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# FAIR AUTO INSURANCE RATES

GOVERNMENT

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## HEARING BEFORE THE COMMITTEE ON THE DISTRICT OF COLUMBIA UNITED STATES SENATE NINETY-THIRD CONGRESS

SECOND SESSION

ON

**S. 2969**

TO REQUIRE A REDUCTION IN MOTOR VEHICLE INSURANCE  
PREMIUMS IN THE DISTRICT OF COLUMBIA, AND FOR OTHER  
PURPOSES

FEBRUARY 22, 1974

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## FAIR AUTO INSURANCE RATES

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FRIDAY, FEBRUARY 22, 1974

U.S. SENATE,  
COMMITTEE ON THE DISTRICT OF COLUMBIA,  
*Washington, D.C.*

The committee met, pursuant to notice, in room 6226, Dirksen Senate Office Building at 9:30 a.m., Senator Thomas F. Eagleton (chairman) presiding.

Present: Senator Eagleton.

Staff present: Andrew E. Manatos, associate staff director; and Colbert I. King, minority staff director.

The CHAIRMAN. Good morning, ladies and gentlemen.

The Senate District of Columbia Committee is now in session to commence hearings on automobile insurance rates and gasoline conservation measures relating to insurance rates.

### FAIR AUTO INSURANCE RATES CONCEPT

The "fair auto insurance rates" concept is based upon the simple proposition that, just as insurance premium costs increase when auto accident and injury rates go up, so too should the cost of auto insurance go down when auto accident and injury rates are reduced.

### GASOLINE CONSUMPTION

On November 7, 1973, President Nixon asked the American people to voluntarily reduce their gasoline consumption. On November 25 he announced a program to close gasoline stations on Sunday and a 15-percent reduction in the production of gasoline. Since that time the cost of gasoline has risen precipitously and the amount of gasoline purchased has been substantially reduced. Parenthetically, I saw figures where the consumption of gasoline in the District of Columbia is 76 percent of what it was a year ago.

Immediately preceding the new year, energy czar Simon urged citizens to consume no more than 10 gallons of gasoline a week and urged filling stations to offer no more than 10 gallons of gasoline per customer. The new year brought a mandatory 55 mile-an-hour speed limit across the country as well as the enactment of daylight saving time.

### ALTERATION OF DRIVING HABITS

These formal governmental actions, combined with the many information pressures to conserve gasoline, have brought about a drastic alteration of the driving habits of a great many Americans.

The first real indication of change came over the Thanksgiving holiday when 22 percent fewer people were killed on the Nation's highways and streets with only 14 of our 50 States enforcing a reduced speed limit. The trend continued and increased through the Christmas holiday when there was a 34-percent drop per day in fatalities reported. The National Safety Council predicted a reduction of 25 percent in auto accident deaths in 1974.

Traffic volume began to decrease for the first time in recent years. In the District of Columbia traffic lessened, in the Baltimore Harbor Tunnel it decreased, and on the John F. Kennedy Memorial Highway there was a 16.7 percent reduction in traffic volume.

#### AUTOMOBILE INSURANCE COSTS

Reports of fewer auto accidents and injuries began to trickle in as State motor vehicle departments received the data from the localities. Because automobile insurance rates are based on these factors, a number of people have raised the question of whether automobile insurance costs should be reduced commensurately.

A number of automobile insurance companies have responded to the gasoline crisis by offering discounts to those who have joined car-pools and are consequently spending less time on the road driving to and from work. Others have promised to return to the insured any money which exceeds a stated percentage of profit, based upon the underwriting aspect of their business.

The Cost of Living Council was given authority over automobile insurance rates by the Economic Stabilization Act. On January 17, the Council acted to freeze any upward movement of automobile insurance rates for 60 days.

#### PURPOSE OF HEARING

The purpose of today's hearing is to gather information from all perspectives on this issue and, hopefully, shed some light on the impact of gasoline conservation upon automobile accident rates, upon the fairness of the industry response, and upon the appropriate course of action for the District of Columbia.

I now place in the record a copy of S. 2969, a bill to require a reduction in motor vehicle premiums in the District of Columbia, and for other purposes, which is the legislation under consideration this morning.

[The bill referred to follows:]

**S. 2969**

## IN THE SENATE OF THE UNITED STATES

FEBRUARY 6, 1974

Mr. EAGLETON introduced the following bill; which was read twice and referred to the Committee on the District of Columbia

**A BILL**

To require a reduction in motor vehicle insurance premiums in the District of Columbia, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*  
3       That this Act may be cited as "The Fair Auto Insurance  
4       Rates Act".

5       SEC. 2. The Congress finds and declares that—

6               (1) gasoline conservation efforts have brought  
7       about substantial reductions in the number of traffic  
8       accidents, fatalities, injuries, and property damage in  
9       the District of Columbia;  
10              (2) such reductions have brought about a con-

1 comitant reduction in the amount of insurance claims  
2 against motor vehicle insurers; and

3 (3) the benefits resulting from participation by  
4 motorists in such gasoline conservation efforts should  
5 be returned to the motorists rather than kept by the  
6 insurers as "windfall profits".

7 SEC. 3. (a) The Commissioner of the District of  
8 Columbia shall issue such orders and regulations as may  
9 be necessary—

10 (1) to reduce, effective as of January 1, 1974, the  
11 premium rates for motor vehicle insurance in the District  
12 of Columbia by 10 per centum of the rates for such in-  
13 surance which were in effect on such date;

14 (2) to provide for a refund of any amounts paid for  
15 such insurance prior to the date of enactment of this Act  
16 which are in excess of the maximum amount allowable  
17 under any rate established pursuant to clause (1);

18 (3) to conduct, at least every sixty days, a detailed  
19 study to determine any changes in the rates of motor  
20 vehicle accidents, fatalities, injuries, property damage,  
21 and in the numbers and dollar amounts of claim pay-  
22 ments made by motor vehicle insurers until no appre-  
23 ciable changes occur for one hundred and twenty days,  
24 and thereafter to conduct such a study and make such a  
25 determination periodically as may be necessary, based on

1 regular monitoring of the traffic and claims figures from  
2 which such rates are derived; and

3 (4) to adjust the premium rates for motor vehicle  
4 insurance after the reduction effective as of January 1,  
5 1974, so as to maintain such premium rates at levels  
6 consistent with the determinations made pursuant to  
7 clause (3).

8 (b) The Commissioner of the District of Columbia  
9 shall—

10 (1) notify the Congress prior to making any adjust-  
11 ment in motor vehicle insurance premium rates, if after  
12 such adjustment, such rates would exceed those estab-  
13 lished pursuant to subsection (a) (1); and

14 (2) make a full report to the Congress with respect  
15 to each study and determination made by him pursuant  
16 to subsection (a) (3).

The CHAIRMAN. Our first three witnesses are the insurance commissioners from their respective States. In the interest of time, I will ask all three of them presently with us to come forward as a group. Each one may testify individually, and then we can, perhaps, question them as a group.

We will hear from insurance commissioners Denenberg, Sheeran, and Monroe.

**STATEMENT OF HERBERT S. DENENBERG, COMMISSIONER OF INSURANCE FOR THE STATE OF PENNSYLVANIA; ACCOMPANIED BY PETER HENNING, AND WILLIAM BROADWATER, ACTUARIES; JAMES J. SHEERAN, COMMISSIONER OF INSURANCE FOR THE STATE OF NEW JERSEY; AND ARK MONROE III, COMMISSIONER OF INSURANCE FOR THE STATE OF ARKANSAS, ACCOMPANIED BY ERNEST FENNELL, ASSISTANT COMMISSIONER**

Mr. DENENBERG. I have Pete Henning, my actuary, and Bill Broadwater, another actuary, with me.

I want to thank you for the invitation to be here, and I want to congratulate the committee and Senator Eagleton for the leadership it has given in this issue.

I have submitted a full statement and some other correspondence for the record, and at this time I would like to briefly summarize the contents of that statement. You have a copy of the statement. It is attached to the press release.

The CHAIRMAN. The material will be made a part of the record. [The material referred to follows:]

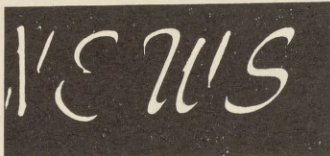
## Commonwealth of Pennsylvania

Milton J. Shapp, Governor



## INSURANCE DEPARTMENT

Herbert S. Denenberg, Commissioner

FOR IMMEDIATE RELEASE
 Contact: David Nestor  
 Communications (717-787-3289)

February 22, 1974 - 9:30 a.m.

PUBLIC MAY LOSE \$3.6 BILLION A YEAR IN WINDFALL PROFITS  
 IF CONGRESS FAILS TO ACT  
 PENNSYLVANIA INSURANCE DEPARTMENT OBTAINS AGREEMENT FROM  
 TWO-THIRDS OF INSURANCE MARKET TO REFUND EXCESS PROFITS

Pennsylvania Insurance Commissioner Herbert S. Denenberg today told a Senate Committee that fast action by the federal government could save American drivers as much as \$3.6 billion on their auto insurance this year.

Denenberg said this figure represents 20 percent of the annual premiums paid for auto insurance and is a reasonable estimate of what might be saved if Congress acts to limit excessive profits which insurance companies may realize as a result of the energy crisis.

The Pennsylvania Insurance Commissioner told Sen. Thomas F. Eagleton's Committee on the District of Columbia studying auto insurance and the energy crisis, that the federal government could mandate a plan similar to the one initiated in Pennsylvania to prevent the insurance companies from reaping windfall profits resulting from decreased claims.

Denenberg said the energy crisis has already changed the Nation's driving habits. Lower speeds, fewer cars on the roads, and the increased use of car pools have all combined to drive down the number of accidents and fatalities. Already, Pennsylvania traffic deaths are down 40 percent in January 1974 as compared with January 1973.

Advising the Committee not to cut auto insurance rates across the board, Denenberg said an arbitrary decrease would not be fair to either consumers or companies.

While one company might deserve a 10 percent decrease, other companies might deserve much higher reductions. Furthermore, the proper reduction will depend on the future dimensions of the energy crisis.

Denenberg said Pennsylvania "believed it was less important to attempt to arbitrarily assign any across the board reductions to all companies, than to provide assurances to the public that the companies would return any windfall profits that were caused by the energy crisis."

The Pennsylvania Insurance Department pressured companies to guarantee the return to their policyholders any windfall profits due to the energy crisis.

Already, insurance companies representing one-third of the Pennsylvania market have guaranteed to return any excess profits to policyholders. Another one-third of the market has agreed to pay dividends on the same basis.

-more-

The companies that have guaranteed returns have filed formulas with the Department which will determine the amount of the refund.

Denenberg said the Department's negotiations with the insurance industry is continuing. The Department also asked the Pennsylvania Legislature for the power to compel insurance companies which had not voluntarily complied to do so.

Denenberg suggested that the Pennsylvania legislation might serve as a model for federal action.

"To depend on each state to come up with an independent program only invites disorder and ineffective regulation. There is need for overall coordination," he said.

He said it is also important for the federal government to act because if they wait for the companies to voluntarily decrease rates or return excess profits, they will be waiting for a long time.

"Insurance companies should not be expected to rush to produce figures which would help reduce their own income. If the industry is left to be guided by the principles of enlightened self-interest, the results will be catastrophic to the consumer interest.

"Among other things," Denenberg warned the Senators, "expert industry representatives will be more than happy to discuss, over a long period of time (perhaps forever), the importance of considering an endless multitude of miscellaneous factors."

Denenberg also suggested that Congress act immediately to define and explain "excessive or windfall profits."

"The real reason rates are not going down is simple," Denenberg said, "insurers don't want to voluntarily reduce their incomes, when they are so uncertain about the appropriate amount of such reductions. And secondly, insurers may believe that they can stall long enough to reap windfall profits.

"This is to be expected. Many industries have not hesitated to use the energy crisis as an excuse to drive profits up and drive services down.

"These industries have not limited their own profits for the common good.

"Who in his right mind would expect anything more from an entire industry, the insurance industry, or any other?

"I don't believe all insurance companies will adopt ideals of corporate philanthropy which involve even the slightest suggestion that an amount of profit is undeserved, unexpected, or undesired in any way whatsoever."

Denenberg said a return of excess profits has a number of advantages over simply reducing rates across-the-board. In addition to not being equitable for the consumers, an across-the-board decrease might be harder to achieve in the near future.

He said companies are not set up to make meaningful loss data available immediately. Even in cases in which the company wishes or an insurance commissioner demands the data as quickly as possible, the information may not be meaningful for many months. And since changes in rates have traditionally been based on a minimum of twelve months experience, what's happening in January of this year may not even be considered relevant by some until January of next year.

Denenberg said this would make it impossible to accurately determine a fair rate reduction at this time.

"The fairest way to achieve the same end," Denenberg said, "would be to see to it that the companies must return their excess profits to their policyholders."

Denenberg said in the absence of nationwide action by the federal government, state regulators should be provided with comprehensive, practical, and complete guidelines and information.

"A distorted, incomplete, or undefined program arising out of political compromise may result in more confusion, dissatisfaction, and frustration than now exists," Denenberg warned.

Automobile Insurance and the Energy Crisis

Testimony By

Pennsylvania Insurance Commissioner

Herbert S. Denenberg

before the

U.S. Senate Committee on the District of Columbia

Washington, D.C.

February 22, 1974

I wish to thank you for the opportunity to testify before your committee today. I believe it is extremely important for the public, the insurance regulators and the industry that you are so concerned with this vital consumer issue. The response of the insurance industry to the energy crisis is of the utmost importance to every automobile driver.

To give some dimension to the problem, Americans pay out \$18 billion in auto insurance premiums every year so billions of dollars are at stake. Swift and positive action on your part could possibly save those policyholders up to 20 percent of their yearly annual premiums, or approximately \$3.6 billion this year alone. The figure may be more or less, but the potential savings may be lost if there is not immediate action.

Given these astronomical figures, it is essential that outside individuals such as yourselves review the performance of the insurance industry to be sure that the consumers get at least one fair break in the energy crisis.

If properly formulated, this committee's decisions and actions could make the difference.

Insurance rate-making is, in theory, a relatively simple matter. All it involves is looking into the past in order to predict the future. On the basis of approximations and reasonable trendings from past experience, rates as suitable and as fair as possible are set.

Rate-making is not an exact science. Predicting the future is always an elusive exercise. The past is not an absolute mirror of the future, as drastic changes in recent months have shown.

While an attempt is made to reduce all errors to a minimum and anticipate variables as much as possible, anyone looking for absolute certainty or precision will be disappointed by insurance rate-making.

Trending and other predicting techniques are regularly used by the insurance industry to project experience into reasonable future anticipations.

Such trending methods can be and have been used for reducing rates on the basis of limited experience, just as they have been used by the industry in the past for increasing rates.

In the few short months of the energy crisis there already has been a dramatic impact on auto insurance experience. A brief review of some of the changes shows:

1. There has been a significant and dramatic decrease in the number of traffic accident related fatalities. Comparing December 1973 to December 1972, there is evidence that changes in driving habits caused by the energy crisis resulted in about a 20% drop in traffic deaths nationwide. For those states which have lowered speed limits the drop was even greater. The National Safety Council has already predicted a decrease in traffic deaths for 1974 of 20 to 25%, meaning that up to 14,000 lives might be saved. The Pennsylvania Department of Transportation, Bureau of Accident Analysis, reported a 13% reduction in fatalities in December of 1973 versus December of 1972. Further, the preliminary figure for January 1974, indicates a reduction in fatalities in

the neighborhood of 40% compared to January of 1973. In conclusion, the fatalities in Pennsylvania have been estimated at a reduction of 24% in this two-month period of the Energy Crisis compared to the corresponding period one year ago.

2. The Energy Crisis has and will continue to get more and more people and cars off the road. Limitations on weekend driving is one obvious example. The Federal Highway Administration is now predicting, based on a traffic survey last December, that there will be a zero percent annual increase in traffic compared to the normal annual increase of five percent. Gasoline rationing or restrictions, especially if they were mandatory, would have an even greater effect on these figures. And even if the State or Federal government should not take action to force limitations on driving, the rising cost of gasoline alone is bound to have a limiting effect on the use of cars.

For example, the extensive use of car pooling should greatly reduce the amount of traffic especially during rush hour, always a prime time for auto accidents.

Such factors inevitably lead to lower losses for insurance companies and should result in substantially decreased auto insurance rates. The only real questions are, how much of a reduction and when will it occur.

But the insurance industry has argued against imposition of any rate reduction or limitation on their profits. In fact, representatives of some companies have argued that rate increases may be appropriate.

1. Some insurance companies point to inflation as driving up the costs of repairing both autos and people. But insurance companies, in many cases, have already made certain that rates anticipate inflation. Whether an individual company has inadequately anticipated inflation, must be decided on a case to case basis and is certainly no reason to delay decisive action now.
2. Some companies also claim that the increasing use of smaller autos will result in greater injuries and thus greater losses.
3. While studies tend to confirm this contention, the industry has not shown these facts to be substantial enough to offset other factors which indicate that most rates should be driven down and windfall profits should be controlled now.

In overview there is no doubt whatsoever that the industry can produce any number of rationalizations to show that rates should not be reduced or future profits limited. But no matter how they would like to, insurance companies must not, under any circumstances, be allowed to profit through a totally unregulated and unreviewed absorption of windfall profits.

The failure to reduce an unjustifiably high auto rate or limit windfall profits that are otherwise certain to be made by insurance companies rubs the public much more than an unjustified price increase. The consumer, unaware that his existing rate may become excessive, might be totally duped.

The arguments by the industry seem to be excuses to soothe complaining consumers, but they cannot be used to justify inaction at this time.

The real reasons rates are not going down is simple. Insurers don't want to voluntarily reduce their income when they are so uncertain about future developments. And secondly, some insurers may believe that they can stall enough to reap windfall profits. This is to be expected. Many industries have not hesitated to use the energy crisis as an excuse to drive up profits and drive down services. These industries have not limited their own profits for the common good. Who, in his or her right mind, would expect anything more from the insurance industry?

I don't believe all insurance companies will adopt ideals of corporate philanthropy which involve even the slightest suggestion that any amount of profit is undeserved, unearned, unexpected or undesired in anyway whatsoever.

Thus, there is an immediate need for controls in the public interest and there is need for leadership in setting an immediate course of action.

In Pennsylvania, we have started programs to protect consumers which could easily be applied Nationally.

First, data coming out of the energy crisis is being carefully monitored and analyzed to determine when sufficient evidence is available for rate making purposes and for specific reductions.

Second, companies have been asked to grant car pool discounts to their drivers. We did this immediately following the announcement of the crisis and so far more than 200 companies doing business in Pennsylvania have acted. This means that car pool discounts are now available to 90% of the auto insurance market in Pennsylvania. Discounts vary from 10% to nearly 30% depending on the number of miles driven and the frequency of use of the individual auto.

Third, we declared a moratorium on auto rate increases. Some considered this rather superfluous since we haven't granted an auto rate increase for more than four years. However, we did put the companies on special alert that no increases would be considered until the full impact of the energy crisis could be determined and accounted for. Several companies withdrew

their latest attempts to get increases after our special alert.

Fourth, and probably most importantly, all companies have been pressured to guarantee the return to policyholders of any excess or windfall profits realized as a result of the energy crisis. We choose this method, as opposed to any across the board decrease, since it was impossible to tell the exact extent of decreases necessary for individual companies. Depending on the company and on the future dimensions of the energy crisis, a rate decrease of 10%, 20% or 40 or 50% or more might be in order.

We believed it was less important to attempt to arbitrarily mandate any across the board reductions for all companies, than to provide assurances that the companies would return any windfall profits that were caused by the energy crisis. We also drafted legislation for the Pennsylvania General Assembly to require compliance by those companies not voluntarily cooperating.

The response of companies to our pressures has been surprisingly good. Already companies representing one-third of the Pennsylvania market guaranteed to return excess profits resulting from the energy crisis. Another one-third have agreed to return windfall profits in the form of dividends. Our negotiations with the companies are continuing and we hope for even better results.

Most recently we have been considering simplifying our procedures for rate approvals, so that insurance companies can

immediately reduce rates with little of the usual paperwork and with no delay.

But, under the present circumstances, I am not certain how effective our program can be without further legislation. We cannot be assured of total and continuing voluntary cooperation from the insurance industry.

Even as we were developing an energetic program using a maximum of our legal authority, it was clear that the problem being confronted was of such magnitude as to require involvement of others. Our first step is not the entire journey.

There is an inherent weakness in depending on the good conscience of insurance companies to guarantee the return of excess profits they might make in the future. Although many companies responded positively in Pennsylvania when we applied pressure, it should not be assumed that such behavior can be expected from all companies in Pennsylvania or across the country.

In fact, many insurance companies appear to be relying on existing inefficiencies in the regulatory system and the inherent uncertainty of predicting the dimensions of future changes to insure that they won't be forced to lower rates very soon. Even if rates are pushed down eventually, the longer the companies can keep rates unchanged or windfall profits unregulated in some states the longer these companies will reap increased profits.

The regulatory system in most states makes quick response in the consumer interest extremely difficult. In particular, you should be aware of some of the related reasons rate decreases or limits on profits may be greatly delayed or totally avoided under existing state laws.

To disapprove or reduce an existing rate, the State Insurance Department has to show it is excessive. While information on the frequency and severity of accidents and deaths, obtained from national and state agencies, may be useful in indicating very general trends, rate making information must come from the company.

And companies do not normally have basic loss data available immediately. Even if such data could be gotten instantaneously, it might not be meaningful for many months. Accordingly, rate changes have traditionally been based on a minimum of twelve months experience. This means that what's happening in January of this year may not be considered relevant by some until next January.

Perhaps most importantly, with the exception of very few states, insurance companies are not required to return any part of profits in excess of underwriting predictions. When a company files for approval of a rate, it predicts a certain level of underwriting profit. If the company makes more profit than originally predicted, it is not required to return the excess. While an excessive rate may and should be reduced in any future

filing, the company keeps any excess profits it may have already received up until the time the rate is actually changed.

Under the circumstances, it is not surprising that insurance companies are urging great care before any action is taken in regard to a reduction of rates or control of windfall profits. The longer these companies delay action, the more profits they may be able to absorb.

After considering what we have done in Pennsylvania and the problems we have faced, I have several recommendations for this Committee.

First, do not expect the insurance industry to voluntarily provide information or programs that could result in lower rates. The industry is quick to react with information or suggestions in regard to increases, but ponderously slow in regard to decreases.

Insurance companies should not be expected to rush to produce figures which would help reduce their own income. If the industry is left to be guided only by the principles of enlightened self-interest, the results will be catastrophic for the consumer interest. Among other things, expert industry representatives will be more than happy to discuss, over a long period of time (perhaps forever), the importance of considering an endless multitude of miscellaneous facts.

The message here is clear, if you depend on the fox to guard the chicken coup, you'll save yourself some guard duty but don't be surprised if some chickens are gone in the morning.

Secondly, in planning what Federal action is necessary, recognize both the weaknesses and strengths of state regulators.

State regulators operate from a position of relative strength. They have the power to look at almost any record of an insurance company. They can now get most or all of the information Congress has been asking the oil industry to provide. The insurance industry has no choice; the information must be provided when requested.

In addition, we state regulators have a wide range of discretionary powers that can bring about some changes. Our program in Pennsylvania is one example of the things that can be done.

On the other hand, it should be recognized that in this situation existing state regulation has its inadequacies and cannot be depended upon completely.

We are dealing with a national crisis. To depend on each state regulator to come up with an independent program only invites disorder and ineffective regulation.

There is a need for overall coordination and the natural choice for a coordinator is the Federal government. The Federal government presently plays the major part in deciding what the effects of the energy crisis will be. It has been impossible for state regulators.

determine fair insurance rates without knowing the likelihood or type of gas rationing or driving restrictions that may be imposed by Mr. Simon, the Price Commission, the Congress or the President.

If you wish to depend on state regulators to do a job, and within limits it does make sense to do so, make sure that whatever system you set up is comprehensible, practical, complete and provides all necessary information and standards for the individual regulators. Hopefully, the errors of the economic stabilization program will not be repeated. State regulators should not again find themselves in the same kind of vacuum that was initially created by the economic stabilization program. That is, having great responsibility in the absence of real guidelines or information.

Also, there is a need to allow some flexibility in the administration of the law. I note that Senate Bill 2969 requires the Commissioner to initially issue detailed reports at least every 60 days. This is probably overly restrictive. In such areas, discretion should be left with the Commissioner. At this time, I don't believe you want to initiate a reporting system that may turn out to be unnecessarily expensive and burdensome.

Thus, if you want to do something, do it right. A distorted, incomplete, underdefined or overly restrictive program may result in more confusion, dissatisfaction, inequities and frustration than now exists.

And finally, after having reviewed Senate Bill 2969 which deals with the District, and Senate Bill 2757 which attempts a national approach, I would like to make some specific comments and suggestions in regard to what action Congress should take.

As I have already indicated, Federal legislation is necessary in this type of national crisis. Existing state laws are almost certainly inadequate to insure uniform and coordinated action. And without doubt, past experience and common sense absolutely demonstrate that state legislatures cannot be depended upon. All too often, state legislatures seem more easily influenced by special interests than by public needs.

Depend on state legislatures to guard the chicken coop in this case and the next morning not only will all the chickens be gone, but the coop also will have disappeared and you probably will no longer have title to your land.

And even if every state was likely to take independent action, each state would almost certainly have different regulatory provisions, standards and time tables.

Inevitably, the resulting national situation would be chaotic.

Senate Bill 2757 does recognize the importance of a national solution. State regulators should welcome a reasonable Federal law providing uniform nationwide standards to deal with this nationwide crisis.

Also, I recommend that you avoid an approach which would mandate a uniform across the board cut in insurance premiums. An across the board cut at this time seems unreasonable, arbitrary and unfair to both insureds and insurers.

For example, a 10% cut may be too little because it is coming too soon and on the basis of too little information. Each insurance company stands on a different footing in regard to what rate reduction is appropriate. Based on their existing rates and loss experience, some companies might require rate decreases far in excess of 10%.

And even if all companies were the same, which they certainly aren't, it is impossible to tell what the size of an across the board decrease should be at this time. Energy policies are still evolving and we have no idea of what the next two or three months will bring in changed driving patterns and loss experience.

In place of an across the board premium cut, I recommend that you guarantee through legislation, that windfall profits, accruing to insurance companies will be speedily and directly returned to policyholders, no matter how great such profits may eventually be. In this way, there is no need to make a quick decision on an across the board cut.

The emphasis is not put on an immediate premium cut, but on a guarantee that insurance companies will not gain because of the energy crisis. This may mean that policyholders will receive a rebate several months later than they would have

received the benefits of a premium cut. But in the final analysis, the rebate received could well be much greater than any premium cut you might mandate at this time and would be far less arbitrary to insurance companies.

In drafting such legislation, I believe you have a minimal responsibility to become involved in insurance rate-making at least far enough to set up relatively specific criteria on what would be considered windfall profit or should otherwise be of special concern to those who would administer this law.

In the bill we drafted in Pennsylvania, prohibited windfall profits were defined as "increases in profits received as a result of favorable changes in loss experience or other factors directly related to energy conservation measures." Windfall profits can be defined in terms of a number of factors such as underwriting profits or overall profits to the company. It is essential that some clear criteria be established. Otherwise, you may pass a meaningless bill which may temporarily soothe the public, but really doesn't deal with the problem.

Also, consideration should be given to how windfall profits should be returned. Dividends or other payments which are at the total discretion of the board of directors of a company should not be sufficient. Return of excess profits to the policyholders should be a matter of compulsion, not discretion.

And last, I believe any legislation should place most of the responsibility on the insurer to monitor and limit its own windfall profit. Under most legislation being drafted, including Senate Bill 2757, a company can keep windfall profits until caught.

And then, the only requirement is to return the money the company shouldn't have retained in the first place. There is no specific penalty.

To make the companies more responsible and responsive, I recommend an inclusion of a provision subjecting an insurer to heavy penalties for each instance for which it is found that excess profits have not been returned to a policyholder as required.

In closing, I again urge immediate action to protect auto policyholders from possibly losing billions of dollars in the form of windfall profits to the insurance industry.

Mr. DENENBERG. In Pennsylvania, we are convinced that auto insurance rates ought to be down. The only question is how much should they go down. Across the United States there are \$18 billion in auto insurance premiums written every year. So if we are talking about a possibility of, say, a 10- or 20-percent reduction, we are talking about \$2 billion to \$4 billion being at stake here in your deliberations.

The CHAIRMAN. Is that a nationwide figure, \$18 billion in insurance premiums written?

Mr. DENENBERG. \$900 million in Pennsylvania alone.

#### ENERGY CRISIS CUTTING LOSSES

We are convinced the energy crisis is cutting losses and, therefore, should cut automobile rates in the long haul. There are fewer cars on the roads and they are going at slower speeds.

You have cited many of the statistics we have seen from the National Safety Council and the Federal Highway Administration. They all indicate a decrease in accidents and in traffic. We have also looked at Pennsylvania figures, and they bear this out.

In December the death rate in Pennsylvania was down 13 percent. In January it was down almost 40 percent. So, for the 2 months—January and December—the death rate has been cut 24 percent already as a result of the energy crisis.

The CHAIRMAN. What are those figures?

Mr. DENENBERG. It was 13 percent.

The CHAIRMAN. This is the death rate?

#### WINDFALL PROFITS

Mr. DENENBERG. Right. And averaging those 2 months, it is 24 percent. Those figures are not final yet, but we think they are a pretty good approximation of what the final figure will be. So we have moved immediately to cut windfall profits in the auto insurance industry.

#### MORATORIUM ON RATE INCREASES

The first thing we did was put a moratorium on rate increases until we could figure out which way the energy crisis was taking us. As a result of that moratorium, several large companies and others reduced or pulled out their requests for increases. Of course, in the way of background, we have not granted any automobile rate insurance increases for the last 4 years, so this moratorium was not exactly revolutionary.

#### CARPPOOL DISCOUNTS

After imposing the moratorium, we also called on the companies to grant carpool discounts. We found that only two major companies had such discounts—Area Exchange and Nationwide—and most of the people did not even know of the existence of the carpool discounts. Some, even the agents, and some, even the few on the books, were not doing any good.

Most companies responded to our requests, and they now grant carpool discounts ranging up to 30 percent, depending on the individual

driver's situation and classification. At this time we have well over 90 percent of the Pennsylvania market granting carpool discounts.

The CHAIRMAN. Do you mind, as these things come up, if I question them?

What methodology would you suggest to more widely disseminate the information that carpool discounts are available with certain companies?

Mr. DENENBERG. One thing we did was to put out what we call a mini shoppers guide on carpooling. This was very effective. We put out a shoppers guide in the last 3 years. There are over a million of these guides in circulation. That is one way to get the message out.

I notice most of the newspapers will have a story almost every week about the carpool discounts, but it takes a long time to get the message out. It requires communication, not only of the public, but of the agencies and the public itself. And even many of the agents were not familiar with the carpool discount. So you can never have overkill. We have continued to do that, specifically relating to the energy crisis, and, more broadly, by putting out automobile insurance shoppers guides.

#### DISCOUNTS

The CHAIRMAN. You said some companies in Pennsylvania have issued a 10-percent discount, and others as much as 30 percent?

Mr. DENENBERG. It varies. A lot of companies make rates on an individual basis, and there are all different kinds of rating forms you have that apply. It depends how many times you use your car and what classification you were in before.

There are other ways to get discounts. As a result of the energy crisis, if you stop driving your car to work, you will fit into a lower category, for you cut your annual mileage down. You also get a lower premium. So immediately there were rate classifications that would become applicable in the energy crisis. Those were also applicable. The big difference was the companies also granted carpool discounts, and we think this has been successful in Pennsylvania. We think the public is beginning to get informed on this, and the agents, too.

This still leaves us with the broader question, and the bigger question, as to how much they should be. We could try to cut rates, say 10 percent or 20 percent, as many have suggested. But we do not think this is the wisest approach, and we think there is a better alternative. To understand why, you might briefly view how automobile insurance rates are made.

#### AUTOMOBILE INSURANCE RATEMAKING

Basically, in automobile insurance ratemaking, you are relying on past experience to predict the future. You take loss statistics, and there are some problems of getting them immediately. They are simply not available immediately due to reporting, tabulating, and similar requirements. Even when they are available they are not meaningful. You cannot tell a liability claim until it ages. So early statistics may not be meaningful even after they become available. Even when they are available, even when they are meaningful, it is not easy to predict the future.

What you are doing with auto insurance rates is try to look at the past statistics, frequency of accidents, and predict what is going to happen in the future. And now all uncertainties of the past have been magnified tenfold to twentyfold by virtue of the energy crisis. Nobody knows what is going on and nobody knows what is going on in the future. We get different stories from President Nixon, from Simon, and Roy Ash. And even if we had the facts at the moment, no one will know what is going to happen in the future.

We drove down to Washington from Harrisburg in an automobile, and we are not sure we are going to be able to get back. That is one homey example of how predictable the energy crisis is. No one knows what the Arabs will do in terms of the boycott, nobody knows what is available in terms of gas lines and oil. So, under the best circumstances, it is difficult to predict rates for the future.

We have seen companies come in and present arguments for 12-percent to 25-percent rate increases only to find those rate increases were not required. We have seen this in many cases. You are talking about a great margin of error—15 percent to 20 percent—even without the energy crisis. You are talking of all kinds of differences and actuarial and statistical judgments, so that, in our opinion, it would not make sense at this time to order a rate reduction when nobody has the foggiest idea what is going to happen. And even when the statistics come in in the next month or two, no one will still be able to predict what is going to happen with the energy crisis, with gas rationing and the like. So if we would order a 10-percent rate reduction now, it may prove that we should have ordered 20 percent to 30 percent.

In World War II, the rates went down 40 percent. I doubt any reduction is in order of that amount, but no one knows. Furthermore, it does not make any sense to say there should be a 10-percent reduction across the board because every company is in a different position. As I pointed out, we have not granted any automobile insurance rate increase in Pennsylvania in over 4 years.

#### EXCESS PROFITS

Now, some companies have not had rate increases in 5 or 6 years. Each company has a different book of business. They may be concentrating in different geographic areas with different kinds of drivers, so it is impossible to say that all companies should receive a 10-percent decrease even if they were all in the same situation at any given time. So our approach is to call on the companies to refund excess profits. And I might add that excess profits are defined in the rating formulas on file in the insurance department. We immediately ask the companies to include such a provision in their policies on a voluntary basis. We cannot order the companies to do this, but we ask them to do it on a voluntary basis.

At the present time, we have received agreements from one-third of the Pennsylvania market, so we are talking about \$300 million in refund profits at the end of this calendar year—based on predetermined formulas.

Another one-third of the companies have agreed to pay dividends for any excess profits and we are still negotiating with many of the

companies. We would hope to get this kind of an agreement out of all of the companies.

I might add that we are not perfectly satisfied with every proposal coming in from every company. Basically, we think we are moving in the right direction and we think this is the best approach. Furthermore, if the company refuses to grant any decrease, rather, any agreement to refund excess profits, we can still take them into a hearing and try to force their rates down.

Now, there is an alternative if a company does not voluntarily include this refund of excess profits provision. Furthermore, this is a 1-year situation. So at the end of 1974 we can take another look at the rates. And if a reduction is in order, the public will not only get the excess profits refunded but we will also be able to lower our rates.

#### NEED FOR LEGISLATION

Now, from what I have said, it should be quite clear that we do need legislation. All of the companies in all States cannot be expected to act voluntarily in the public interest. Therefore, we have already drafted legislation which has been introduced in the Pennsylvania Legislature to require refunds of excess profits. We are not hopeful, however, that it will pass. As several members of the legislature pointed out, the Pennsylvania Legislature this last year has been hopelessly partisan. I frankly don't think they will pass anything the insurance industry does not want passed, and, therefore, some serious problems.

They even make Congress look good by comparison.

I am glad you smiled.

We are here to ask for help. We would like to see a Federal law to compel refunds from the insurance company.

In our submitted statement we have included many suggestions for the two pieces of legislation you have proposed. We think you are on the right track. They can be improved, but we think you are moving on the right track. We support the idea of Federal guidelines to be imposed on the performance of State regulators. We know companies are quick to increase premiums when the time comes. They are very slow to reduce premiums. And, as I indicate in my statement, I don't believe all insurance companies will adopt ideals of corporate philanthropy.

The motto of the Pennsylvania department has always been: The consumer has been screwed long enough. We think, during the energy crisis, the consumer has been screwed at every turn. It is about time he gets one break. We have tried to give them that break in Pennsylvania. We need the help of Congress in doing that. We would hope you would act urgently, because every month of delay means billions of dollars in possible profits that will go to the insurance industry rather than the public.

#### AUTHORITY MANDATING REBATES OR REFUNDS

The CHAIRMAN. I have not had a chance to examine your full proposal that is contained in your prepared statement as far as Federal legislation is concerned, but would you give me the gist of what you are suggesting insofar as Federal legislation mandating rebates or refunds?

MR. DENENBERG. Well, I think you could either put that authority in a Federal agency or require States to have it. I think that is essentially a decision you ought to make. But I know if we don't get help at the Federal level, either require that the States be subject to some penalties, or if there is not authority directly coming out of the Federal Government, we will not be able to completely solve this problem in Pennsylvania, and I think the situation will be the same in every other State. So I am not too particular. I do not consider it an interference in State regulations. We need help. Our insurance laws are not adequate. They are very difficult to amend in the State legislature. And I think it is the Federal Government's responsibility either to provide the authority through the price stabilization legislation or directly by imposing certain requirements on insurance regulations in the States.

THE CHAIRMAN. Would you have authority now under existing Pennsylvania law to order any kind of refund if you had the facts to justify such an order?

#### UNCERTAIN SITUATION

MR. DENENBERG. We could go in and hold hearings, look at the statistics and try to get premium reductions. I don't think that is really a sound approach because it is virtually impossible to predict what is going to happen. Even if we knew that the energy situation had stabilized, and we knew what was going to happen in the future, and it would continue in the same way, it would be very difficult, based on available statistics, to order rate reductions, and to prove it was a sound reduction. This is completely compounded by the fact we don't know what is going to happen tomorrow. The energy crisis may get 10 times as bad. Who knows what this truckers strike is going to do; who knows what the Arabs are going to do? Nobody knows. So even under the best of circumstances it would be very difficult. So you have the change brought about by the energy crisis, that is, compounding things tenfold or twentyfold, and then on top of that you have the uncertainties of the future timing dimensions of the energy crisis. So you have five different levels of uncertainty and complexities, I don't think anybody can sit here and tell you what is going to happen. If they can, they are too smart to be making automobile insurance rates. They ought to be doing something else.

#### FAIR WAY

So it is an impossible task. And we feel the only fair way to handle it is to refund money. Some companies claim there will be no reduction in order. I don't agree with that. But let's say, on some far out chance, their estimate proves to be correct. Or let's say there ought to be a 30-percent reduction or 10-percent reduction. If we have a refund of profit provision, that will be fair to all parties. If we attempt to reduce rates, it is essentially a gamble. No one can make that kind of prediction.

THE CHAIRMAN. So the method you have opted for the moment in Pennsylvania is that you will analyze the statistics as they come in through this calendar year. And if the statistics bear it out by the end

of this calendar year, order refunds, based on what those statistics show.

Mr. DENENBERG. We really cannot order any refunds. Precisely what we have done is put out a regulation asking—really asking—the companies to put provisions in their policies calling for a refund of excess profits based on some predetermined formula.

#### PREDETERMINED FORMULA

The CHAIRMAN. What is that predetermined formula?

Mr. DENENBERG. That would appear in the rate file. Some companies may be allowed a 3-percent underwriting profit, some, if they produce a high underwriting profit, let's say, 10 percent, would refund the difference.

The CHAIRMAN. So we keep this the same throughout the hearing, 3-percent underwriting profit; that is, profits based on premiums paid in and claims paid out?

Mr. DENENBERG. Right. It is loss expenses, the total premiums minus loss expenses. They are paying out 98 percent loss expenses. That means there is a 2-percent underwriting profit.

The CHAIRMAN. But it does not take in any profits they make on the premiums they hold on investments.

Mr. DENENBERG. Actually, in the underwriting figure, we do make deductions for investment income.

The CHAIRMAN. Would that be included in that 3-percent figure?

Mr. DENENBERG. Yes. The figure that finally comes out is in the figure after making certain deductions. It would be higher. And then we, in effect, reduce and take into account investment earning.

The CHAIRMAN. It is a neat figure. And 3-percent profit based on underwriting and profit on investments together?

Mr. DENENBERG. Right.

This is in Pennsylvania, of course. And in every State they can do it differently.

Even in the same States you may have had companies file on different bases.

We are continuously reevaluating different approaches to ratemaking. We are also refining, modifying, getting the statistics, but that is basically where we stand. We have not granted any rate increase in 4 years, so these would be, in many cases, a rating formula. Every company has not come in with precisely the same formula.

The CHAIRMAN. You say one-third agree to comply?

Mr. DENENBERG. One-third have agreed to comply, but each one is not using precisely the same formula. We are not completely happy.

The CHAIRMAN. Can some be higher than 3 percent on both underwriting and in terms of investment?

Mr. DENENBERG. Some are higher than 3 percent on what you call rate of return basis, and some companies want to do it on a national basis rather than a State basis. We think it ought to be done on a State basis.

The CHAIRMAN. And you have no legislative clout to mandate the formula thesis. You are sort of urging and cajoling, but you cannot mandate?

Mr. DENENBERG. That is correct.

We are glad we have as many to cooperate as they have. As I say, one-third have come in already. There is still time. And we have not had much time to get the other companies to come in. Another one-third have agreed to pay dividends.

The CHAIRMAN. Dividends to whom?

Mr. DENENBERG. The policyholders, mainly mutuals; in some cases, stock companies.

This is not completely satisfactory because we do not have the predetermined formulas and we do not consider this an ideal solution at all. They have indicated their intentions to refund excess profits through the dividend route, but that is essentially within the control and discretion of the board of directors. So we are going to continue to negotiate with all of the companies to try to get a formula we like that will protect the public and try to get the companies that have not cooperated yet to cooperate.

Now, if they won't cooperate in Pennsylvania, and the Pennsylvania Legislature does not pass legislation, and Congress does not pass legislation, the only thing we would be able to do then is to call them in and try to reduce rates. And that is the clout that we have. This may encourage them to agree to refund profits because that is the fairest way to all parties. But if they don't want to be fair to the public we can go in on the basis of limited statistics, try to reduce their rates.

This is not going to be completely satisfactory, but it is another operation.

The CHAIRMAN. Is there a point in time where you would have to make that decision between now and the end of the calendar year, depending on the degree of cooperation you receive from the remaining two-thirds of the companies in Pennsylvania?

Mr. DENENBERG. We are prepared right now to start holding hearings. We, of course, have been monitoring the rate situation. So at any time we can go in and start holding hearings. I don't think that time has come yet. I'd rather give the companies a chance to volunteer and respond. But if they don't in the near future, we are going to go in and hold hearings.

#### STATISTICS AVAILABLE

The CHAIRMAN. What statistics have been submitted to you either by companies or that you have gathered independently outside of the companies with respect to either facility or accident rates in Pennsylvania in recent months?

Mr. DENENBERG. We do not have any statistics from the companies. We are in the process of having them update their filings and giving the statistics available. But the companies themselves do not have very much at this point. Certainly the rating bureaus would not be able to put it all together. They are very slow, typically, and they would have difficulty putting it together on short notice. I would think some of the large companies that make rates on their own would be able to come up with figures fairly quickly. We think this may not even be necessary if we can get them to agree to refund the excess profits. I am not sure what the statistics will mean.

## DETERMINATION OF EXCESS PROFIT

The CHAIRMAN. Is the key to their excess profits the determination of what is an excess profit?

Mr. DENENBERG. We think we can do that right now in terms of the rating formulas that are already on file. This is a lot like requiring the circumstantial. They had a case over in New Jersey that went on for 6 years trying to figure out how much profit insurance companies have. It is a great academic question. We think you can make some very reasonable conclusions on what is an excess profit. And we also think that any extra other profit that occurs now has got to be related to the energy crisis.

I think it would be difficult to relate—to explain in the other terms. So if you have a company that is supposed to make a 3-percent profit, and it turns out it has made a 20-percent profit, we think it is a simple matter of refunding that 17 percent. I don't think we would have a problem with that.

