes are not filed with or reviewed by the Commission.

Letters in parentheses denote how the system operates as a practical matter when it differs from the nominal legal system.

Source: Systems in use from Parsons (1988); definitions from Shapiro et al. (1981).

INDUSTRY-FUNDED ANALYSES ALSO CONFIRM THE RANGE OF IMPACT

Two analyses by industry-funded organizations that analyze claims data further confirm that the impact on prices of injury-related coverage is likely to lie roughly in the 1.7 to 2.8 percent range for each 10 percentage point increase in belt use. First, the Highway Loss Data Institute, an industry-funded claims data analysis organization, studied 1985 injury claims rates for Model Year 1983-85 cars in New York, New Jersey, and Connecticut prior to and after implementation of the New York and New Jersey safety belt laws (Highway Loss Data Institute, 1986). They found that, relative to the control state, a 35 percentage point increase in belt use in New York was associated with a 6 percent drop injury claims and an 8 percent drop in injury claims in cases with collision damage also claimed. For New Jersey, the corresponding drops were 8 percent and 6 percent for a 24 percentage point rise in belt use. This equates to a 1.7 to 2.3 percent reduction in claims frequency for each 10 percentage point increase in belt use in New York and a 2.5 to 3.3 percent reduction in New Jersey.

Second, since November 1986, ISO has recommended a 30 percent discount on PIP or own-medical coverage for vehicles equipped with automatic safety belts -- essentially for belt use 100 percent of the time -- or with air bags.

MANY INSURERS OFFER INCENTIVES FOR BELT USE

Insurers that in aggregate write at least 35 percent of all premium volume offer a 30 percent discount on PIP or own-medical coverage for cars with automatic belts. Insurers that write another 20 percent of the market, most notably State Farm and Nationwide, offer or are in the process of filing a 10 percent discount. All of these companies and Allstate, which has almost 9 percent of the market, also match or exceed ISO's recommended 30 percent discount for full front air bags. These discounts are not offered in Texas where the Board of Insurance would not approve them (but moved to do so in mid-1988), or in Massachusetts and North Carolina where insurers chose not to offer them. Table 6 lists the discounts offered by selected major insurers. These discounts generally save drivers about $5 to $20.

Rising belt use will lead to a reduction of $1 to $2.5 billion in insurance payments. Spreading this saving uniformly across all coverages would reduce injury coverage prices about 5 to 10 percent.

As an alternative approach, incentives for increased belt use may be created by using some of the savings to offer a major reduction in the price of one coverage component or a free add-on coverage. Some insurers now offer such incentives. State Farm and the Farmers Insurance Group, for example, both double their accidental death benefit if a fatally injured person was wearing a belt. USAA adds $10,000 to the benefits under its own medical payment and PIP coverages for any occupant who is injured or killed while wearing a safety belt, protected by an air bag, or secured in a child seat. Between 1984 and April 1988, USAA paid more than $1 million in claims under this provision (Insurance Institute, April 1988).

Table 6. Insurer Market Shares and Discounts for Vehicles with Automatic Restraint Systems (Selected Insurers, as of April 1988)

		PIP or Own-Medical Discount for:		
Front Insurer	% of Auto Premiums	Automatic Belts	Driver Air bag	Full Air bag
Aetna Casualty	2.9%	30%	20%	30%
Allstate	8.7%	None	20%	30%
American Family	1.0%	30%	30%	30%
Continental	1.3%	30%	30%	30%
Erie Exchange	0.7%	30%	30%	30%
Farmers Group	4.7%	None	None	None
GEICO	1.6%	30%	30%	30%
Hartford	2.1%	30%	20%	30%
Liberty Mutual	2.5%	30%	20%	30%
Maryland Casualty	0.7%	30%	20%	30%
Nationwide	4.1%	10%	25%	40%
Prudential	0.8%	20%	30%	30%
State Farm	15.1%	10%	20%	30%
Travelers	2.5%	30%	15%	30%
USAA	1.9%	30%	60%	60%
U.S.F.& G.	1.6%	30%	30%	30%
ISO Recommendation		30%	20%	30%

Note: Only insurers with large market shares and a few with medium market shares were surveyed. Some insurers that are not mentioned also offer discounts.

Source: Discounts, Insurance Institute for Highway Safety, October 17, 1987 and April 16, 1988. 1986 Market Share, Wasilewski, 1987.