The CHAIRMAN. Would the 3-percent figure, you have recommended, be a fairly standard criteria?

Mr. DENENBERG. Well, we use actually different figures for liability and collision. I will ask Pete Henning to answer.

Mr. HENNING. It is a little lower for liability insurance. It is about 4 percent for physical damages.

Mr. DENENBERG. It is a little lower for liability.

Mr. HENNING. It is. The liability coverage is about 3 percent. The physical damage is about 4 percent.

The CHAIRMAN. All right

And, again, that includes profit on investment?

Mr. HENNING. That varies slightly from company to company, so it might vary by one-half percent from company to company.

The CHAIRMAN. I see.

When the statistics start coming in from insurance companies, and rating bureaus and the like, what are the statistics you are most anxious to see? Would it be claims paid out in a certain month? For instance, suppose we compared the claims paid out by company X in January 1974 versus January 1973. Would that tell us a lot or would it not also include paid out claims paid a year, 2 years maybe, before?

Mr. DENENBERG. You can separate these things out. Basically, what you are looking at is what is going on with frequency: Are you having more or fewer claims, and what is the average size claim? And from that you can see which way things are going.

The CHAIRMAN. Let me read into the record a part of your statement, because I think it is perhaps pertinent on this point.

Insurance companies should not be expected to rush to produce figures which would help reduce their own income. If the industry is left to be guided only by the principles of enlightened self-interest, the results will be catastrophic for the consumer interest. Among other things, expert industry representatives will be more than happy to discuss, over a long period of time (perhaps forever), the importance of considering an endless multitude of miscellaneous facts.

I think that is a relevant statement.

Mr. DENENBERG. There is a lot of good stuff in there.

The CHAIRMAN. During the lunch hour I will read other portions.

Mr. DENENBERG. Let me apologize for not having it in, but we were given fairly short notice.

The CHAIRMAN. We understand.

What do you think of what has been referred to as the fast track monitoring system of the National Association of Insurance Commissioners energy task force?

Mr. DENENBERG. I think it will produce interesting statistics, but I don't think that will solve the problem. And I would, of course, get nervous any time you are going to be sitting around waiting for figures to come in. They will not come in until April, and then they will have February figures, so I think it is a mistake to sit around and wait for something to happen. But the insurance industry, as you read in that quotation, can stall and can argue for years. So I think something ought to be done fairly quickly.

#### FEDERAL LEGISLATION

I notice States get more responsive when the Congress watches what they're doing. I think monopoly committees have an important impact on that by investigating insurance. I think you can have the same kind of impact not only by bringing out the facts, if nothing else, and certainly by legislating.

The CHAIRMAN. How would Congress legislate considering the various ways different companies compute their profits? How would we legislate some kind of a national uniform formula that would relate to excess profits?

Mr. DENENBERG. You could actually specify, based on, say, our figures or other figures that you found more acceptable. You would actually specify an amount to be refunded. I think that is entirely possible. You could leave it to the discretion of, say, the insurance commissioner, or you could leave it within the control of the Federal wage price people and let them require the refund. I think there are all different ways you can go.

The CHAIRMAN. Specifically, for the District of Columbia, we are in the role of legislating as if this were a State. We could devise a formula of proreturn premiums on claims paid out and investment profits, and then anything beyond that would have to be refunded to the policyholder.

Mr. DENENBERG. Yes; you could that. Or you could leave it to the discretion of the insurance commissioner. You have got a very good insurance commissioner. I trust him.

The CHAIRMAN. Could you stand by, Mr. Denenberg? We will go on now to Mr. Sheeran, the insurance commissioner of New Jersey, and hear from him. And perhaps ask some more questions.

Mr. Sheeran, we welcome you. And you may proceed.

Mr. SHEERAN. I, like my colleagues, would like to thank you for this opportunity to appear. We consider it to be a most important subject and particularly as it relates to millions of consumers.

It is quite interesting, Senator, and I have submitted a statement. I think we have three insurance commissioners here taking a different approach to the problem.

The CHAIRMAN. That is why we invited the three of you to testify, because your approaches have varied, and we want to have the best available alternatives that are at least in the current marketplace.

Your prepared statement will be made a part of the record.

[Mr. Sheeran's prepared statement follows:]

## TESTIMONY BEFORE COMMITTEE ON THE DISTRICT OF COLUMBIA

UNITED STATES SENATE  
by  
James J. Sheeran  
Commissioner of Insurance  
State of New Jersey

I should like to preface my testimony with an expression of appreciation to Senator Eagleton and members of the committee for the opportunity to appear here on what I regard is a matter of great importance to millions of drivers across the nation.

Automobile insurance coverage is a not inconsiderable burden on American consumers, particularly those in the lower income brackets, and anything that can be done in New Jersey to lighten that burden will be of interest, I'm sure, to car owners everywhere.

In New Jersey, we are moving ahead without delay to find out to what extent the gasoline shortage has brought about a reduction in automobile accidents that would justify an immediate reduction in auto insurance rates. We think the effect is significant particularly in New Jersey, because New Jersey of all the states is among the hardest hit by the shortage.

We are in the forefront of the states in this endeavor despite the fact that New Jersey, as you know, has just undergone a change in administrations with all the traumas of any transitional period. Nevertheless, New Jersey got a headstart because my predecessor, Commissioner Richard C. McDonough, had initiated preliminary steps as long ago as last November to explore the possibility of relief for New Jersey motorists if the voluntary program of driving restrictions suggested at that time by the President resulted in a decrease in the frequency and severity of accidents. A few weeks later, the National Association of Insurance Commissioners

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established a Task Force to develop a study of the same subject.

The Task Force report was made available in the latter part of January. It recommended an accelerated monitoring system under which a selected number of companies would report accident data on a monthly basis. I decided that the NAIC reporting system would not serve the best interests of our State for a number of reasons, one of them being that selected nationwide averages might not have statistical validity in New Jersey because our distribution of business among the companies is quite different from the national pattern. Instead, I accepted the recommendation that came out of my own staff's study and I have directed thirty-two companies which write 90% of the private passenger insurance volume in New Jersey to file with the Department monthly reports of accidents beginning with October 1972, up to the present and on a continuing basis hereafter. These reports will be used in conjunction with the number of insured cars which companies have reported to the New Jersey Department for some years on a quarterly basis, so that we will be able to know very soon whether accident frequencies have changed under the impact of the fuel shortages. I want to point out that this is the same type of information that was used by the insurance industry during the years following the end of World War II when it became necessary to increase automobile insurance rates because of increasing availability of fuel and cars in those years. And I also want to state that it is my Department's intention to continue obtaining this information so that it will be available when the fuel situation returns to normal, whenever that may happen.

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In addition, my staff is assembling various other data that may help us to evaluate the change in driving habits of New Jersey motorists, such as accident reports from police departments, data on gasoline sales, passenger miles in public transportation and toll road receipts.

From all these sources, we hope to have sufficient evidence in hand during the month of March or early April to enable us to make an intelligent decision on rates without abandoning responsible ratemaking procedures. We thereby hope to head off any windfall profits because, if our rates are not adjusted, there is a real possibility that insurance carriers in New Jersey will profit excessively from the drastic curtailment of automobile use. I believe that the only fair way to make sure that insurance companies do not enjoy a spate of excess profits, is the swift application of any required correction of automobile insurance rates by the traditional ratemaking process that takes into account past and prospective losses and all other relevant factors. I interpret statutory language to mean that I have an affirmative duty to disapprove rates that do not meet the standards and to bring about a reduction in rates to head off unreasonable profits before they materialize.

This approach places New Jersey in direct opposition to the stance of several insurance companies that have proposed that no action be taken on rates at this time and that any excess profits that may turn up sometime in 1975 be returned to policyholders through refunds or payments of dividends. I cannot agree to this for a number of reasons:

Page 4

1. Under long standing practices in the administration of rate regulatory laws in New Jersey and other states, rates are established prospectively to provide for expected losses and expected expenses and for a reasonable margin of profit. Actual past profits are not used to increase or to reduce prospective rates.
2. If we were to rely on refunds of excess profits in lieu of appropriate and timely rate action under the present conditions, which clearly indicate a substantial reduction in the automobile insurance hazard, the insurance business would be operating on a cost-plus basis which I do not believe would be in the public interest because it would pervert the objective of providing insurance protection to the consumer at the lowest possible cost.
3. If pricing of insurance should be shifted to such a cost-plus basis, it would be necessary to re-examine the need for any profit provision in the rates because a cost-plus system eliminates or substantially reduces the risk a company takes when it engages in the business of insurance.
4. It is inconceivable that one part of the insurance business, private passenger automobile insurance, could be conducted on a basis of refunding excess profits without profound impact on the rest of the insurance business.

5. Even if the idea of refunding excess profits instead of timely rate reductions were acceptable, it would be next to impossible to ferret out an insurance company's profit by line of insurance in a particular state to any reasonably accurate degree. The carriers themselves concede this. The National Association of Insurance Commissioners only recently completed a study of the feasibility of allocating profits. The insurance industry strenuously objected to any calculation of profits by line and by state other than on the basis of broad industry averages, and maintained that any measurement of profit must be based on the performance of several years' averages, if distortion and misinterpretation is to be avoided. It is inconceivable in view of that position, taken by the insurance industry only two months ago, that the same spokesmen would now tell us that they are able to determine how much of a windfall in profits should be returned to policyholders by an individual company for a subdivision of automobile insurance in any given state.

Mr. Chairman, I wanted to comment in detail on the question of windfalls resulting from the present fuel situation because the avoidance of windfalls is also the objective of Senate Bill No. 2969. While this Bill applies specifically to the District of Columbia, it could well become a pattern for the entire country.

As I outlined before, in New Jersey we will determine, as accurately as can be done, the present and prospective effect of

Page 6

the fuel situation on loss levels and this evaluation will be incorporated in the regular ratemaking formula for prompt action which I will demand from every company writing private passenger automobile insurance in New Jersey. While any rate reductions will be introduced as promptly as orderly procedures allow, it is not my intention to make any such reductions applicable retroactively, nor do I intend to require that companies make any refunds for premiums paid or payable during the period while accidents have actually been reduced.

Refunds and retro-active rate adjustments are difficult to handle from an administrative point of view and are rarely resorted to in the conduct of the insurance business or its regulation. I believe that such a procedure could set an undesirable precedent.

Rate making always lags behind changing conditions whether rates are going up or going down. If the time lag is reduced to a minimum and if an orderly rate making process is adhered to, nobody is unduly enriched or unduly deprived. We will not, in New Jersey, order a rate reduction before adequate statistical support is available. Rate reductions will be required if experience, including statistics reflecting reductions in the number of accidents due to the fuel crisis, support such action. When gasoline supplies become freely available again and use of the automobile returns to pre-crisis levels, we will rely on the same process before any rate increases will be allowed.

Page 7

While policyholders may experience a short delay in rate reductions now, companies will have to accept comparable delays when the situation reverses itself at a future date.

We will continue to observe the situation in New Jersey by a continuous review of the relevant statistics partly collected by the Department and partly obtained from the statistical agents.

Senate Bill 2969 makes periodic review at frequent intervals obligatory for the District of Columbia. I would consider this a useful provision. In this connection, I call attention to the New Jersey statute, as revised in 1971, which gives the New Jersey Commissioner unique powers to enforce proper performance by the industry in producing ratemaking statistics. The industry has had two years of advance notice, and it is now my intention to see to it that we will get the information we need, with great emphasis on automobile experience influenced by the fuel situation.

Mr. Chairman, I shall be pleased to respond to any questions you may have pertaining to insurance matters.

FEBRUARY 22, 1974

## CARPOOLING

MR. SHEERAN. Before I get into this subject I thought I might comment on a question of carpooling, which I think we probably all face, and is probably being faced here. And I would like to advise you that we have had 100 percent cooperation from all of the companies doing business in New Jersey. The last company to respond to that request responded last Friday, and that has resulted, and will result, in a substantial benefit to those who are conserving gas through carpooling.

## NEW JERSEY'S POSITION

I think I will get right into the position of New Jersey, since it does, to a degree, agree with your proposed bill, as well as my colleague, Herbert Denenberg's position on that matter.

We have taken the position that the best approach to this problem is through the ratemaking process. And, briefly, we have done this because we do not believe that either the approach just fixing a percentage of decrease is much in agreement with Commissioner Denenberg's position as a responsible way to ratemake or fix since it may be way off the mark, so to speak.

It could be way off the mark, either up or down. And at least, in my State, we have a responsibility, by statute of giving the companies the opportunity to make a reasonable profit, but only a reasonable profit, which is defined. And I can give you some information on our figures which probably do differ from State to State.

## MONITORING

We did not accept the monitoring system of the NAIC for this reason. They have chosen a number of companies, I think five in number, on which they are monitoring. They are very large companies. Those companies do not necessarily write the insurance in the State of New Jersey. We have gone to the 32 companies that write about 90 percent of the business in our State, and we are attempting now to gather valid statistical data from them concerning accident reports and accidents. We have insisted that they go back to November 1971, and give us monthly reports right up to the present date on a month-by-month basis, and monthly thereafter. The reason we have done that is basically the same reason the NAIC has done it, in order to hasten the reporting system. By doing this, we get valid and valuable statistical data on which we can ratemake. In addition, we have asked the major cities of New Jersey to give us reports on accidents. And they are responding to that. We have asked our State police to do likewise.

We are monitoring the use of our toll roads, the Garden State, the turnpike. We are monitoring the facilities going into the cities of New Jersey, that is, the bridges, the tunnels, and so on, in which we are developing data.

## RATEMAKING

It is our opinion, by the end of March or the beginning of April, we should have sufficient valid information upon which to fix a rate, a reasonable rate, that takes into consideration the energy crisis.

Now, this position does fly in the face of the approach of a number of the companies who have taken the position that they should return excess profits. Some companies have suggested to us that that would be the way to do it. But, we don't believe that the companies get more by way of insurance premiums than, in fact, the conditions at this time call for. We believe we can, and we are, gathering the necessary data to make a rate that will be fair and reasonable.

Now, a number of reasons we do not agree with the companies' position—and I'll cite what we consider to be valid reasons.

The CHAIRMAN. Are you going to be reading from your prepared statement?

Mr. SHEERAN. I have five points I would like to make and I will refer to those. They are on pages 4 and 5.

1. Under long standing practices in the administration of rate regulatory laws in New Jersey and other states, rates are established prospectively to provide for expected losses and expected expenses and for a reasonable margin of profit. Actual past profits are not used to increase or to reduce prospective rates.

2. If we were to rely on refunds of excess profits in lieu of appropriate and timely rate action under the present conditions, which clearly indicate a substantial reduction in the automobile insurance hazard, the insurance business would be operating on a cost-plus basis which I do not believe would be in the public interest because it would pervert the objective of providing insurance protection to the consumer at the lowest possible cost.

3. If pricing of insurance should be shifted to such a cost-plus basis, it would be necessary to reexamine the need for any profit provision in the rates because a cost-plus system eliminates or substantially reduces the risk a company takes when it engages in the business of insurance.

4. It is inconceivable that one part of the insurance business, private passenger automobile insurance, could be conducted on a basis of refunding excess profits without profound impact on the rest of the insurance business.

5. Even if the idea of refunding excess profits instead of timely rate reductions were acceptable, it would be next to impossible to ferret out an insurance company's profit by line of insurance in a particular state to any reasonably accurate degree. The carriers themselves concede this. The National Association of Insurance Commissioners only recently completed a study of the feasibility of allocating profits. The insurance industry strenuously objected to any calculation of profits by line and by state other than on the basis of broad industry averages, and maintained that any measurement of profit must be based on the performance of several years' averages, if distortion and misinterpretation is to be avoided. It is inconceivable in view of that position, taken by the insurance industry only two months ago, that the same spokesmen would now tell us that they are able to determine how much of a windfall in profits should be returned to policy holders by an individual company for a subdivision of automobile insurance in any given state.

In any given State these are most important to us, because we are convinced that in the State of New Jersey the impact has been much greater. And I think it has been recognized here more than it has in many other States. The question of the impact on New Jersey will be very much different than the impact possibly on Arkansas, on Pennsylvania, or on California, and, therefore, we feel our responsibility is to ratemake and not force a company to deal with a profit and work back, and decide what are excess profits.

Actually if you were to take the entire Nation and take its averages, it would probably differ substantially from the change, the driving habits of the citizens of an industrial State like New Jersey; therefore, we have taken this position.

Now, I would like to speak on Senate bill 2969, which I think also includes the provision of backdating it—a 10-percent discount and also a return refund profit.

We take the position that this is also a practice that probably should be frowned upon for several reasons. In the ratemaking process, there is also a lag, and that lag appears on both sides of the aisle, that is, at a time like this when conditions are changing rapidly and the companies seem to be getting the advantages of those changing conditions. The same proposition, or the same problem will occur on the other side of the spectrum and the companies will have a lag behind as conditions return to normal, when and if they do. As this happens, of course, there is a benefit to the consumer. Now, the question of administering such is by requiring the return of premium, and so on. It is a very, very difficult thing to do.

The CHAIRMAN. I am not sure I comprehend, Mr. Sheeran. How different is the approach you are taking in New Jersey versus the one Dr. Denenberg is taking in Pennsylvania? You are getting monthly statistics, reporting on accidents, traffic counts, all relevant data, and then you say by the end of March or April you ought to have enough relevant statistics to make a determination—to do what?

Mr. SHEERAN. To set a rate.

The CHAIRMAN. Rate hearings with each company?

Mr. SHEERAN. No. We will set a rate based upon our statistical data, and then we will have orders to show cause, whatever, why those rates should not be fixed.

The CHAIRMAN. Presumably, because you say present conditions clearly create a substantial reduction in automobile insurance claims, the result will be to lower rates?

Mr. SHEERAN. That is correct. We believe there will be a lowering of the rates.

The CHAIRMAN. How is that different from what you contemplate, Commissioner Denenberg?

Mr. DENENBERG. I don't believe you will be able to make rates rationally at that point. You still don't know what will happen. Simon may say something to them that will make those statistics less. And even if you can make them meaningful, which is very questionable, and even if you can interpret them properly, which is very questionable as to the future, the whole thing may change the week after you go through the process and that will require you to come in and have hearings on every company's rates.

I am not sure on the situation in New Jersey, but I think it is basically the same all over the United States. You cannot just order a 10-percent reduction. Every company is entitled to a hearing. That means we would have to have 330 hearings in Pennsylvania. And every company would be in a different situation regardless of how those rates came out to be, because some companies would have higher rates than others, and when their increases were made, depending on the situation. Furthermore, that approach will not protect the public from the windfall profits that occur between January and the time this finally happens. In fact, in New Jersey, they spent 6 years figuring out how much profit the insurance companies should make. It will be a

long process involving many companies, and you will still not be able to go back and pick up the excess profits between January and April, and it will take a super genius to come out with the rate that is right. And no matter how smart he is, Simon can make him wrong the next day.

#### STATISTICAL DATA

Mr. SHEERAN. I don't consider that a challenge to our position actually because it is a difference of opinion.

We have actuaries in the State of New Jersey. We have two fellows and an associate actuary we consider to be quite competent in their field. What they have suggested to us is the gathering of the statistical data, which we are doing, and we will have sufficient statistical data to present and to take a position on rates. That means that immediately the people of New Jersey will realize a reduction and not wait until 1975, while the godfather waits to decide what your profits should be. We think we are responsible for that. It is our duty to so fix the rates and we will proceed that way.

Now, I might say I don't have any problem with the legislature. We have an extremely cooperative legislature when it comes to matters like this in the fixing of rates and so on. They give the commissioner of New Jersey probably the strongest power of any State in obtaining the necessary statistical data. If the companies, through their statistical agents, do not respond promptly we have the right to move immediately to appoint our own statistical agent, and to go in and get the data that is necessary. And we charge back the company for that.

I must say that we have found that the statistical agents in New Jersey have been very cooperative, and the companies have been cooperative because I think that they are convinced. And I am convinced that what we do will be done in a very responsible way. It is true that Mr. Simon may do something tomorrow, but regardless of what he says, the one factor that is more important than anything else is the availability of gasoline. I know that we in New Jersey, as we look, there is no specific rationing, but there is a de facto rationing. Our people are not driving vehicles. They are being stopped in their business efforts, they are being stopped in their daily pleasure efforts, and, therefore, we believe we will have that data by early April. And we will take affirmative action to fix a rate that we think is commensurate at this time.

#### ACTUARIES

Mr. DENENBERG. The commissioner of New Jersey has great confidence in his actuaries. I love my actuaries, too. I even brought them with me. I can tell you actuaries may know something about insurance losses, but they don't know anything about Arabs, they don't know anything about the world energy situation, and they have great difficulty in predicting the future on insurance losses. They have actually no ability or knowledge to predict the future of the energy situation, and I don't think anyone else does. So regardless of what you do in April, and regardless of what kind of numbers you come up with, you cannot possibly anticipate the gasoline situation. Actuaries cannot tell you how much energy or gasoline you can buy and you cannot get a straight answer out of the Federal Government. So how can we say we know what is going to happen in the future?

Mr. SHEERAN. Let me rebut that.

Are not insurance rates supposed to reflect the conditions as we best know them? How imperfectly we know them is debatable, but as we best know them at a given point, so that the consumer—the purchaser of insurance—is paying an adequate amount but not an excessive amount at that point in time.

Mr. DENENBERG. It is difficult to do that under normal circumstances. You can get into 20 to 25 percent arguments even under those circumstances, but you can perhaps predict the future roughly when you just have to worry about the variables of insurance losses and inflation. Although it is tough enough. But now you have all kinds of uncertainties that don't have anything to do with those two, and you cannot possibly predict them.

If this were the beginning of World War II, and you sat down and said, let's try to see what will happen. You may have ordered a 10-percent reduction, and it may have turned out to be 40 to 50 percent. You may order a 30-percent reduction, and it will turn out to be 10 percent. So I don't have any problem with this approach. In fact, I think this approach is sounder even if there was not an energy crisis because I have been sitting there trying to make rates for 3 years. Actuaries are just like lawyers or any other professionals, they will say what they are paid to say, except these two on my left. And, therefore, you get into these good arguments. These will be much more limited in their credibility and they will have to try to predict the future. And so it seems to me that is a better approach.

If I were in an insurance company I would say this is the best approach. And if I were a policyholder I would say this is the only approach. The only one who can sit and say any differently is the DFL, enough to sit and say what will happen next year.

#### CAJOLE INSURANCE COMPANIES

Mr. SHEERAN. So your approach is to wait until the end of the year and cajole the insurance companies.

Mr. DENENBERG. Not cajole. We are trying to get them to agree right now. The cajoling season will be over very soon in Pennsylvania.

Mr. SHEERAN. But if you don't succeed?

Mr. DENENBERG. Then we will have to do what they are doing. But we think this is a better approach for everybody.

The CHAIRMAN. So if your cajoling does not work you may have to join Mr. Sheeran.

Mr. DENENBERG. Right, but only as a last resort.

The CHAIRMAN. If the cajoling works and they agree to make refunds, will part of the agreement be to pay the interest on the money refunded?

Mr. DENENBERG. That can be an aspect of the calculation. You can fix a formula that attempts to take that into account.

#### PROFIT MARGINS

I might say that there are companies that may be in a position where their losses may actually go up. So it is conceivable that they are entitled to some recognition of the fact that they may be taking a certain

risk, that if losses actually go up, they are running a risk for which there is no countervailing return. So you may want to even allow them slightly excessive rates in excess of what they would ordinarily be expecting.

The CHAIRMAN. But as a standard insurance practice, if a company at the end of the calendar year has shown a loss, you don't let them retroactively charge higher rates?

Mr. DENENBERG. Yes. But, under standard practices, they don't refund additional profits.

This is a different situation, and, therefore, there is some logic to the argument. It should perhaps work both ways. You cannot let them raise the premium at the end of the year, so you could make an argument.

I am not saying it is necessarily sound, but to play the devil's advocate, you could make an argument they are not only entitled to the additional profit but, in fact, additional factors in some cases.

Mr. SHEERAN. Senator, the confidence in the insurance companies in setting a profit margin differs between the commissioner and I. I don't have that confidence in them. I think our statute is very specific. It says the commissioner is required to determine whether the rates are reasonable and adequate, and not unfairly discriminatory. This is a statutory responsibility, I believe, to fix rates under the conditions as they exist. But let me just touch on the problems that would be raised if the companies would be in that position.

#### PUBLIC UTILITY APPROACH

I think you put them in the position of a public utility, where you assure them a profit. If this became a way of ratemaking or controlling profits of an insurance, they would determine that act as a profit, and if they felt that it was an excess profit they would return it. There is no real control of that factor. It is left solely in their hands. They cannot reasonably establish those rates on a per State, per line of business kind of position. You can look at the statements that are filed in an insurance company by the various carriers and they differ substantially from the reports that are filed with their stockholders. There are different considerations involved, investment considerations, and so on. So that, again, we believe we can do it and we will follow that procedure.

Mr. DENENBERG. First of all, we are not following a public utility approach. We are not assuring the profit. We are simply assuring a refund of any excess profits. And if there are losses, the company will have to absorb them.

Furthermore, this is only for a 1-year situation.

And, finally, there is control as to what the profit formula will be. That will be defined.

#### RATEMAKING

And, finally, you seem to keep expressing an inability to determine what profits are, but you are doing the same thing every time you make a rate. So when you go in and make a rate in April, you are going to have to go through the same considerations we are going through. You cannot escape the profit picture by calling it ratemaking rather than a refund of excess profits.

Mr. SHEERAN. Actually, as I understand ratemaking, ratemaking is designed to establish a fair figure on which people can reasonably buy insurance, and, if they properly manage themselves, get proper underwriting practices, make a major return.

Ratemaking is a prospective art that does not assure a profit. If a company goes in and writes in your State, and makes more profit than another company doing the same line of business, that reflects on their management. And some companies can go into the same State with the same rates and lose money. So that ratemaking is not designed to assure profit.

#### NEW JERSEY FORMULA FOR PROFIT

The CHAIRMAN. What is the formula of profit in New Jersey?

Mr. SHEERAN. We had a New Jersey Supreme Court case very recently that considered the rate established as a fair rate by former commissioner and now Supreme Court Justice, Robert Clifford. The calculations produce a profit provision in rates for private passenger cars of 0.8 percent for automobile liability insurance, and 2.5 percent for collision and comprehensive insurance—after Federal income taxes. So that these are the two figures that have gone through our supreme court as reasonable figures. It is hard to make any comparison here.

Mr. DENENBERG. You have to adjust for taxes and they really get very close to what we are using. The only difference is it took their Supreme Court 6 years to figure it out.

The CHAIRMAN. It is 0.8 percent for what?

Mr. SHEERAN. 0.8 percent for automobile liability insurance, and 2.5 percent for collision and comprehensive insurance. That is after Federal income taxes.

The CHAIRMAN. That is the same as is physical damage?

Mr. SHEERAN. Yes.

The CHAIRMAN. It is the same concept?

Mr. SHEERAN. Yes; the same concept.

The CHAIRMAN. 0.8 percent for automobile liability and 2.5 percent for physical damage.

Mr. SHEERAN. After Federal taxes.

The CHAIRMAN. Mr. Denenberg says that is fairly close, 3 percent for liability and 4 percent for physical damage.

Mr. DENENBERG. That is correct.

The CHAIRMAN. And both of those include the concept of profit made on investment and the premiums received in the automobile liability line and physical damage?

Mr. SHEERAN. Correct.

The CHAIRMAN. Now, for yet another approach, we turn to Mr. Monroe. Mr. Monroe is the commissioner of the State of Arkansas. I understand you ordered an across-the-board refund of 10 percent.

The commissioner of Oklahoma, Mr. Hunt, has issued a similar order.

Mr. Monroe, we would like to hear your approach.

Your prepared statement and exhibits will be made a part of the record.

[The material referred to follows:]

TESTIMONY BY  
ARKANSAS INSURANCE COMMISSIONER  
ARK MONROE, III

Senator Eagleton, I appreciate your invitation to appear this morning. I will introduce myself for the record. I am Ark Monroe, Insurance Commissioner of the State of Arkansas. I would also like to introduce Mr. Ernest Fennell, who is Assistant Commissioner of the Arkansas Insurance Department.

In response to your inquiry about the activities of the Arkansas Insurance Department as they relate to the automobile insurance rates and the energy crisis, the position of the department is best explained by a letter sent from our office on December 13, 1973 to Insurance Services Office and the 350 automobile insurance companies licensed in Arkansas.

The letter marked Exhibit 1 reads as follows:

(See letter dated 12-13-73)

In December, the public was being urged to sacrifice to prevent unnecessary use of fuel. The Arkansas Department naively hoped for a voluntary, substantive response on the part of the insurance industry. This is the response we received.

- (1) One Arkansas company voluntarily reduced its rates 10% across the board.
- (2) Three companies promised to refund excess windfall profits, if any, at some time in the future. (U.S.F.&G., All State, & Hartford)
- (3) One rating bureau and three companies filed variations of discounts for car pooling, which

affected very few drivers in Arkansas. (ISO, St. Paul, Aetna, State Farm)

- (a) For example, the Insurance Services Office filing did not help young drivers or drivers in the best classification. It only helped two classes of drivers.
- (b) Under the St. Paul filing, there will have to be four persons in a car pool before any credit is given. In Arkansas, which has a widely dispersed population, meeting this criterion is almost impossible and few will earn the credit.

Quite obviously, the response of the industry was inadequate in light of continuing developments in the energy crisis -- the reduction in speed limits in Arkansas, the reduction in fatalities in those states where speed limits had been reduced in November, 1973, and the decreased driving of those persons experiencing a fuel shortage.

Therefore, on January 18, 1974, we issued an order requiring the companies to reduce their rates by a minimum of 10% by March 15.

We received the following response:

- (1) 30 companies said that they would wait for Insurance Services Office, of which they were members, to do something.
- (2) 4 companies requested hearings.

- (3) Eleven said it was too early to reduce rates and some of those relied on their previous replies.
- (4) Five companies complied, and these companies write a rather small share of the market in Arkansas.

One company responded in this manner:

The Executive Committee of Lumbermen's Mutual Casualty Company passed the following resolution:

(Read from letter marked Exhibit 2 dated 1-31-74.)

This is not a commitment to reduce rates and it is representative of the industry's attitude.

We did not receive a reply from Insurance Services Office. They ignored the January 18 Order.

On February 12, we set a hearing on Insurance Services Office and its 115 member companies for March 6, at which time we will require that they justify their present rates in the light of both profits made during the past three years and the almost certain prospective profits. The trend in Arkansas from the information we have gathered from the state police and the highway department and other sources indicates most graphically that the frequency of accidents, fatalities, and injuries has dramatically reduced.

Similar hearings have been set for All State, State Farm and Travelers on March 13 - 15. Additional hearings will be held on the other independent companies.

We have directed Insurance Services Office and the companies to furnish the following information: (See Exhibit 3)

(Read copy of letter 2-12-74)

This additional information has been requested because traditional methods of rate-making are not responsive. The concepts of profitability and the return on net worth - the total performance of an insurance company should be the measure. We intend to look at the whole picture and we recommend this approach to other regulators.

Thank you, Senator Eagleton, for inviting me to appear today. I will be most happy to furnish any documents which I have mentioned for the record.

EXHIBIT 1

ARKANSAS



DEPARTMENT OF COMMERCE  
INSURANCE DEPARTMENT  
400-18 UNIVERSITY TOWER BUILDING  
LITTLE ROCK, ARKANSAS 72204

ARK MOHROE III  
INSURANCE COMMISSIONER  
(501) 371-1325

DONALD V. ALLEN  
DIRECTOR OF COMMERCE  
(501) 371-2231

December 13, 1973

Mr. Daniel J. McNamara  
President  
Insurance Services Office  
160 Water Street  
New York, New York 10038

Dear Mr. McNamara:

The advent of the energy crisis with its attendant reduction of miles driven per car will manifestly result in reduced accident frequency. The imposition of reduced speed limits should result in a drop in the severity of injuries and of physical damage to vehicles.

The growing participation in car pools and increasing use of public transportation facilities accompanying these factors must again produce more favorable results.

With these considerations in mind, it is incumbent upon your industry to equitably measure the savings which will accrue and pass those savings on to your policyholders.

Including trend factors in your rate filings is an attempt to make rates prospectively. We firmly believe that at this juncture rate adjustments should be made in the light of almost certain reductions in dollar losses.

Please direct your member companies to vigorously pursue research designed to accomplish the following:

1. An immediate reduction in rates for all lines of automobile insurance.

Mr. Daniel J. McNamara  
Page Two  
December 13, 1973

2. Granting of rate credits for car pool participants.
3. The liberalization of policy contracts where necessary to eliminate avoidance of coverage in car pool situations.
4. The constant monitoring of statistical and trend data to more accurately and immediately reflect the experience of the business in this volatile period.

We request that this letter be forwarded to your membership for immediate action.

Yours very truly,

Ark Monroe, III  
Insurance Commissioner

AM:lo

cc: Mr. William Harman, Manager  
Insurance Services Office of Arkansas  
Tower Building  
Little Rock, Arkansas 72203

## EXHIBIT 2

## LUMBERMENS MUTUAL CASUALTY COMPANY

## EXECUTIVE COMMITTEE MEETING

December 20, 1973

FUEL SHORTAGE RESOLUTION

The president said that this meeting had been called to act on a resolution to be adopted as the result of insurance industry meetings that have been taking place in the last several days with representatives of the National Association of Insurance Commissioners. A document is being prepared for release by the three insurance trade associations, plus large independents, who write most of the auto insurance in the United States. The document will be released under the sponsorship of the NAIC. We need a resolution expressing our intention to reflect any improvement in automobile loss experience, traceable to the fuel shortage, in our rating structure, hopefully by way of dividends based on actual experience.

After discussion, the following resolution was moved, seconded and unanimously adopted:

RESOLVED, that it is the intention of the companies that unabsorbed premium refunds (dividends) will be allowed on the earned premium on automobile policies to reflect any extraordinary additions to surplus caused by the fuel shortage.

EXHIBIT 3

ARKANSAS



DEPARTMENT OF COMMERCE  
INSURANCE DEPARTMENT

400-18 UNIVERSITY TOWER BUILDING  
LITTLE ROCK, ARKANSAS 72204

ARK MONROE III  
INSURANCE COMMISSIONER  
(501) 371-1325

February 12, 1974

DONALD V. ALLEN  
DIRECTOR OF COMMERCE  
(501) 371-2231

Insurance Services Office of Arkansas  
P. O. Box 2661  
Little Rock, Arkansas 72201

In the Matter of the Review of the  
Current Rate Filings of Insurance  
Services Office of Arkansas for  
Voluntary Private Passenger Auto-  
mobile Coverages of Bodily Injury  
and Property Damage Liability, Medi-  
cal Payments and Physical Damage.

Gentlemen:

In connection with the notice of hearing with which this letter is enclosed, the material set out below must be filed with this Department (on behalf of your members and subscriber companies) by March 1, 1974.

1. Earned premiums and incurred loss figures for the years 1971, 1972, and 1973, for all lines and sub-lines of voluntary private passenger automobile insurance. Such figures shall be regularized to 1973 rate levels and shall reflect both Arkansas and countrywide experience.
2. Loss adjustment expenses, Arkansas and countrywide for the lines and years stated in Paragraph 1.
3. Underwriting expense incurred Arkansas and countrywide for such lines and years stated in Paragraph 1.
4. Loss and expense data should be weighted for appropriate credibility and trend factors with explanation of source and of method of computation.
5. Total (all lines) direct net premium written countrywide for the years stated in Paragraph 1.

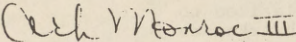
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6. Total net worth of member and subscriber companies with details of method of determination for 1973.
7. Investment Income on unearned premium reserves and on loss reserves for the lines and sublines of coverage and years set out in Paragraph 1. Such investment income should be shown both in dollar amounts and as a percentage of earned premium for such lines and sublines.
8. Member or subscriber companies federal tax rate for the years stated in Paragraph 1.
9. ISO may file such additional material, consistent with Ark. Stat. Ann. §66-3107, as it desires.

According to the Industry Advisory Committee Report to the Special NAIC Task Force on the Energy Crisis and Related Matters (the "Report"), an accelerated reporting system was established which would make automobile insurance experience available thirty days following the close of each month. The reporting became effective as of January, 1974. We shall also appreciate receiving this data for the month of January, compared to 1973, as described in the Report, as soon as possible. The purpose of requiring the submission of the foregoing data is to up-date your current filing.

The burden of justifying the continuance of the current filing is on the filers and, accordingly, this information is necessary for the hearing.

Yours truly,



Ark Monroe, III  
 Insurance Commissioner

AM:bd

cc: Insurance Services Office  
 Suite 510, 900 Grant Street  
 Denver, Colorado 80203

Insurance Services Office  
 160 Water Street  
 New York, New York 10038

## ARKANSAS APPROACH

Mr. MONROE. Thank you, Senator Eagleton, for allowing us to appear before your committee today.

As you said, I am accompanied by Ernest Pennell, who is an assistant commissioner of the Arkansas Insurance Department. I can say we are beyond the cajoling stage in Arkansas. I think you will best be able to understand our situation in Arkansas. By understanding the sequence of events, and what we have tried to do in Arkansas to attempt to obtain a reduction in insurance rates.

On December 13 this year, I wrote a letter to all of the 350 automobile insurance companies which are listed in Arkansas. I think the letter spelled out exactly what the position of the Arkansas Department is. I would like to read from the letter at this time.

The advent of the energy crisis with its attendant reduction of miles driven per car will manifestly result in reduced accident frequency. The imposition of reduced speed limits should result in a drop in the severity of injuries and of physical damage to vehicles.

The growing participation in car pools and increasing use of public transportation facilities accompanying these factors must again produce more favorable results.

With these considerations in mind, it is incumbent upon your industry to equitably measure the savings which will accrue and pass those savings on to your policyholders.

Including trend factors in your rate filings is an attempt to make rates prospectively. We firmly believe that at this juncture, rate adjustments should be made in the light of almost certain reductions in dollar losses.

Please direct your member companies to vigorously pursue research designed to accomplish the following:

1. An immediate reduction in rates for all lines of automobile insurance.
2. Granting of rate credits for car pool participants.
3. The liberalization of policy contracts where necessary to eliminate avoidance of coverage in car pool situations.
4. The constant monitoring of statistical and trend data to more accurately and immediately reflect the experience of the business in this volatile period.

We are in a different position in Arkansas. Pennsylvania and New Jersey have a much larger market. It is very easy for the industry to focus attention on those States that do have a large market, but when you are a State like Arkansas you almost have to direct the industry to direct attention to our particular situation.

In December, the response was this—I have to say that we naively hoped for a voluntary substantive response on the part of the insurance industry, and this was our response from the industry, which I think would reflect filings which were made nationwide—there was only one filing that was made in Arkansas which probably was not made nationwide. One Arkansas company voluntarily reduced its rates 10 percent across the board.

The CHAIRMAN. I think we have the name.

Mr. MONROE. National Investors Fire & Casualty Co. It only had a half million dollars in premiums—a fairly small portion of the market.

Three companies promised to refund excess windfall profits, if any, at some time in the future. Those three companies were United States Fire & Casualty, Allstate, and Hartford. These were also filings which were made nationwide.

## CARPOOL DISCOUNTS

One rating bureau and three companies filed variations of discounts for carpooling which affected very few drivers in Arkansas. These four companies were the rating bureau, the insurance service organization, Aetna, and State Farm. The reason I say it affected very few drivers in Arkansas is for this reason: the insurance services offices filing did not help young drivers. Young drivers could participate in carpools all they wanted to, but that classification was not affected. It did not affect drivers in 1-A, which is the normal classification. It only affected the classes of drivers 1-B, 1-C, where you have people trying to use their cars going to and from work. But the most discriminatory effect was against young drivers. There was no attempt to give any kind of rate credit to young drivers already having a difficult time paying for their car insurance. There would have to be four persons in a carpool before any credit is given, and all of those four people have to share the driving equally. In Arkansas, which has a widely dispersed population, it is very difficult to get four people to join in a carpool, and meeting this criteria is almost impossible.

The CHAIRMAN. How would they monitor?

Mr. MONROE. They have to sign some kind of certificate saying they do have four people in their carpool, which probably would lend itself to a little bit of fraud on the part of the public to take advantage of the carpool discount.

Quite obviously the response was inadequate in light of the continuing result in January. At this time there was reduction in speed limits in Arkansas. The reduction of fatalities in those States with speed limits reduced in November, 1973, was apparent, and the increased driving of those persons experienced an actual fuel shortage. We had not experienced an actual fuel shortage as you have here in the District of Columbia, but we were beginning to feel the pinch.

## RESPONSE TO 10-PERCENT REDUCTION

On January 17 we issued an order requiring the companies to reduce their rates by 10 percent by March 15. This is rather drastic action. We felt we had the authority to issue this order under insurance codes which does contemplate issuing orders without a hearing. Also, this was to increase the pressure and to make sure somebody looked at Arkansas' particular situation. We had received no response. We had received form letters from companies that had been written by some of the same people that circulated around some of the companies and we wanted somebody to take a look at our Arkansas experience.

We received the following response from our order: 30 companies said they would wait for insurance services offices to respond.

The CHAIRMAN. What is the insurance services?

Mr. MONROE. It is a rating bureau which files rates on behalf of 115 companies in Arkansas. They are the ratemaking body for 115 of the 300 companies we have in Arkansas.

The CHAIRMAN. It is a company group?

Mr. MONROE. Right.

The CHAIRMAN. And they were going to wait?

Mr. MONROE. They were going to wait for them to respond.

The CHAIRMAN. How did others react?

Do they usually react with promptness on the question of rate reduction?

Mr. MONROE. We probably have not had a rate reduction in Arkansas in about 15 years..

The CHAIRMAN. Are they fairly prompt when they want a rate increase?

Mr. MONROE. Very prompt.

Four companies requested a hearing, which is allowed under the code. Eleven said it was too early to reduce rates, and some of these were allowed on the previous replies, such as Allstate, State Farm, which had given these carpool discounts. Five companies combined, and of these, all wrote a very small portion of the market, I think about a total of about \$1 million in premiums. One company responded in this manner and I think it is really important to read this into the record.

Lumberman's Mutual Casualty Co. had an executive committee meeting on December 20.

The CHAIRMAN. It is a pretty big nationwide company.

Mr. MONROE. They are pretty large. They write a fairly large portion of the market.

They passed this resolution:

Resolved that it is the intention of the companies that unabsorbed premium refunds (dividends) will be allowed on the earned premium on automobile policies to reflect any extraordinary additions to surplus caused by the fuel shortage.

That was pretty vague language as far as I was concerned. And I really cannot understand what it meant. This was their response: They were going to try to respond and try to give something back. They did not offer any kind of formula. The only company that offered a formula for us to look at was United States F&G. The formula was designed in such a way it took into greater account the nationwide experience rather than State experience, and very doubtful in that situation that anybody in Arkansas would ever get a premium refund. So this, in our opinion, wasn't really a commitment to reduce rates, but it was repetitive of the industry's attitude.

We did not receive any review from the insurance services office. They ignored the January 18 order.

The CHAIRMAN. What is the insurance services office?

Mr. MONROE. The rating bureau. They just ignored the order and 30 companies were waiting for them for a reply.

#### ACTION TAKEN

So, on February 12, we set a hearing for 115 companies on March 6, at which time we will require that they file their present rates in light of both profits made in the past 3 years and almost certain prospective profits.

The trend in Arkansas, from the information we have gathered from the State police, the highway department, and other sources, indicate most graphically the frequency of accidents, the frequency of fatalities, and the number of fatalities and injuries in vehicles which have been reduced in our State.

Similar hearings have been set for all State Farm and Travelers from March 13 through 15. Additional hearings will be held for other companies.

Comments have been made that this will be setting a hearing for 350 companies. We don't think that is the case because about 15 or 20 companies write the majority of the business in Arkansas.

If we set hearings on those companies and make them justify their rates or rate levels which were approved in the past, we feel we can affect 99 percent of the market in our State.

We have directed insurance services offices and the companies to furnish the following information, some of which has been discussed today. We have not used the New Jersey rating formula, which has been described to you today.

#### COMPARISON OF FORMULAS

We are attempting to go to the rating formula. We feel like it is a better measure of profitability of the company.

The CHAIRMAN. The New Jersey formula?

Mr. MONROE. The New Jersey formula.

The CHAIRMAN. What do you think of the Pennsylvania formula?