CASE STUDIES SHOW INCENTIVES OFTEN ARE NOT COSTLY

General Motors and its Motors Insurance Corporation mounted one of the best-known insurance incentive campaigns to encourage belt use. From April 16, 1984 until the end of the 1986 model year, buyers of General Motors cars received a free life insurance policy that paid a $10,000 death benefit if someone was killed in a crash in the car while belted. The coverage lasted for one year from date of purchase. More than 17 million policies were written in the U.S. and Canada, but less than $7.5 million dollars in claims costs were incurred -- less than 50 cents per vehicle sold (O'Toole, 1988). By structuring a business-related incentive that could be used as the focus of a major vehicle sales campaign and an insurance sales campaign directed at car buyers, General Motors was able to provide tremendous positive publicity for belts with minimal increase in its normal advertising costs.

USAA, the nation's ninth largest writer of auto insurance and primarily a writer of coverage for military officers, announced the strongest air bag incentive program to date on March 30, 1988 (Insurance Institute, April 1988). Again, the package reflected a business-related commitment to auto safety. USAA offered to pay $300 to any of its insureds as a bonus for buying or taking a long-term lease on a car equipped with an optional air bag in 1988. This offer actually applies to very few vehicles. As of March 1988, optional airbags were available only on the Ford Tempo, Mercury Topaz, Oldsmobile Delta 88, Volvo 740 GLE, and Porsche 944. They were expected to be available later in the year on the Saab 9000T.

USAA is encouraging manufacturers and dealers to market optional air bags agressively through a companion dealer incentive program in which USAA pays for the dealer prizes awarded for optional air bag sales. It also added a free $25,000 death benefit to its life insurance policies, which is paid when an insured is killed in an auto crash while belted in an air bag protected position in a car. And it increased its PIP or own-medical discount for an air bag to 60 percent in all but a few states.[4]

---

[4]USAA also announced a 5 percent discount on property damage and bodily injury coverages for cars equipped with another new safety device -- anti-lock brakes.

USAA's explanation of its decision to offer a strong program of business-related incentives for buying safety devices is consistent with Congress' concept of an insurance-based belt use incentive scheme and suggests how to encourage this type of action. USAA Chief Executive Robert McDermott announced the policy in a joint press conference with NHTSA Administrator Diane Steed. He stated that it was a direct result of a challenge issued by Transportation Secretary Jim Burnley at a meeting of the Insurance Institute for Highway Safety's Board in December 1987. Burnley told insurance executives that he was "100 percent committed to automatic restraints," but that the insurers were far better positioned "to come up with incentives to encourage car buyers to opt for air bags and other safety devices" (Insurance Institute, April 1988).

Burnley continued his campaign at the press conference. In a written statement, he said:

> The insurance industry has long had a lead role in advocating these safety devices and now must take a lead role in making them affordable and desirable in the eyes of the American public. Significant insurance discounts and incentives will make air bags more appealing and underscore your belief in the lifesaving effectiveness of this new safety technology.

The largest auto insurer, State Farm, also began using discounts to encourage greater automatic crash protection purchases in 1988. In announcing its new discount structure for automatic restraint systems, State Farm offered a 40 percent discount for cars equipped with both bags and automatic belts, even though none currently are manufactured. Said a State Farm spokesman, "We hope to drive the market a little and get some out there shortly" (Insurance Institute, April 1988). State Farm also noted that its action was "a gesture of support" for automatic crash protection systems rather than a reflection of loss experience (Yates, 1988).

These case studies and the discount structures listed in Table 6 suggest insurers, and even their largest rating bureau, are using insurance price breaks as incentives rather than just reflections of loss experience. This is especially clear for insurers who offer the same percentage discount for air bags that protect only the driver and ones that protect the full front seat since losses will be somewhat higher if only the driver receives air bag protection. More generally, the incremental advantages of adding automatic crash protection depend on how often belts would have been used if automatic crash protection were not available. Since manual belt use currently varies widely between states, the uniform national discounts for cars with automatic crash protection must not accurately reflect expected loss reductions by most states.

As insurers consider how to return the savings resulting from rising belt use to consumers, they should be encouraged to use a substantial portion to structure business-related incentives. These incentives would both serve as a symbol of the industry's conviction that safety is good business and as an inducement for belt use or other positive safety behavior on the part of customers. Typical business-related incentives are a relatively low-cost coverage offered at a large discount or an impressive-sounding but not overly costly add-on coverage provided for free. The incentives can be used as an advertising tool to sell the company's policies as well as to "sell" the public on safety equipment (automatic belts or airbags) and safety behavior (manual belt use). Marketing budgets and sales forces are generally much larger than loss prevention budgets and staff, so this linkage provides an essential guarantee of high visibility for the incentives.