Mr. MONROE. I think they are pretty close.

I do not think there is very much difference. I think we are all in agreement on the formula.

Since 1967, we have taken into account investment income on unearned premiums, and now that is part of our statute in Arkansas.

But now the New Jersey formula goes one step further and takes into account investment income and loss reserves, which is a much more dramatic figure. The investment income of unearned premiums is really negligible in the rating formula.

The CHAIRMAN. Are these all component factors taken into account in the New Jersey formula?

Mr. SHEERAN. Yes, sir.

The CHAIRMAN. Are all of these factors related to part of the ingredient of your formula?

Mr. DENENBERG. Yes, sir.

Mr. MONROE. We feel that this is important information that should be developed.

This will be the first instance that any companies in Arkansas will ever be required to come in and justify present rate levels.

We do not think they can do it.

This additional information is requested for another reason.

Traditional methods of ratemaking are really not responsive. The conception of profitability, and total performance and net worth should be the measure.

We intend to look at the whole picture of an insurance performance in the rate hearings we have coming up and we recommend this approach to other regulators. We think the companies should be required to come in and justify their rate levels. We have plenty of authority to do this under the code, and we think this is a proper approach to use.

I am sorry I did not have a prepared statement—I prepared this last night—but I will be glad to furnish anything for the record.

The CHAIRMAN. We may want some additional things in writing. I think we jotted them down.

Would it be a fair summary, Mr. Monroe, to say your approach is fairly similar, as I hear it, to the New Jersey approach, except that you have ordered this instant 10 percent reduction? That serves, if nothing else, to get the attention of the companies rather quickly.

Mr. MONROE. This is right.

The CHAIRMAN. But in terms of holding hearings and making decisions in the next month or so, you are about in the same posture as the Commissioner from New Jersey.

Mr. MONROE. That is correct. I agree with Commissioner Denenberg and Commissioner Sheeran.

The monitoring system setup by the NAIC, as admitted in this document, to say this can be used for ratemaking purposes, why gather the statistics if—

The CHAIRMAN. The NAIC, which is the association of the insurance commissioners, specifically stated that this information is not to be used for ratemaking purposes.

Mr. MONROE. Their statement is similar.

Mr. SHEERAN. I might have it here.

The CHAIRMAN. What are they going to do with all of this information if it will have no real evaluation effect in determining proper rates?

Mr. MONROE. We have asked the same question.

The CHAIRMAN. Are you all members of that club?

Mr. DENENBERG. It is even smaller than the Senate. It has only 50 members. You can also use any statistical information in the writing. They say it cannot be used because it is not precise as to the typical rate statistics, but any indicator—you count the people going over a bridge and you try to use that in decreasing traffic.

The CHAIRMAN. In Arkansas what is the formula, statute, or regulation regarding excess profits?

Mr. MONROE. It is not spelled out as it is in the New Jersey formula. We have a lot of flexibility in the amount of information. We can request the recent addition of investment income on our premiums, which was just passed in our last session of the legislature, but we have authority to bring in all relevant data.

The CHAIRMAN. So you can establish what you consider, as the Commissioner, to be an excess or windfall profit.

Mr. MONROE. Yes, sir.

The CHAIRMAN. Let me ask all three of you a couple of questions as we go down the line.

#### EXCESS PROFITS

It was alleged in the debate on the Senate floor when we were considering an excess profits tax or a windfall profit tax for oil companies, that there are many hangups with an excess profits tax. One of the principal ones being if you go to the mechanism of trying to decide what is a legitimate profit, that it encourages the loading in of expenses so as to keep the profit down.

Would the rationale apply in this situation on ratemaking and insurance when we are trying to decide what is an exorbitant or an excessive profit?

Mr. Sheeran?

Mr. SHEERAN. I think so.

We have, I think, the same experience when we get into matters such as cost containment with hospitals. And we find that we have to be in control of almost every facet of that industry to make sure they just don't use all of the money that comes in, no matter how much it gives improved medical services. And I think the same kind of position would exist here.

The CHAIRMAN. So you have to be on guard against that even in the application of your New Jersey formula?

Mr. SHEERAN. Yes; I think, really, that it gets back to the same theory of fixing rates or making the company comply with that rate. If they manage well and make a good profit out of it—that is a reflection on their ability as a company.

The CHAIRMAN. Mr. Monroe, would you comment on that subject matter?

Mr. MONROE. I agree. In a way it is a difficult thing to assess, but I agree with Commissioner Sheeran.

Mr. DENENBERG. The insurance industry is different from most industries. It has a long tradition of rate regulations and a long tradition of annual statements and detailed reporting. So you would not run into the same kind of difficulty in regulating excess profits in the insurance industry as in other industries.

You do know what the companies have been spending. It could be essentially monitored. You would not get the same kind of difficulty.

The CHAIRMAN. That was my position. I was hoping it would be brought out.

If there was a precipitous increase in cost in a certain category in that company's operation, you have on file a whole history of patterns and practices, and you could ask: What did all of the expense accounts for your insurance liability accounts cover in a given year?

Mr. DENENBERG. That is correct.

Mr. MONROE. We have tried to assess this on a local basis. This is the main argument. The companies induce the inflationary trends and cost factors are just skyrocketing. This is offsetting any kind of break they are getting because of reduced driving habits. And we think on a local basis this is not true.

We do have a certain amount of information in repair cost and cost expense of companies. But if you are looking at the Arkansas experience—this might not be true for other States—but in Arkansas we think the reduced driving has had an effect on other factors and the inflationary trend. And I think it would be true in most rural States. It might not be true in the urban States, but if you are talking about the rural States, this would be a true statement.

Mr. SHEERAN. I think in an urban State that would hold true.

#### TREND DATA

The CHAIRMAN. In Arkansas, you have statistics coming in on travel, gas consumption, and accidents?

Mr. MONROE. Yes, sir.

The CHAIRMAN. As you currently have them: Can you give us any evaluation of those statistics in terms of what trend sign is indicated in terms of reduced fatalities and accidents?

Mr. MONROE. I will let Mr. Fennell answer this question.

Mr. FENNELL. Just very briefly, using records, there are past trends data here on frequency, showing a decrease beginning back in 1966 and almost steadily down to the end of 1972.

The CHAIRMAN. Is this fatalities?

Mr. FENNELL. This is claim frequency.

The CHAIRMAN. This claim frequency is by numbers?

Mr. FENNELL. Numbers. These data here in these graphs are from the State and city police—the city of Little Rock and the State police—showing this graph here, is the number of accidents in Little Rock.

This is the number of injuries in Little Rock. These are for North Little Rock.

Statewide, this is the fatality for 1972, 1973 takes a nose dive.

These are the injury statistics. 1973 takes a nose dive in the last two months of 1973—I am sorry, of January of 1974.

The CHAIRMAN. That is, fatalities take a nosedive since the so-called energy crisis.

How about accidents?

Mr. FENNELL. The number of accidents in 1972: a jump in December and went back down in January. In 1973, in December, it took a real nosedive, and, in January, continued on down very, very far below the 1972-73 period.

The CHAIRMAN. So, these are statistics you gathered from police departments and other sources in Arkansas?

Mr. FENNELL. Yes, sir.

The CHAIRMAN. In December of 1973 and in January of 1974, there was a nosedive decrease in both fatalities and accidents?

Mr. FENNELL. And injuries.

The CHAIRMAN. And injuries.

Mr. FENNELL. All three.

The CHAIRMAN. Fatalities, accidents, and injuries declined sharply.

Do you have any statistics for New Jersey that are relevant?

Mr. SHEERAN. I don't have them with me. I can tell you the statistics we have gathered indicate the same kind of trend.

The CHAIRMAN. They indicate the same nosedive of fatalities, accidents, and injuries.

What is the trend in Pennsylvania, Mr. Denenberg?

Mr. DENENBERG. Fatalities, as I indicated, are 40 percent down in January 1974 as compared with January 1973. The accident material is not in. There are also a lot of other statistics. They all indicate decreases.

The CHAIRMAN. A downward trend?

Mr. DENENBERG. Yes.

Mr. FENNELL. We have a traffic count about 9 percent decrease in January and about 20 percent decrease in the number of hazardous arrests by the State police. These are driving arrests, which is an indicator of the slow speed.

I drive 99 miles one way every 2 weeks, and the traffic has slowed down in volume and in speed amazingly.

The CHAIRMAN. Could I ask a general question of all three of you?

#### CONTINUATION OF DOWNWARD TREND

Based on such statistics as you have, and with respect to Dr. Denenberg—his statistics are not as pretty as the Arkansas figures, or even the New Jersey figures—but based on such data as you have, plus your experience as commissioners, and the study of the automobile liability field, are you satisfied that there has been, and, as long as the gasoline is tight, there will continue to be, a substantial reduction in automobile fatalities, accidents, and injuries?

[Yes, from all.]

Mr. FENNELL. So we are all satisfied with the basic premise that injuries, deaths, and accidents will go down.

#### PREMIUM REDUCTION APPROACH

What is in disagreement among the three of us is the mechanism of the method, gentlemen, of coping with that insofar as premium reduction is concerned.

Mr. DENENBERG. Yes.

Mr. SHEERAN. I don't think I disagree with the Arkansas position. The only disagreement—and it is not really disagreement—we have not taken the position that we can take a 10-percent reduction. That is the only basic difference.

Mr. DENENBERG. I don't disagree with Arkansas and New Jersey. I just think our approach is better. That would be the approach I would turn to for the second position.

The CHAIRMAN. You say if you are getting to the end of the line or cajoling and suggesting, if that avails not, then you may have to go to this attention-getting approach in order to get some interest and some compliance?

Mr. DENENBERG. I might indicate that one advantage of our approach is to the extent the companies come in and agree to refund profits. We have already done that and it goes back to January 1974.

If you are talking about hearings, you see the way it works. There is an order and they don't answer the letter. Then there is a hearing, and there has to be a transcript, and you will have to have an order and that is a 6-month process. Then you have lost half a year even if you move fairly quickly.

The CHAIRMAN. If you ordered a 10-percent reduction today in Pennsylvania you probably would get some immediate interest.

Mr. DENENBERG. No; they are smart enough to know I cannot order anything. I will order it right now. I order a 50-percent reduction. This is all it mentions. I don't have any authority to order reductions.

Arkansas apparently has a different statute. He ordered it and they did not answer his letters. So what would they do to me with no authority at all?

The CHAIRMAN. Thank you, gentlemen.

The committee will take a short recess.

[Subsequent to the hearing the following material was received:]

## ARKANSAS

DEPARTMENT OF COMMERCE  
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## A STAFF REPORT TO THE COMMISSIONER

Recent changes in conditions which affect Rate Making for Voluntary Private Passenger Automobile Coverages of Bodily Injury and Property Damage Liability, Medical Payments and Physical Damage.

Submitted By:

The Rating Division of the  
Arkansas Insurance Department

March 4, 1974

PURPOSE OF REPORT

The onset of a national energy crisis in November, 1973 brought about a drastic curtailment of the use of the automobile in the United States. On November 7, 1973 the President asked the people of this country to reduce their consumption of gasoline. Eighteen days later he announced a 15% reduction in the production of gasoline and asked gasoline stations to close on Sundays. Since the first of the year gasoline prices have been permitted to increase and gasoline station dealers have been requested to limit sales to 10 gallons per customer. The federal government also mandated a 55 mile per hour speed limit nationwide with which all states were in compliance by March 1, 1974. Arkansas complied with this mandate in January, 1974.

The present rate filing of Insurance Services Office of Arkansas ("ISO") for Voluntary Private Passenger Automobile Coverage of Bodily Injury and Property Damage Liability, Medical Payments, and Physical Damage (the "Filing") was filed in 1968. The result of the above mentioned governmental actions and the natural consequences of a drastic reduction in the amount of gasoline consumed by the driving public dictate a review of the Filing particularly in the light of its approximate six year age.

The purpose of the following report is to review the filing in the light of these changes and to evaluate their effect on automobile usage and hence automobile insurance rates. In preparing this report the Rating Division has gathered, compiled and reviewed numerous reports, statements, data and information from various governmental and non-governmental agencies and sources including the United States Department of Transportation, National Safety Council, Arkansas State Police records, news media and financial statements and other records, reports and documents on file with the Insurance Department.

#### STATUTORY AUTHORITY

Automobile insurance rates are made pursuant to Ark. Stat. § 66-3107 which provides that, "rates shall not be excessive, inadequate or unfairly discriminatory." (Subsection (d) In determining whether a particular rate filing meets the standards of Subsection (d), the statute further provides that, "due consideration shall be given to past and prospective loss experience within and outside this state, to catastrophe hazards, if any, to a reasonable margin for underwriting profit and contingencies, to dividends, savings or unabsorbed premium deposits allowed or returned by insurers to their policyholders, members or subscribers, to past and prospective expenses, both country wide and those especially applicable to this

State, income derived from the investment of unearned premiums and to all other relevant factors within and outside this State." (Subsection (a))

Ark. Stat. § 66-3112 provides for subsequent review of a filing by the Commissioner and sets forth the procedural requirements whereby such a review is brought about. Thus, any filing is subject to the continuing review of the Commissioner.

#### ARKANSAS AS A RATING DISTRICT

At the outset it is pertinent to establish certain information about the state for purposes of rate making. ISO, the largest rating bureau in the state, divides the state into three territories for rate making purposes. Rating Territory No. 1 is Pulaski County; Territory No. 2 is the greater portion of Sebastian County and a part of Crawford County; the remainder of the state is classified as Territories 5, 6 and 7. (Exhibit A) Arkansas is predominantly a rural state with low population density, except for a few counties in the state. (Exhibit B) In 1970 Arkansas had a population of 1,923,295. (Exhibit C) The population distribution in terms of rating districts was as follows:

Pulaski County	-	2,087,189
Sebastian County	-	79,237
Remainder of State	-	1,556,869

Vehicle registration records in 1972 (Exhibit D) indicate that there were 738,768 passenger vehicles registered in Arkansas and these vehicles were distributed as follows:

Pulaski County	-	137,104
Sebastian County	-	36,075
Remainder of State	-	565,589

Other relevant information relative to vehicle registration is also contained in Exhibit D.

#### REDUCED CONSUMPTION OF GASOLINE

In common with other states, Arkansas has experienced a substantial reduction in the amount of gasoline available for public consumption. Nationwide, there is said to be 15% less gasoline available at the present time than in the previous year. Reallocations of gasoline by the Federal Energy Office have been necessary to avoid critical shortages in this state during January and February, 1974.

In addition to the reduced availability of gasoline, the price per gallon of regular gasoline has shown a drastic increase in recent months. Information from the Division of Weights and Measures of the Commerce Department for the State of Arkansas indicates a state-wide average retail price increase of 9.9 cents per gallon of regular gasoline

for the period May 15, 1973 through February, 1974. Sample statistics further indicate that the majority of this increase occurred in November and December of 1973 and January of 1974. (Exhibit E) In addition to the price increase cited above, the Federal Energy Office, on February 26, 1974, predicted that service stations would increase the price per gallon by 3 cents during the month of March. It is anticipated that the higher cost of gasoline will further reduce its consumption in this state and nationwide.

It is anticipated that these two factors, i.e. reduction in the amount of gasoline available and higher prices at the retail level, will continue to keep more and more cars off the nation's roads and highways. Based on a traffic survey in December, 1973, the Federal Highway Administration is now predicting that there will be a zero per cent (0%) annual increase in traffic compared to the normal annual increase of 5%.

Information available and public statements of Federal and State energy officials indicate that the reduced availability of gasoline and higher prices will continue, with some predictions that the situation will worsen. However, even at present levels of reduced consumption, it is apparent that there are and will continue to be substantially fewer automobiles on the nation's highways in the months and years to come.

REDUCED USAGE OF MOTOR VEHICLES

While there is little statistical data available as to "automobile counts" on the streets and highways since the emergence of the energy crisis, the information available reflects there has been a reduction. Statistics provided by the Division of Planning and Research of the Arkansas Highway Department compare traffic counts on all Arkansas roadways for the period November 30th - December 6th, 1973 with the period of December 1 - December 7, 1972. (Exhibit F). This count, taken even before the full impact of the energy crisis was felt, reflects a 2.9% reduction in Saturday driving and an 11.91% reduction in Sunday driving between the two comparison periods. Weekday travel showed a slight increase of 0.33%. A recent count compares the period of February 11 - February 17, 1974 with the period of February 12 - February 18, 1973. (Exhibit G). This count reflects an 8.2% decrease in Saturday driving, a 12.3% decrease in Sunday driving, and the weekday travel showed an overall decrease of 2.1%. The significant percentage reductions in the Sunday counts may be attributable to the fact that hardly any gasoline stations are now open on Sundays in Arkansas.

Another indicator of the reduced usage of private passenger automobiles can be found in the statistics gathered at the major recreation centers in this state

by the Arkansas Department of Parks and Tourism. (Exhibit H). These statistics reflect a drastic reduction in the use of the State's parks and recreational areas in October, November, and December, 1973 and January, 1974, over the same four month period for the previous year. These statistics support the anticipation of reduced use of recreational facilities as a direct result of the energy crisis.

Since the onset of the energy crisis authoritative sources have predicted a reduction in the number of automobile accidents and the severity thereof. For example, the National Safety Council has predicted a reduction of 20% - 25% in automobile accident deaths in 1974. These predictions were based upon reduced usage of the automobile in the light of the energy crisis and voluntary and involuntary reduced consumption of gasoline. These predictions have proved valid in the light of experience to date.

The National Highway Traffic Safety Administration of the Department of Transportation in a Release dated January 27, 1974 reported:

"The Department of Transportation's National Highway Traffic Safety Administration says its figures for December confirm its earlier reports that states which had lowered maximum speed limits are showing a significant reduction in highway fatalities. In addition, voluntary reduction of highway speeds and a decrease in total driving may be having a further effect in lowering highway deaths nationwide.

"Administrator, Dr. James B. Gregory said his agency earlier reported a 15 - 20 per cent drop in fatalities among those States which had reduced their speed limits in November. The 18 states which had lower maximum speed limits in December have shown an overall reduction of 25 per cent in fatalities below December 1972.

"In the 32 States which had not lowered their speeds, there was an overall reduction of 12 per cent, which Dr. Gregory says may well be due to voluntary action on the part of motorist in reducing speeds, and to reduce the travel as a result of the energy shortage. The total December reduction for the entire nation was 16 per cent below the same month in 1972." (Exhibit I).

In an appearance before the United States Senate Committee on the District of Columbia, on February 22, 1974, Dr. Gene A. Mannella, Associate Administrator for Research and Development, National Highway Traffic Safety Administration, stated:

"Gasoline conservation efforts have clearly had a marked effect on traffic fatalities. The fatalities in the fifty states in November dropped 3.5% from the preceding year, in December the reduction was 16.8%, and in January of 1974, it was 22.6%. The bulk of this reduction is attributed to the reduced supply of gasoline available to the driving public and reduced speeds on the highway resulting from lowered speed limits and voluntary compliance with the President's request.

"While the lowered gasoline supply accounts for much of the reduced traffic fatalities, there is evidence that the lowered speed limits also contribute substantially. Fatalities in states having lowered speed limits during the three months of November, December and January were 23.5% below the preceding year while the reduction during this period for those states not lowering speed limits was 8.9%.

"In November, 1973, the nine States that had enforced lowered speed limits by November 21 experienced a 17.4% reduction in traffic fatalities from November, 1972 compared with a 1.2% reduction for other States. In December, 1973 the 18 states that had enforced lowered speed limits by December 22 experienced a 25.1% reduction compared with a 12.5% reduction in 32 states which had not reduced the limits. In January, 1974, the 25 states that had enforced lowered speed limits by January 22, experienced a 24.4% reduction compared with a 20.4% reduction in the other States."

Available information relative to Arkansas experience is consistent with the experience cited by Dr. Mannella. The Arkansas State Police Department reported a reduction of 33.5% in traffic accidents in December, 1973 over December, 1972 (1972: 1,562; 1973: 1,039) and 13.84% in January, 1974 over January, 1973 (1974: 1,150; 1973: 990). For the same periods fatalities were reduced by 4% and 29% respectively. (Exhibit K).

#### CONCLUSION

Available information and data reflect a substantial reduction in the use of the private passenger automobile and a concomitant reduction in automobile accident frequency and fatalities. Such a reduction may be anticipated to continue for as long as the shortage of gasoline continues.

#### RECOMMENDATION

There appear to be two alternative choices in respect of the filing and the anticipated windfall profits to auto-

mobile insurers from current rates: A refund of any excess profits at the end of the year or an immediate decrease in rates based upon a reasonable judgment of what the anticipated experience will be. There is precedent for an immediate reduction. An example is the introduction of gasoline rationing during World War II. While not precisely comparable to the present situation the World War II experience, may at least be considered in the light of current conditions. It was apparent at that time that the restriction in the use of automobiles would be likely to affect the accident frequency while rationing prevailed. Accordingly, automobile insurance rates were reduced in anticipation of lower premium requirements. Current conditions indicate a similar outlook.

Although the experience of the last several months might support a greater reduction in automobile rates, the Rating Division believes a reduction of 10% of the Filing would be appropriate.

Our reasons for recommending a reduction in rates now are as follows:

1. Statutorily and under long standing practice of this and other insurance departments, automobile insurance rates are established prospectively rather than on an experience refund basis.

2. There is a demonstrated probability that insurers will profit excessively from the drastic curtailment of



# TERRITORY DEFINITIONS

**ARKANSAS**  
(State Code 03)

	Territorial Schedule and Code	
<b>CRAWFORD COUNTY</b> —see Fort Smith and Remainder of State.		
<b>CRITTENDEN COUNTY</b> —(entire County)	05	
<b>FAULKNER COUNTY</b> —(entire County)	06	
<b>FORT SMITH</b> territory comprises the entire city of Fort Smith and all territory and places lying within the area enclosed by the outside boundaries of the following city and townships in Crawford County	02	
Dora	Van Buren (city and township)	
and all territory and places lying within the area enclosed by the outside boundaries of the following townships in Sebastian County		
Lon Norris	Upper	Mont Sandals
<b>GRANT COUNTY</b> —(entire County)	06	
<b>JEFFERSON COUNTY</b> —(entire County)	06	
<b>LEE COUNTY</b> —(entire County)	05	
<b>LITTLE ROCK</b> territory comprises all of Pulaski County	01	
<b>LONOKE COUNTY</b> —(entire County)	06	
<b>MISSISSIPPI COUNTY</b> —(entire County)	05	
<b>PULASKI COUNTY</b> —see Little Rock.		
<b>ST. FRANCIS COUNTY</b> —(entire County)	05	
<b>SALINE COUNTY</b> —(entire County)	06	
<b>SEBASTIAN COUNTY</b> —see Fort Smith and Remainder of State.		
<b>REMAINDER OF STATE</b>	07	

**LIST OF IMPORTANT CITIES AND TOWNS**

The following list contains all the more important cities, towns, boroughs, and villages in the state, together with their counties and territory and code assignments.

City and County	Territorial Schedule and Code	City and County	Territorial Schedule and Code
<b>A</b>			
Alma, Crawford	07	Cabot, Lonoke	06
Arkadelphia, Clark	07	Camden, Ouachita	07
Arkansas City, Desha	07	Cammack Village, Pulaski	01
Ashdown, Little River	07	Cardsie, Lonoke	06
Atkins, Pope	07	Charleston, Franklin	07
Augusta, Woodruff	07	Clarendon, Monroe	07
<b>B</b>			
Bald Knob, White	07	Clarksville, Johnson	07
Batesville, Independence	07	Coal Hill, Johnson	07
Bearden, Ouachita	07	Conway, Ludker	06
Beebe, White	07	Corning, Clay	07
Benton, Saline	06	Cotter, Baxter	07
Bentonville, Benton	07	Cotton Plant, Woodruff	07
Berryville, Carroll	07	Crossett, Ashley	07
Bigheville, Mississippi	04	<b>D</b>	
Booneville, Logan	07	Danville, Yell	07
Brinkley, Monroe	07	Dardanelle, Yell	07
		De Queen, Sewier	07

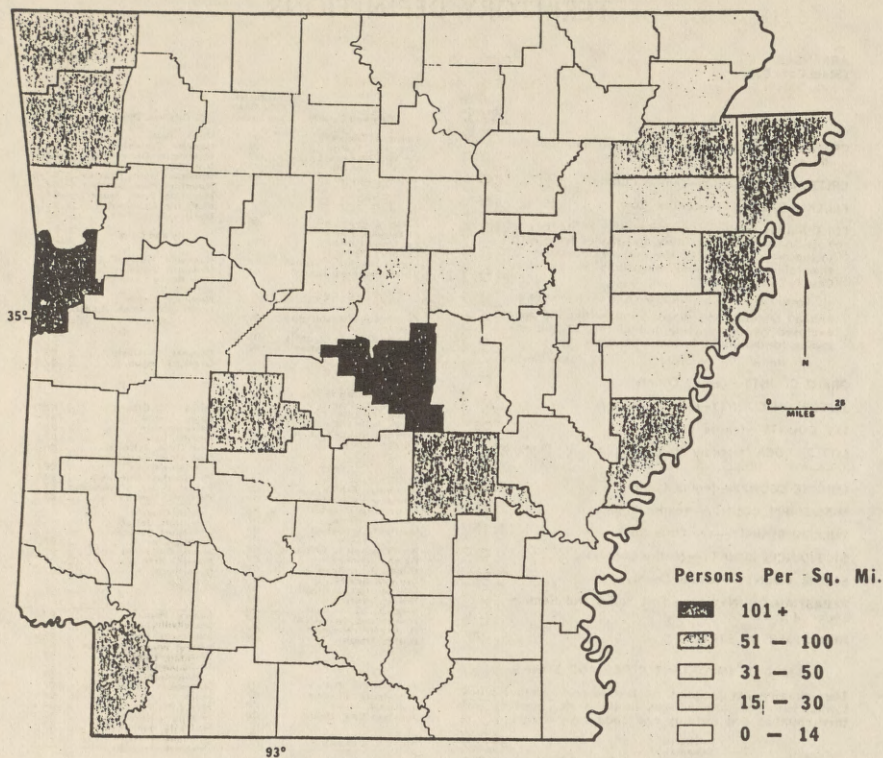
City and County	Territorial Schedule and Code	City and County	Territorial Schedule and Code
Dermott, Chicot	07	Mena, Polk	07
Des Arc, Prairie	07	Monette, Craighead	07
De Well, Arkansas	07	Monterello, Drew	07
Dierks, Howard	07	Morrilton, Conway	07
Dumas, Desha	07	Mountain Home, Baxter	07
		Mountain Pine, Garland	07
		Mountain View, Stone	07
		Mulberry, Crawford	07
		Murfreesboro, Pike	07
<b>E</b>			
Farle, Crittenden	05	<b>N</b>	
El Dorado, Union	07	Nashville, Howard	07
England, Lonoke	06	Newport, Jackson	07
Eudora, Chicot	07	New Rocky Comfort,	07
Lurid Heights, Garland	07	Little River	07
Eureka Springs, Carroll	07	Norphlet, Union	07
		North Little Rock, Pulaski	01
<b>F</b>			
Fayetteville, Washington	07	<b>O</b>	
Fordyce, Dallas	07	Osceola, Mississippi	05
Forest City, St. Francis	05	Orark, Franklin	07
Fort Smith, Sebastian	02	<b>P</b>	
<b>G</b>			
Gillett, Arkansas	07	Paragould, Greene	07
Glenwood, Pike	07	Parrs, Logan	07
Goold, Lincoln	07	Parkin, Cross	07
Green Forest, Carroll	07	Piggott, Clay	07
Greenwood, Sebastian	07	Pine Bluff, Jefferson	06
Gurdon, Clark	07	Pine Bluff Southeast,	06
<b>H</b>			
Hamburg, Ashley	07	Jefferson	06
Hampton, Calhoun	07	Pocahontas, Randolph	07
Harrisburg, Poinsett	07	Prarie Grove, Washington	07
Harrison, Boone	07	Prescott, Nevada	07
Hartford, Sebastian	07	<b>R</b>	
Hazen, Prairie	07	Rector, Clay	07
Heber Springs, Cleburne	04	Rison, Cleveland	07
Helena, Phillips	07	Rogers, Benton	07
Hope, Hempstead	07	Russellville, Pope	07
Horatio, Sevier	07	<b>S</b>	
Hot Springs, Garland	07	Scary, White	07
Hope, Lawrence	07	Sheridan, Grant	06
Hughes, St. Francis	05	Sherwood, Pulaski	01
Huntington, Sebastian	07	Silham Springs, Benton	07
Huntsville, Madison	07	Smackover, Union	07
Hutlog, Union	07	South Fort Smith,	02
<b>J</b>			
Jacksonville, Pulaski	01	Springdale, Washington	07
Jonesboro, Craighead	07	Stamps, Lafayette	07
Judson, White	07	Star City, Lincoln	07
Junction City, Union	07	Stephens, Ouachita	07
		Stuttgart, Arkansas	07
<b>L</b>			
Lake Village, Chicot	07	<b>T</b>	
Leachville, Mississippi	05	Texasiana, Miller	07
Lepanto, Poinsett	07	Thornton, Calhoun	07
Leslie, Seary	07	Trumann, Poinsett	07
Lewisville, Lafayette	07	Tuckerman, Jackson	07
Little Rock, Pulaski	01	<b>V</b>	
Lonoke, Lonoke	06	Van Buren, Crawford	02
Luxora, Mississippi	05	<b>W</b>	
<b>M</b>			
McCrory, Woodruff	07	Waldo, Columbia	07
McGhee, Desha	07	Waldron, Scott	07
Marion, Columbia	07	Walnut Ridge, Lawrence	07
Marion, Hot Spring	07	Warren, Bradley	07
Marion, Mississippi	05	West End, Jefferson	06
Marshall, Scott &		West Helena, Phillips	07
Sebastian	07	West Memphis, Crittenden	05
Marion, Lee	05	Widmar, Drew	07
Marked Tree, Poinsett	07	Wilson, Mississippi	05
Marshall, Seary	07	Wynne, Cross	07
Marvell, Phillips	07		

NOTE: Refer to an atlas or map for places not listed.

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EXHIBIT A



## POPULATION DENSITY, 1970

SOURCE: U.S. CENSUS OF POPULATION, 1970

EXHIBIT B

## POPULATION DENSITY

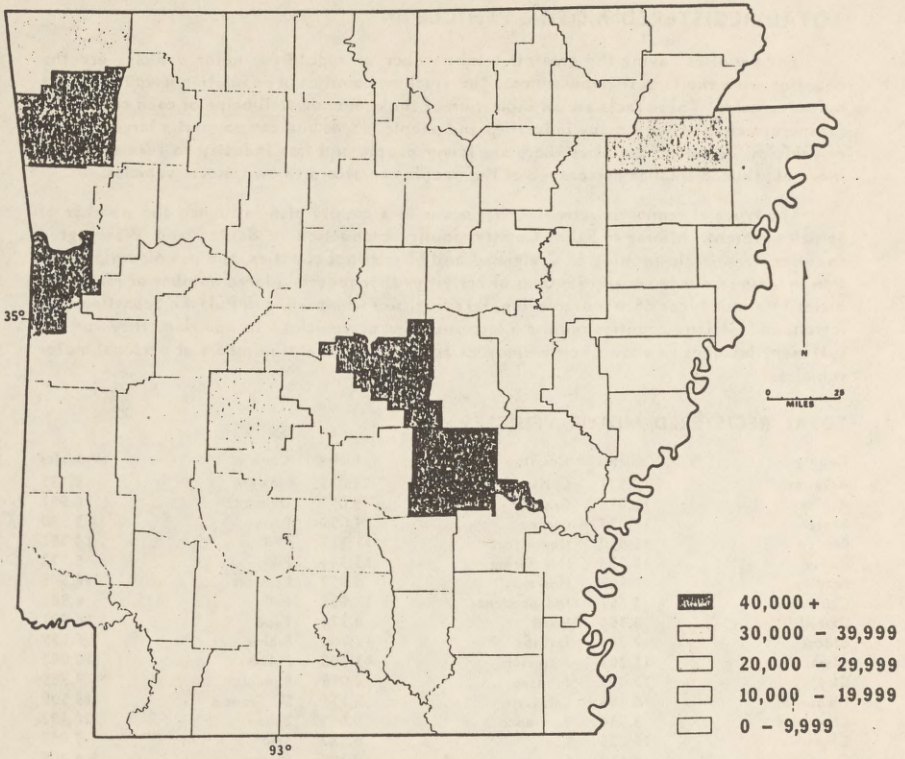
County	Persons per sq. mi.	County	Person per sq. r
Arkansas	23.0	Lee	31.1
Ashley	26.9	Lincoln	22.9
Baxter	28.5	Little River	23.0
Benton	59.3	Logan	23.4
Boone	32.5	Lonoke	33.0
Bradley	19.6	Madison	11.4
Calhoun	8.9	Marion	12.0
Carroll	19.7	Miller	53.6
Chicot	28.2	Mississippi	68.7
Clark	24.5	Monroe	25.8
Clay	29.4	Montgomery	7.5
Cleburne	18.7	Nevada	16.4
Cleveland	11.0	Newton	7.1
Columbia	33.8	Ouachita	42.0
Conway	30.0	Perry	10.2
Craighead	72.7	Phillips	58.4
Crawford	43.1	Pike	14.5
Crittenden	79.1	Poinsett	35.3
Cross	31.7	Polk	15.5
Dallas	14.9	Pope	35.2
Desha	25.5	Prairie	15.5
Drew	18.2	Pulaski	375.4
Faulkner	49.3	Randolph	19.5
Franklin	18.4	St. Francis	48.5
Fulton	12.7	Saline	49.9
Garland	82.3	Scott	9.1
Grant	15.4	Searcy	11.6
Greene	42.7	Sebastian	150.4
Hempstead	26.6	Sevier	21.6
Hot Spring	35.4	Sharp	14.2
Howard	20.1	Stone	11.2
Independence	30.2	Union	43.3
Izard	12.9	Van Buren	11.8
Jackson	32.5	Washington	80.8
Jefferson	97.7	White	37.7
Johnson	20.3	Woodruff	19.6
Lafayette	19.2	Yell	15.3
Lawrence	27.7		
		STATE	37.0

TOTAL RESIDENT POPULATION: ACTUAL 1960 AND 1970;  
ESTIMATED 1971 AND 1972

Area	1960		Estimates		Percent Change	
	1960	1970	1971	1972	1960-1970	1970-1972
ARKANSAS	1,166,717	1,523,295	1,551,000	1,579,000	7.7	2.8
Adair	21,111	25,317	23,100	22,200	-	-4.8
Adams	21,111	21,976	25,100	25,700	3.1	0.8
Adcock	25,914	15,319	17,500	17,500	51.1	15.1
Adrian	56,272	56,378	52,200	51,100	32.2	7.7
Adwell	16,116	19,072	19,700	19,700	16.3	3.3
Ady	11,079	17,778	12,400	13,000	-8.9	1.7
Ady	1,991	5,573	5,500	5,200	-7.0	-7.1
Ady	11,981	12,301	12,100	12,000	0.0	0.0
Ady	12,000	12,161	12,600	17,100	-1.3	-5.8
Ady	29,900	21,537	21,500	21,200	2.8	-1.6
Ady	21,258	18,771	19,600	19,800	-11.7	5.5
Ady	8,809	10,349	10,800	11,700	14.2	13.1
Ady	6,711	6,095	6,300	6,300	6.0	0.0
Ady	26,100	25,712	26,700	26,500	-1.7	2.0
Ady	16,100	16,805	16,800	17,000	8.2	1.2
Ady	11,104	52,069	51,700	56,700	10.1	8.9
Ady	21,100	25,677	26,900	27,100	20.4	6.9
Ady	11,100	48,106	47,200	46,800	1.1	-2.6
Ady	19,111	18,783	19,700	19,300	1.2	-2.5
Ady	10,111	10,227	10,300	10,500	-1.8	4.5
Ady	20,111	18,761	18,500	17,900	-9.7	-4.8
Ady	15,111	15,157	14,800	15,100	-0.1	-0.3
Ady	21,101	21,572	22,900	23,700	79.0	6.8
Ady	10,111	11,101	11,200	11,200	10.7	0.0
Ady	2,611	7,699	8,400	8,300	15.7	8.1
Ady	10,697	54,111	56,400	57,700	15.9	6.5
Ady	8,111	9,711	10,300	10,800	17.1	11.0
Ady	2,111	21,765	25,800	26,400	-1.7	6.5
Ady	19,611	18,300	19,500	19,500	-1.8	0.8
Ady	10,111	21,963	22,000	22,700	0.3	3.5
Ady	10,111	11,112	12,000	12,600	4.9	10.7
Ady	22,723	22,723	23,500	23,900	13.3	8.2
Ady	1,111	7,381	7,800	8,400	9.1	14.0
Ady	20,111	20,111	21,500	21,500	-10.5	5.1
Ady	23,700	23,700	23,700	23,700	4.5	-2.7
Ady	13,610	13,610	13,700	14,500	9.7	6.3
Ady	10,010	10,010	9,800	9,300	-9.2	-6.9
Ady	16,320	16,320	16,700	17,200	-5.5	5.2
Ady	18,883	18,883	18,800	18,000	-16.1	-4.5
Ady	12,813	12,813	12,700	12,300	-10.6	-4.7
Ady	11,111	11,111	11,800	11,700	21.5	4.5
Ady	16,789	16,789	17,300	17,300	5.2	2.9
Ady	26,210	26,210	27,200	27,200	6.9	3.6
Ady	8,400	8,400	8,400	8,400	1.2	-1.4
Ady	2,000	2,000	2,000	2,000	15.0	13.7
Ady	31,385	33,385	31,800	33,500	5.1	0.5
Ady	67,000	67,000	61,000	61,000	-11.6	-7.1
Ady	15,000	15,000	15,000	14,500	-9.6	-7.4
Ady	10,111	10,111	10,100	10,100	8.4	0.6
Ady	5,811	5,811	5,800	5,800	-5.5	1.6
Ady	29,600	29,600	29,600	29,600	-2.4	-1.1
Ady	5,631	5,631	5,900	6,200	11.3	10.6
Ady	10,016	10,016	10,000	10,000	-9.0	-3.9
Ady	9,711	9,711	9,200	9,200	10.8	5.8
Ady	27,100	27,100	27,100	27,100	13.0	2.1
Ady	13,297	13,297	13,100	13,100	11.0	3.1
Ady	28,607	28,607	28,100	28,100	35.1	11.6
Ady	10,115	10,115	10,500	10,500	-2.5	2.8
Ady	283,888	283,888	283,888	283,888	19.7	3.7
Ady	12,815	12,815	11,800	11,800	1.0	1.9
Ady	29,799	29,799	29,700	29,700	-7.5	-
Ady	38,100	38,100	38,100	38,100	-21.7	6.8
Ady	8,700	8,700	8,700	8,700	-12.5	8.9
Ady	7,711	7,711	8,000	8,000	-4.8	1.8
Ady	80,000	79,211	80,000	82,100	12.8	3.4
Ady	11,111	11,111	11,100	11,000	11.0	6.8
Ady	8,211	8,211	8,200	8,200	30.3	16.8
Ady	7,211	7,211	7,200	7,200	8.6	5.9
Ady	11,100	11,100	11,000	11,000	8.7	-2.2
Ady	8,800	8,800	8,800	8,800	14.5	7.1
Ady	22,110	22,110	22,100	22,100	16.7	4.6
Ady	11,100	11,100	11,100	11,100	18.9	8.8
Ady	10,700	11,100	10,700	10,700	-17.1	-10.3
Ady	14,700	14,700	14,700	15,000	18.0	5.3

Figures rounded to nearest April 1 and the estimates as of July 1. State estimates are shown to the nearest thousand; county estimates to the nearest hundred.

Source: Prepared by the author for the Census Bureau, University of Arkansas, under the auspices of the U.S. Census Bureau's Federal Statistical Program for Local Government Information.



## TOTAL REGISTERED MOTOR VEHICLES, 1971

INCLUDES PASSENGER VEHICLES, PICKUPS, TRUCKS, AND MOTORCYCLES

SOURCE: ARKANSAS STATE HIGHWAY DEPARTMENT

EXHIBIT D

## TOTAL REGISTERED MOTOR VEHICLES

The counties having the greatest total number of registered motor vehicles are the counties with the largest populations. The smallest counties in population have the fewest motor vehicles. These facts are an indication of the economic well-being of each county. A prosperous county, with many industries and people, needs and can support a large number of vehicles. In poorer counties there are fewer people and less industry to furnish higher incomes; thus, a smaller percentage of the people can afford to own motor vehicles.

The types of economic activities that occur in a county also influence the number of vehicles present. Mining in Saline County, poultry production in Benton and Washington counties, large-scale farming in Craighead and Mississippi counties, and petroleum production in Union County are all examples of activities that require a large number of motor vehicles. Various types of manufacturing, retailing, and wholesaling in Pulaski, Sebastian, Jefferson, and Garland counties require a large number of vehicles. In addition, they furnish sufficient incomes to allow their employees to purchase greater numbers of personal motor vehicles.