Insurers can return the savings produced by increased belt use as across-the-board price reductions, or targeted incentives, or some combination. They also should be encouraged to provide extra incentives beyond current savings, or prior to those justified by definitive actuarial data. That's what USAA did for airbags and GM did for belt use. These are highly visible programs, which exemplify how business incentives can promote auto safety.

V. CONCLUSIONS

Increasing belt use is reducing traffic injuries and auto insurance claims and should slow the growth in insurance prices. It already has done so in a few states and should in more as enough data become available for actuaries to determine the reductions occurring in claims payments. The reductions in both injury rates and auto insurance prices should accelerate as automatic crash protection equipment becomes mandatory. Reductions will be even greater if manual belt use continues to increase.

The insurance claim savings are substantial in the aggregate, but rather small when spread uniformly over all policies.

- In 1987, the rise in belt use above 1984 levels probably saved private and public insurers $1.5 to $3.75 billion dollars. A third of this saving went to health, life, and workers' compensation insurers, however, rather than auto insurers.

- Injury claims account for 40 to 50 percent of auto insurance claims. Rising belt use probably will reduce injury claims costs by roughly 5 to 12 percent. The $1 to $2.5 billion savings to auto insurers, if spread across all injury coverages, would cut typical auto insurance bills by 2 to 6 percent -- about $9 to $27 annually per vehicle insured.

The savings produced by rising belt use should be used to promote safety as they are passed on to those insured. One way is to reduce insurance prices directly, either voluntarily or through regulation.

- Four states reduced insurance prices for injury coverages because belt use laws were implemented. The reductions range from 5 to 12 percent -- a 1.5 to 2.8 percent decrease in cost for each 10 percentage point rise in belt use. The average auto insurance bill in these states also dropped approximately 2 to 6 percent, $9 to $27 per vehicle insured.

- Except in Texas, an act of the state legislature, like the ones passed in Hawaii, Iowa, and Massachusetts, probably would be needed to allow the insurance commission to dictate when and how insurers should incorporate the impacts of rising belt use into their prices.

- Auto insurance prices have been rising very rapidly because claims payments per injury have risen at least 7 percent per year since 1979. If this trend continues, a price reduction related to belt use probably would slow, but not reverse, the rise in overall prices. Publicity that rising belt use has reduced insurance prices may not convince consumers who are paying more for insurance.

Case studies suggest that carefully structured marketing tools that emphasize the savings from belt use may be effective incentives for improved occupant protection.

- USAA, the nation's ninth largest auto insurer, offered to pay a $300 bonus to policyholders who buy or take long-term leases on cars equipped with optional air bags in 1988, negotiated creation of and helped finance incentive programs to encourage dealers to market air bags aggressively, and added other incentive coverages.

- From April 16, 1984 until the end of the 1986 model year, General Motors gave buyers of their cars a free life insurance policy that paid a $10,000 death benefit if someone was killed in a crash in the car while belted.

- Health, disability, life, and other insurers also will benefit from the injury cost reductions produced by increased belt and air bag system use. They also should consider how they can promote increased use.

Transportation Secretary Jim Burnley has challenged the insurance industry "to come up with incentives to encourage car buyers to opt for air bags and other safety devices." Insurers should respond to the Secretary's challenge with creative, highly visible programs to promote increased occupant protection through advertising and incentives. Such programs are more likely to be effective than small reductions in standard injury coverage prices.

STATE OF ALASKA
1989 LEGISLATIVE SESSION

Bill Version: Sen. CS HB 105
Publish Date: 3/15/89

FISCAL NOTE

REQUEST:

Revision Date:
Title: An act relating to mandatory use of safety devices
Sponsor: Cotton, Ulmer, Zawacki ...
Requestor: Finance

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		$0-315	$0-315	$0-315	$0-315	$0-315

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)

See attached analysis.