## TOTAL REGISTERED MOTOR VEHICLES

County	Vehicles	County	Vehicles	County	Vehicles
Arkansas	15,531	Garland	33,075	Newton	3,135
Ashley	12,898	Grant	6,051	Ouachita	16,991
Baxter	11,087	Greene	14,059	Perry	3,500
Benton	33,470	Hempstead	11,111	Phillips	14,962
Boone	12,794	Hot Spring	13,384	Pike	5,373
Bradley	7,162	Howard	6,978	Poinsett	14,545
Calhoun	2,651	Independence	13,953	Polk	8,962
Carroll	8,764	Izard	4,373	Pope	16,787
Chicot	7,368	Jackson	11,706	Prairie	6,185
Clark	11,281	Jefferson	41,560	Pulaski	176,082
Clay	12,095	Johnson	8,055	Randolph	7,385
Cleburne	6,983	Lafayette	5,171	St. Francis	13,509
Cleveland	3,534	Lawrence	9,949	Saline	20,133
Columbia	13,225	Lee	6,682	Scott	5,058
Conway	9,410	Lincoln	5,305	Searcy	4,205
Craighead	30,370	Little River	6,684	Sebastian	49,738
Crawford	15,286	Logan	10,522	Sevier	7,015
Crittenden	21,124	Lonoke	14,716	Sharp	5,718
Cross	10,054	Madison	5,559	Stone	3,831
Dallas	5,255	Marion	4,529	Union	26,980
Desha	8,763	Miller	18,358	Van Buren	4,831
Drew	7,690	Mississippi	28,537	Washington	48,413
Faulkner	17,189	Monroe	6,990	White	22,822
Franklin	7,237	Montgomery	3,907	Woodruff	5,554
Fulton	4,601	Nevada	5,612	Yell	8,410
				STATE	1,092,772

## TOTAL MOTOR VEHICLE REGISTRATION, 1960, 1970 AND 1972

Area	TOTAL MOTOR					Registration by Type of Vehicle		
	1960	Number		Percent Change		1972		
		1970	1972	1960-1970	1970-1972	Passenger Vehicles*	Trucks	Motor- cycles
ARKANSAS	696,000	1,059,183	1,091,428	62.2	3.3	738,768	325,842	29,818
Akron	11,083	15,133	15,556	39.2	0.8	8,827	6,266	463
Ashley	8,301	12,613	12,769	57.3	1.0	8,177	4,454	134
Baxter	1,731	10,096	11,530	113.2	14.2	8,044	3,236	253
Benton	16,609	31,735	33,720	70.8	6.3	22,698	9,818	1,213
Bonne	8,721	12,161	13,081	42.9	5.0	8,130	4,615	336
Buick	2,395	6,957	6,753	78.0	-2.9	4,158	2,167	128
Calhoun	1,871	2,519	2,600	38.2	2.0	1,628	916	86
Carrroll	5,663	8,129	8,519	48.8	1.1	3,226	3,038	255
Chicot	5,297	7,242	7,232	36.7	-0.1	4,772	2,409	51
Clara	2,159	11,065	10,704	49.3	-3.3	7,069	3,275	360
Clay	5,825	11,570	12,419	17.2	7.3	7,927	4,264	228
Cleburne	3,979	6,474	7,314	62.8	13.4	4,263	2,813	288
Cleveland	2,317	1,137	3,004	45.8	5.5	2,137	1,379	89
Columbia	8,587	11,093	13,077	32.3	-0.2	8,866	3,763	358
Cotton	5,600	8,883	9,095	58.6	2.3	5,812	3,051	189
Crawford	15,554	29,191	30,441	49.3	4.3	21,246	8,171	1,091
Crawford	8,299	11,121	15,708	61.3	8.9	9,931	5,179	498
Crittendon	12,705	20,110	20,993	59.8	2.9	15,050	5,290	753
Cross	6,114	9,755	9,873	59.4	1.2	4,877	3,527	249
Dallas	3,845	5,895	5,272	35.6	-9.5	3,610	1,523	134
De Soto	6,387	8,761	8,433	27.2	-3.8	5,419	2,983	131
Desha	1,820	2,657	7,610	61.1	-0.6	1,850	2,628	132
DeWitt	9,139	16,731	17,392	72.0	7.2	11,638	5,312	412
Franklin	1,714	2,404	7,193	48.5	2.7	4,291	2,717	185
Fulton	3,450	4,790	4,690	39.4	-6.6	2,621	1,929	120
Garland	20,185	31,590	33,318	54.0	5.5	24,167	7,762	1,088
Grant	3,521	5,473	6,158	61.7	8.2	3,761	2,201	196
Greene	8,681	13,332	13,918	37.4	4.5	9,391	4,109	448
Hempstead	2,364	10,797	11,006	46.6	1.9	7,003	3,745	178
Holt Spring	8,737	13,016	13,231	49.4	2.2	8,731	4,251	246
Howard	1,151	6,621	7,325	48.8	10.6	1,111	2,335	116
Independence	8,240	13,670	14,323	65.9	4.8	6,836	6,053	431
Iber	2,554	3,945	4,669	48.4	18.4	2,717	1,875	77
Jefferson	9,166	11,304	11,171	19.4	1.5	7,278	3,805	348
Jefferson	25,805	41,723	42,193	58.6	2.2	20,178	19,177	1,100
Johnson	5,711	7,322	7,912	18.7	2.1	5,018	2,762	99
Justice	3,712	5,161	5,132	37.9	-0.4	3,192	1,846	91
Lewis	6,161	8,541	8,927	47.7	4.0	6,321	3,442	156
Lico	5,822	6,508	6,611	30.4	0.4	4,190	2,311	81
Linn	3,210	2,379	2,182	12.1	-3.5	2,101	1,816	122
Little River	3,118	6,298	6,464	88.7	8.0	1,009	2,610	185
Lucas	6,727	10,880	10,111	48.7	3.3	6,133	3,797	184
Lumber	9,071	11,009	11,998	61.3	7.1	9,352	5,320	326
Madison	3,409	5,236	5,617	37.5	7.2	2,993	2,602	122
Madison	7,608	11,270	11,684	68.8	8.1	5,756	3,552	76
Mail	11,051	12,978	12,850	27.9	-0.7	12,401	4,771	590
Mississippi	22,847	27,966	27,135	21.9	-3.0	20,010	6,614	509
Monroe	1,823	7,001	6,615	45.2	-5.1	4,131	2,409	102
Montgomery	2,273	3,618	3,731	59.2	3.2	2,088	1,518	98
Nevada	3,789	5,432	5,187	23.4	-4.0	3,163	1,918	106
Newton	1,532	2,911	3,111	97.8	3.8	1,626	1,471	44
Oak Ridge	11,851	16,796	17,039	41.7	1.4	11,686	4,974	379
Ozark	1,781	3,300	3,504	85.0	6.3	2,082	1,383	43
Phillips	13,327	11,881	15,138	31.1	1.7	10,134	4,182	508
Pike	1,011	5,730	5,452	30.1	4.4	3,292	2,148	129
Poinsett	11,711	11,146	13,088	25.6	-11.1	9,179	4,503	306
Polk	5,161	8,426	8,903	58.0	3.2	5,118	3,555	202
Pope	8,841	16,019	16,460	81.1	5.1	10,928	5,441	450
Pratt	1,941	6,990	8,085	51.9	1.8	3,293	2,670	122
Putnam	103,676	171,796	173,263	63.7	1.1	127,104	26,917	6,212
Randolph	5,263	7,003	7,212	30.1	3.4	4,501	2,530	208
St. Francis	9,159	13,687	13,216	14.7	-3.5	9,248	3,725	241
Saline	11,111	10,257	19,188	72.2	1.2	12,918	5,712	817
Scott	3,012	1,977	5,183	65.2	3.3	2,868	2,103	112
Sevier	2,637	4,127	4,281	50.3	3.7	3,217	1,918	84
Sevier	10,917	16,203	20,291	56.1	4.1	16,075	17,422	1,744
Sevier	1,736	6,630	1,258	56.5	9.6	4,291	2,407	170
Sharp	2,891	5,082	5,870	75.8	15.5	3,810	1,954	106
Shaw	2,652	3,631	3,741	39.2	1.4	1,978	1,206	87
Union	21,187	26,521	26,133	25.1	-1.6	18,711	7,290	892
Van Buren	2,801	4,104	4,999	61.5	6.4	2,783	2,943	73
Washington	21,832	47,184	44,637	82.7	2.8	32,312	14,702	1,492
White	13,732	22,194	23,321	60.2	6.0	14,720	7,855	648
Woodruff	1,555	5,817	5,560	72.5	-4.0	3,399	2,051	130
Yell	1,757	8,128	8,408	70.9	3.4	5,130	2,155	123

\*Includes passenger cars, taxicabs, commercial and other buses, and ambulances and hearses.

Source: Compiled from data of Arkansas State Highway Department, Division of Statistics and Analysis, calendar year 1960, and Division of Planning and Research, calendar year 1970 and 1972, Motor Vehicle Registration by Counties (Little Rock).

## ARKANSAS



DEPARTMENT OF COMMERCE  
DIVISION OF WEIGHTS AND MEASURES  
WEIGHTS AND MEASURES CENTER  
4608 WEST 61ST STREET  
LITTLE ROCK, ARKANSAS 72209

SAM F. HINDSMAN  
DIRECTOR  
(501) 371-1759

DONALD V. ALLEN  
DIRECTOR OF COMMERCE  
(501) 371-2231

February 28, 1974

Mr. Art Monroe, III  
Commissioner  
Arkansas Insurance Division  
Suite 400 - University Tower Building  
Little Rock, Arkansas 72204

Dear Mr. Monroe:

Investigators of the Weights and Measures Division of the Department of Commerce have surveyed 4,648 gasoline stations since January 14, 1974, in the State of Arkansas. The purpose of the survey was to gather information concerning the retail and wholesale price of gasoline for the Economic Stabilization Program.

One hundred random samples concerning the retail price of regular gasoline were used to determine average retail price of regular gasoline for the months of May 1973, and February 1974. These samples represent a well-scattered distribution, including major company-owned stations and small independent stations. The samples ranged from two-pump stations to larger complexes.

To determine average retail prices of regular gasoline for the month of October 1973, 24 samples were taken in Little Rock, Pine Bluff, and Fort Smith. These were samples that were used by major oil companies to determine the range of retail prices in those respective areas.

Results of these samples are listed below:

EXHIBIT E

Art Monroe, III

-2-

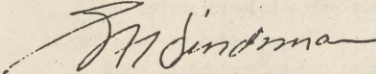
February 28, 1974

## RANDOM SAMPLES OF REGULAR GASOLINE PRICES

<u>Month</u>	<u>Year</u>	<u>Average Retail Price</u>
May 15	1973	36.7¢ per gallon
October	1973	
Little Rock:		37.9--39.9¢ per gallon range
Pine Bluff:		38.9--40.9¢ per gallon range
Fort Smith:		37.9--39.9¢ per gallon range
February	1974	46.6¢ per gallon

Attached is a copy of a News Release from FEO concerning increases in gasoline prices for the month of March. The News Release is self-explanatory and I would prefer not to predict what might happen to the retail price of gasoline in the month of March.

Sincerely yours,



Sam F. Hindsman  
Director

SFH:bw

Attachment: News Release

FOR IMMEDIATE RELEASE  
FEBRUARY 26, 1974

NOA-1837  
3-9

Motorists can expect two gasoline price adjustments during the month of March, the FEO noted today.

Operators of independent service stations -- those not wholly owned and operated by oil companies -- will be permitted to make two price changes during March if necessary. Usually, they are permitted just one price adjustment during the month.


One of the adjustments will be a two cent a gallon increase that will go toward the service station's margin. That increase was authorized by the FEO on Feb. 25 and is to be effective on March 1.

The other adjustment will be an cost changes passed along by refiners. That will include an approximate one cent a gallon increase for refiners that was announced on February 27 as an incentive to increase gasoline production.

The second price adjustment is to be made by the service station operators as it is received, which usually is in the first 10 days of the month. The FEO had previously requested that all price adjustments be made by the refiners prior to March 1 so that they could be reflected at the pump on that date. However, the later price adjustment was authorized in order to give the refiners more time to collect and interpret their cost data.

FEO price regulations generally limit gasoline price adjustments to any changes in the cost of the crude oil from which the product is made, or in the cost of imported product. In recent months, the price of gasoline has reflected

State  of Arkansas  
**HIGHWAY DEPARTMENT**

P. O. BOX 2261  LITTLE ROCK, 72203

February 13, 1974

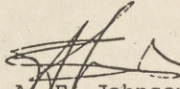
Miss Reva Fletcher  
 Arkansas Insurance Commission  
 400 University Tower Building  
 Little Rock, Arkansas 72204

Dear Miss Fletcher:

We are sending two copies of the Arkansas Highway Department's comparison of traffic counts in Arkansas for the period November 30 to December 6, 1973 to the period December 1 to 7, 1972. This is sent in accordance with your request by phone on February 11.

We trust that this information will be satisfactory for your needs and if we can be of further service, please let us know.

Very truly yours,



A. E. Johnson, Jr., Engineer  
 Planning & Research Division

.AEJ:JDH/drg

Enclosure

RECEIVED

FEB 13 1974

INSURANCE DIVISION  
 STATE OF ARKANSAS

EXHIBIT F

ARKANSAS HIGHWAY DEPARTMENT  
 Division of Planning and Research  
 In Cooperation with the U.S. Department of Transportation  
 Federal Highway Administration

Table 1. Comparison of Traffic Counts (in Arkansas) for the Period  
 November 30 - December 6, 1973 to the Period December 1-7, 1972.

(Percent Change)

	Interstate Rural	Other Rural	Interstate Urban	Other Urban	Total Rural	Total Urban	Total
Saturday	+1.66	-0.59	-5.88	-2.53	0.91	-4.58	-2.90
Sunday	-25.56	-10.67	-6.55	-2.12	-21.52	-5.23	-11.91
Weekend	-11.95	-5.10	-6.15	-2.40	-9.86	-4.83	-6.57
Weekday	+2.10	8.97	-1.27	-0.80	4.18	-1.09	0.33
7-day Total	-1.91	4.91	-2.37	-1.14	0.16	-1.91	-1.31

ARKANSAS HIGHWAY DEPARTMENT  
 Division of Planning and Research  
 In Cooperation with the U.S. Department of Transportation  
 Federal Highway Administration

Comparison of traffic counts for the  
 period February 12 - February 18, 1973 to the  
 period February 11 - February 17, 1974

	Interstate		Interstate		Other		Total		Total	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Saturday	20,749	38,046	11,297	25,721	32,046	63,767	95,813	1973		
	19,288	33,507	10,926	24,222	30,214	57,729	87,943	1974		
	-7.0	-11.9	-3.3	-5.8	-5.3	-9.5	-8.2	%		Change
Sunday	20,470	28,189	8,944	14,554	29,414	42,743	72,157	1973		
	16,303	24,928	9,298	12,748	25,601	37,676	63,277	1974		
	-20.4	-11.6	4.0	-12.4	-13.0	-11.9	-12.3	%		Change
Weekend	41,219	66,235	20,241	40,275	61,460	106,510	167,970	1973		
	35,591	58,435	20,224	36,970	55,815	95,405	151,220	1974		
	-13.7	-11.8	-0.1	-8.2	-9.2	-10.4	-10.0	%		Change
Weekday	97,587	212,255	52,611	141,008	150,198	353,263	503,461	1973		
	100,596	203,096	52,460	136,550	153,056	339,646	492,702	1974		
	3.1	-4.3	-0.3	-3.2	1.9	-3.9	-2.1	%		Change
7-Day	138,806	278,490	72,852	181,283	211,658	459,773	671,431	1973		
	136,187	261,531	72,684	173,520	208,871	435,051	643,922	1974		
	-1.9	-6.1	-0.2	-4.3	-1.3	-5.4	-4.1	%		Change

EXHIBIT G

# Arkansas

DEPARTMENT OF PARKS & TOURISM

March 1, 1974

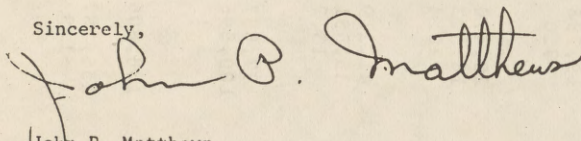
Mr. E.J.W. Fennel  
Insurance Department  
University Tower Building  
Little Rock, AR 72204

Dear Mr. Fennel,

Following are revenue figures from selected large parks and recreation areas in Arkansas as reported to our office. We also included the total revenue for all parks in the State for the period involved.

<u>PARK</u>	<u>Dec. 1972</u>	<u>Dec. 1973</u>	<u>Jan. 1973</u>	<u>Jan. 1974</u>
Petit Jean State Park	\$1,542	\$832	\$1,166	\$318
Lake Catherine State Park	229	120	651	302
Devil's Den State Park	1,146	200	909	181
TOTAL	\$10,520	\$4,514	\$10,030	\$4,049

Sincerely,



John P. Matthews  
Asst. Director, Tourism  
Director, Research

JPM:lc

EXHIBIT H

# Arkansas

DEPARTMENT OF PARKS & TOURISM

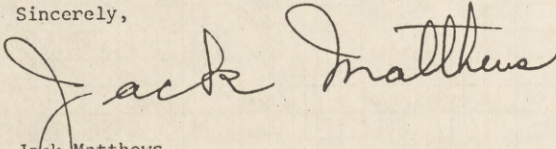
March 1, 1974

Mr. E.J.W. Fennel  
Insurance Department  
University Tower Building  
Little Rock, AR 72204

Dear Mr. Fennel:

Enclosed are individual revenue figures from each of the parks and recreation areas in the State Park system. Percentage figures are also shown. If you need additional data, please let me know.

Sincerely,



Jack Matthews  
Asst. Director Tourism  
Director, Research

JM:lc

Period - Receipts

Period: Oct, Nov, Dec - 1972 + Jan 1973

Date	Particulars	Conc.	1972			
			Oct-72	Nov-72	Dec-72	Jan-73
1 22,710.10	Peter Dean		14,917.44	5,084.41	15,421.7	11,660.25
2 2,158.80	Lake Cathlamet		1,010.15	2,694.8	2,290.7	6,511.2
3 7,567.99	Buffalo River		2,287.38	3,479.79	1,256.45	5,443.7
4 7,113.56	Bevelin Bend	4.80	5,729.74	11,233.8	11,460.4	7,080.05
5 4,726.87	Tr. Park		1,914.43	1,222.47	895.74	6,742.3
6 1,176.15	Lake Dardanelles		676.60	3,346.5	1,650.0	8,871.2
7 1,076.85	Chauvin Ridge		2,577.8	6,264.4	0	21,243
8 2,853.85	Lucy Shaker	5474	2,042.48	6,121.3	11,700	7,750
9 2,097.68	Lake St. Archaie		1,572.52	4,634.5	0	6,165
10 5,080.86	Lake Christ		2,759.15	8,959.8	4,606.1	9,651.2
11 41,779.12	Green Wellbourn	45555	2,057.625	14,699.08	3,136.11	26,112.5
12 1,048.00	Be...		326.00	2,980.00	2,850	3,205.00
13 447.00	Lake Parnett		2,840.00	1,000.00	450.00	1,800
14 1,486.00	Lake Charles		1,035.75	2,580.00	1,050.00	10,775
15 695.53	Wellbourn Spgs		1,951.5	4,236.3	5,250	3,700
16 778.80	White Sulphur		5,123.30	1,350.00	1,200.00	1,530.00
17 360.70	St. James post		2,072	646.5	251.5	7,200
18 157.60	Winnamoth Spgs		90.55	66.76	0	0
19 262.90	Lost Valley		1,364.0	510.0	0	7,580
20 231.20	Lake St. Smith		1,441.4	615.0	1,050	1,506
21 160.00	Travis Bay		610.0	620.0	340.0	0
22 16,867.03	Crater of Diamond		11,702.42	25,258.7	11,417.8	4,967.1
23 83.70	Old Riverside		0	7,570	0	7,550
24 654.10	Brairie Grove		6,386.5	1,545	0	1
25						
26 12,616.67	-TOTALS-	515 09	67,644.45	52,906.58	1,052,012	10,030.45
27						
28						
29						
30						
31						
32						
33						
34						

## Parks Revenue

Period Oct, Nov, Dec - 1973 + Jan 1974

Total Year Period	Parks	Revenue	Oct '73	Nov '73	Dec '73	Jan '74
21013 75	Paid Jeans		15929 75	11420 01	8234 71	51850
4185 74	Lake Parkville		2185 58	1577 51	1205 5	30200
1120 17	Lincoln River	1395	1100 22		closed	
5154 42	Lincoln River		3551 57	1387 32	200	1811 28
5732 58	W. H. Park		1552 94	3060 80		12284
991 52	Lake Parkville		464 11	210 91	2500	1000
1245 87	Lincoln Ridge		344 42	192 13	5122	7610
3611 27	Lucas State	14891	2762 16	507 50	163 10	2200
2924 27	Lake Parkville		2046 83	144 11	53 55	14040
4523 84	Lake Parkville		1767 05	349 42	977 32	7425
53275 86	Quinn's Park	33729	18711 17	13901 34		32606
731 00	Quinn's Park		715 00		1600	
588 17	Lake Parkville		196 75	286 32	143 10	1200
2174 43	Lake Parkville		1715 50	187 00	254 93	
915 32	W. H. Park		257 72	214 00	155 05	8725
1105 31	W. H. Park		647 53	353 68	50 00	2200
110 20	Jackman			100 00	20 00	
400 95	W. H. Park		173 05	142 35	44 65	6090
3600	Lost Valley		3600		closed	
628 17	Lake Parkville		522 11	125 00	11 00	
46 15	W. H. Park		328 75	114 00		
1952 54	Crater & Diamonds		10485 01	6307 70	1248 73	2250
468 50	Old Parkville		275 05	125 50	52 00	175
4402 19	W. H. Park		405 26		19 68	1545
3000	W. H. Park		1500	1500		
	Wooded Hills					
1948 70	Old Parkville		287 75	666 05	134 10	1190
11635 94	- TOTALS -	500 15	67205 94	40295 00	45136 2	404925



DEPARTMENT OF  
TRANSPORTATION

NEWS

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

WASHINGTON, D.C. 20590

RECEIVED

JAN 27 1974

INSURANCE  
STATE OF MICHIGAN

NHTSA -- 16-74 (BAB)  
Tel. 202-426-9550

FOR SUNDAY RELEASE  
January 27, 1974

The Department of Transportation's National Highway Traffic Safety Administration says its figures for December confirm its earlier reports that States which had lowered maximum speed limits are showing a significant reduction in highway fatalities. In addition, voluntary reduction of highway speeds and a decrease in total driving may be having a further effect in lowering highway deaths nationwide.

Administrator, Dr. James B. Gregory said his agency earlier reported a 15-20 percent drop in fatalities among those States which had reduced their speed limits in November. The 18 States which had lower maximum speed limits in December have shown an overall reduction of 25 percent in fatalities below December 1972.

In the 32 States which had not lowered their speeds, there was an overall reduction of 12 percent, which Dr. Gregory says may well be due to voluntary action on the part of motorists in reducing speeds, and to reduced travel as a result of the energy shortage. The total December reduction for the entire Nation was 16 percent below the same month in 1972.

- more -

EXHIBIT I

"We must always be cautious about projecting long-term results from short term data," said Dr. Gregory. "Nonetheless, we have seen such a dramatic change in the highway fatality picture that we have high hopes for a significant reduction in total 1974 fatalities."

Dr. Gregory pointed out that the fact that the decrease in November was followed by a large drop in December is especially significant, since the totals for the month of October were close to an all-time high. "We would normally have expected this last November and December to show increases over 1972. Up through last October, our projections for total fatalities in 1973 held at 58,000. We have since reduced that to around 56,500, showing the effect of fatality reductions reported during November and December. Two of the 18 States which lowered their speed limits did show increases in December but this is not statistically significant because of the small numbers involved.

Some States showed remarkable declines. New York, for example, which had 285 fatalities in December 1972, had by NHTSA's report 154 last month -- a drop of 46 percent. Pennsylvania, with 281 in December of 1972, showed 203 last month for a decline of 28 percent. And Florida, with 247 in December 1972, showed 199 last month for a 19 percent decrease.

Dr. Gregory said, "We will be asking others who closely follow highway accident statistics to examine their data and give us the benefit of any conclusions they have come to regarding trends.

"We shall continue to work closely with other Federal agencies, in particular the Cost of Living Council, the Federal Energy Office and the Federal Highway Administration, all of whom have a direct interest in these figures."

## HIGHWAY FATALITIES DECEMBER: 1972, 1973

<u>Year</u>	<u>States with Lowered Speed Limits</u>	<u>Other States</u>	<u>Total</u>
1972	1635	3072	4707
1973	1225	2689	3914
% Change	-25.1%	-12.5%	-16.8%
No. of States	18	32	50

Estimated  
Traffic Fatalities for  
States Enforcing Lower Speed Limits

<u>State</u>	<u>December 1973</u>	<u>December 1972</u>	<u>Percent Change</u>
Alaska	5	4	+25.0%
Connecticut	35	33	+ 6.0
Delaware	6	9	-33.3
Florida	199	247	-19.4
Maryland	55	62	-11.3
Massachusetts	77	96	-19.8
New Hampshire	14	11	+27.3
New Jersey	102	120	-15.0
New York	154	285	-46.0
North Carolina	147	188	-21.8
North Dakota	5	15	-66.7
Oregon	41	45	- 8.9
Pennsylvania	203	281	-27.8
Rhode Island	6	12	-50.0
Vermont	10	10	0
Virginia	88	115	-23.5
Washington	53	61	-13.1
West Virginia	25	41	-39.0
Total	1,225	1,635	-25.17%

## Statement of

DR. GENE G. MANNELLA  
ASSOCIATE ADMINISTRATOR FOR  
RESEARCH AND DEVELOPMENT

NATIONAL HIGHWAY TRAFFIC SAFETY  
ADMINISTRATION

Before the

COMMITTEE ON DISTRICT OF COLUMBIA  
UNITED STATES SENATE

February 22, 1974

Mr. Chairman and Members of the Committee:

I am very pleased to appear before this Committee today to present the data compiled by DOT's National Highway Traffic Safety Administration relating to the effect of the energy shortage on highway fatalities, injuries, and accidents. With me today are Marie Eldridge, Acting Director of NHTSA's Office of Accident Investigation and Data Analysis, and Steve Wood from NHTSA's Office of the Chief Counsel.

Since our agency has never testified before this Committee, it might be helpful to point out that the main mission of the National Highway Traffic Safety Administration is to reduce the number of deaths and injuries resulting from motor vehicle accidents as well as the number of accidents themselves. To this end, we do, among other things, encourage the collection of data relating to vehicle deaths, injuries, and accidents.

EXHIBIT      J

The statistical data that I can provide you today are, unfortunately, meager and narrow in scope. This is primarily because of the very short elapsed time since the energy crisis began. Our figures are highly preliminary and we adjust them statistically to reflect expected subsequent reports. There is a lag of anywhere from one to six months or more after the close of any calendar month before that month's accidents reported in a given State are processed and in usable form on magnetic tape. However, we do have confidence that the overall trend shown by our fatality reporting system is a real one, and I am glad to provide the data to you.

Gasoline conservation efforts have clearly had a marked effect on traffic fatalities. The fatalities in the fifty States in November dropped 3.5% from the preceding year, in December the reduction was 16.8%, and in January of 1974 it was 22.6%. \* The bulk of this reduction is attributed to the reduced supply of gasoline available to the driving public and reduced speeds on the highway resulting from lowered speed limits and voluntary compliance with the President's request.

While the lowered gasoline supply accounts for much of the reduced traffic fatalities, there is evidence that the lowered speed limits also contribute substantially. Fatalities in States having lowered speed limits during the three months of November, December, and January were 23.5% below the preceding year while the reduction during this period for those States not lowering speed limits was 8.9%.

In November 1973, the nine States that had enforced lowered speed limits by November 21 experienced a 17.4% reduction in traffic fatalities from November 1972 compared with a 1.2% reduction for the other

States. In December 1973, the 18 States that had enforced lowered speed limits by December 22 experienced a 25.1% reduction compared with a 12.5% reduction in the 32 States which had not reduced the limits. In January 1973, the 25 States that had enforced lowered speed limits by January 22 experienced a 24.4% reduction compared with 20.4% reduction in the other States.

In response to concerns about how pedestrian and pedalcycle fatalities have been affected, preliminary data from all States was collected and we have complete data now on 35 States and the District. Pedestrian and pedalcycle fatalities in January 1974 decreased 30% from January 1973. Notable here was a 39% decrease in school age pedestrian fatalities in January 1974, as well as a 31.7% decrease in all pedestrian fatalities from January 1973. This preliminary study completed on February 14 showed no increase in pedestrian and pedalcycle fatalities in the District of Columbia, with only one fatality reported both in January 1973 and January 1974.

The reduction in motor vehicle deaths that we have experienced recently cannot be used to predict the reduction in the total number of accidents and injuries that will occur as a result of the energy crisis. This is because the energy crisis has affected total U.S. driving exposure in several ways. The newly imposed speed limits affect driving in the higher speed range where in the past some 30-40 percent of the fatalities have occurred but only about 5-10 percent of the reported accident involvements were experienced. To the extent that the speed limits are observed, the principal effect is likely to be a reduction in severity of

accidents rather than any substantial reduction in the number of accidents. This was the experience when speed limits were imposed in Germany and England--a sharp reduction in deaths but lesser or no reduction in the number of accidents.

A second factor of importance is that the current reduction in total travel does not affect all types of trips uniformly. Pleasure trips and long-distance high-speed driving are more likely to be eliminated than commuting or essential family business trips (e.g., to food store, to doctor). The types of trips most affected are, however, the ones most likely to result in fatal accidents. Hence, the percent reduction in deaths may well be greater than we would expect in total accidents. Again, any attempt to estimate the reduction in overall accidents on the basis of these fatality figures would probably result in an over-estimate of the accident frequency reduction.

We had hoped to provide today a comparison of accidents, injuries, and fatalities in the District of Columbia since the energy crisis began with the corresponding data for the same period last year. We regret that, due to a change in the D.C. record system as reported to us by the Office of Highway Safety, D.C. Department of Motor Vehicles, this comparison cannot be made. It should be noted, however, that the District was not affected by the National policy on speed limits due to the absence of any roadways with speeds in excess of 55 miles per hour.

NHTSA could have statistical reports and estimates of the reduction in total accidents in a sample of States within six to eight weeks, which we would gladly make available to the Committee. However, in my opinion the transportation industry should be able to provide information on

requencies and average amounts of claims, information which is much more relevant than the total number of accidents.

Mr. Chairman, this completes my prepared statement. My associates and I would be pleased to answer whatever questions you have.

STATE OF ARKANSAS  
DEPARTMENT OF  
PUBLIC SAFETY



POLICE SERVICES DIVISION  
POST OFFICE BOX 4005  
LITTLE ROCK, ARKANSAS 72204

PHONE 371-1049  
AREA CODE 501

March 4, 1974

TO: MR. E. J. W. FENNELL  
Assistant Commissioner  
Insurance Division  
Department of Commerce.

FROM: MAJOR T. L. GOODWIN *TLG*  
Commander  
Highway Safety Section

RE:

Traffic accidents investigated by the Arkansas State Police for the months of October, 1972 through January, 1973 and October, 1973 through January, 1974; and the total fatalities investigated by all police agencies for the months of October, 1972 through February, 1973 and October, 1973 through February, 1974.

	<u>TOTAL ACCIDENTS</u>	<u>TOTAL DEATHS</u>
OCTOBER, 1972	1,318	70
OCTOBER, 1973	1,322	74
NOVEMBER, 1972	1,179	68
NOVEMBER, 1973	1,261	48
DECEMBER, 1972	1,562	63
DECEMBER, 1973	1,039	60
JANUARY, 1973	1,150	51
JANUARY, 1974	990	37
FEBRUARY, 1973	-----	39
FEBRUARY, 1974	-----	26

TLG:ns

EXHIBIT K

## AFTER RECESS

The CHAIRMAN. I apologize, ladies and gentlemen, for the delay, and to compensate, we will just work straight through and forget the lunch hour.

Dr. Gene G. Mannella, Associate Administrator for Research and Development, National Highway Traffic Safety Administration of the Department of Transportation.

Dr. Mannella is accompanied by: Ms. Nancy Ebersole, Coordinator for Government-wide Daylight Saving Time; Mr. Steve Grossman, Assistant General Counsel for Regulation, Department of Transportation; and Ms. Marie Eldridge, National Highway Traffic Safety Administration.

Dr. Mannella, if you would like your associates to accompany you, you are welcome to bring them up.

**STATEMENT OF DR. GENE G. MANNELLA, ASSOCIATE ADMINISTRATOR FOR RESEARCH AND DEVELOPMENT, NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION**

Dr. MANNELLA. Mr. Chairman, my associates are here behind me to answer any questions that might come up subsequent to the reading of the statement, so I would like to go ahead and read the statement.

Mr. Chairman and members of the committee, I am very pleased to appear before this committee today to present the data compiled by DOT's National Highway Traffic Safety Administration relating to the effect of the energy shortage on highway fatalities, injuries, and accidents.

With me today are Marie Eldridge, Acting Director of NHTSA's Office of Accident Investigation and Data Analysis, and Steve Wood from NHTSA's Office of the Chief Counsel.

Since our agency has never testified before this committee, it might be helpful to point out that the main mission of the National Highway Traffic Safety Administration is to reduce the number of deaths and injuries resulting from motor vehicle accidents as well as the number of accidents themselves. To this end, we do, among other things, endeavor to collect data relating to vehicle deaths, injuries, and accidents.

The statistical data that I can provide you today are, unfortunately, meager and narrow in scope. This is primarily because of the very short elapsed time since the energy crisis began.

Our figures are highly preliminary, and we adjust them statistically to reflect expected subsequent reports.

There is a lag of anywhere from 1 to 6 months or more after the close of any calendar month before that month's accidents reported in a given State are processed and in usable form on magnetic tape.

However, we do have confidence that the overall trend shown by our fatality reporting system is a real one, and I am glad to provide the data to you.

## GASOLINE CONSERVATION EFFECT

Gasoline conservation efforts have clearly had a marked effect on traffic fatalities. The fatalities in the 50 States in November dropped 3.5 percent from the preceding year, in December the reduction was 16.8 percent, and in January of 1974 it was 22.6 percent.

The bulk of this reduction is attributed to the reduced supply of gasoline available to the driving public and reduced speeds on the highway resulting from lowered speed limits and voluntary compliance with the President's request.

## EFFECT OF LOWERED SPEED LIMITS

While the lowered gasoline supply accounts for much of the reduced traffic fatalities, there is evidence that the lowered speed limits also contribute substantially.

Fatalities in States having lowered speed limits during the 3 months of November, December, and January were 23.5 percent below the preceding year while the reduction during this period for those States not lowering speed limits was 8.9 percent.

The CHAIRMAN. How many States have lowered speed limits in the first category, where the 23.5 percent reduction was effectuated?

Dr. MANNELLA. It varied between those 3 months, Mr. Chairman. I can give you that information if you would like.

The CHAIRMAN. Is it about a dozen States or so?

Dr. MANNELLA. During November there were nine States which had instituted lowered speed limits by the 21st of November which was our cut-off date.

In December, there were 18 States which instituted lower speed limits by the 22d of December, and there were 25 States in January which had instituted lower speed limits by the 22d of January.

The CHAIRMAN. The insurance industry, in communications to me, has expressed the opinion that lower speed limits will cause a higher number of accidents, and higher number of fatalities, because they say this will keep people on the roads longer, and hence expose them to risk longer.

Will you comment on that bizzare position?

Dr. MANNELLA. I will also cover this in the statement.

The CHAIRMAN. All right.

Don't forget we want to come back to that.

Dr. MANNELLA. In November 1973, the nine States that had enforced lowered speed limits by November 21 experienced a 17.4 percent reduction in traffic fatalities from November 1972 compared with a 1.2 percent reduction for the other States.

## PEDESTRIAN AND PEDALCYCLE FATALITIES

In response to concerns about how pedestrian and pedalcycle fatalities have been affected, preliminary data from all States was collected, and we have complete data now on 35 States and the District.

Pedestrian and pedalcycle fatalities in January 1974 decreased 30 percent from January 1973. Notable here was a 30-percent decrease in

school age pedestrian fatalities in January 1974, as well as a 21.7-percent decrease in all pedestrian fatalities from January 1973.

This preliminary study completed on February 14 showed no increase in pedestrian and pedalcycle fatalities in the District of Columbia, with only one fatality reported both in January 1973 and January 1974.

The CHAIRMAN. I have just itemized on a sheet of paper all of the industry allegations, and another one of their allegations is the energy crisis will increase bicycle use, which tends to increase both the number and severity of traffic accidents.

The statistics that you have just quoted seem to me very much to behoove that allegation.

#### REDUCTION IN SEVERITY OF ACCIDENTS

Dr. MANNELLA. In terms of fatalities that we have had reported to us from the States, we do see a substantial reduction during the period in which daylight saving time was in place.

The reduction in motor vehicle deaths that we have experienced recently cannot be used to predict the reduction in the total number of accidents and injuries that will occur as a result of the energy crisis.

This is because the energy crisis has affected total U.S. driving exposure in several ways. The newly imposed speed limits affect driving in the higher speed range where in the past some 30-40 percent of the fatalities have occurred but only about 5-10 percent of the reported accident involvements were experienced.

To the extent that the speed limits are observed, the principal effect is likely to be a reduction in severity of accidents rather than any substantial reduction in the number of accidents.

The CHAIRMAN. On that point, I know you are not an actuary, or insurance commissioner, but if you reduce the severity of accidents, the damage to the car, and the damage to the human body, the amount of claims paid out would be reduced, would not that be common sense?

Dr. MANNELLA. Mr. Chairman, I think in terms of the property damage, it is very difficult to say, because the reduction in the speed may still be at a level where significant property damage occurs.

In terms of the claims, while we see the reduction in fatalities, we have no way of knowing whether or not some of those fatalities might show up as serious injuries.

The CHAIRMAN. But you underscored the word severity in your prepared statement.

That is your underscoring, not mine, and you said to the extent speed limits are observed, the principal effect is likely to be reduction in severity of accidents rather than substantial reduction in the number of accidents.

Dr. MANNELLA. That is right.

The CHAIRMAN. So if accidents are less severe, less horrible in their consequences, it would seem to follow the amounts of money paid out for claims would be reduced because of less severe accidents.

Dr. MANNELLA. This is based on our looking at the fatalities.

The CHAIRMAN. Are there degrees of severity in fatalities?

Dr. MANNELLA. No, sir; but there are injuries.

The CHAIRMAN. To be sure; but a fatality is a fatality.

Dr. MANNELLA. Yes, sir.

This was the experience when speed limits were imposed in Germany and England—a sharp reduction in deaths but lesser or no reduction in the number of accidents.

A second factor of importance is that the current reduction in total travel does not affect all types of trips uniformly. Pleasure trips and long-distance high-speed driving are more likely to be eliminated than commuting or essential family business trips—that is, to food store, to doctor.

The types of trips most affected are, however, the ones most likely to result in fatal accidents. Hence, the percent reduction in deaths may well be greater than we would expect in total accidents. Again, any attempt to estimate the reduction in overall accidents on the basis of these fatality figures would probably result in an overestimate of the accident frequency reduction.

We had hoped to provide today a comparison of accidents, injuries, and fatalities in the District of Columbia since the energy crisis began with the corresponding data for the same period last year.

We regret that, due to a change in the District of Columbia record system as reported to us by the Office of Highway Safety, District of Columbia Department of Motor Vehicles, this comparison cannot be made.

It should be noted, however, that the District was not affected by the national policy on speed limits due to the absence of any roadways with speeds in excess of 55 miles per hour.

The CHAIRMAN. From a subsequent witness we will make that comparison with an adjustment factor, because of the change in the reporting system.

I just say that for the record.

Dr. MANNELLA. NHTSA could have statistical reports and estimates of the reduction in total accidents in a sample of States within 6 to 8 weeks, which we would gladly make available to the committee. However, in my opinion the insurance industry should be able to provide information on frequencies and average amounts of claims—information which is much more relevant than the total number of accidents.

Mr. Chairman, this completes my prepared statement. My associates and I would be pleased to answer whatever questions you have.

#### EFFECT OF LOWERED SPEED LIMITS ON ACCIDENTS

The CHAIRMAN. Let me get back to my earlier question, as I said, it has been alleged that lower speeds on highways will not reduce fatalities, let us leave it to accidents, will not reduce highway accidents, because if it took you 3 hours to drive from Washington to Philadelphia at 70 miles per hour, if you reduced the speed to 55 miles per hour, it might take you 4½ hours, and thus there will be more accidents it has been alleged because you are exposed longer on the highway.

What do you say about that?

Dr. MANNELLA. We cannot say whether or not there will be the same number or more accidents, however, our experience, and our understanding of what has happened in other countries, strictly due to reduced speed limits, is that the number of accidents do not decrease substantially.

The severity does.

The CHAIRMAN. If that theory had any validity at all, then the best thing to do would be just from a safety point of view would be to up the speed limit to 100 miles per hour, move people much faster from Washington to Philadelphia to reduce this exposure time.

Dr. MANNELLA. There are other matters, such as ability to stop, and the severity of the crash itself, which increases markedly with speed.

The CHAIRMAN. But based on your position, and the National Highway Traffic Safety Administration, is it not the general thrust of your policy that reduced speed enhances the quality of safety?

Dr. MANNELLA. Yes, sir.

The CHAIRMAN. And that it is safer to drive at reduced speeds than at higher speeds?

Dr. MANNELLA. That is correct.

The CHAIRMAN. And if that is not the situation, then these ads that are put out, some with governmental input—speed kills—we ought to discontinue?

Dr. MANNELLA. Yes, sir.

The CHAIRMAN. What about property damage, by reduction of speeds, what do we know about that?

Dr. MANNELLA. Well, we are not in a position to comment on that, because our data primarily deals with fatalities, and then on a summary or extract basis with injuries.

The CHAIRMAN. Did not we have some data from other countries?

Was that on property damage, was that Germany and England?

Dr. MANNELLA. Germany and England, the reference is to the fatality count.

The CHAIRMAN. So the gist of what you presented today insofar as fatalities are concerned, the record is already in, at least for Thanksgiving, Christmas, and the month of January, the fatalities are markedly reduced in those States that reduced the speed limit?

Dr. MANNELLA. We see a reduction of fatalities across the country.

The CHAIRMAN. And even States that did not reduce the speed limit—fatalities are down?

Dr. MANNELLA. Fatalities are down.

The CHAIRMAN. And on accidents, were there some preliminary figures that accident rates were down?

Dr. MANNELLA. No, sir; we do not have any information on accidents.

We do not have any information on the severity of injuries produced.

The CHAIRMAN. Thank you very much.

Dr. MANNELLA. Thank you.

The CHAIRMAN. Our next witness is Officer Anthony Silva, of the Operations Research Branch, Metropolitan Police Department, and he is accompanied by Officer Jerry Galloday and Mr. Wallace Weiss.

STATEMENT OF OFFICER ANTHONY SILVA, OPERATIONS RE-  
SEARCH BRANCH, METROPOLITAN POLICE DEPARTMENT;  
ACCOMPANIED BY OFFICER JERRY GALLODAY AND MR. WAL-  
LACE WEISS

Officer SILVA. Thank you, Mr. Chairman.

The CHAIRMAN. We welcome you all. We are pleased to have you with us, and, Officer Silva, I presume you are the chairman of this group?

Officer SILVA. Yes, sir.

The CHAIRMAN. You may proceed.

Officers, if we are going to read from that chart, why don't you stand here in the area near the reporter.

I place a copy of the chart in the record.

[The chart referred to follows:]

Time of day	December 1971		December 1972		December 1973		January 1972		January 1973		January 1974	
	total	f inj	total	f inj	total	f inj	total	f inj	total	f inj	total	f inj
0001 - 0359	309	3	303	1	268	2	355	1	253	3	245	2
0400 - 0759	217	0	209	1	178	0	159	0	203	0	184	1
0800 - 1159	515	0	428	0	546	0	513	0	444	1	301	0
1200 - 1559	744	0	624	1	732	2	803	1	595	1	412	1
1600 - 1959	858	1	766	1	798	0	860	5	638	0	467	2
2000 - 2400	482	2	486	2	427	3	498	2	399	2	235	0
TOTAL	3,125	6	3,116	6	2,949	7	3,188	9	2,532	7	1,844	6

\* F=fatal inj=injury

Accident Cost	December 1971		December 1972		December 1973		January 1972		January 1973		January 1974	
	total	f inj	total	f inj	total	f inj	total	f inj	total	f inj	total	f inj
Property Damage	986,800		973,200		1,051,200		1,017,600		781,600		602,000	
Fatality	270,000		270,000		315,000		405,000		315,000		270,000	
Injury	1,760,400		1,827,900		807,300		1,714,500		1,541,700		899,100	

Officer SILVA. This shows the number of accidents for December 1971, 1972 and 1973.

The number of accidents are shown here. It is broken down, total of accidents, fatalities, and injuries.

The CHAIRMAN. Let us start with the total lines as I read them, let us start with fatalities, in December 1971. Is this all within the District of Columbia?

Officer SILVA. Yes, sir.

The CHAIRMAN. December 1972, six. December 1973, seven, and then in comparison of January, nine, 1972. Seven, 1973, and six, 1974.

Officer SILVA. Yes, sir.

The CHAIRMAN. And totals on the accident line, 652 in December 1971?

#### INJURY ACCIDENTS

Officer SILVA. That is injury accidents.

The CHAIRMAN. Injury accidents?

Officer SILVA. Yes, sir.

The CHAIRMAN. It went up a bit in December 1972 to 677.

It plummeted in December 1973 to 299. Using the month of January 1972, 635 injury accidents, it dropped a bit to 517 in January 1973, and plummeted in January 1974 to 333, so injury accidents in December 1973, last December, were down well over 50 percent.

In December 1973, versus the previous year, and down 640 plus percent in January 1974.

Officer SILVA. Yes, sir.

The CHAIRMAN. Does the particular hour of the day tell us something?

Officer SILVA. No; we found it is pretty much the same from one year to the next.

In fact, 99 percent of the time it will be the same.

You have the same distribution of accidents throughout the day.

The CHAIRMAN. Curiously, I do not know why, but in the hour of 2000 which is 8 p.m., injury accidents went up in December 1973 versus the previous year, but in January they were down well over half in that particular 4-hour time frame.

December 1973, and January 1974, are the totals actual?

Officer SILVA. Yes, sir.

The CHAIRMAN. The totals are actual in all of those monthly periods?

Officer SILVA. Yes. December 1973 and January 1974, the time was broken down.

We do not have the exact figures.

The CHAIRMAN. With that one sort of exception, I look down the line, taking every other time, that midnight to 4 a.m., in December, down from 81 to 27.

January down from 72 to 44. 4 a.m. to 9 a.m., down from 50 the preceding year to 18, and January, about the same, a little down, from 36 to 33.

In 8 a.m. to 12 noon, down a half from 110 to 56. Down substantially from 71 to 54. From 12 noon to 4 p.m., down about half.

From 135 in December 1972 to 74 in December 1973. Down almost a half in January, 139 to 75.

The next, 4 p.m. to 8 p.m., down from 196 to 81.

Down well over half. Down about half from 159 to 84, and we covered the last one before, so I take it what that chart shows is that in the overall that in December 1973 and in January 1974, injury accidents were down markedly in those 2 months compared with the previous year.

Officer SILVA. Yes, sir, definitely.

The CHAIRMAN. As part of the Operations Research Branch of the Metropolitan Police Department: Do you pay special attention to matters relating to accidents and fatalities? Is that one of your specialties?