Prepared by: Jan Strandberg, General Counsel — Phone: 264-8228
Division: Alaska Court System — Date: 03/20/89

Approved by: Arthur H. Snowden, II, Administrative Director FOR — Date: 03/20/89
Agency: Alaska Court System

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

ALASKA COURT SYSTEM
Fiscal Analysis
Sen. CS HB 105

Estimated Revenues Derived from Enforcement of Mandatory Seatbelt Usage

COURT	Total FY 88 Traffic Citations	State Issued	Estimated State Traffic Citations	Estimated Seatbelt Use	Estimated Number of Citations Involving Non-Use of Seatbelts
		(1)		(2)	
Anchorage	45,524	20% Survey	9,100	35%	5,900
Barrow	527	50% Est.	260	25%	200
Bethel	264	50% Est.	130	25%	100
Cordova	64	50% Est.	30	25%	0
Craig	227	50% Est.	110	25%	100
Delta Junction	319	50% Est.	160	25%	100
Dillingham	72	50% Est.	40	25%	0
Fairbanks	9,995	70% Survey	7,000	35%	4,600
Glennallen	146	50% Est.	70	25%	100
Healy	390	50% Est.	200	25%	200
Homer	1,021	40% Survey	410	25%	300
Juneau	2,221	50% Est.	1,110	25%	800
Kenai	4,691	68% Survey	3,190	25%	2,400
Ketchikan	1,111	50% Est.	560	25%	400
Kodiak	1,812	5% Survey	90	25%	100
Kotzebue	203	50% Est.	100	25%	100
Nome	160	50% Est.	80	25%	100
Palmer	6,186	84% Survey	5,200	25%	3,900
Petersburg	129	50% Est.	60	25%	0
Seward	1,619	36% Survey	580	25%	400
Sitka	1,210	50% Est.	610	25%	500
Tok	291	50% Est.	150	25%	100
Unalaska	208	50% Est.	100	25%	100
Valdez	213	20% Survey	40	25%	0
Wrangell	328	50% Est.	160	25%	100
Other Low Volume	889	50% Est.	440	25%	300
Estimated total number of citations issued where seatbelts are not used					20,900
Maximum fine amount					$15
Estimated revenue at 100% enforcement at maximum fine (driver only)					$313,500
Estimated revenue at 75% enforcement at maximum fine (driver only)					235,125
Estimated revenue at 50% enforcement at maximum fine (driver only)					156,750
Estimated revenue at 25% enforcement at maximum fine (driver only)					78,375

Notes:

(1) Survey = Based on survey of courts. (approximate citation distribution)

Est. = Non-surveyed courts citations issued are estimated at 50% all citation received by court.

(2) Based on seatbelt usage survey for Anchorage and Fairbanks. Rest of state, seatbelt usage estimated at 25% of cited drivers.

HOUSE COMMITTEE REPORT

(11)
Date Referred: March 8, 1989 FURTHER REFERRALS:

Date of Committee Action: 3/13/89

The FINANCE Committee considered: HB 106

HOUSE BILL NO. 106 [HAZARDOUS WASTE REDUCTION PROGRAM]
"An Act relating to hazardous waste; and providing for an effective date."

RECOMMENDATIONS:
[✓] be replaced with 2nd CS HB 106 (Fin) [ ] the same title [ ] a new title
[ ] have attached amendment(s)
[✓] do pass
[ ] do not pass
[ ] no recommendation
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(s): (Dept) APPROVES PREVIOUS: (Date/Dept)
[✓] fiscal impact House Finance 3/8/89 [ ] fiscal note(s) _____
[ ] zero fiscal note _____ [ ] zero fiscal note(s) _____
[ ] zero with analysis _____ [ ] zero fn/analysis _____

SIGNING DO PASS:

Larson
Swackhammer
Brown
Koponen
Ulmer
Barnes
Shultz
Phillips
Rieger
Wallis

SIGNING: (Check approp. column)

	Do Not Pass	No Rec	Amend
Hoffman		X	

co- Fenna Hoffman
co- Ronald C. Larson
Chairman's signature

STATE OF ALASKA
1989 LEGISLATIVE SESSION

BILL VERSION: CS HB 106 (Fin)
PUBLISH DATE:

FISCAL NOTE

REQUEST:

Revision Date: 03/08/89
Title: "An Act relating to hazardous waste; and providing for an effective date."

Agency Affected: Environmental Conservation
BRU: Environmental Quality

Sponsor: Brown, Davis, et al
Requestor: House Finance Committee

Components: Environmental Quality

Adopted

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	75.0	75.0	75.0	75.0	75.0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	75.0	75.0	75.0	75.0	75.0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	75.0	75.0	75.0	75.0	75.0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	75.0	75.0	75.0	75.0	75.0

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)

See attached page.