Officer SILVA. Yes, sir; we are part of the traffic section. We are part of the section that pays attention to those matters.

The CHAIRMAN. Do you have any conclusions of your own, sir?

How long have you been with the Department?

Officer SILVA. Five years.

The CHAIRMAN. How long have you been in this research division?

Officer SILVA. Just over 1 year.

The CHAIRMAN. Based on that 1 year's experience: What conclusions do you draw for those precipitous and notable declines in injury accidents for the period of December 1973 and January 1974?

#### CHANGE IN REPORTING SYSTEM

Officer SILVA. There could be several reasons. We have had a change in our reporting system.

The CHAIRMAN. We want to get into that.

Officer SILVA. The change in the reporting system: There is a definite decrease in the number of property damage accidents, and we did not think it would make any difference in the injury accidents.

I would like to read this. This is our current policy for registering traffic accidents.

The CHAIRMAN. When did this change come about?

Officer SILVA. January 1974.

The CHAIRMAN. January 1974, so December figures—

Officer SILVA. Would not have been affected.

The CHAIRMAN. The same reporting mechanism was used in December 1972, as in December 1973?

Officer SILVA. Yes, sir. As you can see, December 1973 was notably affected in the total overall accidents, whereas in January 1974, it was affected—

The CHAIRMAN. December 1973, there was a considerable change from 677 injury accidents in December 1972 to 299 injury accidents in December 1973?

Officer SILVA. Yes, sir. That is injury accidents. However, the overall accidents have not been changed.

The CHAIRMAN. Overall number of accidents did not change much?

Officer SILVA. From 3,100 to 2,900.

The CHAIRMAN. Let us take this piecemeal.

Do you have any rationale as to why injury accidents decreased from December 1972 at a rate of 677 to December 1973 to 299?

Officer SILVA. No, sir.

The CHAIRMAN. Does anything relating to the energy crisis, do you think, affect those statistics?

Officer SILVA. It could. We have not gone into it in this manner.

The CHAIRMAN. I sort of diverted you from the change in the reporting system, but I just wanted to establish for the record that the December figures were directly comparable, because they were the same reporting system.

Now, tell us what is the difference in the reporting system—the one that went into effect in January?

Officer SILVA. This went into effect in January 1974. The policy is that accident reports will be taken if someone is killed or injured.

If the damage to a motor vehicle renders it inoperable under its own power—of course, this is totally inoperable, it would not be a flat tire or something of that nature, it would have to be considerably damaged, the operator of the motor vehicle is not on the scene—a report will be taken.

A Government vehicle or public transportation vehicle involved in an accident, multiple or serious traffic violations, then reports will be taken in that case.

If the officer summons the parties to a corporation counsel hearing, or if one or more of the persons involved leads the officer to believe they may attempt to evade responsibility for an accident.

The CHAIRMAN. Now, those are the criteria used as of January 1 in reporting accidents?

Officer SILVA. Yes, sir.

The CHAIRMAN. How do they differ from what the system was a month prior thereto?

Officer SILVA. Prior to that, the only major difference is in the damage to motor vehicles.

Prior to this, it was a \$200 minimum. If the motor vehicle damage was in excess of \$200, then an accident report would be taken.

The CHAIRMAN. Under the old system?

Officer SILVA. Yes, sir.

The CHAIRMAN. Under the new system, if there is any damage to the vehicle, is it reported?

Officer SILVA. No, sir; if there is any damage to the vehicle which renders it inoperable. There would have to be considerably more damage, generally, I would assume.

The CHAIRMAN. But the other criteria about somebody leaving the scene, was not with the car, those are the same under both systems?

Officer SILVA. Yes.

The CHAIRMAN. At the bottom of this reproduced chart?

Officer SILVA. It is in small print.

#### NATIONAL SAFETY COUNCIL FORMULA

The CHAIRMAN. On the bigger chart are some figures with respect to property damage, interpret those for me, how did you arrive at those figures?

Officer SILVA. The National Safety Council apparently has established values for different types of accidents.

Property damage accidents have been valued at \$400 by the National Safety Council for each accident. That is the average: \$400 property damage.

Fatality accidents are valued at \$45,000. Injury accidents are valued at \$2,700 for each accident.

The CHAIRMAN. So these are arbitrary figures that you think came from the National Safety Council. A fatality accident in the District of Columbia is evaluated at a \$45,000 loss?

Officer SILVA. Yes, sir..

The CHAIRMAN. So if there is an accident in which a passenger or somebody is injured, it is evaluated at \$2,700, and if it is purely property damage, and arbitrary figures, it is assigned \$400, that is the formula?

Officer SILVA. Yes, sir.

The CHAIRMAN. Is this a formula they recommend for standard use by metropolitan police departments insofar as you know?

Officer SILVA. Yes, sir.

The CHAIRMAN. So there has been no change in this formula that you know of?

Officer SILVA. No, sir.

The CHAIRMAN. So injuries in December 1972, under this formula, admittedly arbitrary, were \$1,827,900 in December 1972, and were only \$807,300 in December 1973?

Officer SILVA. Yes, sir.

The CHAIRMAN. Comparing the 2 months of January, the same injury line, \$1,541,700 in January 1973 versus \$899,100 in January 1974. The formula: All it does is apply a multiplier, I take it. Those arbitrary dollar figures as against the number of injuries, the number of fatalities, or the number of property damage accidents as the case might be.

Officer SILVA. What it does is to put it on a comparable level so you can compare property damage accidents with fatality accidents.

It puts it on the same level.

The CHAIRMAN. Bear with me a minute while I look at these figures.

This is the first time I have seen them, and I want to glance at them before moving on.

Now, insofar as talking about injuries alone, there is no change between January 1973 and January 1974 in the reporting of injuries?

Officer SILVA. Right; no change.

The CHAIRMAN. So on injuries, at all times throughout these statistics, we are comparing oranges and oranges and oranges?

Officer SILVA. Yes, sir.

The CHAIRMAN. And there is no change in fatalities?

Officer SILVA. None at all.

The CHAIRMAN. So they are constantly comparable. Where the change comes in is with respect to property damage, and that change came about in January 1974?

Officer SILVA. Yes, sir.

The CHAIRMAN. And that change in property damage would affect that accident column in January 1974, is that right?

Officer SILVA. Yes, sir.

That is total accidents, the 1,844 figure.

The CHAIRMAN. All right.

So in trying to compute these in percentages—

Officer SILVA. We have some percentages.

The CHAIRMAN. Give me what has happened in accident injury percentages—December 1972 versus December 1973.

Officer SILVA. What we did, we combined December 1973 along with January 1974.

The CHAIRMAN. That is good enough.

So it is a 2-month comparison, between the December–January two-month period.

What do they do there?

Officer SILVA. Comparing the December 1971–January 1972 period, to December 1972–January 1973 period—injuries off 3 percent.

The CHAIRMAN. That is 1971–72?

Officer SILVA. Yes.

The CHAIRMAN. All right.

Officer SILVA. Comparing last year: January 1972–73 time period with December 1973–January 1974 injury accidents down 49.4 percent, whereas overall accidents down 15.1 percent.

The CHAIRMAN. Injury accidents are down 49 percent in the last December–January period?

Officer SILVA. Yes, sir.

The CHAIRMAN. Thank you very much, sir.

Thank you, gentlemen.

Officer SILVA. Thank you.

The CHAIRMAN. Our next witness is from the insurance industry, Mr. R. L. Jewell, assistant vice president, National Association of Independent Insurers.

Mr. Jewell is also a member of the Insurance Industry Energy Advisory Committee of the National Association of Insurance Commissioners Task Force Committee.

Mr. Jewell also is representing The American Insurance Association, The American Mutual Insurance Alliance, The Allstate Insurance Co., The GEICO Insurance Co., and The State Farm Insurance Co. He is accompanied by Mr. John J. Nangle, Washington counsel of the National Association of Independent Insurers.

Welcome, Mr. Jewell, and Mr. Nangle.

**STATEMENT OF R. L. JEWELL, ASSISTANT VICE PRESIDENT, NATIONAL ASSOCIATION OF INDEPENDENT INSURERS; ACCOMPANIED BY JOHN J. NANGLE, WASHINGTON COUNSEL**

Mr. JEWELL. I would like to make one correction with regard to my representation. I am representing the American Insurance Association, the American Mutual Insurance Alliance, the National Association of Independent Insurers, and all of the affiliated members of those organizations.

The State Farm Mutual Insurance Co. is not a member of our organization, so, therefore, I am not representing them.

The CHAIRMAN. You are not speaking for State Farm, so we will strike them.

Mr. JEWELL. I speak for the other trade associations, and with your permission, I would like to read from my statement, and if you have any questions, I will be very happy to stop and answer any questions you might have.

My name is R. L. Jewell, assistant vice president of the National Association of Independent Insurers. With me is Mr. John J. Nangle, Washington counsel for the National Association of Independent Insurers.

It is an honor and a privilege to appear before this distinguished committee today and present the views of three insurance company trade associations, the American Insurance Association, American Mutual Insurance Alliance, and the National Association of Independent Insurers in opposition to S. 2969.

The AIA, AMIA, and NAII are voluntary insurance company trade associations representing property and liability insurance companies.

These associations represent the great majority of the companies writing automobile insurance. Companies affiliated with these associations range from small one-State type companies to the largest multi-State writers; they are representative of highly specialized writing companies to large all lines insurers; and from those merchandising their insurance product through the mails to those using independent businessmen to sell their product.

#### INDUSTRY POSITION ON S. 2969

With respect to S. 2969, our position can be summarized as follows:

(1) The automobile insurance industry is responding to the energy crisis by encouraging use of carpools which will result in lower automobile insurance rates for many drivers, providing lower rates for low mileage drivers and utilizing dividend or premium refund programs. These programs properly reduce the rates for those drivers who have reduced their driving.

The CHAIRMAN. These programs, as you describe, with respect to encouraging carpools, lower rates for low mileage drivers, and so forth: Are these programs that affect only some of the companies in the industry?

Mr. JEWELL. That is correct.

The CHAIRMAN. There is no standard policy throughout the industry, with respect to the industry as a whole, is there?

Mr. JEWELL. This will vary by the companies, but representing a number of companies as I am today, there are almost all of the companies who have given discounts for carpool operations.

I would say that was widespread. With regard to lower rates for low mileage drivers. I would say the great majority of the companies are giving lower rates for low mileage drivers.

There are some companies which have the dividend or refund program in addition to the carpooling discounts and the mileage.

The CHAIRMAN. With respect to that last one, the refund programs, not all companies in the industry are in that position, are they, at the present time?

Mr. JEWELL. That is correct. Not all companies are in that position.

The CHAIRMAN. What about the major companies, let us say the

major five in this area, does GEICO have a program for giving dividend refunds?

Mr. JEWELL. No, sir; not to my knowledge.

The CHAIRMAN. How about Allstate?

Mr. JEWELL. Allstate has announced a program.

The CHAIRMAN. How about State Farm?

Mr. JEWELL. State Farm does have a program as I understand it.

The CHAIRMAN. Travelers?

Mr. JEWELL. I am not sure about Travelers.

The CHAIRMAN. Aetna?

Mr. JEWELL. No, sir; I do not believe they do.

The CHAIRMAN. Nationwide?

Mr. JEWELL. I am not sure about Nationwide, sir.

The CHAIRMAN. All right.

Mr. JEWELL. (2) Based on information available at the present time, a flat overall reduction for all automobile insurance rates is not justified.

The CHAIRMAN. You are going to explain that later?

Mr. JEWELL. Yes, sir.

(3) The insurance industry has established a fast-track monitoring system to determine the impact of the energy crisis on automobile insurance losses.

Companies will react at the earliest possible date when it is determined if there are measurable changes in automobile insurance losses.

#### CARPools

As soon as the announcement of the need to conserve gasoline was made, the National Association of Insurance Commissioners appointed a Special Task Force on the Energy Crisis and Insurance Related Matters.

An industry advisory committee was appointed to assist this special task force. Due to the request for greater use of carpools, in order to conserve the Nation's gasoline supplies, the insurance industry assured the commissioners that it was their intent to interpret liberally the insurance coverage for carpool operations.

This intent has been given widespread publicity and has, we believe, encouraged the formation and operation of carpools and improved public understanding regarding coverage for expense-sharing pools.

#### CLASSIFICATION RATING PROCEDURES

Many companies have for a number of years afforded reduced rates to the lower mileage driver. Likewise, most companies base their rate on the number of miles driven in going to and from work. Since the energy crisis, most companies have amended their rules so that if the policyholder is a member of a carpool and only drives the car 1 or 2 days a week to work, or uses public transportation, they will be eligible for a lower rate.

#### DIVIDENDS AND PREMIUM REFUNDS

Some companies have for many years returned savings to their policyholders in the form of dividends.

The CHAIRMAN. Would those be the mutual companies?

Mr. JEWELL. Yes, sir.

The CHAIRMAN. The stock companies do not do that routinely?

Mr. JEWELL. That is correct.

The CHAIRMAN. Do they ever?

Mr. JEWELL. Yes; there are dividends paid to policyholders by some stock companies in some jurisdictions.

The CHAIRMAN. But it is the exception rather than the rule?

Mr. JEWELL. Yes, sir, I would say that.

Recently, additional companies which normally compete in ways other than by means of dividends have announced their intent to use dividend or premium refund programs to recognize extraordinary reductions in losses which may result from the energy crisis.

#### USE OF FORMULAS

The CHAIRMAN. What measure, what standard, or what formula will they use in determining what is to be refunded?

Mr. JEWELL. Sir, this varies by the company. They have developed their own programs and filed their programs in the various jurisdictions throughout the country, based on their own individual decisions, for their management, as to how they feel these programs should be worked.

I would say there is no set uniform plan.

The CHAIRMAN. Nationwide there is not, but you heard the testimony that certain States have formula that they apply within that State—for instance, New Jersey.

Mr. JEWELL. Commissioner Denenberg indicated they have set out a certain formula, but I think he also said they are now receiving filings from companies that differ from that, and they are trying to solve that problem.

The CHAIRMAN. Right, but the man from New Jersey—whether it is a good formula or not, it can be debated—has a standard formula they apparently apply to all liability writers in New Jersey.

Mr. JEWELL. I believe that formula is as a result of a court case in New Jersey, by which they establish the procedures of which investment income would be determined by what is a reasonable profit.

The CHAIRMAN. As a matter of public policy, should not we consider a standard formula, to all insurance writers in the District, let us take the District, which is not left to the individual company to decide what that company should do?

Mr. JEWELL. No, sir. In my opinion, it would be better for the companies to compete, and for them to establish the procedures.

They operate in different manners, they operate in different ways, and in my opinion it would be better for the companies to develop the programs. At the present time the companies are subject to the State regulations, and the regulators of the States have the power and authority to determine whether they are developing proper formulas, and charging proper rates.

In my opinion, this would be a much better procedure.

The CHAIRMAN. In the District, those companies that are practicing some kind of a refund formula: To your knowledge do any of those formulas include a consideration of moneys earned on the pre-

miums, or are they formulas related solely to premiums paid in as contrasted with claims paid out?

Mr. JEWELL. Sir, I am not familiar with what has been filed.

The CHAIRMAN. I think it is the latter, but we can bring that out with the District of Columbia Insurance Commissioner.

It is my understanding that such formulas as a few companies are voluntarily considering relate only to premiums and pay-out, but they do not take into account money earned on the premiums as they are held by the company, which is a considerable amount usually.

Mr. JEWELL. I am not trying to avoid your question, but I have not been that familiar with the individual programs of the companies.

We merely know there are companies that have some type of program.

The CHAIRMAN. I understand.

Mr. JEWELL. Likewise, most companies rate on the number of miles driven.

It is important to note that as an overall result of these existing and newly instituted rate classification and dividend systems, any extraordinary reduction in insurance loss exposure due to decreased car usage during the energy crisis will entitle motorists to corresponding premium reductions or savings.

The CHAIRMAN. I do not want to keep repeating it, but any extraordinary reduction in insurance loss at the determination of the individual company thus far, it does not seem—

Mr. JEWELL. It would be determined by the company based on the rates that they are charging in that particular State, and we must remember the rates vary by the companies in the District.

Mandating an across-the-board rate reduction of 10 percent, or any amount, on top of these existing rate-saving mechanisms would be unsound and unwarranted.

Since the reduction-in-car usage has already been given substantial recognition in the rate classification systems of virtually all companies by classification refinement, imposition of the proposed across-the-board rate cut would, in many cases, mean forcing insurers to make duplicative rate reductions based on the same hoped for loss saving.

#### COMPETITION

The automobile insurance business is a fiercely competitive industry.

The CHAIRMAN. I have to stop you there.

You mentioned competition twice now. We have had some comparisons made through the District of Columbia Insurance Commissioner's Office of premiums charged by the various big insurance companies operating in the District, and the premiums vary dramatically.

That is why we are questioning you here on this point with respect to this fierce competition.

For instance, GEICO, take a policy of \$25,000-\$50,000 bodily injury, \$10,000 property damage, comprehensive and \$250 deductible. We want to be comparing the same policy in all instances. GEICO for that package policy would charge \$172, and Travelers would charge \$244.

Now, let us take a little bigger policy. \$300,000 bodily injury, \$25,000 property damage, comprehensive ACB, and \$100 deductible.

GEICO for that charges \$210, and Travelers \$324. So with the first policy, if he went to GEICO, he would pay 70 percent of what he would have paid Travelers. He would save 30 percent.

On the bigger policy that I mentioned, Travelers \$324 premium versus the \$210 premium at GEICO he would pay only 64 percent of what he would pay at Travelers. The same comparison can be made up and down the line, eliminating criterion, which I understand has sort of a high risk operation, but all of the others are in the same competitive field, and there are these wide variances.

How fiercely competitive is an industry where two major sellers in the same market selling the same item, the same package of coverage, one sells it for 70 percent, or 64 percent for what his fierce competitor sells it.

Mr. JEWELL. In my opinion this just points out there is fierce competition pricewise in the District.

The CHAIRMAN. You say it does?

Mr. JEWELL. Yes, sir; it does to me. A policyholder in the District can go to these companies, and in the wide range of costs, a very low cost for the GEICO, and Nationwide, and those companies, and ranking on up into the higher.

Of course, these companies operate in different manners, they merchandise their products for different groups, and in different manners, and I think this accounts for a lot of difference in the pricing of the product.

It does to me show the people in the District of Columbia have an opportunity of a wide range of prices to choose from.

The CHAIRMAN. If they know.

Mr. JEWELL. Yes, sir.

#### POLL RESULTS

The CHAIRMAN. And the facts are based on the survey made by Louis Harris and the department of insurance at the Wharton School—the people do not know.

This is a Harris joint venture by both Louis Harris and the Wharton School of Business.

*Question 1.* Do premiums charged by competing auto insurance companies significantly differ?

Only 11 percent answered yes, but they significantly differ.

*Question 2.* Are premiums about the same? Yes, at 45 percent.

*Question 3.* Have you ever compared premiums? Fifty-two percent have never compared premiums.

*Question 4.* How much would another premium have to vary before you would switch?

Sixty-six percent would switch if they varied 40 percent.

The average would switch if varied 18 percent.

Now, I know polls are not always controlling, but there is some relevance in terms of consumer attitudes and purchasing habits.

#### WIDE RANGE OF PRICES

In your opinion, you are in the insurance business, how widely known is it that there are these enormous disparities between what GEICO charges and what Allstate or Travelers will charge?

Mr. JEWELL. Well, it was my impression it was fairly well known by the public that there is in most States. This would not be true in all States, because you do have one or two States that do start off with uniform rates such as Texas. But in those States where you do have the rating laws that allow different premium charges by different companies, it was my impression it was a fairly well known fact by the public there was a wide range of prices, and there was a lot of advertising done.

The CHAIRMAN. So those poll results come as a surprise to you?

Mr. JEWELL. This is a surprise to me, yes, sir.

The CHAIRMAN. My concept of competition may differ from yours. But I guess competition at a supermarket, where, for instance, a consumer can go into Giant Food, and there is a can of Giant peas, and a can of Campbell peas, and a can of Heinz peas, and they vary in price, the consumer makes a value judgment as among three competing items which one they desire, based on a host of considerations—quality, previous experience with that can of peas, and cost in price—and then makes a value judgment.

I am not satisfied that a purchaser of insurance is sufficiently informed to make a comparable value judgment with respect to automobile liability insurance, and hence, I am not as satisfied that this business is as fiercely competitive as you describe it to be in your testimony.

Mr. JEWELL. I am aware of the wide range of prices, and I have observed that there has been a great deal of competition throughout the United States by various companies in advertising and trying to get across that they do have low rates, and they do write at a lower rate.

I have made no polls or surveys, but it is my impression there is a knowledge on the part of the American public that there is available varying rates and varying types of services in the automobile insurance field.

In the District of Columbia, and throughout the country, policyholders have always had a wide choice of price, coverage, and service.

The American public has benefited from this competitive atmosphere and has enjoyed the lowest possible automobile insurance rates.

In a period when the cost of almost every product and service, including those purchased by insurers, has increased, automobile insurance rates have remained stable. In fact, in recent years automobile insurance rates have declined countrywide. While the overall Consumer Price Index increased 8.8 percent during 1973, the automobile insurance composite index decreased 1.7 percent.

In the District of Columbia, the rates for automobile insurance for the major writers have not been increased during the past 3 years.

The CHAIRMAN. So a great measure of that is by State regulation.

Mr. Denenberg said for 4 years he has not allowed a rate increase in Pennsylvania.

Mr. JEWELL. He has not allowed a rate increase, but we are talking about overall countrywide, a slight decrease, so this would have been with some initiative on the overall part of insurance companies to file for decreases in the States.

The CHAIRMAN. Have they decreased?

Mr. JEWELL. There may have been some companies that have decreased.

I see that there are no changes from the companies I contacted in the last 3 years.

#### LARGEST AND LEADING INSURANCE COMPANIES DECLINE TO TESTIFY

The CHAIRMAN. I should note at this point in the record, we twice invited the leading and biggest insurance companies operating in the District of Columbia area to come to testify before this committee, and they turned us down both times.

We invited them as recently as a couple of days ago for a second time, because we wanted to have specific data from the leading companies of this area, including GEICO and the ones being mentioned but twice they have declined to come. I take it as a disinterest in the proceedings relating to this subject. But the four invited were: Travelers, GEICO, All State, and State Farm.

Each one was invited twice, and each one declined to come twice.

I would have thought if I were busily engaged in the insurance business in the District of Columbia, writing a significant amount of coverage in this area, in a hearing that would affect premiums charged, I would have thought they would be lined up outside the door, but they do things differently.

Mr. JEWELL. Could I give you an answer to that maybe a little bit later on in the statement?

The CHAIRMAN. I know you are speaking for some of them, but you do not have the relevant data pertaining to the precise operations of each one of these companies in terms of premiums charged, what companies have car pooling, which ones are going to get back dividends, which ones are going to give reduced coverage for reduced driving, and so forth.

Mr. JEWELL. I think I can give you a partial reason as to why they declined.

The CHAIRMAN. All right.

#### DETERMINATION OF AUTOMOBILE INSURANCE RATES

Mr. JEWELL. Automobile insurance rates are based on three elements:

1. The number of insured accidents;
2. The cost of these accidents; and
3. The administrative expense of claim and policy services.

A reduction simply in the number of accidents as a result of the energy crisis would not necessarily mean a reduction in insurance rates. Medical costs, auto repairs, and administrative expenses have been caught in the inflationary spiral in recent years.

It is predicted that they will continue to increase during 1974. If these inflationary forces are large enough, higher automobile insurance rates may result.

The CHAIRMAN. Now we had just prior to your testimony, the statistics from the Metropolitan Police Department of the District of Columbia with respect to injury accidents, comparing the period of December 1973-January 1974, with the same period of the prior year—

year end and year beginning—and injury accidents were down 49 percent.

Now, that is obviously a very, very important ingredient in insurance, is it not, in terms of how much you are going to have to pay out for claims?

Mr. JEWELL. Yes; it would be one of the ingredients that is in there.

The CHAIRMAN. Now, in candor, would not it be a very significant ingredient?

Mr. JEWELL. It would be one of the ingredients, but we are dealing with insurance costs, not only the number of accidents, but how much did those accidents cost.

The CHAIRMAN. In terms of cost of accidents, if you reduced injury accidents by 49 percent, would not that be a significant change?

Mr. JEWELL. It could be a significant change.

The CHAIRMAN. Is there any way it could not be a significant change?

Mr. JEWELL. No, but what I am trying to say, we are dealing here with the number of accidents, not only injury accidents, but we are dealing with property damage accidents.

We are dealing also with the cost of those accidents, and the injury accidents are one component of the total insurance costs.

The CHAIRMAN. And are fatalities one component?

Mr. JEWELL. They are one component—but a very minor component of automobile insurance costs.

The CHAIRMAN. In the District the fatality rate was about the same, I think.

Let me find the fatalities here. There were no fatalities in January of 1974. There were two in January of 1973, and for December 1973, there were three.

In December of 1972, there were two, so there is not any enormous change in the fatality figures, however, nationwide—you heard the testimony of the gentleman from the Department of Transportation, and I think also one or more of the insurance commissioners mentioned the enormous reduction of fatalities nationwide during the energy crisis months, Thanksgiving, Christmas, and thereafter, but that would be a component?

Mr. JEWELL. Yes. It is a component of insurance rates—one component.

#### AUTO BODY REPAIR WORK

The CHAIRMAN. Now, with respect to the cost of auto body repair work, is that a factor, a significant factor?

Mr. JEWELL. Yes, it is a part of the overall insurance costs.

The CHAIRMAN. According to Mr. Patrick Hanagan, president of the Washington Association of Body Shop Owners, and the Power Appraisal Co., labor costs of auto body repair shops, because of inflation over the past 2 years, has been zero.

There has been no increase in labor costs. Parts have gone up 10 percent. On the average repair job parts are equal to one-fourth to one-half of the total cost. That is 2½ to 5 percent inflation rate in the auto body repair business.

Do you dispute that figure, or do you think it is higher?

Mr. JEWELL. I cannot dispute it. I am trying to recall just what the composite index countrywide was.

The CHAIRMAN. This was a survey made of the Washington area.

Mr. JEWELL. In Washington, D.C.?

The CHAIRMAN. Yes; Washington, D.C., not the State of Washington.

#### COST OF HOSPITAL CARE

You talk about health and medical costs, which you say have been caught in the inflationary spiral.

The cost of hospital care in the District of Columbia increased 3.3 percent over last year.

Mr. JEWELL. That is in hospital costs.

The CHAIRMAN. Yes; we are talking about the District of Columbia only, now.

Mr. JEWELL. That could be. I am not familiar with the District of Columbia.

My figures here are based on the consumer price index countrywide.

The CHAIRMAN. I know we gravitate from time to time nationwide, and then D.C., but I just wanted to put in perspective what increases in Washington there have been in medical costs and auto repairs, so we do not imagine an enormous inflationary figure.

At this time, I place in the record a letter from the Hospital Council of the National Capital Area.

[The letter referred to follows:]



**HOSPITAL COUNCIL  
OF THE NATIONAL CAPITAL AREA, INC.**

1812 K STREET, N.W., WASHINGTON, D.C. 20006 • 202 | 296-5727

OSCAR BENWOOD HUNTER, JR., M.D.  
President

WILLIAM M. BUCHER  
Executive Vice President and Director

February 20, 1974

The Honorable Thomas F. Eagleton  
Room 6235  
New Senate Office Building  
Washington, D.C. 20510

Dear Senator Eagleton:

The question as to inflationary trends in hospital charges in the Washington Metropolitan Area must be answered in terms of the maximum controls placed upon hospitals both locally and nationally during the past several years especially under the Economic Stabilization Program. Hospitals were singled out for special praise for their accomplishment of meeting the challenges of inflation. We did so well as to find ourselves one of two industries still under Phase IV controls while being faced with a decontrolled environment which threatens our very existence.

As to the inflationary trends in local hospitals, the following American Hospital Association research will serve as a local response in that the charges and costs were applied nationally and few exceptions were granted locally.

I will comment on two areas to give you and your committee the necessary perspective to effectively evaluate the forces of inflation and their affect upon the hospital including, 1) the nature of hospital costs and 2) an assessment of the experience of hospitals under existing pre-Phase IV Economic Stabilization Program regulations.

TABLE I  
Categories of Hospital Expense

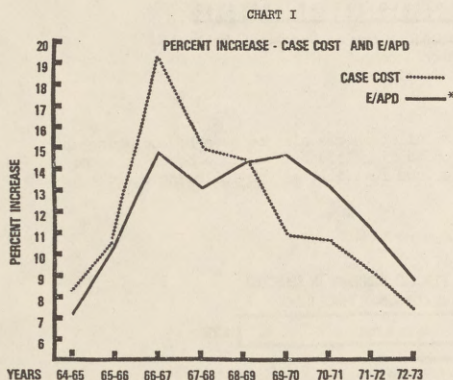
Payroll Expenses		60.6%
Wages and Salaries	54.5%	
Employee Health and Welfare Benefits	6.1%	
Nonpayroll Expenses		39.4
Drugs	2.8	
Raw Food	2.8	
Utilities	1.7	
Depreciation	3.7	
Interest	1.6	
Insurance	.7	
Medical Supplies	8.5	
Other	17.6	
		<u>100.0%</u>

MEMBERS- ALEXANDRIA HOSPITAL • ARLINGTON HOSPITAL • CAFRITZ MEMORIAL HOSPITAL • CHESTNUT LODGE • CHILDREN'S HOSPITAL • CIRCLE TERRACE HOSPITAL • COLUMBIA HOSPITAL FOR WOMEN • DOCTORS HOSPITAL • FAIRFAX HOSPITAL • FREEDMEN'S HOSPITAL • GEORGE WASHINGTON UNIVERSITY HOSPITAL • GEORGETOWN UNIVERSITY HOSPITAL • HADLEY MEMORIAL HOSPITAL • HOLY CROSS HOSPITAL • HOSPITAL FOR SICK CHILDREN • LELAND MEMORIAL HOSPITAL • MALCOLM GROW (USAF) MEDICAL CENTER • MONTGOMERY GENERAL HOSPITAL • NATIONAL ORTHOPAEDIC AND REHABILITATION HOSPITAL • PRINCE GEORGE'S GENERAL HOSPITAL • PRINCE WILLIAM HOSPITAL • PROVIDENCE HOSPITAL • PSYCHIATRIC INSTITUTE OF WASHINGTON • ROGERS MEMORIAL HOSPITAL • SIBLEY MEMORIAL HOSPITAL • SUBURBAN HOSPITAL • WASHINGTON HOSPITAL CENTER • WASHINGTON SANITARIUM AND HOSPITAL

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It is essential to note that wages and fringe benefits constitute the largest portion of hospital costs but the relative size of the labor portion has steadily diminished in recent years due to the increase in the quality and rapidly rising prices of goods that the hospital must purchase to provide care. Thus recognition must be given to the fact that inflationary forces in such areas as fuel, food, supplies of all types and wages have a major impact on the hospitals as a service institution.

Next I believe the following chart will illustrate that prior to 1966 and the implementation of the Medicare program, hospital costs per adjusted patient day were rising at the annual rate of about 6 to 7 percent, the case cost (total inpatient cost per admission) was rising about 8 to 10%.

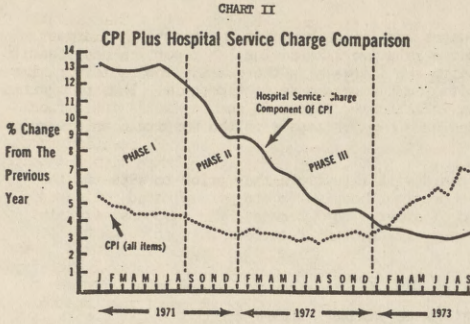


\*E/APD refers to expenses per adjusted patient day.

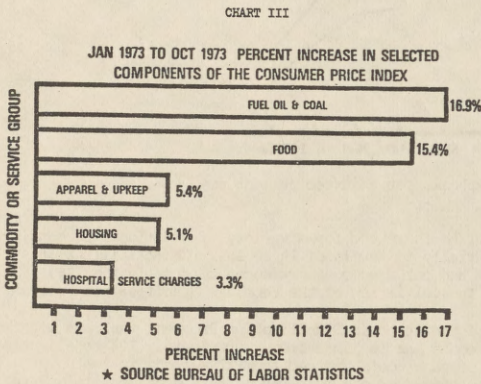
Following the implementation of Medicare and for a variety of additional reasons, rates of increase rose substantially to levels of 14 to 15%. Chart I illustrates that the costs per patient day and per case cost commenced to drop in the 1969 and 1970 period both prior to the initiation of the Economic Stabilization Program.

Since 1971 and the beginning of the Economic Stabilization Program, the rate of increase in hospital per diem costs has declined from approximately 13% to slightly more than 8% and the increase of case costs dropped from 11 percent to just over 7 percent. Since your question concerned the most recent period of hospital charge fluctuation as the result of inflation, I am inclined to relate this data to the Consumer Price Index in similar chart form for ease in presentation as follows:

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The efforts of hospitals to reduce inflation can also be seen by comparing the rate of increase in hospital charges during 1973 with certain other consumer commodities, such as food, housing, and fuel oil, as the following chart illustrates.



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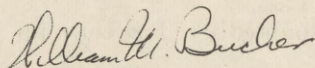
Approximately half of the increase in hospital costs (and therefore charges) has stemmed traditionally from prices hospitals pay for the labor and non-labor inputs (the inflationary factor) used in the provision of hospital services. The other half of the cost increase has been the result of an increase in the quantity of the labor and non-labor inputs employed to provide more and better hospital services.

The dramatic reduction by hospitals in the rate of increase in both hospital prices and costs has not been accomplished without great sacrifice. The operation of the health services industry section of E.S.P. was at best accomplished with fragmented and diverse regulatory methodology which varied from situation to situation.

The ability for hospitals to maintain their 1973 position on the Consumer Price Index while all other industry from whom we must buy or compete with in wages has been totally decontrolled is of course an absolute farce. Being less than one half the Consumer Price Index for most of 1973 illustrates only that the hospital industry achieved a cost related charge level. From this point forward, the increase in hospital costs and charges will forcibly follow the fluctuation of the Consumer Price Index as inflation continues to run its course. Congress itself will have a major role in increasing future costs with minimum wage, Taft Hartley legislation, broadened health insurance and other legislation currently under consideration.

I hope this letter will point up for you and the committee the effect of inflation on health care charges and what we can expect in the future. We have joined in litigation against the Cost of Living Council's Phase IV provocations and have little doubt that our charges will carry.

Sincerely yours,



William M. Bucher  
Executive Vice President  
and Director

WMB:rr

Mr. JEWELL. But there are still increasing costs both to auto repair and some degree in medical care costs.

They are still increasing.

In order to comply with the standards of the rate regulatory laws that rates must not be excessive, inadequate or unfairly discriminatory, considerable detail is necessary so that proper rates can be developed by type of vehicle, by coverage, by territory, and by class.

A flat reduction of any amount in all automobile insurance rates would not be equitable since the energy crisis will affect private passenger cars differently than commercial cars.

It will also affect insurance coverages in different ways.

Companies writing automobile insurance in the District of Columbia compete in price by charging different rates based on their experience. An overall reduction for all companies from their present rate level would be inequitable and would not recognize the adequacy of the current rates charged by individual companies.

#### REDUCTION IN SPEED LIMITS

It is difficult, if not impossible, to measure what effect the present mandatory reduction in speed limits and the voluntary fuel allocation programs will have on automobile insurance losses.

Nationally, the 55-mile speed limit will undoubtedly reduce the number of fatalities.

This will certainly be a beneficial result of the energy crisis. However, in the area of insurance rates, fatalities are only a very small component of aggregate automobile insurance losses: The Department of Transportation closed claim study showed that approximately 1 percent of all bodily injury claims involved death cases. Most of the overall cost of automobile accidents comes from nonfatal injuries and property damage.

The effect on fatalities and injuries of a reduced speed limit will vary greatly by State and even by areas within a State.

In the District of Columbia, we do not see how imposition of a 55-mile speed limit could have any measurable impact in reducing accidents or losses, since speed limits in the District have always been well under 55 miles an hour on almost all streets and highways.

The CHAIRMAN. That does not take into account the fact that one can be insured as a resident of the District, take out insurance in the District, and he may well be out on the beltway when his accident occurs?

Mr. JEWELL. This does take into account that the number of out-of-State injuries of Washington, D.C., residents is a very minor percentage of the total injuries and accidents.

I think it is only about 5 percent out of State.

#### AVAILABILITY OF GASOLINE

The availability of gasoline varies by area and while it is extremely scarce in some areas, there are other areas where there is a plentiful supply.

A number of alternatives to strict rationing have been explored in various areas throughout the country.

A further complication in measuring the effect of the crisis are changes in the allocation of gasoline. An area which is short 1 month may receive an additional supply the next month. These measures will have an effect upon automobile loss costs, but the extent will vary depending on the system and the available supply.

The CHAIRMAN. There is no dispute where we stand in the District on that, is there?

Mr. JEWELL. I have heard, sir, that it is very tight.

The CHAIRMAN. I think that the supply of gasoline in the District of Columbia for the month of January was 76 percent of what it was a year ago. The Maryland situation is almost as bad or maybe even worse. I may be off on the exact figure but I know it was in the seventies. Now if that 76 percent figure is correct it means there was about a one-fourth reduction in miles driven in the District.

Mr. JEWELL. Well, there would be a reduction in the available gasoline supply. I do not know if that would be directly correlated.

The CHAIRMAN. Let us assume that 76 percent also pertains to the contiguous outlying areas of Maryland and Virginia, I think it is fairly close to that. But if there is only 76 percent as much gasoline sold today in the District versus 1 year ago, and if there is about a one-fourth reduction in the amount of driving around this metropolitan area—

Mr. JEWELL. If this was all that was available to the residents of the District, that would be correct.

The CHAIRMAN [continuing]. Where else would I go to get gasoline?

Mr. JEWELL. If that was all of the fuel available, it would have to go down as the same amount, I would agree with you.

The CHAIRMAN. So it would stand to reason there is a lot less driving going on around this metropolitan area today than a year ago?

Mr. JEWELL. There is in the District of Columbia; yes, sir.

The CHAIRMAN. The point I want to make is that there would have to be 25 percent less.

Mr. JEWELL. I think this is what I am trying to point out here, even though in the District there has been a limited supply, that it may be that some months in the future, they will get additional supplies, and this could change from 1 month to another month, and this could happen all over the country.

In my particular State of Illinois, they supposedly allocated some additional gasoline there in the Chicago area, and this will affect the driving habits of the people, and will have an effect in those areas. It will depend on the availability of gasoline.

#### SHIFT TO SMALLER CARS

In order to conserve gasoline, there will undoubtedly be a shift from the larger, standard model automobile to the smaller models.

Of significance to automobile insurance are various research studies by the Insurance Institute for Highway Safety showing that the passengers of smaller cars, once they are involved in accidents, tend to sustain more severe injuries than the passengers of larger cars. Further, these studies show small cars tend to be involved in accidents more frequently than larger cars.

The CHAIRMAN. I want to put that in perspective too.

If a Vega hits a Vega at 30-miles-per-hour headon, and let us say an Impala hits an Impala at 30-miles-per-hour headon, tell me what your studies show, in terms of property damage to the Vegas, viz-a-viz the Impalas, and personal injury?

Mr. JEWELL. This reference here came from a rather elaborate study made by the Insurance Institute for Highway Safety, I am merely talking from this study. What they have said they have found with regard to the injuries in small cars, and the more accidents to the smaller cars, is contained in this report—the Insurance Advisory Committee Report to the Special NAIC Task Force on the Energy Crisis, dated December 31, 1973.

I would like to put this in the record if you would like to have it.

The CHAIRMAN. We will make that an appendix to the record.

[The report referred to appears in the appendix.]

Now, on the rate of change to small cars from large cars, let me read into the record at this time what the automobile manufacturers state will be the case.

It is a projection—it could be accurate, or it could be wrong.

General Motors is going to maintain 35 percent of its production in large cars, Ford 40 percent in large cars, Chrysler 45 percent in large cars.

General Motors predicts that 60–65 percent of the cars on the road will be small in the next 2 years.

Ford continues to stress the continuation of the demand for large cars.

According to Motor Vehicle Manufacturers Association, there will continue to be a place for heavy cars on the American market—we will continue to see that.

Last year small cars comprised 41 percent of the market. There is a shift to small cars, there is no doubt about that.

The question is if it is not going to be total or universal, and that there will be a good number of large cars around, we will see just that, if these estimates are correct.

Mr. JEWELL. At the outset of the energy crisis, the National Association of Insurance Commissioners Task Force on the Energy Crisis and Insurance Related Matters requested the Industry Advisory Committee, of which I am a member, to develop and implement a fast-track monitoring system to determine the effect of the current fuel shortage and reduced speed limits on automobile insurance loss costs.

#### EFFECT OF CURRENT CRISIS ON AUTOMOBILE INSURANCE LOSSES

This program has been developed and accepted by the task force. The program will compare, on a monthly basis, insurance loss costs during 1974 with those occurring in 1973.

Companies writing well over half of the countrywide automobile insurance premiums have voluntarily agreed to participate in this program. In the District of Columbia, over 75 percent of the automobile volume will be included in this program. Data will be available starting in April of 1974 and will be available 45 days after the end of each month during 1974.

It will give information by coverage and by State, including the District of Columbia, both for the number of accidents and the cost of these accidents. With this type of meaningful information, individual companies and advisory organizations will be in a position to analyze overall trends in automobile loss costs at the earliest possible date and react accordingly.

The CHAIRMAN. When NAIC, which is the National Association of Insurance Commissioners, set up this task force, they had asked the industry for these figures, and the industry initially said they would only give the figures on an annual basis.

They wanted to average the last 3 months of 1973 with the first 9 months of 1973.

Do you know that to be the case?

Mr. JEWELL. This is a case in preparing the proposal to the task force, they proposed in the initial report, that everything with the exception of some quarterly loss ratio would be on a month by month basis.

The CHAIRMAN. That is what you place great emphasis on here is the quarterly loss ratio.

Mr. JEWELL. My emphasis is the data on the number of claims and what the cost will be on a monthly basis.

There is another item referred to in the report as bodily injury, property damage, and incurred losses for 12 months ending, and this is the original proposal, but in submitting this to the technical task force of the insurance commissioners, they recommended instead of getting it by year, they would like to get it each quarter, which the industry said is perfectly all right, because we could collect it in that manner.

I might comment right here that there was some comment made this morning in regard that this data would not be used for rate-making. I would like to clarify the record in the summary of this report. The Industry Advisory Committee said the accelerated monitoring system should provide meaningful information at the earliest possible date on trends in automobile loss costs in the immediate crisis.

The data is not intended to be used nor is it adequate for the purpose of making automobile insurance rates.

Its only purpose is to indicate any overall trend that will occur as a result of it.

These rates should continue to be determined by individual insurers or advisory organizations, with full consideration of these factors, plus the adequacy of present rates in the various States and the effect of continuing inflation, and so forth.

I think what we are trying to say there is that this fast track monitoring data cannot be taken by each and every company, and for them to develop their own rate based on their overall experience.

They should take this fast-track monitoring data, and compare it with their own experience, and with their own rate levels they have in the various States where they are, and make their own individual determination should rates be changed.

I think this has to boil down to what we are trying to do in the fast-track monitoring system is to measure their sum effect on insurance loss cost of the current energy crisis, and then this should be translated into the individual companies, where you can proceed.

In addition to this industry effort, the regulatory authorities of most States, including the District of Columbia, are developing additional information for their use in administering the rate regulatory laws.

#### SUMMARY OF POSITION OF INSURANCE INDUSTRY

The present programs of the insurance industry are responsive to those policyholders who reduce their exposure by driving less as a result of the fuel shortage.

Any proposal for an additional across-the-board rate cut would be unwarranted, duplicative, and productive of serious inequities for different categories of motorists. No such action is needed or can be justified.

Due to the competitive nature of the automobile insurance industry, any present or prospective savings to policyholders will be passed on to the public at the earliest possible date when the facts are available.

The CHAIRMAN. When do you think that might be if it is left up to you?

Mr. JEWELL. I think this is being done now, as I have said, by the companies revising their classification rules, and by companies giving discounts on carpools.

This is some of the areas in which they are reducing the premiums for some insurers.