Prepared by: Rep. Ron Larson, Co-Chair/H. Finance — Phone: 465-3727
Rep. Lyman Hoffman, Co-Chair/H. Finance — Phone: 465-4453
Division: — Date: 03/08/89

Approved by Commissioner: — Date:
Agency:

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

03/08/89
Revised Fiscal Note - CS HB 106 (Finance)

FISCAL NOTE ANALYSIS

The proposed legislation directs the DEC to establish a hazardous waste reduction and recycling program to coordinate, promote, and assist efforts to reduce the generation of hazardous waste in Alaska. In Alaska there are more than 300 facilities that have notified EPA as hazardous waste generators and there are several hundred more small businesses that could benefit from these services.

The bill directs the department, subject to available funds, to undertake several activities. These include: providing for technical assistance to businesses upon request; information and referral assistance; organizing workshops and seminars; development of a technical reference center and data base; development of curricula; and administration of a hazardous waste reduction and recycling matching grants program.

The fiscal note includes 75.0 in contractual funds. These funds would be used for non-regulatory, on-site technical assistance to businesses upon request (assumes approximately 8 to 10 on-site waste reduction audits at $5,000 each plus administrative overhead); contractual services to provide waste reduction technical workshops and seminars; and acqisition of a technical reference materials.

No new positions are authorized by the fiscal note.

Original sponsors: Brown, M. Davis,
Menard, et al.

IN THE HOUSE BY THE FINANCE COMMITTEE

2nd CS FOR HOUSE BILL NO. 106 (Finance)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to hazardous waste; and providing for an effective date."

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

* Section 1. FINDINGS. The legislature finds that

(1) several thousand pounds of hazardous waste are added to the nation's environment for every person in the United States each year;

(2) hazardous substances have been improperly disposed of at more than 200 known or suspected sites in the state, including 40 regulated public water supply systems that have been contaminated, and more sites are discovered each year;

(3) the Congress of the United States, in adopting the Hazardous and Solid Waste Amendments in 1984, established a national policy that wherever feasible, the generation of hazardous waste should be reduced or eliminated as expeditiously as possible;

(4) by reducing or eliminating hazardous waste before it is generated, hazardous waste source reduction efforts can be more effective than traditional "end-of-the-pipe" pollution abatement strategies;

(5) hazardous waste reduction can improve workplace safety as well as lower waste management and regulatory compliance costs;

(6) while some large businesses have successfully undertaken hazardous waste reduction initiatives, small businesses have a particular need for information and technical assistance regarding opportunities to reduce the generation of hazardous waste; and

(7) hazardous waste reduction and recycling efforts are

increasingly recognized by both business interests and the general public as an economically and environmentally effective response to the increasing costs and liabilities resulting from hazardous waste generation.

* Sec. 2. AS 46.03.299 is amended by adding a new subsection to read:

(f) In order to minimize the present and future threat to human health and the environment, the department shall promote the following hazardous waste management practices in the following order of priority:

(1) waste source reduction;

(2) recycling of waste;

(3) waste treatment; and

(4) waste disposal.

* Sec. 3. AS 46.03 is amended by adding new sections to read:

Sec. 46.03.316. HAZARDOUS WASTE REDUCTION AND RECYCLING PROGRAM. (a) There is established within the department a hazardous waste reduction and recycling program. Within the limit of funds available, the department shall

(1) coordinate agency efforts to reduce the production of hazardous waste, including air and water emissions;

(2) in order to implement the priorities set out in AS 46.03.299(f)(1) - (2), promote hazardous waste source reduction and on-site recovery of resources from hazardous waste streams and through materials recycling;

(3) provide for source reduction and recycling technical assistance and consultation to hazardous waste generators at their request;

(4) sponsor or co-sponsor with public or private organizations technical workshops and seminars on hazardous waste reduction;

(5) develop a hazardous waste reduction technical reference

center and data base;

(6) establish and maintain a hazardous waste reduction information referral service;

(7) identify and evaluate hazardous waste reduction research needs for state businesses and industry, local governments, and state agencies;

(8) develop, in consultation with institutions of higher education in the state, courses and curricula related to hazardous waste reduction; and

(9) issue hazardous waste reduction grants under AS 46.03.317.

(b) In response to a request of a hazardous waste generator, a representative of the department may visit the hazardous waste generator's site for the purpose of observing a waste generating process, obtaining information relevant to waste reduction, rendering advice, and making recommendations. A visit under this subsection may not be regarded as an inspection or investigation. A representative of the department designated to render advisory or consultative services may not have enforcement authority.

(c) This section does not diminish the responsibility of a person to comply with this chapter, AS 46.04, or AS 46.09.

Sec. 46.03.317. HAZARDOUS WASTE REDUCTION MATCHING GRANTS. (a) A hazardous waste reduction grant account is established in the general fund. It consists of appropriations made to it.

(b) The department may issue matching grants from money in the account to businesses, local governments, industry trade associations, labor organizations, or nonprofit organizations for the purpose of feasibility analysis and evaluation of ways to implement hazardous waste reduction.

(c) Grants under this section

(1) must be matched on a dollar-for-dollar basis by the grantee in cash or in kind;

(2) may not exceed $10,000 for any single proposal or project.

(d) The department shall establish an advisory committee, consisting of five members, to assist the department in reviewing and evaluating grant applications under this section. The advisory committee must include

(1) an officer or employee of the department;

(2) a representative of the University of Alaska;

(3) a professional civil or chemical engineer with experience in environmental engineering;

(4) an owner or representative of a small business; and

(5) a public member.

* Sec. 4. AS 46.03.900 is amended by adding a new paragraph to read:

(34) "hazardous waste reduction" means decreasing, avoiding, or eliminating wastes that are hazardous to human health or the environment through source reduction or recycling; the term does not include hazardous waste treatment or hazardous waste disposal.

* Sec. 5. This Act takes effect July 1, 1989.

(11)

Date Referred: February 8, 1989 FURTHER REFERRALS:

Date of Committee Action: 3/2/89

The FINANCE Committee considered: HB 106

HOUSE BILL NO. 106 [HAZARDOUS WASTE REDUCTION PROGRAM]
"An Act relating to hazardous waste; and providing for an effective date."

RECOMMENDS:

[ ] replacing with CS HB 106 (Fin) [ ] the same title [ ] a new title
[ ] the attached amendment(s)
[✓] do pass
[ ] do not pass
[ ] no recommendation
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(s):
[ ] fiscal impact
[ ] zero fiscal note
[✓] zero with analysis

APPROVES PREVIOUS:
[ ] fiscal note(s) published:
_____
[ ] zero fiscal notes(s) published:
_____

SIGNING DO PASS:
Larson
Swackhammer
Brown
Koponen
Shultz
Phillips
Rieger

SIGNING OTHER THAN DO PASS:
(Do Not Pass, No Recommendation, Amend)
Ulmer
(Needs a new fiscal note)
Barnes
(Needs a Zero fiscal note)

Chairman's signature
Ronald I. Larson

STATE OF ALASKA
1989 LEGISLATIVE SESSION

BILL VERSION: CS HB 106 Fin)
PUBLISH DATE: _____

FISCAL NOTE

REQUEST: _____

Revision Date: 3/2/89
Title: An Act relating to hazardous waste; and providing for an effective date.
Sponsor: Brown, Davis, et. al.
Requestor: _____

Agency Affected: Environmental Conservation
BRU: Environmental Quality
Components: Environmental Quality

Adopted

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						
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						
TEMPORARY						

ANALYSIS: (Attach a seperate page if necessary)

Attached is the agency's analysis of the cost of implementation of this new program.

Prepared by: House Finance Committee — Phone: 465-3727
Division: Co-Chairman Ron Larson — Date: _____
Co-Chairman Lyman Hoffman
Approved by Commissioner: _____ Date: _____
Agency: _____

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

STATE OF ALASKA
1989 LEGISLATIVE SESSION

BILL VERSION: CS HB 106 (Resources)
PUBLISH DATE: 1/20/89

FISCAL NOTE

REQUEST:

Revision Date: 2/21/89
Title: An Act relating to hazardous waste; and providing for an effective date.
Sponsor: Brown, Davis, et. al.
Requestor: Menard (House Resources)

Agency Affected: Environmental Conservation
BRU: Environmental Quality

Components: Environmental Quality

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 89	FY 90	FY 91	FY 92	FY 93	FY 94
PERSONAL SERVICES	-0-	87.3	87.3	87.3	87.3	87.3
TRAVEL	-0-	5.0	5.0	5.0	5.0	5.0
CONTRACTUAL	-0-	75.0	75.0	75.0	75.0	75.0
SUPPLIES	-0-	2.0	2.0	2.0	2.0	2.0
EQUIPMENT	-0-	10.0	2.0	2.0	2.0	2.0
LAND & STRUCTURES	-0-	-0-	-0-	-0-	-0-	-0-
GRANTS, CLAIMS	-0-	-0-	-0-	-0-	-0-	-0-
MISCELLANEOUS	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL OPERATING	-0-	179.3	173.9	173.9	173.9	173.9
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND	-0-	179.3	173.9	173.9	173.9	173.9
FEDERAL FUNDS	-0-	-0-	-0-	-0-	-0-	-0-
OTHER	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL	-0-	179.3	173.9	173.9	173.9	173.9