I think it is also being done by some of the carriers saying they will pay a dividend or premium refund program, and this will be at the end of the period, and they are saying that. So what I am saying, as people reduce their driving, they do have available now reductions in their premiums, and this will be reflected in the premium income of the companies.

The CHAIRMAN. Suppose I am an insured motorist, for reasons best known to me, I am not a participant in a carpool, and my company has no current policy with respect to reducing premiums insofar as what it tells me or guarantees by a new rate application what it is going to do. Where does that leave me?

Mr. JEWELL. Then I am afraid you are in the area where the competition will bring us along, because I am sure you are faced with this situation as a policyholder, and you know you have reduced your driving, and you have reduced your exposure.

The CHAIRMAN. If I shop around and find GEICO gives a better deal than Travelers—yes. But if these national polls are right, people are not aware of the wide disparity of the premiums charged by different companies. What great comfort is that to me?

Mr. JEWELL. I think this situation will improve. There has been a lot of publicity with regard to carpools, and with regard to the fact that people can save money by joining carpools.

There has been a lot of advertising and a lot of publicity with regard to these classification changes, if you do drive, and you join the carpool, you are entitled to a lower premium.

The CHAIRMAN. Have any of the insurance carriers in the District of Columbia, the ones previously mentioned, run any newspaper, radio, or television ads, to the effect that they will reduce premiums, pay back dividends, or give rebates to customers?

Mr. JEWELL. To my knowledge they have not.

The power of competition among more than 600 automobile insurance companies as a prime regulatory force will be even more intense during the current crisis.

Competition and the regulation of the automobile insurance industry can be relied upon to assure policyholders of fair treatment during this crisis. Caution should be exercised by legislators and regulators in mandating rate reductions which could jeopardize the financial stability of some insurers. Solvency is of utmost importance to policyholders. When a loss occurs, they expect and are entitled to payment for the protection they purchased.

In an effort to measure the effect of various limitations on fuel availability and reduced speed limits at the earliest possible date, the automobile insurance industry in cooperation with the National Association of Insurance Commissioners will monitor experience during 1974.

This information will enable companies to analyze trends in automobile loss costs and make proper adjustments which will recognize not only these trends but also the adequacy of present rates and the effect of inflation on loss costs.

We respectfully urge against any action by Congress to require an overall reduction in motor vehicle insurance premiums in the District of Columbia.

#### USE OF FORMULA

The CHAIRMAN. Rather than leave it to the discretion of each insurance company: What do you say about the design of a formula? Let us say, for example, similar to the New Jersey formula, or the Pennsylvania formula. So it becomes automatic, if there are these savings that most of us anticipate should come about by reason of reduced driving, reduced speeds, reduced availability of gasoline, all of these things that are part and parcel, that each insured motorist of the District of Columbia would get a refund depending on the profit experience of that particular carrier?

Mr. JEWELL. I think that these are available today by the various State regulatory laws, and by the administration of those laws where it does require that due consideration shall be given to pass on prospective loss experience, to pass on prospective expenses, and to a reasonable margin for underwriting profit.

#### COMPETITION

I think it is there now, and I think the companies are reacting to this in different manners. As I pointed out here, and I have stressed competition a great deal, I do think this is the great leveling factor. It has been for a number of years in the automobile insurance industry.

The companies have competed very vigorously for business, and you have a wide range of prices, a wide range of services, different

types of merchandising, and I think the public is benefiting from this right now.

The CHAIRMAN. The wide range of prices, which we discussed once before, does not compel me to believe there is a great element of competition upon which you place such great reliance in your testimony. I am just not certain in my own mind that the people are aware of these disparities in prices—enormous as they are. They are not just a nickel, a dime, or a dollar.

We have already put in the record some information, but we will at this time put in the chart that shows the prices vary, such as where we compare GEICO with Travelers, comparable policies, one is 70 percent cheaper, one is 64 percent of what the other one is.

[The chart referred to follows:]

District of Columbia  
Annual Private Passenger Automobile Premiums<sup>1</sup>

	Bodily Injury		Property Damage		ACV Comp.	Ded. Coll. \$250 \$100		
	10/20 25/50	100/300	5,000 10,000	25,000				
GEICO	\$ 60	\$ 74	\$ 87	\$ 39	\$ 40	\$ 22	\$ 37	\$ 61
ALLSTATE	142	153	167	Incl. <sup>4</sup>	Incl.	26	40	67
STATE FARM <sup>2</sup>	127	159	173	None	Incl.	30	42	60
TRAVELERS	78	93	110	58	61	63	47	78
CRITERION	104	128	140 (50/100)	66	69	71	45	58
AETNA	91	112	136	60	63	64	22	37
NATIONWIDE	65	75	87	45	49	54	32	34
DAIRYLAND	276	300 (20/40)	None	Incl.	None	None	12 (50 Ded.)	None
HARTFORD	76	93	113	48	51	52	28	46
UNITED SERVICES <sup>3</sup>	61	74	90	38	41	42	22	37

1) Based on 1969 Chevelle Malibu, 4 door sedan, symbol 4.6. Car driven to work -- less than 10 miles one way -- no at-fault accidents or serious traffic charges last three years -- no young drivers.  
 2) Paid dividends since 1971 averaging about 21%. Charges membership first policy year.  
 3) Makes refunds. 1972 refund approximately 10%.  
 4) "Incl." = Property damage premium included in bodily injury premium.

## FORMULA

The CHAIRMAN. Are you familiar at all with either the New Jersey or the Pennsylvania formula?

Mr. JEWELL. I am familiar with the Pennsylvania formula.

It is in bulletin form put out by Commissioner Denenberg, and I think he has made some modification of his original bulletin.

The Chairman. What is your impression of that formula?

Mr. JEWELL. I do not believe this is the proper way to go about recognizing the current energy crisis.

I do not think it is proper to set up a formula which must be followed by all companies in determining what is extraordinary, or what you might refer to as windfall profits.

I think this is a matter in which the companies themselves, with the regulations of the insurance commissioner should determine. As I pointed out previously, a number of companies are doing this right now. There are companies that I think we heard from that have already reduced their rates in some of these things.

The CHAIRMAN. Mr. Jewell, how long have you been in your position with the National Association of Insurers?

Mr. JEWELL. Since October 1, 1973.

The CHAIRMAN. Have you been in insurance prior to that time?

Mr. JEWELL. Yes, I have been in the insurance rating business for about 27 years.

The CHAIRMAN. In rating, you dealt with liability insurance?

Mr. JEWELL. Yes, sir.

The CHAIRMAN. Personal injury, property damage, and the like?

Mr. JEWELL. Yes, sir.

## EFFECT OF REDUCTIONS IN DRIVING, GASOLINE, AND SPEED LIMITS

The CHAIRMAN. Based on 27 years of experience in the business, what effect will substantially reduced driving, substantially reduced availability of gasoline, and substantially lowered speeds have on claims?

Mr. JEWELL. It will cause a reduction in the number of claims. There is no doubt about that, if there is a reduction in the amount of driving, and if there are reductions in the speed limits. But as I said, this has varied by different areas and by different States. The effect of the lowered speed limits in some States, such as the District of Columbia, will not be affected.

In some areas of a State like Texas, it will be affected, but in other areas, it will not have any effect.

Then we have the question of the reduced driving. I know I am familiar in my State, in some areas there is reduced driving, in Metropolitan Chicago, but downstate, there is no reduced driving. There is available gasoline; therefore, there will be very little effect there. The point I am trying to make here in my testimony today is that we are uncertain as to just what effect this will have.

We know there will be an effect. Like I said, fatalities are down, and this is a fine thing; this is a component part of automobile insurance losses. We want to get the facts. If there is a measurable difference,

then I think I can assure you the insurance industry is going to reflect it.

#### AVAILABILITY OF FINAL FIGURES

In answer to your previous comment about the reluctance of the companies to come here to testify, it is not the fact that the companies I have talked to do not at the present time have actual facts and figures within their companies. As it was pointed out here on the accident statistics, it takes from 30 days to 6 months to get the final figures. It is even more difficult with an insurance company operation. You are not meeting there with just the accident occurring, but you are dealing with a claim being presented, processing the claim, and payment of the claim.

The CHAIRMAN. Well, claim payout might not be very relevant, because you might be paying out a claim in a given month for an accident that occurred a year or 2 years prior thereto.

Mr. JEWELL. This could be true in personal injury cases, but in property damage cases, and in your collisions, there is a very rapid payout, so it would be fairly indicative, I think, in those areas.

You are right on the personal injury.

#### INTEREST ON EXCESS PREMIUM

The CHAIRMAN. If it is determined to be an excess premium charge, by reason of the energy crisis, what about a payment of interest on that excess premium?

Mr. JEWELL. I think this would be a very difficult thing to determine and to administer. Because, first of all, we would have to define what is an extraordinary profit.

The CHAIRMAN. No great problem with that. You tell me in your testimony the companies are going to do that. That is the strength of your argument. On page 3 of your prepared statement: "Companies will use dividend premium refund programs to recognize extraordinary——"

Mr. JEWELL. That is for those companies that have adopted those programs.

You were asking me if there should be interest on that.

For those programs, those companies that have adopted it, then there would not be that problem. I thought you meant for the overall industry basis.

The CHAIRMAN. For those that have adopted it, they can figure out what their extraordinary profits are, and they can figure out what a fair rate of interest ought to be in the returning of that money.

Mr. JEWELL. I think this would, in my opinion, be a question for the individual company to determine just what should they pay back, how should they pay that back to their policyholders, and what would be the equitable way to return this to the policyholder.

The CHAIRMAN. Well, that is where we part company. In a highly regulated industry, and that is what insurance is, to leave it up to the whim of the particular company to decide what is extraordinary, whether they are going to make that finding, and whether or not they

want to pay the interest stretches confidence beyond the point of comprehension.

Mr. JEWELL. But I think there are fairly rigid regulations. The regulators have, for a number of years, made it a policy that insurance companies should justify the rates they are charging. There are certain criteria set down in the rating loss as to how to determine what is a reasonable rate.

The CHAIRMAN. Finally, based on your 27 years of experience: What about this notion that has been advanced by the insurance companies—I know it is less applicable to the District of Columbia, but in any event, these are the letters they send in to me, so they must think it is of some relevance to the District—that reducing highway travel speeds to 55 miles per hour will not reduce accidents or injuries because of this increased exposure time?

Mr. JEWELL. I was interested in that too. I read from the Congressional Record, and I went back to take a look at the insurance industry highway safety report, and I think it is explained by the fact that they say it should be noted that decreased traffic speeds result in increased accidents.

I would like to submit this report for the record.

The CHAIRMAN. It will be made a part of the appendix of the record.

[See appendix.]

Mr. JEWELL. Yes, sir.

Now, that is what I got from the insurance report. I think what they are trying to say is that this reduction in speed limits will increase the time that the person is on the road, and it will take him a longer time, and he will be exposed to environmental hazards and more traffic density in those areas.

The CHAIRMAN. So if everybody drove 30 miles per hour, you would expect even more accidents, because you would be doubling the exposed time, and you would expect more accidents, more injuries, and more deaths?

Mr. JEWELL. The report says the effect of this increase time exposure on losses is not known.

The CHAIRMAN. And if everybody walked, you would have an awful lot of exposure time, and you would have a lot of body collisions.

Do you really think that is a credible rationale?

Mr. JEWELL. I think the point in there that they are trying to make, and I hate to try to pass on what somebody else is doing, but in my opinion what we are talking about here today is that I do not think any of us here today know what effect the energy crisis will have on insurance loss costs.

The CHAIRMAN. What do you think will result from reduced speeds?

Mr. JEWELL. My best guess is, on an overall basis, there will be some reduction.

The CHAIRMAN. With reduced speeds?

Mr. JEWELL. Yes; of accident frequency.

I think this will reduce the number of fatal accidents.

The CHAIRMAN. What about the number of severe injuries?

Mr. JEWELL. It will probably not increase the number of injuries.

The CHAIRMAN. How about the severity?

Mr. JEWELL. The severity, I do not know. I have not been able to figure out whether there will be more severe injuries or less.

My impulse is that they will be less severe.

The CHAIRMAN. So that the ads on the TV, which say speed kills, should read speed kills but does not injure.

Mr. JEWELL. Speed does injure, but it is a question of how severe it will be, and how severe it will be as far as losses.

The CHAIRMAN. Thank you very much.

[Subsequent to the hearing the following letters were received.]

NATIONAL ASSOCIATION OF INDEPENDENT INSURERS,

*Des Plaines, Ill., March 7, 1974.*

HON. THOMAS F. EAGLETON,  
*Chairman, Committee on the District of Columbia,  
U.S. Senate, Washington, D.C.*

DEAR SENATOR EAGLETON: This letter and attachments supplement our testimony at the hearing on Automobile Insurance Rates and Gasoline Conservation (S. 2969) held on February 22, 1974, and we respectfully request that it be included in the official record of your hearing.

On Page 90 of the transcript, reference was made to programs which have been adopted by the leading insurance companies operating in the District of Columbia. Attached is a brief summary of the programs in effect for each of the ten leading automobile insurance companies. You will note that each of these companies have programs which do recognize reduced mileage and participation in carpools.

In the course of the hearing you expressed concern that many people may not be aware of the opportunities for rate savings for reduced car usage.

Companies have made an effort to inform policyholders of the availability of lower premiums in a number of different ways. Most companies have issued press releases calling attention to lower rates for low mileage driving and carpool arrangements. In addition, companies have notified their agents of lower rates for low mileage drivers and have included brochures or questionnaires with renewal policies or renewal statements. Some companies have notified their policyholders by articles in publications going to all policyholders or members.

The NAII has bulletined its member companies urging those who have not already taken steps to inform their policyholders of reduced rates for lower usage to do so as promptly as possible.

On Page 108 of the transcript, there was discussion on the cost of automobile accidents and the effect of inflation on automobile insurance rates. Enclosed is a copy of the Industry Advisory Committee's report on "Inflation—The Other Crisis." This report was submitted to the Special NAIC Task Force on the Energy Crisis and Insurance Related Matters on February 15, 1974. You will recall that during my testimony there was reference to increases in costs of automobile repairs and medical costs. This report, based on the Bureau of Labor Statistics of the U.S. Department of Labor, shows that the consumer price index for automobile repairs and maintenance has increased 11.4% and medical care has increased 8.8% over the last two years.

My testimony before your committee set forth a number of reasons why legislation mandating (or authorizing the insurance commissioner to mandate) a reduction in automobile insurance rates should not be adopted. Those reasons apply equally against legislation requiring companies to retroactively refund all profits above a specified margin or level, as was suggested in the course of the February 22 hearing.

It is one thing for individual companies to voluntarily elect (as many have) to return part of their profits to their policyholders by way of dividend or other refund plans; this has long been recognized in our business as an important and beneficial form of competition. It is quite a different thing to mandate a formula requiring all companies to refund profits in excess of a specified margin, as suggested by Commissioner Denenberg in his testimony. Such a mandate would violate the most fundamental principles of insurance economics and ratemaking; its ultimate effect could be to force many companies to withdraw from the market or face insolvency.

In the course of testimony and Q. and A. by the several insurance commissioner witnesses, the following basic characteristics of the casualty/property insurance business and the economic principles governing it were enunciated and recognized:

(1) An insurance company is not a public utility (Tr., p. 40, etc.), i.e. no company enjoys a market monopoly. On the contrary, its business is constantly subject to the competitive inroads of scores or hundreds of other companies.

(2) Casualty/property insurers are not guaranteed a profit or a fixed return on capital (Tr., p. 38-40). Practically speaking, there is no way that a profit or a fixed return could ever be guaranteed in an industry like ours with hundreds of competing enterprises. To do so would provide a substantial lack of incentive to cost reductions.

(3) When a casualty/property insurer suffers an underwriting loss for a given year, it is not permitted to recoup that loss by retroactively raising rates (Tr., p. 38-40).

As you know, unlike most other businesses in our economy, insurers do not know the *actual cost* of the product they sell until long after they have sold it. They must formulate and file with insurance departments *today* the rates they will charge tomorrow for policy contracts whose actual ingredient costs (in the form of claims arising under those contracts) won't be known with finality until some time after the close of the experience period involved.

In setting their rates, insurers include allowances for estimated future loss payments, expenses, and a provision for profit. That profit provision, as noted above, is only a hoped for target and in no way an assured return. Review of the by-line operating results of various companies will show that in some years they succeed in achieving a profit (which may be greater or smaller than that aimed at in their rate filing), and in other years they suffer a loss. Unless its losses from the bad years are counterbalanced by its profits from the good years, a company cannot long afford to stay in the market and line in question.

The above facts and considerations should serve to demonstrate the folly of legislation which would retroactively take away all profits above a specified margin (whether it be 3% or 5% or any other arbitrary figure) for periods when the experience cycle proves favorable, and yet leave the companies to absorb the losses for periods when the experience cycle is unfavorable. A cyclical, risk-taking business like insurance could not long survive under such an unbalanced and economically disastrous system. Nor would an inherently unsound concept such as this be any the less unsound simply because it is instituted on a "temporary" basis.

The compelling forces of competition, coupled with the regulation and close surveillance by state insurance departments, with the help of the industry's accelerated monitoring system, can be relied upon to assure the insurance buying public that they will realize any insurance cost reduction that might result from the energy crisis.

We appreciate very much the opportunity to present our views on behalf of the American Insurance Association, American Mutual Insurance Alliance and the National Association of Independent Insurers.

Very truly yours,

R. L. JEWELL, Jr.,  
Assistant Vice President.

P.S.—Since we are speaking on behalf of the American Mutual Insurance Alliance, they have specifically requested that we furnish you with letters relating to the effect of the energy crisis on one of their member companies which specializes in the writing of taxicab business. As you know taxicabs are more in demand since the "energy crisis" and therefore accident rates are at least as high as previously.

AMALGAMATED CASUALTY INSURANCE Co.,  
Washington, D.C., March 1, 1974.

BERT M. THOMPSON, Esquire,  
American Mutual Insurance Alliance,  
Washington, D.C.

Re Washington, D.C., experience ratings for P.I. and P.D., as regards this Company which insures taxicabs only.

DEAR MR. THOMPSON: The energy crisis has adversely affected this Company's costs per taxicab insured in the D.C. area. The reasons are simple and apparent. Since taxicabs have available by allocation all the gas they can use, they

are and have been busier than ever. There is a greater demand for their services. Hence, the taxicab accident rate to date is at least as high as before, if not higher. Also, taxicabs in the last few months of the emergency have been able to "group ride" (that is, pick up one passenger, then another further down the road, until they get a full load) so that, in effect, the cab load of the driver and passengers at any one accident is higher than before. Our records show that in the last months the driver-passenger load is a factor of 3 compared to 2.4 before the energy crisis.

You asked for our average payment figures as regards the costs to pay property damage claims and personal injury claims from 1963 to date. Inflation costs, specifically in the D.C. area, to repair vehicles and for medical and hospital expenses are extremely high.

Five years ago the hourly repair charge on automobiles was \$4.50-\$5.00 and is now at \$11.00 an hour. Five years ago D.C. doctors charged \$5.00 a visit and now charge \$15.00 to \$25.00. Hospital costs in five years in the D.C. area went from about \$30.00 a day to an average of \$85.00 a day, and we extrapolate a continuing inflationary cost in these areas of about 10% a year.

Property damage costs paid on an average per claim by this Company, either paid or incurred.

1963 -----	\$106. 32	1969 -----	\$207. 43
1964 -----	112. 09	1970 -----	210. 90
1965 -----	120. 51	1971 -----	216. 04
1966 -----	134. 86	1972 -----	222. 10
1967 -----	149. 60	1973 -----	236. 10
1968 -----	167. 43	1974 to date -----	251. 00

Personal injury costs paid on an average for each personal injury, either paid or incurred.

1963 -----	\$488. 25	1969 -----	\$850. 20
1964 -----	518. 06	1970 -----	1, 001. 80
1965 -----	635. 75	1971 -----	1, 049. 10
1966 -----	622. 88	1972 -----	1, 090. 00
1967 -----	738. 30	1973 -----	1, 150. 00
1968 -----	794. 98	1974 to date -----	1, 200. 00

What is most important is that our reported taxicab accident rate has not declined and has probably increased the last few months. We can only speak for our commercial vehicles (taxicabs) and have no records on private passenger vehicles though, in our crowded metropolitan area, it appears to us that accident rates still approximate the same as before. Urban areas are a problem unto themselves, insurancewise.

Very truly yours,

CHARLES F. HOELZER, *President.*

The CHAIRMAN. Our next witness is Mr. David E. A. Carson, senior vice president, the Hartford Insurance Group.

I must note, of all of the companies we invited to testify here today, you are the only one that agreed to come, and we are all the more pleased to have you.

I wish we had the others as well, but we are glad you came in any event.

#### STATEMENT OF DAVID E. A. CARSON, SENIOR VICE PRESIDENT, THE HARTFORD INSURANCE GROUP

Mr. CARSON. Thank you, Mr. Chairman.

I have a brief statement which I would like to read, Senator.

My name is David Carson. I am senior vice president of the Hartford Insurance Group.

I am responsible for the property and casualty underwriting and actuarial operations of the Hartford Insurance Group.

The Hartford is the ninth largest writer of private passenger automobile insurance in the District of Columbia. We wrote about 2.8 percent of that market in 1972. We welcome this opportunity to make some brief comments concerning the effect of the energy crisis on automobile insurance premiums.

Although we are strongly opposed to legislation mandating a rate decrease, we are pleased to be afforded this opportunity to express our views on Senate bill 2969.

We have received a copy of the recent report of the National Association of Insurance Commissioner's Task Force on the Energy Crisis.

This report carefully reflects a number of critical countervailing factors which should further a general appreciation of the uncertainty facing all of us on the impact the energy crisis is likely to have on the cost of auto insurance.

#### ABSENCE OF HARD DATA

As an actuary and as a senior executive of the Hartford Insurance Group I cannot overstate our concern about the absence of any really hard data upon which to base reasonable judgments concerning the extent of or even the direction of prospective changes in our loss experience for automobile insurance.

Inflationary trends in areas such as the price of automobiles, repair costs, and medical and hospital costs are continuing. The Consumer Price Index through December of 1973 showed automobile repair and maintenance costs rising 5.4 percent, and medical and hospital costs rising 4 percent.

Recent action by the Cost of Living Council will permit hospitals to increase their charges up to 7.5 percent per year.

But directly in point is the fact that average claim costs for automobile property damage liability insurance costs increased 8.2 percent in 1973. An 8.9 percent annual rate of inflation measured by the GNP Price Index was recently reported by the Department of Commerce for the fourth quarter of 1973, the worst such rate in 23 years, and Assistant Secretary Jones predicted that inflation will remain high in 1974.

Our own countrywide experience for the last 3 months—November, December and January—shows no significant change in the number of claims reported to us from the same period 1 year ago.

For these 3 months the number of auto liability claims for the Hartford was 3 percent over the previous year. The number of auto physical damage claims for these 3 months was 12.1 percent higher than last year.

For the year 1973, the Hartford wrote \$426 million in personal automobile insurance. We incurred an underwriting loss of \$21 million.

We have noted that official sources are citing a reduction in highway fatalities since lowered highway speed limits went into effect. But the significance of this reduction, welcome as it is in human terms, is ever so much less than one might suppose.

Deaths constitute considerably less than 1 percent of the total number of automobile insurance claims.

The Hartford is faced with the following situation: It is possible, and I emphasize the word possible, that the gasoline shortage could

be so pronounced as to outweigh all other adverse factors and produce lower insurance costs.

At the present time, however, we do not have enough information to determine just how severe the fuel shortage will be, whether it will be temporary or permanent, whether its impact will be felt uniformly throughout the Nation or in varying degrees by State, whether some States may escape the shortages altogether and, above all, what the overall dollar and cents impact will be on automobile insurance losses.

We thus do not feel that we can justify an overall rate level reduction at this time. If we were to lower rates in anticipation of a reduction in losses that did not occur, we could find that our rates were seriously inadequate.

It is our view that rates should be made in the normal manner, recognizing all of the factors that affect pricing—known inflation—known changes in frequency—and all other relevant factors.

#### HARTFORD PLAN

The Hartford's very positive response to the dilemma of the unknown with respect to claims frequencies and loss costs due to the energy crisis is a premium return plan.

Under this plan if the Hartford during calendar year 1974 realizes profits in excess of 5 percent of earned premium in the District of Columbia on its private passenger automobile business, the portion of the profit in excess of 5 percent will be returned to its policyholders in the form of dividends, with the exception of amounts so minimal that the administrative costs of the distribution would not be justified.

Even if the Hartford's countrywide results for 1974 show a loss, it is possible that some States will receive the dividend.

For example, in 1973 the Hartford suffered a countrywide statutory underwriting loss on automobile insurance, but we estimate that in 23 States we made a profit.

The premium return plan we have announced makes it unnecessary to make a premature guess as to the impact of the fuel shortage, and at the same time assures our policyholders that the energy crisis will not result in the Hartford's reaping unanticipated profits.

The Hartford has also adopted changes in its automobile class plan which gives specific benefits to individuals who use their cars for driving to work and are part of a carpool arrangement.

We will be participating in the fast track monitoring system which is to be established as a recommendation of the National Association of Insurance Commissioners' Task Force on the Energy Crisis.

This system will provide us and other insurers with month to month data which will enable us quickly to spot reliable trends in automobile insurance frequency and severity statistics and to respond promptly with appropriate rate changes.

Whether or not such trends become apparent sufficiently early in 1974 to warrant changes, our policyholders will be assured of a premium return on their 1974 premiums if we do realize extraordinary profits on that year's business.

The CHAIRMAN. The figures in your prepared statement are nationwide experience for Hartford?

Mr. CARSON. That is nationwide experience.

The CHAIRMAN. In your prepared statement you talked about the Hartford plan, and profits in excess of 5 percent earned premium in the District of Columbia. Is that the same as the underwriting return?

Mr. CARSON. That is the underwriting return; yes, sir.

The CHAIRMAN. The same phraseology?

Mr. CARSON. Yes, sir.

The CHAIRMAN. That does not include profits made on premium investment?

Mr. CARSON. That is correct.

The CHAIRMAN. The relationship between premiums paid in by District of Columbia policyholders and damages paid out in claims: Is that how you compute the percentage?

Mr. CARSON. And our taxes and expenses, but not including Federal income tax.

The CHAIRMAN. What about including a return on profits made on the premium investment?

Mr. CARSON. The position on the profit which we allowed under the dividend program, we spent a lot of time in discussion.

However, let me give you our rationale for the 5 percent.

The traditional figure in automobile insurance ratemaking country-wide has been a 5-percent return.

Now, the 5-percent return has been justified in most States of the country on the basis of that return plus the return on investment income we normally anticipate. So the reason for the 5-percent return in ratemaking prospectively has been a consideration of total income.

On this plan, we are not making rates, and as Commissioner Denenberg pointed out this morning, we are not guaranteed a profit.

This is not a cost-plus plan. Unfortunately, the commissioner from New Jersey talked about cost-plus. This is not cost-plus because the insurance companies do not receive a guarantee of additional money should they lose money.

If you take out all of the States, and the reason why I cite the fact we lose money countrywide, yet in 23 States we made money.

Obviously if we were to return all of the profit in those States we would have had a tremendous loss.

We would have broken even in those States. It seems to us equity requires, because of the wide variances from State to State, that the allowance we are making is reasonable in the light of what it is.

We are prepared, and we do file rates in each of the States according to the profit allowances they make for prospective ratemaking. But I think there is a substantial difference between talking about an average profit for future ratemaking versus an analysis, not of your total book of business, but on piece-by-piece of your business, as to whether or not each individual piece makes a profit. On that basis we feel that the advantages of doing this on a State-by-State basis are to reflect the State differences, but the disadvantages which have led some companies to talk about countrywide experience, and that is the great problem, that we can lose money and still return money and lose more money.

We feel justified that this approach is not identical to the ratemaking approach. The ratemaking approach on a fair and reasonable

basis and on a State-by-State basis assumes if the rates are correct in every State, we will make some profit.

On a prospective return, knowing that we perhaps have not made money in every State, then we should use a different formula approach, and we think this is fair and equitable.

The CHAIRMAN. Did you make a profit in the District of Columbia last year?

Mr. CARSON. Yes; we did.

The CHAIRMAN. Was it more than the 5 percent?

Mr. CARSON. Yes; it was.

The CHAIRMAN. You would prefer not to tell us what it was?

Mr. CARSON. I can tell you in round figures, but right now we have in preparation our annual statements, which are due in the District offices approximately March 1, and the figure is approximately 9 percent on underwriting basis.

I would like to point out that we face another one of the hazards in this problem, and that is that in a jurisdiction like the District, where we write just less than \$1 million of premium, the presence or absence of one major loss, for example, a \$200,000 debt case, and I think there were seven debts in January in the District, has a very volatile effect on one company's experience.

Now, we might go 4 or 5 years in a district, or an area like Washington, without having one. The ratemaking basis eliminates large losses from the ratemaking base. So the rates are not unduly affected by the presence or absence of large losses. But here again we are prepared, in our dividend program, to allow those fluctuations to flow in. We think the greater good is served by recognizing the overall impact that the energy crisis could have, and our desire to show our consumers the Hartford has no intention of unduly benefiting from any change in loss experience due to the energy crisis.

The CHAIRMAN. If we had the energy crisis a year ago and your plan had been in effect, then you would be rebating the difference between 9 percent and 5 percent—that is 4 percent?

Mr. CARSON. That is correct.

The CHAIRMAN. Under your plan?

Mr. CARSON. That is correct.

The CHAIRMAN. How does Commissioner Denenberg's approach strike you?

Mr. CARSON. We have our approach. We are old friends, having appeared at hearings together a number of times, I must say I found myself more in agreement with Professor Denenberg today than I have on most of those other occasions.

We did file with Commissioner Denenberg the Hartford's plan. We are in discussion on the profit formula.

I think the arguments I gave you are the same arguments that we would like to work out with the Pennsylvania insurance department.

The CHAIRMAN. So the general approach is satisfactory to you. You are in disagreement as to the measure of profit?

Mr. CARSON. That is correct, and on the basis of whether or not it should be considered under normal ratemaking. I point out my reasons why I do not think it is normal ratemaking. I think those are the things that should be considered.

The CHAIRMAN. Would you fault the New Jersey commissioner's approach because you consider it to be premature?

Mr. CARSON. I am a little disturbed, Senator, at the problem we face. I was not sure if I understood the New Jersey commissioner correctly. He was talking about getting a whole new set of statistics, other than the NAIC statistics.

The CHAIRMAN. He is going to use both. He is going to use the NAIC for whatever merit it has, plus gather his own on his experience in New Jersey.

Mr. CARSON. Rather than have us put them all together, he wanted us to do it separately for New Jersey. If every State did that, it would take us even longer to process all of the statistics and get them to each State, and in a means in which we can all readily understand them. I think the NAIC took a tremendous step forward when most of the commissioners seemed to agree with each other that they should ask for a set of statistics on a uniform basis from all companies. That is the easiest way to get statistics because we can do it and process them on a normal basis. I think if we are allowed in each jurisdiction to use the NAIC format we will get the statistics faster, and they will be better. They can be processed with greater speed by every State in the country, and by every regulatory jurisdiction.

#### DIFFERENCE IN RATES

The CHAIRMAN. Your rates competitively in the District of Columbia vary from those of GEICO, which seems basically the cheapest rates.

I know you are not huge in this area, as you said, 2 percent or so of the market, but on a bodily injury coverage of \$300,000: GEICO, \$87; Hartford, \$113.

How does your agent sell a prospective client with that disparity in rates?

I might say others are even greater, but I have got you here, and I have not got the others.

Mr. CARSON. This is something not only of interest to you, but others.

We use substantially two different marketing methods. I cannot speak for GEICO, but it is my understanding that most of their solicitation is done from mailing lists which are prepared by the company, and their approach has been, I understand, a selective approach.

Our agents do business using not only the Hartford, but the other companies' customers. Their manner of getting customers is as different as each of their operations.

They are independent, they are not employees, and they develop their customers from I assume different sources.

Many times their customers feel that their independence as an agent, their personal contact as opposed to the mail gives them greater assurance of their proper coverage. That they bought the right limits, that they are fully covered, that they are going on a long trip, to Canada and so forth, a variety of reasons, people feel that they get better service from an independent insurance agent, and they are generally willing to pay more for that type of service.

The CHAIRMAN. Mr. Carson, you are in charge of the actuarial operations?

Mr. CARSON. That is correct. I am an actuary.

The CHAIRMAN. And you specialize in property and casualty underwriting.

It is an obvious fact that there are many imponderables in this energy crisis. As Commissioner Denenberg pointed out no one can predict what King Faisal is going to do, or how successful Dr. Kissinger will be on the Syrian front. There are many things that can happen that are not capable of precise prediction. But if, in this area of the country—the District of Columbia and the greater metropolitan area—for a considerable period of time we remain short of fuel, with the obvious result that there will be reduced driving, on a commonsense predictable basis would it not be fair to say that there will be a reduction in fatalities, reduced injuries, and reduced accidents?

Mr. CARSON. Yes, sir.

The CHAIRMAN. Anyone of those categories, of course, is subject to all of the imponderables—many of which I did not recite.

Now, I know companies prefer not to be regulated at all. My personal preference, as an individual, I would prefer to be as unregulated as possible, but we live in a nation of laws.

#### MANDATED REDUCTION

As a matter of policy for the District of Columbia area: Do you think we should just leave it up to the good motives, whether it be the Hartford Co. or Company X to decide to have some kind of reduction plan, rebate plan, or dividend plan? Should not there be some standardization so that it is across the board available to any and all insured motorists in this area, rather than just available to some, at the discretion of the individual company?

Mr. CARSON. Our preference, Senator, is for diversity of approach on the basis that if diversity of approach is allowed, and there is some freedom to act, that better solutions are found.

As I am not satisfied that the marketplace in the long run might find the Hartford solution to be the best one.

A company that operated freely might decide next week a 15-percent reduction was warranted. It might have a much better answer, and if that answer finds reaction in the marketplace, the way the competitive system works is that it naturally results in market reaction, and certainly no major market leader company could make a significant change without causing serious consideration by other companies as to the approach they would take.

The problem with legislative restrictions and mandated action is that it imposes one idea that may in the long run prove not to be the best one, and may result in serious dislocation.

For example, the problem of the mandated reduction by the Congress of the United States, if this were taken as a lead by States in which there has not been similar reduction in gasoline availability, and earlier indications of some reduction in driving, could result in serious financial problems for insurers that depend on that one State

for their operation. The genesis of the insurance regulation in this country was not the problem of rates, as it was the problem of solvency of companies. This is still one of the foundations upon which good regulation of the insurance industry in this country has had. The lead by the Congress of the United States in taking this kind of action would have very serious effect in States where currently rates are seriously inadequate, where despite the energy crisis companies are losing money. Markets could be restricted. That kind of dislocation caused by this action would be extremely unfortunate, would take a long time to undo, and would cause serious problems, not just for the insurance companies, but for the insurers.

The CHAIRMAN. That is if we were to mandate nationwide, those observations would come into play.

Mr. CARSON. I think your visibility is such if you were to do it for the District, it would make it extremely difficult for us and for the insurance business to explain our position on a State-by-State basis.

The CHAIRMAN. All right. Suppose we did not do that. Suppose we just mandated, let us say we mandated the Hartford formula for the District of Columbia.

Mr. CARSON. I am happy with the Hartford formula. As I say, my own reaction now on mandated programs of any sort, is in not knowing what is going to happen in the next 6 months. They could serve as impediments to more action and freer action of the other companies.

The CHAIRMAN. You would not like it if we mandated the New Jersey formula or the Denenberg formula?

Mr. CARSON. The Denenberg request to companies is very similar to our program. We are arguing about 4-5 percent.

The CHAIRMAN. Very good. Thank you, Mr. Carson.

Mr. CARSON. Thank you, Senator.

The CHAIRMAN. Our next witness is Mr. Maximilian Wallach, Superintendent of Insurance for the District of Columbia, and he is accompanied by Mr. James R. Montgomery.

Mr. Wallach and Mr. Montgomery, we are pleased to have you here, and we thank you for your patience.

I know you have been here all day, and I am grateful that you stayed with us this long.

**STATEMENT OF MAXIMILIAN WALLACH, SUPERINTENDENT OF INSURANCE FOR THE DISTRICT OF COLUMBIA, ACCOMPANIED BY JAMES R. MONTGOMERY, DEPUTY SUPERINTENDENT AND ACTUARY**

Mr. WALLACH. Mr. Chairman, I am very gratified to be here.

I have not prepared a statement as such, but I have furnished you during the week a statement, and I have prepared a memorandum for the files which I present as the statement for the day.

It is somewhat repetitious, maybe, in view of what has been said, which is an indication that other people have given thoughts to it, and maybe nobody as yet has found the proper solution.

Before I read from the statement, I wish to assure you that I have a triple concern. (1) How to translate the energy crisis into reduction

of rates. (2) How to find the proper means, one or more means which also has a dual purpose to reduction, if you will, because that has an impact on society, aside from reduction of premiums and auto insurers. (3) This concern has grown while I was sitting here, because I am worried to some extent as to whether the energy crisis impact will be overlapping or fall between two chairs, so I would like to take a real good hard look when the 1973 figures come in, which will be available at the end of next week, for some companies a little later due to the mailing.

For 1973, I understand there are different experiences in the first 9 months than the last 3 months. I do not know how much it will show up.

The CHAIRMAN. You will have figures available next week from some of the companies?

Mr. WALLACH. For the companies as a whole, and experience for the District.

The CHAIRMAN. And will it be the big companies? Will you have GEICO, Allstate, State Farm, Travelers, Aetna, and so forth, by the end of next week?

Mr. WALLACH. They are due the 28th of February. They can come in anytime depending where they are mailed from, but usually the local companies bring them in.

The CHAIRMAN. Will those be monthly figures?

Mr. WALLACH. No; these are figures for the entire year.

The CHAIRMAN. The entire year?

Mr. WALLACH. Right.

The CHAIRMAN. It does not help us as if they were monthly.

Mr. WALLACH. That is correct; however, I have some monthly figures from State Farm given to me over the telephone, and somehow they do not jive, because they show only decreases in November, and increases otherwise, which is rather puzzling, and with similar experience they got from GEICO, which does not have January.

State Farm has January.

The CHAIRMAN. What do they have for January?

Mr. WALLACH. State Farm in January showed incurred frequency per thousand cars insured, compared to 1973, moved from 28.06 to 29.78.

The CHAIRMAN. So State Farm showed an increase in both December and January. Are these accident rates?

Mr. WALLACH. For December 1972 and December 1973, it is 21.79 and 24.21.

November is the only month where there was a decrease, and some people claim that November 1972 was the unusual thing rather than November of this year.

I don't know. These are studies I have seen, and I have no way of checking these studies.

However, we should also consider in this connection that State Farm has approximately 12,000 cars insured in the District. The fluctuations could happen.

The CHAIRMAN. How many total insured cars are in the District, roughly?

Mr. WALLACH. I don't know the total number, but I understand that 30 percent are uninsured. I do not know what the other 70 percent amounts to roughly.

The CHAIRMAN. GEICO is by far the biggest carrier?

Mr. WALLACH. Yes. GEICO is one of the 10 companies which are listed here in order. This is the order of the size. These are individual companies, not groupings. GEICO's share of the total business in the District on private passenger, bodily injury, and property damage was 25 percent in 1972.

Now, as far as the statement itself is concerned if you want me to read it, I will be glad to, or summarize it to save you time.

As a background, I stated what the National Association of Insurance Commissioners has done and how it started.

Speed limits have remained unchanged in the District; however, that does not mean the District resident is not subject to the new speed limits when he travels outside the District, and many do.

The CHAIRMAN. As we brought that out earlier, if somebody is a resident in the District, covered by GEICO, he is supposed to drive 55 miles per hour when he is driving in Maryland as many do.

Mr. WALLACH. Yes. The gasoline shortage is felt, no doubt about it, and Mayor Washington has instigated the voluntary gas rationing system.

I have tried to find out what the carriers proposed to do. I pointed out at that time, and that morning, I only noticed that two companies were doing something, and during the day it was four, before the letter went out, and these companies have responded.

Some have a refund for carpooling, some in other ways, such as increase of dividends, and one company has in addition to increase of the dividends, since 1971, up and down, and now there are some with lower reduced rates.

The CHAIRMAN. One company reduced the rates?

Mr. WALLACH. Yes; by 13.9 percent.

The CHAIRMAN. We ought to give them some publicity.

Which company is that?

Mr. WALLACH. State Farm. That is the puzzling thing.

The CHAIRMAN. I guess I understand State Farm had the highest premiums going in, hence the great—

Mr. WALLACH. State Farm also since 1971 declared a dividend, and for 1971 the dividend amount was about five times as much in the District as in Pennsylvania. So, they do go State by State.

#### REFUNDS OR DIVIDENDS

The CHAIRMAN. Of the 10 on the list—do you have the information with you?

We go down the 10, tell me which ones have announced or filed with you a refund or dividend plan, and I assume the plans vary one to the other?

Mr. WALLACH. They do vary.

The CHAIRMAN. I will not get all of the details of the various plans, I understand that.

Mr. WALLACH. The Hartford and State Farm have filed refunds. I think that is all of the refunds which were filed.

State Farm has a refund as well as a dividend—so it is a combination.

United Services has not filed a refund, but they have the flexibility, due to the fact they are reciprocal and not a mutual, to this type of refund so it is more in the way of dividend.

Those who declare dividends can absorb it without declaring any special type of fund.

We have United Services, Hartford, State Farm, and I think that is it.

The CHAIRMAN. In addition, State Farm has filed a rate reduction?  
Mr. WALLACH. Yes.

#### CARPOLS

Now, the most immediate response, and the one which I think may have the biggest impact in the District is due to carpool rate discount.

Now, again, similar to the measuring of the impact of the energy crisis, I have no data to base my statement as to carpooling is concerned, but I assume that this town lends itself to carpooling, because of Government working at certain schedules.

Now, if you have more staggered hours, it still might work with those offices where there are enough people who live in the same neighborhood and can carpool.

I do not know as to what extent there are more people now using the Metro system. It is a fluctuating thing, I understand.

I have not looked into that. In the reducing of mileage as far as the carpool, there is also an automatic reduction. If people would go to the bus depot and take the bus, they might get quite a bit of reduction, depending how much they drove before.

Everything is relative. There was quite a bit of carpooling in some connection with rate reduction. One taxicab company pointed out to me that their situation may be different. It could very well be, since they do get gasoline, that more people will take a taxi, so their accident rate, in rough trend over the 4 years, measured from September 1 through February 10 of the following year for each of the years showed a reduction in 1971, showed the lowest one in 1971-72, and a slight reduction for 1973-74, compared to 1971-72 to 1972-73, but they only measured between 3,500 and 3,700 insured taxicabs in which all accidents occurred. So it is just a total trend of numbers which may not have much meaning.

We have not rejected anything which looks like or is a reduction.

We have the file-in-use law. We do not have the Pennsylvania or the New Jersey law. Of course, we can make adjustments, but the adjustment cannot be retroactive.

#### RATES

The CHAIRMAN. When the company files their rates: Do they automatically go into effect?

Mr. WALLACH. They go automatically in effect unless we can show it is not equitable, and have a hearing, and have an adjustment.

The rates have remained fairly stable in the District. There were not many filings. There were some increases, nevertheless, and some decreases.

Interestingly enough, one company in 1970 asked for a decrease, in 1971 for an increase, in 1972 for a decrease, and on the bodily injury line for 1972 they had a loss instead of a gain in underwriting.

It is one company in which the rate is somewhat higher than the other companies, so consequently there are two ways to approach this problem.

That is to look into the energy crisis as such, and what we heard would indicate that accurate statistics will be either not soon available, or may not be usable for ratemaking, and that we should look at the experience in 1973. We have 195 companies writing private passenger automobile insurance, and the premium for 1972 was \$24 million bodily injury and \$18 million physical damage.

Ten of the biggest companies listed 72 percent of the business.

The CHAIRMAN. The 10 did what?

Mr. WALLACH. They wrote 72 percent of the business, and 52 percent for physical damages.

The first figure was for bodily injury, so to review 195 companies might be difficult, but I do not know as yet what approach we will take, but I want to study the 1973 figures.

Now, the NAIC, which was discussed sufficiently, I do not have to repeat it, even though it is in my memorandum.