POSITIONS:

FULL-TIME	-0-	2.0	2.0	2.0	2.0	2.0
PART-TIME	-0-	-0-	-0-	-0-	-0-	-0-
TEMPORARY	-0-	-0-	-0-	-0-	-0-	-0-

ANALYSIS: (Attach a separate page if necessary)

See attached page

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Phone: 465-2671
Date: 2/17/89

Approved by Commissioner: A.D.Kyle
Agency: DEC
Date: 2/21/89

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

RECEIVED
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LEGISLATIVE FINANCE

Adopted

HB 106 FISCAL NOTE ANALYSIS

The proposed legislation directs DEC to establish a hazardous waste reduction and recycling office to coordinate, promote, and assist efforts to reduce hazardous waste efforts in Alaska. This bill designates several activities that the Department will conduct, including the administration of a hazardous waste reduction and recycling grant program.

The fiscal note includes funds to establish the hazardous waste reduction and recycling office within DEC's Solid and Hazardous Waste Management Program. During FY 90, two positions would be established: an Ecologist II (Range 18) to provide overall coordination and administration of the Department's waste reduction efforts and to develop the necessary policies, procedures, regulations, contracts, reference information, grant awards, and progress report; and an Administrative Assistant (Range 12) to assist with the development of program policies and procedures, contract documents, grant awards, reports, and assist with implementation of the other aspects of the program.

FY 91 and future years will continue implementation of the program at the same level of service. One-time equipment costs, included in FY 90, are not required in subsequent years.

Position Title	No. of Positions	Range/Step	Barg. Unit
Ecologist II	1	18A	GGU

Time Status	Staff Months	Location	Election District
PFT	12	Juneau	4

Type of Expenditure		Amount
1	2	3
Salary	37400	
Benefits	14000	
Premium Pay	-0-	
Other	-0-	
Total Personal Services		51400
Travel		2800
Contractual		2600
Commodities		1000
Equipment		5000
Other		-0-
Total Cost		62800

Funding Source for Total Cost		
Federal Receipts	1002	-0-
G. F. Match	1003	-0-
General Fund	1004	
GF Program Receipts	1005	-0-
Other		

Justification

See attached page

Request For New Position

Agency: Environmental Conservation

BRU: Environmental Quality

Component: Environmental Quality

FY 90

HB 106
JUSTIFICATION FOR ECOLOGIST II

The incumbent will work on a largely independent basis, under the supervision of the Solid and Hazardous Waste Program Chief, to coordinate and promote the Department's efforts pursuant to HB 106, to reduce the production of hazardous wastes, including the following specific tasks:

- Prepare, evaluate, and select one or more contractors to provide technical assistance services to waste generators;
- Arrange for the Department's sponsorship or co-sponsorship of technical workshops or seminars on waste reduction;
- Evaluate and select materials and equipment necessary to establish and maintain a hazardous waste reduction technical reference center and data base;
- Establish and maintain a hazardous waste reduction referral service;
- Identify and evaluate hazardous waste reduction research needs for government agencies and private businesses;
- Assist with the development of courses and curricula for hazardous waste reduction; and
- Develop regulations for the administration of, advertise the availability of, evaluate proposals for, award, monitor, and closeout grants made pursuant to the hazardous waste reduction matching grant account.
- Prepare annual hazardous waste reduction progress reports to the Legislature.

This position will supervise an Administrative Assistant I.

Position Title	No. of Positions	Range/Step	Barg. Unit
Administrative Assistant I	1	12A	GGU

Time Status	Staff Months	Location	Election District
PFT	12	Juneau	4

Justification

See attached page

Type of Expenditure		Amount
1	2	3
Salary	24900	
Benefits	11000	
Premium Pay	-0-	
Other	-0-	
Total Personal Services		35900
Travel		-0-
Contractual		2600
Commodities		1000
Equipment		5000
Other		-0-
Total Cost		44500

Funding Source for Total Cost	
Federal Receipts 1002	-0-
G. F. Match 1003	-0-
General Fund 1004	
GF Program Receipts 1005	-0-
Other	

Request For New Position

Agency: Environmental Conservation

BRU: Environmental Quality

Component: Environmental Quality

Revised Date

FY 90

HB 106
JUSTIFICATION FOR ADMINISTRATIVE ASSISTANT I

The incumbent will work under the supervision of the Ecologist II (Hazardous Waste Reduction Office) to assist the Department's efforts, pursuant to enactment of HB 106, to reduce the production of hazardous wastes, including the following specific tasks:

- Assist with preparation of one or more contracts and account for contractual funds for the provision of technical assistance services to waste generators;
- Assist with arrangements for the Department's sponsorship or co-sponsorship of technical workshops or seminars on waste reduction;
- Assist procurement of materials and equipment necessary to establish and maintain a hazardous waste reduction technical reference center and data base;
- Assist the establishment and maintenance of a hazardous waste reduction referral service;
- Assist with the development of regulations and assist with the administration and disbursement of grant funds from the hazardous waste reduction matching grant account.
- Assist with the preparation of annual hazardous waste reduction progress reports to the Legislature.