In addition, another Federal Government agency—the Cost of Living Council—decreed a freeze in January 1970, a moratorium on automobile insurance rate increases and also requiring that, after March 17, 1974, rate increases are to consider the net effect on frequency and severity of claims attributable to the energy crisis, including reduced speed limits and shortages of fuel, on automobile insurance experience.

I might add that the authority will expire on April 30, unless it is extended by an act of Congress.

In concluding, I would say that it is estimated that the reduction for carpooling could produce an 8 percent to 20 percent reduction for those insured drivers who now use the car for driving to and from work, providing they either restrict such use to a great extent, such as 30 miles a week or less, or participating carpools, whereby an additional 2 other drivers share on a rotating basis.

Other companies have used miles instead of carpooling, which may or may not come out the same in individual cases, but the aggregate may be comparable.

Similar results could be achieved by lower yearly miles and lower use of the car.

The reductions vary from company to company by classification plan.

That is not my opinion. I do not know which one is right, and I do not know which one is not.

Claims are made that switching to smaller cars and carpools may increase accident costs.

#### INCENTIVES TO REDUCE FUEL CONSUMPTION

Reduction of insurance premiums should result from the impact of the energy crisis—provided that a fair measurement could be found. At the same time, preference should be given to the approach which

might be most productive in bringing about incentives to reduce fuel consumption.

In other words, a premium reduction due to less driving would accomplish this. A refund type approach of general applicability may have less impact. Immediate reduction of premiums may be used by insurers to acquire more business on a competitive basis, but it may not provide sufficient incentives for reducing usage of the car and thereby contribute less to energy savings and eventually lessen the potential reduction of insurance costs and premiums in general.

Collection of data for a quick measuring of the energy impact would provide the necessary prerequisite for a reduction of premiums on a nondiscriminatory and fair basis.

#### GASOLINE RATIONING

A mandatory gasoline rationing system would have a greater and a more general impact on mileage traveled and resulting accidents.

Assumptions to predict the impact should be made shortly after the announcement of such system, if one is to be put in force, and should become a special factor in the reduction of rates for the duration of such a system.

I am talking of mandatory rationing which is coupons, because today some get gas, some get some at a given time, or have the wives, on odd and even days, line up for an hour while they work and take the other car. It is something which is hard to get a handle on.

The CHAIRMAN. I think it was stated earlier by one of the previous witnesses that the insurance premium reductions in World War II at the time we had coupon rationing was 40 to 50 percent?

Mr. WALLACH. Yes; the speed limit then was 35 miles.

There was one-quarter of the number of cars on the road, and the able-bodied men were not here. It was a patriotic thing not to drive. So there was actual rationing of gasoline, also.

I think the suburban development was different, too.

Now, as far as accidents in the District itself are concerned, there is a problem, because it would not distinguish between the drivers, the way the statistics are compiled; it could be a Maryland, Virginia, or District driver having the accident in the District.

The District is quite different from New Jersey and Pennsylvania, as far as size and volume and so on are concerned, and it is an urban area.

It is congested traffic, it is city driving, and there are no farmers, and so forth. There are no open spaces in the District. These factors can go either way.

The CHAIRMAN. What observation would you care to make on the statistics given by the Metropolitan Police Department showing a 49-percent reduction in injuries in the District of Columbia during the period of December-January 1973-74, viz-a-viz the preceding comparable period?

Mr. WALLACH. I do not really know, because GEICO and State Farm show indications of going in the other direction in frequency.

It depends how much of this was Maryland and Virginia cars.

The CHAIRMAN. GEICO did not have the January figures in, as I recall.

Mr. WALLACH. No; GEICO did not have January figures.

Now, the January figures are creating a problem because the injury is listed, but property damage is not. Those are accidents which, by the way, will create problems for adjustment of claims and add to administrative costs in the absence of police.

#### DECLINING TRAFFIC

The CHAIRMAN. From the District of Columbia Highway Department, we have this statistic that in January 1974, traffic dropped 7 percent.

Mr. WALLACH. I saw that in the papers.

The CHAIRMAN. Commuter traffic over the 14th Street Bridge dropped 2 percent. However, traffic on Michigan Avenue and 14th Street dropped 18 percent.

The East Capitol Street Bridge dropped 14 percent.

Mr. WALLACH. I think a good part of this is due to carpooling, and availability of gas.

In the Virginia suburbs, gas was more available than it is now. It may have something to do with it. It may be coincidental, but I have a strong feeling it is guesswork.

Nobody can analyze the data as yet—that the carpooling will make the bigger impact, lesser cars on the street, lesser driving.

The CHAIRMAN. What authority under law do you have at the present time to order rate reduction if you desire?

Mr. WALLACH. I have to offer each individual company a hearing. I have to support the case. I am allowed to ask for any information needed.

The company may waive the hearing and subject itself to an adjustment.

The CHAIRMAN. You say there are more than 100 companies doing business in the District?

Mr. WALLACH. There are 195, and the Department is very small staffwise.

The CHAIRMAN. What do you think about the formula approach as suggested by Commissioner Denenberg and the commissioner from New Jersey?

Mr. WALLACH. As I said in the beginning, as of this time I will take everything I can get, as long as it is beneficial to the consumer.

I will have a look later and see. I am not happy that the measurement will be the profit countrywide, but on the other hand, it will not do any good to drive a company into insolvency as long as they make a refund to the District consumer.

I am exaggerating the case to make the point, because the 10 largest companies, as you see, except one, which writes lower class risk, are no fly-by-night.

They have been here for years and will not fold up, but in the case of State Farm, the dividend is 5 times as much here as in Pennsylvania.

I would like to see a formula in which companies will—they will object to that, and I understand why, from where I am sitting in the

interest of the consumer. I would like to see the equity when the equity rises.

Those who contribute to lower frequency should reap the benefits, and if there is an overall reduction, it ought to go as long as we have ratemaking State by State to the residents of the District if there is such an event in the District, but by the same token, if the company has an underwriting loss in the District and gain somewhere else, they will not pay in the District anyway.

Now, what will create problems for a given company, I can go over it again, but it would just repeat what Mr. Carson said, as happened in the case of Hartford, but if the ratemaking is in such a way in one State where a company has a chance of getting increases, and not getting increases somewhere else, then I think that the District resident should not be penalized for the fact that the company did not get an increase in another State as far as refunds are concerned or rates for that matter.

The CHAIRMAN. With your legal authority now, could you devise and impose mandated formula at the present time under present law?

Mr. WALLACH. I would like to see first the 1973 figures, and then I would like to give some thought, and I wish I could be smart enough to develop a good formula.

I do not think anybody has a good formula, it is just guesses, and that bothers me, because with the way the District is constituted, in other words, the size of income, the premium income from the District, the company needs certain incentives to stay.

Now, I do not believe that a company will pull up and go.

This I do not believe at all, but there are other means and ways to restrict business, and that I do not want to see.

For instance, my understanding of things is that maybe some people are not interested in equity between drivers, and it is true that the better driver does pay for the poorer driver.

The only question is where is the dividing line. The number will be absolute equity. The question is to design a system where there is as much equity as possible. We do not have rate changes from month to month. Even computers could not catch up with it.

The CHAIRMAN. What would be your preference: Should each company devise what they think is a fair formula—even though one cannot devise the perfect formula and we are not achieving utopia—or should we devise a formula across the board?

#### USE OF FORMULA

Mr. WALLACH. I would say that if there is anything to competition for the companies, assuming that I have the authority, I may have missed.

In other words, I want to give the opportunity to competition for a limited period of time.

I will not be patient forever, but for a limited period of time, I would like to see competition, and see which ones can reduce most, and see how it can be applied.

I do not want to be blind when I can say to some companies they have to do it when they cannot, because all I will do is chase them out.

When we get to the 10 biggest companies, we talk of 5 percent and down to 3 percent, and, by the way, United Services, of course, has restricted underwriting because they only cater to the military personnel.

They do not take everybody, so there are differences in the makeup, differences in the risk, differences in the approach to marketing, and all of these are to be considered.

If a formula can be devised, I am sure that if I can devise it, I would like to do so.

The CHAIRMAN. What would be your preference, to let the Congress devise you one, and save you the burden of devising one for yourself, or would you prefer to have the delegated authority to devise one for yourself?

You do not have the authority now.

Mr. WALLACH. I do not have the authority now, but I think it can be picked up in the adjustment of rates as such.

That would be retrospective. I am not sure that the companies who have reductions for carpooling—some may have gone overboard for other reasons for the energy crisis.

I do not know. That will have a bearing too. I think it is very difficult to separate the energy crisis from ratemaking, or from rates themselves.

The CHAIRMAN. It is part of the picture to be sure.

Mr. WALLACH. As Mr. Carson pointed out.

The CHAIRMAN. What would be your preference, would you prefer the Congress write the formula for you, or would you prefer to write one on your own?

Mr. WALLACH. I would prefer to write on my own if I can carry out the task depending on staff availability in the Department, because it is a question of looking over 195 companies and giving sufficient treatment, be aware of their needs, and be fair with them.

In other words, if I have that authority, I also have the responsibility to be fair to industry and the public. This means a lot of deliberations, and there is not too much time. Therefore, I would say that such delegated authority would be good maybe on a standby basis to give the companies so many days to come forward, and then if they do not, we will look at this point.

The CHAIRMAN. How about this, we could devise a formula for you for current application, and then delegate authority to you to change that formula in 1975?

Mr. WALLACH. Then they would have the burden to make the case, rather than me having the burden to make the case against them.

The CHAIRMAN. We would save you a great deal of headaches if we devised it for you. It becomes operable, it goes into effect, and it is your job to enforce it. We might delegate future authority to amend it a year from now if conditions warrant.

Mr. WALLACH. That is a possibility.

The CHAIRMAN. Thank you very much, sir.

Mr. WALLACH. Thank you.

The CHAIRMAN. I will place the documents you have submitted in the record.

Mr. WALLACH. Thank you.

[The documents follow:]

**Memorandum** ○ Government of the District of Columbia

TO: The File

Department, Insurance  
Agency, Office:

FROM: Maximilian Wallach  
Superintendent *M.W.*

Date: February 21, 1974

SUBJECT: Energy Crisis - Impact on Automobile Insurance Rates  
in the District of Columbia.

Background

Mandatory speed reduction and gasoline shortages of different degrees in the several states and the District led the National Association of Insurance Commissioners at the December 1973 (Las Vegas) meeting to establish the "NAIC Task Force on the Energy Crisis and Insurance Related Matters". An Industry Advisory Committee was appointed by the Chairman of the NAIC. This committee consults with and provides information to the NAIC Task Force.

In the District of Columbia speed limits have remained unchanged, however, the District resident, who drives outside the city limit, is subject to the lower speed limits (55 miles maximum).

The shortage of gasoline is felt in the District of Columbia as evidenced by the long lines at the gas stations, their shorter hours and the voluntary rationing system put in force by the Mayor.

Action Taken - District of Columbia

On January 2, 1974, the Superintendent questioned the 13 largest insurers as to the action they propose to take in regards to lowering automobile insurance rates for residents of the District.

Prior to January 2, 1974, a few companies had already proposed some changes.

The answers to the January 2, 1974 inquiry, the filing from the Insurance Service office and other insurance companies, contained proposals, as well as formal filings, which were found to be acceptable, namely automatic reduction through reclassification when the insured drives less than a certain mileage as filed by the respective insurer, and/or a step down in classification for car pool driving. In both cases the premiums will be lower. The third category dealt with a refund of premiums or the payment of dividends to policyholders, if the energy conservation leads to underwriting profits in excess of

five per cent. Some companies have combined the above approaches. Some companies indicated that the matter is being studied or that rates should be subjected to the normal rating process. It was also pointed out that increasing repair costs may offset at least part of any "windfall profits" resulting from the energy crisis.

Studies by the Highway Safety Research Institute of the University of Michigan, the New York Department of Motor Vehicles, and the Insurance Institute for Highway Safety concerning small car hazards, point to greater number of accidents and injuries.

Taxicab accident data furnished the Insurance Department by one company for four years, covering the period of September 1 - February 10 of the following year, shows fluctuations from year to year with 71/72 producing the lowest number of accidents in <sup>the four</sup> years. (The data pertains to 3,500-3,700 insured taxicabs for each year). The ten largest automobile insurers were asked on February 14, 1974, to furnish certain statistics for the last quarter of 1973.

#### Action Taken - NAIC

The NAIC has reported that similar responses are being received throughout the country. The NAIC has requested the industry to develop a statistical monitoring mechanism to measure the impact of the current energy crisis and of the possible continued energy conservation efforts, which may be with us for a prolonged period of time. The format for the data to be collected was designed by the NAIC Task Force. Data will be first available on April 15, 1974. This accelerated monitoring system is intended to provide information on trends regarding four major coverages (Bodily Injury, Property Damage, Collision and Other than Collision). The data will be collected on a state by state basis for each calendar month of 1974 and the respective month of 1973 to afford a monthly comparison.

#### Action Taken - COLC

The Cost of Living Council on January 17, 1974, issued a rule declaring a "Moratorium on Automobile Insurance Rate Increases" and also requiring that, after March 17, 1974, rate increases are to consider "the net effect on frequency and severity of claims attributable to the energy crisis, including reduced speed limits and shortages of fuel, on automobile insurance experience".

#### Concluding Considerations

It is estimated that the reduction for car pooling could produce a 8 per cent - 20 per cent reduction of premiums for those insured drivers who now use the car for driving to and from work, provided that they either restrict such use to a great extent (such as 30 miles a week or less) or participate in car pools, whereby an additional two other drivers share on a rotating basis. Similar results could be achieved by lower yearly mileage

use of the car in those cases where mileage is a basis for classification for rates. The reductions vary from company to company by classification plan.

Claims are made that switching to smaller cars and car pools may increase accident costs (damage to car and/or medical payments in case of accidents).

While reduction of insurance premiums should result from the impact of the energy crisis, provided that a fair measurement could be found, at the same time preference should be given to the approach which might be most productive in bringing about incentives to reduce fuel consumption. In other words, a premium reduction due to less driving (lower mileage or car pools) would accomplish this. A refund type approach of general applicability may have less impact. Immediate reduction of premiums may be used by insurers to acquire more business on a competitive basis, but it may not provide sufficient incentives for reducing usage of the car and thereby contribute less to energy savings and eventually lessen the potential reduction of insurance costs and premiums in general.

Collection of data for a quick measuring of the energy impact would provide the necessary prerequisite for a reduction of premiums on a nondiscriminatory and fair basis.

A mandatory gasoline rationing system would have a greater and a more general impact on mileage traveled and resulting accidents. Assumptions to predict the impact should be made shortly after the announcement of such system, if one is to be put in force, and should become a special factor in the reduction of rates for the "duration" of such a system.

January 2, 1974

Dear

The National Association of Insurance Commissioners established a Special Task Force on the Energy Crisis and Insurance Related Matters.

On December 19 the Task Force received two reports from the Industry Advisory Committee. One dealt with automobile insurance and the other with other property and liability lines.

Two stock insurance companies have informed this Department of a voluntary program whereby a portion of the automobile insurance premium may be returned if experience so warrants in connection with possible loss improvements due to reduction of speed limits and/or reduced exposure due to gasoline restrictions. Companies are also considering or have already instituted a liberalization of rules in connection with car pools.

In light of the above, you are requested to inform this Department whether or not you contemplate any action of this or similar type.

Very truly yours,

Maximilian Wallach  
Superintendent of Insurance

/w

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
DEPARTMENT OF INSURANCE  
WASHINGTON, D. C. 20001



February 14, 1974

Dear

As one of the ten largest automobile insurance writers in the District of Columbia your experience as to the impact of the energy crisis on loss frequencies and severity of losses would be of value to this department.

Please furnish such data on a monthly basis for the period September 1973 to December 1973 with comparable data for the same month of the prior year.

If the above data are not as yet available, any data reflecting an approximation of trends will be helpful for time being.

We do not intend to duplicate the efforts of the NAIC or the Industry Advisory Committee and will use their data for 1974 when they become available.

Your cooperation is appreciated.

Very truly yours,

Maximilian Wallach  
Superintendent of Insurance

mgw

The CHAIRMAN. Our next witness is Mr. Dutch Vandervort, Government Affairs Consultant, Car and Truck Renting and Leasing Association, and he is accompanied by Mr. Samuel Morgan, Jet Rent-A-Car.

You may proceed, Mr. Vandervort.

**STATEMENT OF DUTCH VANDERVORT, GOVERNMENT AFFAIRS CONSULTANT, CAR AND TRUCK RENTING AND LEASING ASSOCIATION; ACCOMPANIED BY SAMUEL MORGAN, JET RENT-A-CAR; AND KENNETH ELDER, THRIFTY RENT-A-CAR**

Mr. VANDERVORT. I have a written statement, which I will abstract in conversation.

We do appreciate the opportunity to extend our views to the committee. We believe that the premise of your bill is a proper one, that insurance rates should be reduced to reflect reductions in losses to the companies.

Insurance is a very large expense for our industry. Many of our members spend as much as 10 percent of their gross receipts on insurance, and so this becomes a very important thing to us.

On the other hand, we appear today as sort of a disinterested party, because our own insurance rates are set by periodic negotiation with the companies that write the insurance. The rates are set on the basis of our recent experience over a periodic basis—6 months, or a year, depending on the individual arrangement—and so it is likely that any legislation that comes from the Senate will affect our companies directly.

We insure ourselves generally against only liability and property damage, and we cover our own losses in terms of collision or comprehensive damages. Another area that is very important to us is something called conversion, where an individual refuses or fails to return his rent-a-car.

This is another cost that we cannot usually get insurance against, and invariably is a cost directly to us.

Parenthetically the District of Columbia is the only area in the country which does not have some statutory recognition of the crime of conversion. There is a bill pending before the Congress which will define this crime and give us that sort of protection.

Because of the fact that we operate a great number of cars, we have a basis of statistics that give us an ability to give you a trend of what has been happening in our part of the driving public.

First of all, our accident rate in terms of number of reportable accidents is down over the last 3 months by about 30 percent over the same period a year ago.

The CHAIRMAN. This is for the District of Columbia?

Mr. VANDERVORT. This is cars operated by District of Columbia car and truck rental companies.

Now, these are not only cars that are driven in the District of Columbia. Many of the accidents occur outside the District, but these are cars rented right here.

The CHAIRMAN. Is Hertz part of your group?

Mr. VANDERVORT. Hertz, Avis, National.

The CHAIRMAN. Would this include lease cars?

Mr. VANDERVORT. We are speaking today strictly in rent-a-car statistics.

Lease car statistics are much harder to come by. This is rental cars.

Mr. Elder is from Thrifty.

Mr. Morgan is from Auto Discount Rent-N-Drive.

The CHAIRMAN. You mean November, December, and January?

Mr. VANDERVORT. November, December, and January. We are down about 30 percent in terms of reportable accidents. However, we are also down by about 25 percent in terms of gross revenue. So our business is down substantially also.

You get other complicating factors. We had two major snowstorms which we did not have to contend with last year. We have much more subway construction this year which presents our industry with a sizable hazard.

We have a lot of subway construction related accidents which we have not had in the past. So we have complicating factors that may change from time to time and not be directly related to the energy crisis, but overall, we think there is a substantial effect from the energy crisis.

We think the number of accidents are going to be down. The trend established in the last 3 months establishes this, and we think that your bill is proper in its intent to reduce the premium cost to the consumer on the basis of savings to insurance companies that write the insurance.

#### GIVING AUTHORITY TO COMMISSIONER

The CHAIRMAN. Have you given any thought to—rather than doing it by an admittedly arbitrary 10 percent—delegating further authority to the commissioner of insurance to adjust to that percentage up or down, but calling for an initial cut? Have you given any thought to this as an alternative to the establishing of a formula?

Were you here during the morning testimony?

Mr. VANDERVORT. I did not attend the morning testimony.

The CHAIRMAN. We had some testimony from other States, Pennsylvania, New Jersey, and Arkansas, where they established formulas for profit for an insurance company, and because of the energy crisis their profits are escalating, and then those premiums would be rebated or refunded to the insured.

Mr. VANDERVORT. Basically, I agree with your second point.

The idea of legislating a flat cut has some inherent danger, in that things do not go exactly as predicted. Then you cause at least a temporary disruption among the companies providing the insurance service.

If you establish the formula you have mentioned, you have some inherent flexibility, and you are going on a retrospective basis, where you are dealing with fact rather than with projection.

The CHAIRMAN. Sir, with respect to your company, how much is your business down?

Mr. MORGAN. My business is up.

The CHAIRMAN. During November, December, and January?

Mr. MORGAN. But that is because of the fact that the airlines have cut back on their schedules, and people are making reservations. I

have the advantage of people who were normally driving down from New York, say, now they are flying down and renting a car. That part is up. It is offset by the fact that my weekend business is down to almost nothing now. But we are having an increase, strictly at the airport, which is where I concentrate.

The CHAIRMAN. What about your reportable accidents during that period?

Mr. MORGAN. They are just about the same. There again, I am relatively a small company, and it is distorted by a couple of accidents during the snowstorm, which distorts—being a small company.

I will mention that I have recently negotiated a reduction in my premium with my insurance company. I might add, it was a nice reduction.

The CHAIRMAN. It was more than 10 percent?

Mr. MORGAN. Yes; it was a reduction of 10.1 percent. It was also the first time in some years that I have had several companies to have interest in serving me. Insurance companies have been unwilling to talk to rent-a-car companies unless you were of some size. But I had two or three different companies that wanted to talk to me, and it gave me some ability to negotiate a better rate.

It always helps when people are competing for your business.

The CHAIRMAN. You did shop around?

Mr. MORGAN. I did shop around, and it was to my betterment to have done so.

The CHAIRMAN. If everybody would do that, everybody would get results in reduced premiums, but apparently not enough people shop.

How about you, sir, what is the name of your company?

Mr. ELDER. Auto Discount. We operate primarily in the District.

The figure that Mr. Vandervort read holds true substantially for our company.

We have actually had about 30 percent reduction in the number of reportable incidents during the months of November, December, and January, as compared to the same 3 months in the previous year.

The CHAIRMAN. But your business is down?

Mr. ELDER. Our business is down.

The CHAIRMAN. How much?

Mr. ELDER. Close to 25 percent. As a result, and it is just a trend, the public is not driving as much, and we are not renting the cars.

The CHAIRMAN. Have you attempted to negotiate a premium reduction with your carrier?

Mr. ELDER. Well, yes; we have. We are in the process right now, and it looks as though it will be a favorable reduction.

I cannot cite percentages right now, but you must remember in our industry our premiums are based entirely on our own experience. When we are ready to negotiate new contracts with the insurance company we review losses and premiums paid, and arrive at premiums we will pay for the forthcoming year in that manner. So, that, certainly, a reduction in the number of accidents as a result of the shortage of gasoline will help us in getting a lower premium.

Although the reduction in volume of business, possibly could more than offset that, but that is something else we will have to wait and see.

It is still too soon to really know anything specifically. Generally we can assume that the trend is a lowering of the number of accidents, but I do not think that anybody can look into the crystal ball and come up with any numbers that are really meaningful at this time.

The CHAIRMAN. Thank you very much, gentlemen. We appreciate it.

We stand adjourned.

[Whereupon, at 3 p.m., the hearing was adjourned.]

[Subsequent to the hearing the following material was received:]

VOLUNTARY PROGRAMS RESPONDING TO THE EFFECTS OF THE ENERGY CRISIS

GOVERNMENT EMPLOYEES INSURANCE CO.

The company has in effect a classification system recognizing the mileage driven to and from work and also recognizing car pooling arrangements.

ALLSTATE INSURANCE COMPANY

The company has a classification rating system recognizing annual mileage, driving to and from work and car pooling arrangements. The company also has converted all private passenger policies to a participating basis and will pay dividends if warranted.

STATE FARM MUTUAL AUTOMOBILE INSURANCE CO.

The company has a classification rating system recognizing annual mileage, driving to and from work and car pooling arrangements. The company also has a dividend program.

TRAVELERS INSURANCE GROUP

The company has a classification rating system recognizing annual mileage, driving to and from work and car pooling arrangements. The company also has a premium refund program.

AMERICAN MUTUAL INSURANCE GROUP

The company has a classification rating system recognizing driving to and from work and car pooling arrangements.

NATIONWIDE MUTUAL INSURANCE COMPANY

The company has a classification rating system recognizing driving to and from work and car pooling arrangements.

AETNA LIFE & CASUALTY COMPANY

The company has a classification rating system recognizing driving to and from work and car pooling arrangements.

UNITED SERVICES AUTOMOBILE ASSOCIATION

The company has a classification rating system recognizing driving to and from work and car pooling arrangements. The company also has a dividend and profit sharing program.

## LIBERTY MUTUAL INSURANCE COMPANY

The company has a classification rating system recognizing driving to and from work and car pooling arrangements.

## HARTFORD INSURANCE GROUP

The company has a classification rating system recognizing driving to and from work and car pooling arrangements. The company also has introduced a dividend program.

AMAGAMATED CASUALTY INSURANCE Co.,  
February 13, 1974.

MAXIMILIAN WALLACH,  
Superintendent of Insurance, D.C.  
North Potomac Building, Washington, D.C.

## Re Effect of Energy Crisis—Accident Rate Taxicabs

DEAR SIR: With so much news as regards the energy crisis and its effect on the accident rate, we compiled some statistics as regards the taxicabs we insure, using the period for each year from September 1 to February 10, as regards accidents reported to this office, regardless of fault:

Average Number of Cabs Insured:	Reported accidents Sept. 1 to Feb. 10
Sept. 1, 1970–Feb. 10, 1971 3,661	1, 275
Sept. 1, 1971–Feb. 10, 1972 3,718	1, 176
Sept. 1, 1972–Feb. 10, 1973 3,631	1, 224
Sept. 1, 1973–Feb. 10, 1974 3,500	1, 154

It is now very apparent to us that the energy crisis has not affected the accident rate per taxi insured. Most of our accidents take place in D.C. where the speed limit is low, with heavy concentration of vehicles. Taxicabs are in more demand since the energy crisis in D.C. and we have more passengers in each accident than before, because the D.C. taxicab can now take on any and all group passengers at any part of his trip.

As far as taxicabs are concerned, what with the taxicab special allocation of gasoline, we extrapolate at least the same, if not higher, accident rate per cab as before and most certainly involving more injured passengers than before as long as the energy crisis continues.

We have no idea how the private passenger vehicles have or have not been affected, since we only insure taxicabs. We hope this is of interest to you, as it is to us.

Very truly yours,

CHARLES F. HOELZER, *President.*

GOVERNMENT EMPLOYEES INSURANCE COMPANY  
COMMENTS ON THE EFFECT OF THE ENERGY CRISIS ON  
AUTO INSURANCE RATES SUBMITTED TO THE SENATE  
DISTRICT COMMITTEE WITH REFERENCE TO S-2969

Mr. Chairman, members of the Committee on the District of Columbia, we appreciate this opportunity to provide you with the comments of Government Employees Insurance Company (GEICO) on the effect of the energy crisis on automobile insurance rates, with reference to Senator Eagleton's bill, S-2969. We respectfully submit the following for the Committee's consideration and ask that our comments in their entirety be placed in the record of the hearings on S-2969.

GEICO is a member of the National Association of Independent Insurers (NAII) which will appear before your Committee to testify on S-2969. Its testimony will be on behalf of the three largest insurance trade associations, the American Insurance Association (AIA), the American Mutual Insurance Alliance (AMIA), and NAII. GEICO would like the Committee to be advised that we fully support the joint trade association's position that will be presented by the NAII at the February 1974 hearings.

GEICO has recently gone on record regarding its position on the effect of the energy crisis on auto insurance rates. The following comments restate our position as promulgated by our press release of January 16, 1974, a copy of which has been submitted to the Insurance Departments of each of the fifty states and the District of Columbia.

The energy crisis, with the concomitant increasing scarcity and cost of gasoline, will undoubtedly result in a changing pattern of use of the automobile by the American driving public throughout the country. Serious attempts are being made on many fronts to define the precise pattern of this change, its influence on the incidence and cost of automobile accidents, and its probable impact on automobile insurance rates.

Imposition of a maximum speed limit of 55 miles per hour, increased utilization of carpools, and reduction in annual mileage driven could very likely lower exposure to accidents and thus reduce the frequency of accidents. However, there is a growing concern that a number of adverse developments may also flow from this changing pattern of automobile utilization. Among these are gradual replacement of standard-size automobiles with the less crashworthy and more easily damaged compact cars resulting in a greater exposure to severity of personal injury to occupants and greater damage to these compact cars;

an increase in the number of persons injured because of the increase in multi-occupant carpools; an increase in travel time resulting from lower speed limits, and thus an increase in exposure to accident; and the transportation of supplemental gasoline supplies in containers stored in car trunks which will create an additional hazard.

Automobile insurance rates are based on three critical factors:

1. Frequency of accidents.
2. Loss costs per accident.
3. Administrative expense costs of claim and policy services.

Ours is a regulated industry, and in compliance with state insurance regulations automobile insurance rates promulgated by each company must (a) be adequate to pay for the losses incurred by its policyholders, (b) not be so high as to be excessive, and (c) be uniformly applied so as not to be unfairly discriminatory. To achieve this triple objective, the rate-making process dictates the use of reliable data to establish a rate level which will be in balance with the loss and expense obligations of the insurer. This data includes both loss experience statistics covering the immediate past as well as reliable trend indications of accident frequency and loss and expense costs projected for the immediate future.

The nature and influence of the changing pattern of automobile utilization resulting from the energy crisis on the frequency and severity trends of insured losses are very unclear at this early date. However, loss costs per accident continue to spiral upward under the unabated inflationary pressures on medical and hospital costs, wage losses, car repair costs, and general operating expenses. It is impossible to predict at this time the net effect of these two influences.

In the forefront of the many inquiries currently being addressed to this subject is the National Association of Insurance Commissioners, an organization composed of the individuals charged with the responsibility for regulating rates and all other aspects of insurance company operations in each of the fifty states and the District of Columbia. The National Association of Insurance Commissioners has established a Special Task Force to monitor continuously the effect of the energy crisis on all aspects of property and casualty insurance. On December 20, 1973, the initial report of this Special Task Force was released. Included in the report is the following statement:

"Voluntary and semi-mandated limitations on fuel availability and automobile use will have an effect on automobile loss costs. The current situation is

uncertain, however, and it is impossible to predict how much effect many of the present restraints will have on automobile insurance experience. The monitoring system is intended to furnish information to measure the effect of these restrictions until more reliable data is available in the ordinary course of business. Until this basic minimal information is available, it is felt that mandatory rate adjustments reflecting the energy crisis would be premature."

GEICO concurs in this position.

The automobile insurance industry is highly competitive and GEICO has been among the most aggressive competitors since its founding in 1936. GEICO premium rates for automobile insurance have consistently been among the lowest in our industry. GEICO has established an impressive record of passing on to its policyholders savings of both administrative expenses and loss costs in the form of low rates. We intend to continue this policy in the future and whatever loss cost savings flow from this changing pattern of automobile use will be reflected in future GEICO rate levels.

Against this background of the GEICO position on the effect of the energy crisis on automobile insurance rates, it is our opinion that S-2969 is deficient in the following respects:

1. The bill either ignores the existence of competition or denies its effectiveness to influence automobile rate levels so as to reflect reduction in loss costs which may flow from reduced utilization of automobiles. Although a regulated industry, no exclusive franchise is granted any company in the District of Columbia to insure automobiles. Active, vigorous competition exists among approximately 120 companies licensed to sell automobile insurance in the District. Foremost among these competitors is GEICO which, since an obscure founding in 1936, has offered District motorists automobile insurance which returns to them an above average percentage of the premium dollar in benefits; a rate level significantly below its competition; and a consistent expansion of its insurance capacity. In an environment of free and open competition over these intervening years, the insuring public of the District of Columbia has been offered a viable choice to acquire quality automobile

insurance service at significant premium savings. As a result, GEICO has earned the patronage of an ever-growing segment of the public and is now the largest insurer of private passenger automobiles in the District of Columbia. Thus the GEICO history in the District is eloquent testimony to the power and influence of free and vigorous competition to bring to the market place automobile insurance protection at significant dollar savings. It is our contention that vigorous competition, stimulated and nurtured, will continue to be the most reliable source of fair automobile insurance rates for the insuring public in the District of Columbia.

2. The bill predicates its mandate for a reduction of 10 per centum of motor vehicle insurance rates, effective January 1, 1974, on the finding that gasoline conservation efforts have already resulted in substantial reductions in automobile accidents and insurance claims. The National Association of Insurance Commissioners Task Force has set up a "fast track" monitoring system to measure changes and trends in insurance losses on a much more current basis than under traditional loss reporting systems. This data produced by the monitoring system is to be supplemented and validated by independent Insurance Department review and analysis of company data and by reference to such external data as gasoline consumption, toll-road usage, and accident reports required by law. To our knowledge, the NAIC Task Force has not yet reported its findings. Our own limited data, requested by the Senate Committee on the District of Columbia and the Insurance Department of the District of Columbia are set forth in Exhibit A. As can be quickly noted, the data is both incomplete and inconclusive, and is not a reliable basis upon which to predicate any rate-making decision. The subjective and judgmental approach to automobile insurance rate-making called for in this bill ignores fundamental actuarial considerations. A glaring example is the uniform application of the 10 per centum reduction to all coverages under the automobile insurance policy, including the "Comprehensive" coverage which provides protection against such perils as fire, theft, vandalism,

windstorm, and flood. Exposure of the automobile to these perils is virtually unchanged regardless of the incidence of use. It is more probable that there will be increased exposure to such perils as theft and vandalism when the vehicle remains unused and unattended.

3. The bill mandates the premium rate reduction for all companies writing automobile insurance in the District of Columbia without regard for the fact that automobile insurance rate levels have been generally stabilized over the past three years while, at the same time, the continuing pressure of inflation (which has been particularly rampant since the beginning of the energy crisis) has eroded the value of the premium dollar available to pay for rapidly increasing loss costs. Unless it can be clearly documented that a reduction in accident frequency can be relied upon to offset the past and future inflationary pressures on loss costs, the arbitrary reduction of the rate level at this time may encourage some automobile insurance companies to curtail or withdraw their underwriting capacity from the District of Columbia. Thus the level of competition would be reduced, and a shortage of automobile insurance capacity in the District could develop. Once again, we would witness yet another classic example of a violation of fundamental economic principles which provides the illusion of a short term benefit for the public in return for the reality of a long term penalty.
4. The entire concept of the bill before your Committee purporting to subjectively regulate auto insurance rates in the District is in conflict with the historically sound and responsible regulatory role of the District of Columbia Insurance Department. The Insurance Department has full regulatory powers to determine, on an actuarial basis, proper and fair rate levels and has, in the past, shown no hesitancy in fully performing its duties and responsibilities to both the public and the insurance industry. We are confident that the Insurance Department, under its present regulatory powers, is now, and will continue, to monitor automobile insurance rate levels with particular regard to any effects of the energy crisis, and will take indicated action based on historically sound actuarial experience and accepted rate-making principles. We are of the opinion this bill would only duplicate the efforts of the District of Columbia Insurance Department and is not necessary to insure the sound regulation of the insurance industry in the District.

GOVERNMENT EMPLOYEES INSURANCE COMPANY  
FREQUENCY AND SEVERITY STATISTICS FOR  
CLAIMS ON POLICIES RATED IN THE DISTRICT OF COLUMBIA

EXHIBIT A

	<u>*FREQUENCY</u>		<u>**AVERAGE COST</u>	
	<u>1972</u>	<u>1973</u>	<u>1972</u>	<u>1973</u>
<u>BODILY INJURY</u>				
September	142.2	177.9	\$1,207.26	\$2,652.09
October	204.1	212.0	2,689.88	1,457.09
November	222.4	162.3	1,699.29	1,461.24
December	161.6	189.6	1,225.65	1,636.14
4 Mo. Avg.	182.5	185.4	1,677.96	1,725.81
January***				
<u>MEDICAL PAYMENTS</u>				
September	112.7	170.0	\$246.71	\$220.57
October	179.2	187.3	169.28	257.97
November	102.1	204.0	251.85	240.08
December	152.2	184.5	182.93	260.14
4 Mo. Avg.	136.5	186.5	209.11	246.96
January***				
<u>UNINSURED MOTORIST</u>				
September	19.0	14.0	\$ 790.81	\$ 1,919.59
October	19.1	20.8	775.00	11,080.37
November	18.8	29.7	2,065.20	2,000.00
December	24.6	25.0	4,206.43	3,784.91
4 Mo. Avg.	20.4	22.4	1,588.62	4,838.26
January***				
<u>PROPERTY DAMAGE</u>				
September	1143.8	1103.2	\$179.03	\$177.56
October	1409.3	1343.4	205.35	204.06
November	1382.1	1189.3	147.46	138.27
December	1462.7	1258.5	174.51	169.93
4 Mo. Avg.	1350.3	1223.9	174.72	170.88
January***				
<u>COLLISION</u>				
September	1764.8	1867.6	\$154.81	\$205.84
October	2187.6	2320.1	167.04	163.71
November	2192.3	2197.8	133.14	142.99
December	1940.2	2258.6	165.49	149.91
4 Mo. Avg.	2019.4	2162.1	154.31	162.03
January***				
<u>COMPREHENSIVE</u>				
September	688.2	942.6	\$ 94.94	\$110.22
October	727.9	794.8	107.54	128.47
November	752.7	795.5	84.83	118.75
December	630.4	505.3	115.07	122.76
4 Mo. Avg.	699.5	758.3	99.74	119.76
January***				

GOVERNMENT EMPLOYEES INSURANCE COMPANY  
FREQUENCY AND SEVERITY STATISTICS FOR  
CLAIMS ON POLICIES RATED IN THE DISTRICT OF COLUMBIA

<u>TOWING AND LABOR</u>	<u>*FREQUENCY</u>		<u>**AVERAGE COST</u>	
	<u>1972</u>	<u>1973</u>	<u>1972</u>	<u>1973</u>
September	552.2	572.8	\$13.96	\$14.25
October	554.3	538.1	11.49	14.37
November	764.4	570.0	13.48	12.91
December	508.1	390.2	12.48	13.76
4 Mo. Avg.	594.7	517.3	12.94	13.82
January***				

\*No. of claims reported against the coverage per 100,000 car months of the coverage earned during the calendar month.

\*\*Total number of loss dollars paid on closed claim/divided by the number of claims closed under the coverage during the calendar month.

\*\*\*January statistics are not available at this time.



414 AUDITORIUM STREET ST. PAUL, MINNESOTA 55102 • PHONE: AREA (612) 227-7647

February 18, 1974

The Honorable Thomas Eagleton  
6235 Dirksen Office Building  
Washington, D.C. 20515

Att: Mr. Andy Manatos

Dear Senator:

Enclosed is some of the information which you requested on our efforts to get auto insurance premiums reduced.

Commissioner Berton Heaton replied that no companies are filing any premium reductions at this time although some are actively notifying policy holders of their right to get a reduction if their driving to and from work has been reduced. State Farm already has a procedure in effect for rebates if profits are in excess of five per cent. However, we do not feel these measures are adequate.

As you will note from the copy of Representative Bruce Vento's letter, there may be attempts to put an excess profits ban either in separate legislation or into no-fault auto insurance legislation. As you will note from the other enclosure, the House and Senate versions of no-fault are rather far apart. The conference committee has met three times so far with no progress. Although the Senate version does not mandate a premium reduction as the weaker House version does, Senate Chief Author Jack Davies predicts a reduction of more than the fifteen percent mentioned in the House Bill.

We are awaiting response to our inquiries about accident loss reductions due to energy saving measures. Right now, a bill allowing the Governor to reduce the speed limit is making quick progress in the State Legislature. There are no rationing plans at the moment in Minnesota, but if the Federal Energy Office reductions to eighty percent of last year's allotments materialize here, there will be a serious shortage.

We are also compiling the results of our own energy survey on the effects on union workers. That information will be available shortly.

Please let me know what other information you would find useful.

Sincerely yours

*Barbara Beerhalter*

BARBARA BEERHALTER  
Public Relations & Research



enc:

BB/d



414 AUDITORIUM STREET ST. PAUL, MINNESOTA 55102 • PHONE: AREA (612) 227-7647

January 29, 1974

To: All Press - for immediate release  
 From: Barb Beerhalter

ROE CALLS FOR AUTO INSURANCE CUTS

Dave Roe says automobile insurance rates should be cut immediately.

Roe, Minnesota AFL-CIO President, says, "Unless the rates are cut right now, Minnesota consumers will be unwitting contributors to windfall profits in still another industry.

"We believe both legal and voluntary actions during this period of energy shortage - such as reduced speed, car pooling and increased use of mass transit - create a safer driving environment and result in fewer accident claims. And it's the people, not the industry, that should reap the cost savings."

Roe has asked Minnesota Insurance Commissioner Berton W. Heaton to release information on what companies, if any, are reducing rates and which are not. "We support you in any attempt to inform the public of the facts and any action your Department is taking in this area," Roe told Heaton.

"We hope public concern and existing state laws can force the rates down," Roe continued, "but if not, we'll support legislative change to do the job."

He also noted the AFL-CIO strongly supports a tough, effective no-fault insurance law. "We'll expect even further cost savings when such a law goes into effect," Roe says, "but there's no excuse for waiting to cut rates when there's a clear reason to cut them right now."

-0-

...ATTACHED FIND COPY OF ROE LETTER TO HEATON...



414 AUDITORIUM STREET ST. PAUL, MINNESOTA 55102 • PHONE: AREA (612) 227-7647

January 29, 1974

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Mr. Berton W. Heaton  
Commissioner of Insurance  
Minnesota Commerce Department  
5th Floor, Metro Square Building  
St. Paul, Minnesota 55101

Dear Commissioner:

The Minnesota AFL-CIO is concerned whether Minnesota consumers are being treated fairly in the area of automobile insurance rates due to the measures required legally and being taken voluntarily during this period of energy shortage.

We believe such actions as reduced speed, car pooling and increased use of mass transit create a safer driving environment and result in fewer accident claims. Are any auto insurance companies writing policies in Minnesota actually reducing their rates to consumers? If so, who is and how much? If not, who isn't and why not?

In this period of energy shortage, there has been significant attention to possible excess profits in the energy industries. We hope that there can be effective attention and action on behalf of consumers so they also will not have to contribute to excess profits in the insurance industry.

We support you in any attempt to inform the public of the facts in the situation and any action your Department is taking in this area.

Thank you.

Sincerely yours

MINNESOTA AFL-CIO

(signed)

David K. Roe, President



DKR/d

BRUCE F. VENTO  
 DISTRICT 66A  
 RAMSEY COUNTY  
 1534 ATLANTIC  
 ST. PAUL, MINNESOTA 55106  
 TELEPHONES:  
 STATE CAPITOL: 296-4230  
 HOME: 771-8930



COMMITTEES:  
 JUDICIARY, VICE-CHAIRMAN  
 EDUCATION  
 FINANCIAL INSTITUTIONS AND INSURANCE  
 GOVERNMENTAL OPERATIONS  
 RAMSEY COUNTY DELEGATION, CHAIRMAN

## State of Minnesota

HOUSE OF REPRESENTATIVES

MARTIN OLAV SABO, Speaker

February 4, 1974

Mr. David K. Roe, President  
 Minnesota AFL - CIO  
 414 Auditorium Street  
 St. Paul, Minnesota 55102

Dear Dave,

In response to your letter to the Commissioner of Insurance, I have requested the Revisor of Statutes to draft legislation which will permit the Insurance Commissioner to review auto insurance rates and to recapture excess profits that are being garnered by Minnesota auto insurance companies.

Minnesota presently only utilizes a file and use law enacted in the '69 Session, which permits the rates to go into effect with very little review, merely a filing of information leaving the "free enterprise system" and the "competition" which theoretically follows to protect the public interest.

I frankly feel that this is inadequate and not in the best interest of our state's consumers, the windfall profits currently being a case in point. This proposal could be made a part of the conference committee report on no-fault or a separate bill, but action must be swift if we are to be successful in addressing this issue during the current session.

Thank you for your continuing interest and concern for the Minnesota Wage earner. I find your interest very reassuring in the pursuit of consumer issues.



414 AUDITORIUM STREET • ST. PAUL, MINN. 55102

Not drafted yet

BFV:am

Sincerely,

Bruce F. Vento  
 State Representative

MINNESOTA AFL-CIO,  
St. Paul, Minn., January 31, 1974.