IN THE HOUSE BY THE FINANCE COMMITTEE

CS FOR HOUSE BILL NO. 106 (Finance)

IN THE LEGISLATURE OF THE STATE OF ALASKA

SIXTEENTH LEGISLATURE - FIRST SESSION

A BILL

For an Act entitled: "An Act relating to hazardous waste; and providing for an effective date."

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

* Section 1. FINDINGS. The legislature finds that

(1) several thousand pounds of hazardous waste are added to the nation's environment for every person in the United States each year;

(2) hazardous substances have been improperly disposed of at more than 200 known or suspected sites in the state, including 40 regulated public water supply systems that have been contaminated, and more sites are discovered each year;

(3) the Congress of the United States, in adopting the Hazardous and Solid Waste Amendments in 1984, established a national policy that wherever feasible, the generation of hazardous waste should be reduced or eliminated as expeditiously as possible;

(4) by reducing or eliminating hazardous waste before it is generated, hazardous waste source reduction efforts can be more effective than traditional "end-of-the-pipe" pollution abatement strategies;

(5) hazardous waste reduction can improve workplace safety as well as lower waste management and regulatory compliance costs;

(6) while some large businesses have successfully undertaken hazardous waste reduction initiatives, small businesses have a particular need for information and technical assistance regarding opportunities to reduce the generation of hazardous waste; and

(7) hazardous waste reduction and recycling efforts are

increasingly recognized by both business interests and the general public as an economically and environmentally effective response to the increasing costs and liabilities resulting from hazardous waste generation.

* Sec. 2. AS 46.03.299 is amended by adding a new subsection to read:

(f) In order to minimize the present and future threat to human health and the environment, the department shall promote the following hazardous waste management practices in the following order of priority:

(1) waste source reduction;

(2) recycling of waste;

(3) waste treatment; and

(4) waste disposal.

* Sec. 3. AS 46.03 is amended by adding new sections to read:

Sec. 46.03.316. OFFICE OF HAZARDOUS WASTE REDUCTION AND RECYCLING. (a) There is established within the department an office of hazardous waste reduction and recycling. The office shall

(1) coordinate department efforts to reduce the production of hazardous waste, including air and water emissions;

(2) in order to implement the priorities set out in AS 46.03.299(f)(1) - (2), promote hazardous waste source reduction and on-site recovery of resources from hazardous waste streams and through materials recycling;

(3) provide for source reduction and recycling technical assistance and consultation to hazardous waste generators at their request;

(4) sponsor or co-sponsor with public or private organizations technical workshops and seminars on hazardous waste reduction;

(5) develop a hazardous waste reduction technical reference center and data base;

(6) establish and maintain a hazardous waste reduction information referral service;

(7) identify and evaluate hazardous waste reduction research needs for state businesses and industry, local governments, and state agencies;

(8) develop, in consultation with institutions of higher education in the state, courses and curricula related to hazardous waste reduction; and

(9) administer the hazardous waste reduction grants program established under AS 46.03.317.

(b) In response to a request of a hazardous waste generator, a representative of the department may visit the hazardous waste generator's site for the purpose of observing a waste generating process, obtaining information relevant to waste reduction, rendering advice, and making recommendations. A visit under this subsection may not be regarded as an inspection or investigation. A representative of the department designated to render advisory or consultative services may not have enforcement authority.

(c) This section does not diminish the responsibility of a person to comply with this chapter, AS 46.04, or AS 46.09.

Sec. 46.03.317. HAZARDOUS WASTE REDUCTION MATCHING GRANTS. (a) A hazardous waste reduction grant account is established in the general fund. It consists of appropriations made to it.

(b) The department may issue matching grants from money in the account to businesses, local governments, industry trade associations, labor organizations, or nonprofit organizations for the purpose of feasibility analysis and evaluation of ways to implement hazardous waste reduction.

(c) Grants under this section