MINNESOTA HOUSE OF REPRESENTATIVES,  
State Capitol,  
St. Paul, Minn.

DEAR REPRESENTATIVE: I want to express my urgent concern over what we consider deficiencies in the form of the No-Fault Automobile Insurance Bill under consideration in the House.

First, all medical and rehabilitation costs should be covered. A limit of \$10,000 and two years is inadequate for those most seriously hurt and who are most undercompensated at the present time. Also, wage loss benefits should include future anticipation income or impairment of earning capacity.

Second, vehicle property damage should be covered.

Third, subrogation—even through intercompany arbitration—must be eliminated if any real benefits in administrative costs of insurance are to be realized and passed on to the consumer. Subrogation negates the concept of no-fault insurance.

I do think it is vital that a strong, effective no-fault automobile insurance law passes during 1974. I believe the above changes are necessary to accomplish that.

Sincerely yours,

DAVID K. ROE, *President.*

COMPARISON OF HOUSE AND SENATE NO-FAULT BILLS

Category	Provisions	
	House	Senate
MANDATORY FIRST PARTY INSURANCE COVERAGE		
Includes motorcycles.....	No.	Yes. \$2,500 deductible. In accidents between motorcycles and cars the insurance company of the car shall pay 50 percent of the first party benefits of the injured motorcyclist if they exceed \$250.
Total allowable on first party benefits.	Insurance plan may require notification of claim for benefits not less than 6 months after date of accident. Insurance plan may terminate eligibility for benefits after lapse of disability and medical treatment of 1 year. 6 year statute of limitations.	No time limitation. Statute of limitations: The basic statute: earlier of: (1) 2 years after the loss; (2) 4 years after the accident. Months during which no loss is suffered do not count unless they add up to more than 10 years.
FIRST PARTY BENEFITS INCLUDE		
Loss of income; replacement services.	Income: \$200/week limit. 85 percent of gross income. Payment retroactive after 1st 7 consecutive days of disability. Replacement: \$200/week limit. Payment not begun until 8th day of injury.	Income: \$200/week limit. 85 percent of gross income or more if lower tax bracket. Payment from 1st day of injury. Replacement: \$200/week limit. Payment not begun until 8th day of injury; not retroactive.
Survivors economic loss benefits..	\$200/week limitation. Payments terminate when spouse remarries or dies and when dependent child marries, attains majority, becomes emancipated or dies. Survivors replacement services: \$200/week limit.	\$200/week limitation. 85 percent of gross income or more if lower tax bracket. No provision for termination of payments. Survivors replacement services: \$200/week limit.
Funeral.....	\$1,000 limit (includes delivery under Uniform Anatomical Gift Act).	\$1,500 limit (\$1,000 optional deductible).
Rehabilitation.....	Treats rehabilitation expenses like medical expenses.	The injured person must give insurance company notice within 60 days after rehabilitation expenses exceed \$1,000. If he does not give notice, the responsibility of the insurance companies to pay is somewhat limited. If the injured person refuses rehabilitation, the other benefits are reduced to the extent that they would not have been necessary had he consented to rehabilitation.

## COMPARISON OF HOUSE AND SENATE NO-FAULT BILLS—Continued

Category	Provisions	
	House	Senate
No fault for auto repairs.....	No. (Maintain present system of fault).	Yes.
Subrogation.....	Yes. By intercompany arbitration (mandatory).	No. Reallocation of loss by damage-causing capabilities of vehicles.
Coverage follows.....	Household for private passenger vehicles; vehicle for commercial vehicles.	Same.
Subtractions from first party benefits.....	Workmen's compensation.	Workmen's compensation. Social Security benefits.
Effective date.....	Jan. 1, 1975.....	July 1, 1973.
Negligence lawsuits permitted....	(1) all property including auto damage. (2) economic loss over first party benefits. (3) medical benefits exceed \$2,000.....  (4) disability for more than 60 days (disability=inability to engage in substantially all the injured person's usual and customary daily activities). (5) death..... (6) dismemberment..... (7) permanent disfigurement. (8) permanent loss of a body function. (9) permanent injury. (10) fracture of a weight-bearing bone. (11) compound, comminuted or dislocation fracture. (12) compression fracture of the vertebrae.	(1) property other than motor vehicle or its contents. (2) economic loss over first party benefits. (3) disability for more than 90 days (disability=inability to perform one's principal activity and a substantial portion of his other daily activities). (4) permanent injury.  (5) permanent disfigurement. (6) death.
Mandatory rate reduction.....	15 percent decrease of all rates including property damage.	No mandated rate reduction.
Third party tort liability insurance required.....	25/50/10,000. Requires uninsured motorist with same limits.	25/100/10,000. Does not require uninsured motorist.
Compulsory arbitration.....	Optional (a) a claimant's option for all claims (b) by rules of court	(a) compulsory for claims under \$5,000 (b) optional upon agreement of both parties for claims over \$5,000 (c) by rules of court
Optional deductibles.....	Mandatorily offered \$100, \$300 from all first party benefits at reduced premiums.	Mandatorily offered: (1) \$100, \$300, \$500 from all first party benefits at reduced premiums (2) exclusion of 10 percent of work loss and survivors' economic loss (3) exclusion of all replacement services' loss and survivors' replacement (4) \$1,000 deductible on expenses related to funeral, cremation (5) \$2,500 deductible for motorcyclists Optionally offered: (1) exclusion of part of replacement services' loss and survivors' replacement services loss (2) exclusion of benefits received from collateral sources
Optional added benefits.....	May offer any optional coverages.	Must offer: (1) \$100 deductible collision (2) collision coverage that pays only where the insured would have been able to sue, but for this act, with or without \$100 deductible May offer any other optional coverages, subject to the approval of the Commissioner of Insurance.
Interest on overdue first party benefit payments.....	10 percent per year simple interest.	18 percent per year simple interest.
Persons excluded from benefits....	People: (1) intentionally causing accidents (2) knowingly operating stolen vehicles (3) whose license is suspended (4) seeking to elude apprehension or arrest (5) committing felony which contributed to the accident	(1) converters (car thieves) (2) persons occupying vehicles as living quarters (3) persons injured in the course of an officiating race or practicing thereof (4) people causing intentional injury Survivors disqualified in (1) and (4) but not (2) and (3)

## COMPARISON OF HOUSE AND SENATE NO-FAULT BILLS—Continued

Category	Provisions	
	House	Senate
Cancellation.....	<p>Reasons for cancellation and modification (must be stated in the notice):</p> <ol style="list-style-type: none"> <li>(1) nonpayment of premium</li> <li>(2) policy obtained through misrepresentation.</li> <li>(3) insured made a fraudulent claim</li> <li>(4) insured failed to disclose accident and tickets</li> <li>(5) insured failed to disclose other necessary information</li> <li>(6) insured breached insurance company "cooperation" clause</li> <li>(7) insured: (a) has had license suspended within last 3 years; (b) is an epileptic or has heart attacks; (c) has an accident or conviction record or physical or mental condition making him dangerous; (d) in the past 2 years has been convicted of: 1. criminal negligence resulting from use of a motor vehicle; 2. assault with a motor vehicle; 3. DWI; 4. hit and run; 5. lying on driver's license application; 6. stealing a car; (e) has been convicted within 18 months of violating any laws which would justify the revocation of his driver's license</li> <li>(8) the vehicle is: (a) so defective as to be dangerous; (b) used to carry passengers for hire; (c) used to carry flammables or explosives; (d) an authorized emergency vehicle; (e) subject to an injunction law and fails to comply; (f) converted to a dragster, etc.</li> </ol> <p>Rules covering nonrenewal and rejection: Cannot nonrenew or reject for the following reasons:</p> <ol style="list-style-type: none"> <li>(1) age</li> <li>(2) arbitrary or capricious reasons.</li> </ol> <p>Notice provisions: Dissimilar to those in Senate:</p> <ol style="list-style-type: none"> <li>(1) allows the Commissioner to suspend insurance companies from doing business if they violate any of these rules.</li> <li>(2) creates a private cause of action for people injured by improper termination to sue the insurance company.</li> </ol>	<p>Rules for cancellation, modification or nonrenewal:</p> <ol style="list-style-type: none"> <li>(1) cancellation, modification, or nonrenewal are allowable only at one-year intervals and upon 20 days' written notice</li> <li>(2) except that insurance may be cancelled within 75 days after inception of coverage or otherwise terminated at any time if 15 days' notice is given. (Does not forbid cancellation for fraud.)</li> <li>(3) Insurance company must only reveal reason for cancellation upon request</li> <li>(4) Senate has no provisions regarding rejection.</li> </ol> <p>Rules covering nonrenewal: Cannot nonrenew for the following reasons:</p> <ol style="list-style-type: none"> <li>(1) age</li> <li>(2) arbitrary or capricious reasons.</li> </ol> <p>Notice provisions: Dissimilar to those in House. Senate bill does not contain either of provisions 1 or 2 listed in House notice section.</p>
Enforcement and certification.....	<p>Self-certifying. Insurance company must notify Commissioner of Public Safety if insurance is terminated. When the Commissioner receives notification of termination of policy the individual must immediately surrender his registration certificate and plates.</p>	<p>Self-certifying except commissioner may require any individual to submit proof of insurance if</p> <ol style="list-style-type: none"> <li>(1) the person has not previously registered a vehicle in this state</li> <li>(2) the owner or operator has previously failed to comply with insurance laws</li> <li>(3) the owner or operator has a bad driving record</li> <li>(4) other circumstances indicate that it is necessary.</li> </ol> <p>Insurance company must notify Commissioner of Public Safety if insurance is terminated. The Commissioner may waive this rule.</p>
Penalties for failure to insure.....	<p>Owner is liable in tort without limitation. Owner's or operator's license must be revoked for not less than 6 nor more than 12 months.</p>	<p>Owner is liable in tort without limitation. Owner's license may be suspended for 6 months.</p>
Severability.....	<p>Expressly severable: If any part is found unconstitutional, just the invalid provision goes.</p>	<p>Generally severable except if any restrictions or retained tort liability on their application are found unconstitutional, the entire clause goes (i.e., all general damages are abolished—no suits can be made for general damages—if any part of the clause is thrown out.)</p>

# APPENDIX

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APPENDIX

INSURANCE ADVISORY COMMITTEE

REPORT TO THE

SPECIAL N.A.I.C. TASK FORCE

ON THE

ENERGY CRISIS

AND

INSURANCE RELATED MATTERS

December 31, 1973

Insurance Advisory Committee Report  
to the Special N.A.I.C. Task Force  
on the Energy Crisis and Insurance Related Matters

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Insurance Advisory Committee Report  
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APPENDICES

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SUMMARY

The Automobile Insurance industry is responding to the energy crisis with interim and continuing emergency measures.

What the insurance industry is now doing, plus the measures being planned, should assure millions of policyholders that they will realize whatever insurance cost reduction is determinable. This assurance is based mainly on the intense competition which prevails in the insurance business and is reinforced by careful monitoring of rates by state insurance departments.

In addition to dividend or premium refund plans announced by some companies and contemplated by others, the industry will:

1. Encourage widespread formation and operation of car pools by whatever means are feasible, including publicity removing policyholder doubt regarding coverage for expense sharing pools.
2. Make policyholders aware of whatever lower rated classification may be applicable because of changed car usage.
3. At the direction of the Task Force on the Energy Crisis of the National Association of Insurance Commissioners, establish a fast-track monitoring system to determine without delay the unpredictable effect on accidents of various voluntary gasoline conservation measures.
4. Predict the probable effect on accidents of a specific gasoline rationing system.

VOLUNTARY PROGRAMS AND RELATED MEASURESCounterforce Factors Many and Varied

A variety of voluntary programs and related measures are now under way, or proposed by federal and state officials, that are designed to reduce gasoline consumption. Reduced gasoline consumption should mean reduced mileage driven, although the reduction in mileage may not be as great as the reduction in gasoline consumption. Reduction in mileage driven also should reduce accidents although, again, the reduction may not be as great. Finally, the frequency of accidents is only one of the components making up insurance losses; the other being average size of loss which is affected by inflation and adversely affected by several of the factors which reduce accident rates. Therefore, reduction in gasoline consumption may not necessarily produce a reduction in insurance losses.

Among the programs involved are reduced speed limits; car pools; smaller cars; ten gallons per family per week; limitations on gas station sales to ten gallons per customer; mandated fuel allocations at source; gas station closings; daylight savings time; mass transit; and shortened work week.

The list continues. And the factors affecting actual gasoline savings and, in turn, lower mileage are both varied and wide ranging. Obviously some will have much greater impact than others, depending upon how well a particular program works. But collectively they are a mixture of counterforces, some tending to reduce accidents or their severity, others tending to increase them -- and all in a flux as the programs are implemented in different parts of the country where urban-rural contrasts, driving habits, needs, and other local conditions add their own special effects.

Understandably, some have speculated that these voluntary programs will so broadly and generally reduce total miles driven (hence total accidents) that there should be immediate and general cuts in automobile insurance rates. Until the true impact of the counterforces can be determined and measured, though, action to force such cuts would be premature and without sound basis. Careful scrutiny is given rate increases; the same treatment should be given to rate reduction proposals. Already, the competitive forces of the automobile insurance industry are at work and individual companies are making adjustments, including some designed to encourage gas savings.

#### The 55 mph Limit: How Significant?

There is wide agreement that the new 55 mph speed limit will help conserve gasoline -- assuming the limit can be enforced. There is difference of expert opinion, however, as to impact of the speed limit upon accidents. Part of this difference stems from interpretation of statistics showing that nearly one-half of all fatal accidents occur at speeds under 50 mph. And, more than one-half of all accidents happen at speeds under 30 mph. In addition, most accidents occur within 25 miles of home.

Still, speed kills. Research studies cited by the Department of Transportation's National Highway Safety Bureau in 1969 found that the ratio of fatalities to injuries rises substantially with the increase of crash speed. In one of four studies cited, using 1967 national highway fatality figures, it was found that of 12,100 deaths from crashes above 60 mph, 6,800 would have been prevented had the crashes occurred at lower speeds.

But California Highway Patrol Commissioner Walter Pudinski has warned that drivers may be lulled into a false sense of security by all the publicity about

impending reductions in accidents from the energy crisis. He points out the 55 mph limit will affect traffic only on the freeways which already have lower accident rates compared to other arteries. (See Appendix A, attached.)

Commissioner Pudinski feels the effect of the energy crisis may increase rather than decrease severity of accidents. He notes that with more small cars on the roads we can anticipate worse injuries in accidents, and with more use of car pools there will be more occupants involved in accidents.

The California highway official further feels fatigue, "a major cause of single vehicle crashes, will be increased on longer trips because the lowered maximum speed will extend travel time. And single vehicle accidents already represent nearly 40 per cent of California's accident problem." (Underwriters Report, December 20, 1973)

Dr. William Haddon, Jr., president, Insurance Institute for Highway Safety, warns that this increase in "time exposure" to go the same distance at lower speed will also increase traffic density. But the effect on losses from increased time exposure is not known, he notes. (Some Hard Data Relative to Highway Losses in Damaged People and Property and Changes That Might Result From the Energy Shortage, December 1973) (See Appendix B, attached. Also, please note Appendix C, attached; The Accident Reporter, University of North Carolina, Highway Safety Research Center, December 1973 Issue, "The Energy and Highway Safety.")

Will the 55 mph limit work? The December 18, 1973, Orlando (Fla.) Sentinel-Star observed. "Florida's attempt to save gasoline by reducing speed limits is being heeded by only 26 per cent of the motorists, the Department of Transportation

said...Checking on the success of the 55 mph speed limit, DOT did a survey on Interstate 10 Friday (Dec. 14). During the three-hour check, only 26 per cent of the cars traveled at the legal limit.

"Another 35 per cent were between 55 and 60 mph, and 26 per cent were between 60 and 65 mph. The remaining 13 per cent ran faster than 65 mph..."

#### Gasoline Apportionment Short of Rationing

Over recent weeks a number of alternatives to strict rationing have been explored by federal authorities and as of late December a voluntary program limiting family use to 10 gallons per week and gas station sales to 10 gallons per customer was being urged. Other measures to limit the 28 per cent bite of national petroleum taken by automobiles included restrictions on gasoline at the source, with refineries being asked in 1974 to cut gasoline production 5 per cent below 1972 levels or 15 per cent below expected demand. This enables greater production of heating oil.

Together these measures will have an effect upon automobile loss costs, but the extent will have to await some more definite pattern to the apportionment programs. The insurance industry's emergency monitoring system (described later in this report) will be able to catch these trends as they develop. Also yet to be determined is the extent to which the public will accept the voluntary plans, a situation which may vary across the nation since average gallon usage is so intertwined with local living and working habits and needs.

Of concern to many are initial signs that some motorists may be attempting to hoard gasoline, either by keeping extra supplies at home or by carrying it with them in their cars. There are grave hazards to both practices, especially in

cases where gasoline is stored or carried in small closed containers, and particularly inside the car or car trunk. The smallest spark will ignite accumulated vapors.

However the gasoline is portioned out, one effect is considered certain: interest in smaller cars will quicken, a trend that has been clearly evident in the past few years.

#### Proportion of Smaller Cars Growing

Sales of 1974 model small cars, including imports, have continued to increase and appear to be influenced further by the energy crisis. In the 1973 model year, the small cars accounted for more than 41 per cent of the U.S. market new car sales. Small cars get many more miles to the gallon than larger standard models and it is reasonable to expect that families with more than one car will now tend to use a smaller second car more often than previously.

Of significance to automobile insurance, therefore, are various research studies showing that the passengers of smaller cars, once they are involved in accidents, tend to sustain more severe injuries than the passengers of larger cars. Further, studies show small cars tend to be involved in accidents more frequently than larger cars. Much of this data has already been summarized by the Insurance Institute for Highway Safety. (See Appendix B, attached.)

A 1968 study in New York State, prepared for the Department of Transportation and based on more than 400,000 vehicles in reported crashes, found a strong association between the weight of an automobile and the per cent of accidents in which there was serious injury or fatality. As vehicle weight went down, severity of injury or fatality rose sharply.

A University of North Carolina study in 1970 concluded that the occupants of larger cars generally show less injury than average while those in smaller cars generally show more than average injury. And a May 1973 study by the University of Michigan found that "once involved in an accident, the chance of injury...increases at the rate of about 2.5 per cent for each decrease of 100 pounds in vehicle weight."

The IIHS itself conducted tests of crashes between large and small cars from the same manufacturers in 1971 and filmed the results. The cars were crashed head-on at about 48 mph and in each case the passenger compartment of the smaller car was demolished while that of the larger car remained intact and almost unchanged.

Smaller cars also have more claims per year than larger cars, according to the Highway Loss Data Institute. Analyzing collision coverage data based on nearly 75,000 "insured years" of exposure for ten popular 1973 smaller models (five subcompacts, five compacts), HLDI found that eight of the ten models produced more than nine claims each per 100 insured vehicle years. In contrast, HLDI found that for five popular 1973 full-size models, only one had more than nine claims. For average loss payment per claim, HLDI found relatively little difference between the full-size and smaller models. Compacts average \$468 and both subcompacts and full-size averaged \$480.

IIHS and the State Farm Mutual Automobile Insurance Company surveyed unrepaired crash damage covering 1968-72 models and learned that the percentage of passenger cars with crash damage unrepaired each year was higher for small cars than large cars. To the extent unrepaired damage affects the operation of the automobile, it will have an adverse effect on accident frequency.

There is considerable evidence, the IIHS concludes in its December, 1973, report, that "if all other aspects of the situation were unchanging, the decreasing size of the cars in the vehicle population would tend to generate more severe and more frequent losses."

Car Pools: How Widespread?

As December drew to a close, the pressures and incentives for car pooling were accelerating. The possibility of government mandate loomed through some press reports, and voluntary programs to encourage pooling were growing from Boston to San Francisco. Automobile insurers responded early to the spirit of these programs and policyholders were assured that car pooling on a share-expense basis is covered under standard family automobile policies. Some underwriting and rating rules also have been eased or altered to encourage the greater use of car pools.

However, the use of car pools may substantially increase the potential for loss through an accident because more people would be involved in each accident. Further, the handling and braking of cars becomes more critical as passenger weight increases.

Mass Transit: A Spot Survey

Among other alternatives to the automobile with the single occupant, mass transit is mentioned more often than walking, bicycling, and motorcycling, probably because there are still some commuter mass transit systems operating in major cities despite the flight to the suburbs by both people and industry. Is the energy crisis impact to be seen in mass transit ridership? A spot check of cities December 26 came up with a mixed bag:

New York - Almost no increase in mass transportation use reported.

Boston - A private commuter bus line reported 3-5 per cent ride increase in September that since leveled off. They are not sure

why. Boston's MBTA declined December comparisons because of too many variables, but did report a decline in riders over the last quarter.

Chicago - No substantial change in rider figures, except that the CTA noted Sunday figures higher now that gas stations are closed that day. Chicago & Northwestern Railway reported slightly higher ridership, but felt it is too early to attribute that to the energy crisis.

Minneapolis-St. Paul - Rider figures on Twin City buses up slightly in September but due to various factors. Heavy publicity campaign is underway to promote "The Greater Metropolitan Car Pool," with buses painted to resemble car pool autos, but it is too early for results.

Miami - No visible change in ridership.

Baltimore - Ridership up 3.5 per cent since November and still climbing. Attributed to energy crisis effect. Heavy publicity campaign underway to win new riders, save on energy.

Philadelphia - Ridership up an estimated one or two per cent since December 1 with energy crisis felt to be one of many factors. Ridership was up though even before the crisis. City's two major commuter railroads, the Penn Central and the Reading, also report one to two per cent increases since early December, partly attributed to energy crisis.

Pittsburgh - Mass transit ridership up 10 per cent in October and 5 per cent in November. Energy crisis considered to be a major factor there.

Los Angeles - Running just about the same as previous years, no change.

San Francisco - Municipal railway reported 3-5 per cent increase in past couple of months with energy crisis definitely a factor. AC Transit Bus Lines also up about the same. BART has found no change.

Denver - Ridership in December was up 9 per cent over same months of 1972, attributed to energy crisis. Denver's July-August 1972 gas shortage experience is believed to have conditioned people to the mass transit alternative.

#### Daylight Savings Time

With the restoration of daylight savings time, some of us now will be going in the dark both ways between home and work, especially during the winter months. Others though who may start earlier will gain daylight at quitting time. To the extent that traffic is shifted from daylight to dark should have some effect upon accidents, but the patterns would be shifting from evening rush hour to the morning and possibly balancing out in the general sense.

#### Reduced Street Lighting, Parking Lots

Studies reported in the Journal of Safety Research, going as far back as the Depression years when street lighting was reduced for economy, show that in nearly all cases they experienced increases in night automobile accidents. Accidents affecting pedestrians and bicycles also would tend to be increased. Vandalism and theft could become serious problems for cars left unattended in parking areas where lighting is curtailed.

Increased Use of Bicycles

For many motorists the bicycle offers an attractive alternative to the auto. But past experience has shown an increase in bicycle use tends to increase both the number and the severity of traffic accidents. Thus, injection of new and inexperienced bike riders into rush hour traffic could bring greater liability risks for the automobile driver.

Because the cycle offers almost no structural protection for its rider, collisions between automobiles and cycles often cause serious injuries or deaths. The recent growth in popularity of the bicycle -- jumping from 28.2 million in use in 1960 to 71.4 million in use in 1972 -- illustrates the heavy risk which accompanies bicycle transportation. The National Safety Council reports deaths from auto-bicycle crashes jumped 120 per cent during the decade 1962-1972. In the period 1971-72, such deaths rose by 29 per cent, totaling 1,100 for the year.

Significantly, the larger portion of these fatalities occurred in urban areas where congestion is heaviest, indicating the danger of mixing bicycles with automobiles. In these city areas, the death toll went up 33 per cent, as compared with a 25 per cent increase for rural areas.

There is strong evidence, too, that many of the deaths associated with bicycle accidents occur when the cycle is being used for basic transportation. In the past, the great majority of fatalities reported in connection with bicycles involved children. In 1960, for example, 78 out of every 100 fatalities were children age 14 or younger. In 1972, however, only 50 deaths per 100 were children, with the other half involving those age 15 and up.

IMMEDIATE RESPONSE OF INSURANCE INDUSTRY TO THE ENERGY CRISISShare-Expense Car Pooling

The insurance industry has already responded to the plea for greater use of car pools. Policyholders have been assured that car pooling on a share-expense basis is covered under existing standard family automobile policies. Some companies have announced new rules which will encourage people to join car pools. Even though there may be some increase in the loss potential because of more people involved in an accident, the insurance industry has made it clear that coverage is provided for legitimate car pooling on a share-the-expense basis. This commitment was confirmed by a statement released by the National Association of Insurance Commissioners. (Appendix D)

Rate Classifications Based On Usage

Automobile insurance has always been highly competitive. Reflecting the competitive nature of the business, many different types of classification and rating plans are available to the consumer. The normal application of existing classification plans will result in rate reductions for many motorists whose usage declines because of the fuel shortage. Most plans provide for lower rates when the car is not driven to and from work, or when the distance to and from work is short. If a motorist decides, because of the fuel shortage, to use public transportation instead of driving his car to and from work, he is generally entitled to a lower rate. If the mileage he has been driving to work is over ten miles, this reduction could be substantial.

Many companies use, in addition to the mileage to and from work, an annual mileage factor. If a motorist drives fewer miles, even though he continues to drive to and from work, under these plans he may be entitled to a lower rate. Because of the energy crisis, and the reduced use of automobiles, some companies have introduced new programs based on the mileage driven, giving lower rates to

those drivers driving the least amount of miles. Other companies are reviewing the situation and other plans may be announced in the future.

Companies publicize their programs and every effort will be made to inform the insurance buying public that lower rates may be available to motorists who drive their cars less and that these motorists are entitled to lower rates.

#### Dividend or Premium Refund Programs

Some companies which normally compete in ways other than by means of dividends or premium refunds have announced their intent to use this method of recognizing extraordinary reduction in losses which may result from the energy crisis. More companies can be expected to adopt this procedure.

#### Effect of Present Programs on Consumer And Insurance Company

The application of existing or new rating plans based on usage and the introduction of dividend or premium refund programs will assure policyholders that they are receiving proper consideration during the energy crisis. These plans will result in savings for many policyholders and will also produce less premium income for the companies, which in effect will be an overall premium reduction.

#### VOLUNTARY ACCELERATED MONITORING SYSTEM

The preceding sections of this report have pointed up the uncertainty regarding the effect on accidents of gas conservation measures short of consumer rationing. (Consumer rationing is the subject of the following section).

This uncertainty makes it imperative that the insurance industry determine as fast as possible what is the actual effect of such measures.

The automobile insurance industry is creating a fast-track loss data monitoring system. This system is being developed in response to a request of the National Association of Insurance Commissioners Special Task Force on the Energy Crisis and Insurance Related Matters. The objective of the monitoring system is to obtain material and credible auto accident trend information on an accelerated basis during the energy crisis. The leading writers of automobile insurance will be asked to participate.

#### THE FORCES CONTROLLING AUTO INSURANCE RATES

The prices that automobile insurance companies can charge are restricted by two controlling forces:

1. The compelling forces of intense competition which continues as the dominant factor in the insurance market place even in this period of fuel availability crisis.
2. The regulation and close surveillance by the insurance departments of the fifty states and the District of Columbia operating under statutory insurance codes and, currently, the limitation of insurance rates under the Federal Economic Stabilization Program.

For the duration of the crisis, regulation by state insurance departments has been stepped up by creation of the Task Force of the National Association of Insurance Commissioners which will be working for full public protection with data provided after next February 1 by the new Fast-Track Monitoring System.

The leveling power of intense competition among over 600 auto insurance companies continues in full effect during the fuel crisis.

In a time of shifting loss patterns and close public examination of insurance practices, the corporate responsibility and consumer awareness of insurers is accentuated by the forces of competition.

In general, there is one certain method to attract new customers and retain them: that is to offer them a lower price for the insurance product. That rule continues to apply in the present situation.

Additional to aggressive price competition, insurers also compete through product innovation and improvement and broadening of services. These manifestations of the competitive force already are beginning to appear as the industry adjusts to the crisis situation.

For a brief review of the development of effective state regulation and the competitive force in auto insurance, see Appendix E, attached.

#### EFFECT OF GASOLINE RATIONING ON ACCIDENT FREQUENCY

##### Consumer Rationing Versus Fuel Allocation

As this report is being written, the Federal Government has announced a contingent consumer gasoline rationing program which could be put into operation as early as March 1, 1974.

The rationing of gasoline among consumers is aimed at equitable distribution of a limited supply of gasoline among all vehicle operators. The probable effect of the reduced supply on the annual mileage and the accident rate of each class of driver is difficult to determine, but rough estimates should be possible.

In contrast, a reduction in the gasoline output of refineries with no effort to ration the reduced supply among consumers has an unpredictable effect on the mileage and accident rates of various classes of drivers. It is impossible to

distinguish those who can outscramble the others and whose driving is unlimited from those who get far less than their share and whose driving is drastically curtailed.

World War II Consumer Rationing Versus Rationing in 1974

It reasonably may be asked whether the rationing of gasoline during World War II did not produce statistics which would be useful in determining the effect of rationing now. The answer is that conditions have changed so much since World War II that productions based on wartime experience would be invalid. The following chart displays some of the differences.

	<u>World War II</u>	<u>1970's</u>
Number of passenger cars	26 million	More than 100 million
Vehicle miles	(1943) 208 billion	1,250 billion
Passengers carried by electric railway:		
Subway-Elevated	(1945) 2.5 billion*	(1971) 1.51 billion*
Surface	(1945) 7.0 billion*	(1971) 0.15 billion*
Bus	(1945) 8.3 billion*	(1971) 3.8 billion*
Civilian labor force	(1943) 54.5 million	(1971) 79.1 million
Speed limit	35 mph	1974 (proposed) 55 mph
Young drivers (15-24)	Number of licensed drivers not available. 5 million age 24 and under in military service.*	(1972) 25,500,000** licensed young drivers. Small percentage in military service.
Traffic deaths involving drivers 24 and under.	(1943) 6,800 fatal accidents involving drivers age 24 and under.**	(1972) 25,200 fatal accidents involving drivers age 24 and under.**
Traffic injuries:		
Fatal	(1941) 40,000** (1943) 23,400**	(1972) 56,600**
Non-fatal	(1941) 1.4 million** (1943) 0.8 million**	(1972) 2.4 million**
Automobile operation reduced by unavailability of parts?	Yes	No

\*Source: 1960 and 1972 Statistical Abstract

\*\*Source: Accident Facts 1943 and 1973 editions

These statistics and others demonstrate that World War II conditions affecting automobile use and accidents were immeasurably different than those which exist today in many respects:

- ... While the civilian work force has increased 45%, the use of public transportation has decreased 69.5%
- ... Young drivers with a much higher than average accident frequency virtually disappeared from the streets and highways in WW II; there will be about 26 million in 1974.
- ... A shortage of parts and tires, as well as gasoline rationing, reduced automobile use in WW II; not so in 1974.

These are facts. They give no weight to the probable difference in public attitude between the patriotic determination to comply in WW II and the indifference, if not hostility, which may be the reaction to driving restrictions by today's more sceptical drivers.

Action of Automobile Insurance Industry Advisory Committee If Gasoline Rationing Is Imposed

The Advisory Committee assumes that consumer gasoline rationing will not be installed unless the total supply of gasoline is reduced significantly. If a substantial cut is ordered, the probable reduction in mileage and accidents would be great enough to justify making some predictions which the makers of automobile insurance rates may find useful.

Toward that end, the Industry Advisory Committee will start work on actionable predictions as soon as the details of a specific rationing plan are available.

Predictions regarding the effect of a gasoline rationing plan probably will vary importantly by territory depending on a number of factors including:

- ... Rural or urban conditions;
- ... Availability of public transportation for essential travel;
- ... Speed law enforcement capability;

Accident frequency predictions also may vary by class of driver and type of use, giving consideration to:

- ... Differences in amount of gasoline allowed;
- ... Availability of excess gasoline;
- ... Car pool activity.

The pricing action of different insurance companies or groups of companies may vary depending on a number of considerations, including:

- ... Their evaluation of accident reduction predicted;
- ... Validity of predictions for each company's "book" of policyholders;
- ... Their recent loss results and adequacy of present rate levels;
- ... Offsetting increases in the insurance loss per accident caused by inflation and other factors.

In weighing the need for regulatory action, major reliance should be placed on competition as the ratemaker's primary reason to use the lowest rates for which a sound basis can be found.

APPENDIX ATHE ENERGY CRISIS: AUTO RATES & ACCIDENTSCHP's PUDINSKI: ACCIDENT DIP COULD BE NON-EXISTENT

SACRAMENTO -- Forecasts that traffic accidents and deaths will fall dramatically when the maximum speed limit becomes 55 mph brought a word of caution from California Highway Patrol Commissioner Walter Pudinski.

He said that "several factors indicate the accident decline could be slight or even non-existent -- but the most damaging aspect may be that drivers hearing these optimistic statements will be lulled into a false sense of security."

Mr. Pudinski cited the following:

A Shifting

The vehicle mix is shifting. The small-car population is increasing, and accidents involving small cars tend to be more severe.

The expected trend toward car pooling, putting more people in each vehicle, can result in more injuries when a car is involved in an accident.

Fatigue, a major cause of single vehicle crashes, will be increased on longer trips because the lowered maximum speed will extend travel times. And single vehicle accidents already represent nearly 40 per cent of California's accident problem.

APPENDIX A - Page 2

The new 55 mph limit will have "little impact on off-freeway traffic because most of that travel is at 55 mph or below right now. On freeways, the potential for more severe rear-end accidents may be increased. The speed differential between the willful violator -- the driver who operates far above the legal limit -- and the 55 mph traffic flow will be that much greater, meaning rear-end and sideswipe accidents could be more serious."

Conclusions

The Commissioner said his conclusions are based on "traffic volumes approximately equivalent to current flows. A volume drop of more than 15 per cent would change the picture, since greatly decreased exposure might produce a numerical decline in accidents. However, experience also shows that as volume drops, accident severity increases, meaning that even though less accidents are occurring, they could more frequently result in serious injury or death."

He emphasized that the Highway Patrol is "not distributing gloom -- simply realism. Improvements in highway construction and design, more far-reaching safety education measures, and vastly refined enforcement techniques have already cut California's mileage death rate to 3.9 per 100 million miles of travel, one of the nation's lowest.

APPENDIX A - Page 3

"The 55 mph maximum, while necessary for energy conservation, may have a less demonstrable effect on accidents. No unqualified productions are supportable right now; experience with the new 55 mph limit will be required first," he said.

Underwriters' Report

December 20, 1973

Pgs. 3-4

APPENDIX B

**SOME HARD DATA RELATIVE TO HIGHWAY LOSSES  
IN DAMAGED PEOPLE AND PROPERTY  
AND  
CHANGES THAT MIGHT RESULT FROM THE ENERGY SHORTAGE**

December, 1973

**Insurance Institute for Highway Safety  
Watergate Six Hundred  
Washington, D.C. 20037**

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## INTRODUCTION

Several measures that have been proposed or suggested to conserve energy could affect highway losses in damaged people and property. A number of people and organizations have suggested that these measures will result in substantial reductions in such losses. However, since both the long and short term prospects with respect to energy supplies, and in particular gasoline and truck fuels, are still very uncertain as are many other aspects of the situation, it is not now possible to predict with accuracy what the effects of the energy shortage will be on each of the various categories of highway losses, or even the direction in which each will move.

The purpose of this document is to present known facts and results concerning several especially well documented aspects of the situation that are changing and that might change, but not to speculate on the overall effect.

## ASPECTS THAT ARE CHANGING

### Vehicle Size

The proportion of small (subcompact, compact and import) cars in the population of all vehicles has been increasing for several years. In 1969, approximately 20 per cent of the new passenger cars registered were small cars, and in 1973 this proportion will have increased to approximately 40 per cent. Sales reports for the first months of the 1974 model year suggest that this trend is being accelerated by the energy shortage. Furthermore, since small cars generally have lower gasoline consumption rates than larger cars, it is probable that families with more than one car will tend to use the smaller of their cars for a greater proportion of their driving than in the past. Therefore, the energy shortage should result in relative increases in small car mileage.

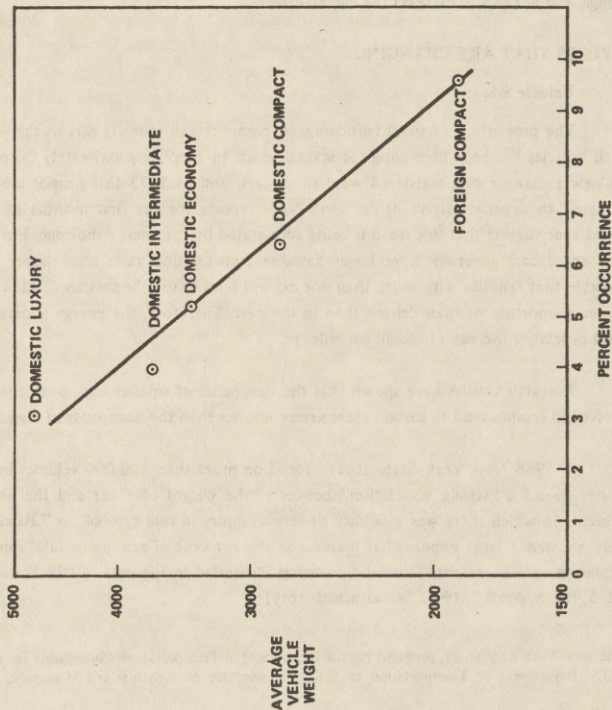
Research studies have shown that the occupants of smaller cars, once they become involved in crashes tend to sustain more severe injuries than the occupants of bigger cars.

A 1968 New York State study<sup>1</sup> based on more than 400,000 vehicles in reported crashes found a "strong association" between "the weight of a car and the per cent of accidents in which there was a fatality or serious injury in that type of car." Results of this study showed a large exponential increase in the per cent of serious or fatal injuries with decreasing vehicle weight. This relationship is illustrated in Figure 1. (IIHS *Status Report*, Vol. 5, No. 6, April 2, 1970. See attached story)

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<sup>1</sup>1968 New York state study, prepared for the Department of Transportation. (Submission for the Record by U.S. Department of Transportation to U.S. Subcommittee on Antitrust and Monopoly, March 10, 1970.)

FIGURE 1  
PERCENT OF ACCIDENT-INVOLVED VEHICLES  
IN WHICH  
THE MOST SERIOUS INJURY WAS FATAL OR SERIOUS



SOURCE: ADAPTED FROM NEW YORK STATE STUDY CONDUCTED FOR DOT. PRESENTED IN "KEY ISSUES IN HIGHWAY LOSS REDUCTION" PROCEEDINGS OF IIHS 1970 SYMPOSIUM, 1970.

A 1970 study<sup>2</sup> by the University of North Carolina concluded that occupants of "larger cars . . . show generally less injury than average," while occupants of "smaller cars . . . show generally more than average injury." Figure 2 illustrates these results. Although the study demonstrated a general relationship between vehicle size and severity of injury, it also showed that there were considerable variations between individual vehicle series. Figure 3 illustrates this variation. (*Status Report*, Vol. 5, No. 6, April 2, 1970)

More recently a University of Michigan study<sup>3</sup> showed that "once involved in an accident, the chance of injury . . . increases at the rate of about 2.5% for each decrease of 100 pounds in vehicle weight." (*Status Report*, Vol. 8, No. 22, November 27, 1973)

Some of the reasons for the inverse relationship between vehicle size and injury severity can be demonstrated using the basic laws of physics. The approximate relationship between velocity change, stopping distance and deceleration was presented in a 1971 paper by Haddon.<sup>4</sup> This relationship is shown in Figure 4. This figure shows that for any given velocity change, the g forces experienced by a properly packaged occupant substantially increase as the stopping distance decreases.

These reasons and also, where involved, the mass differentials in inter-vehicular crashes — as opposed to those only involving a single vehicle — place the occupants of smaller vehicles at a great disadvantage once crashes are initiated. The inter-vehicular aspect of this was demonstrated by filmed IIHS tests in 1971 in which six separate pairs of vehicles, in each case one large and one small car produced by the same manufacturer, were crashed head-on at about 48 mph. In each case the passenger compartment of the smaller car was demolished, while that of the larger remained intact and virtually unchanged. (*Status Report*, Vol. 6, No. 21, November 16, 1971)

In addition to the studies showing increasing injury severities with decreasing car size, Highway Loss Data Institute (HLDI) results<sup>5</sup> from collision coverage insurance data indicate that overall average loss payments per claim tend to decrease slightly with in-creasing vehicle size for the 1972, but not the 1973, models. Figure 5a illustrates these

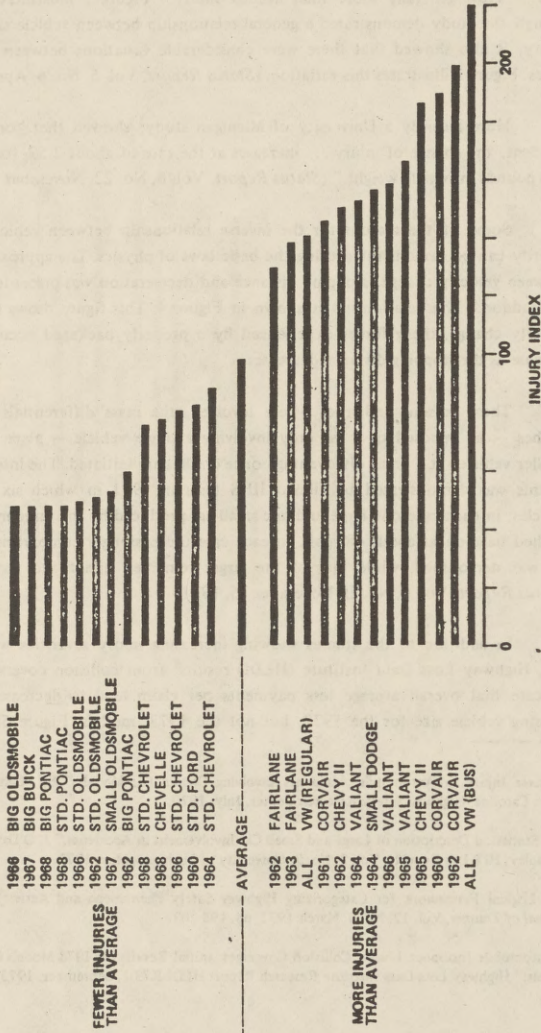
<sup>2</sup>"Driver Injury in Automobile Accidents Involving Certain Car Models." B.J. Campbell, University of North Carolina, Highway Safety Research Center, July, 1970.

<sup>3</sup>"A Statistical Description of Large and Small Car Involvement in Accidents." J. O'Day, D.H. Golomb, and P. Cooley, HIT Lab Reports, Vol. 3, No. 9, University of Michigan, May, 1973.

<sup>4</sup>"A Logical Framework for Categorizing Highway Safety Phenomena and Activity." W. Haddon, Jr., *Journal of Trauma*, Vol. 12, No. 3, March 1972, pp. 193-207.

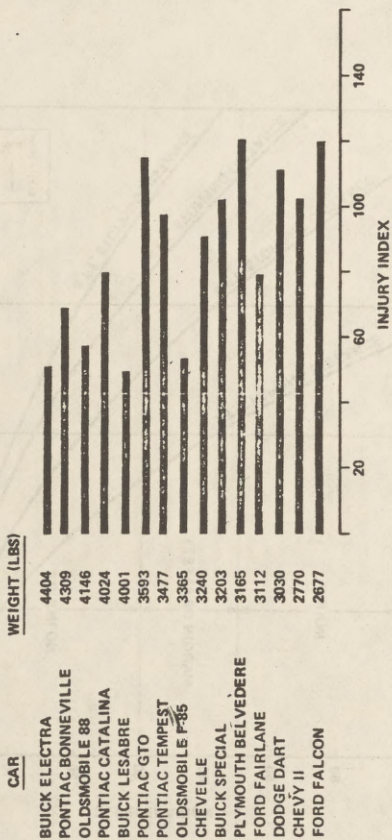
<sup>5</sup>"Automobile Insurance Losses, Collision Coverages. Initial Results for 1973 Models Compared with 1972 Models." Highway Loss Data Institute Research Report HLDI R73-1, September, 1973.

**FIGURE 2**  
**SERIOUS DRIVER INJURIES**  
**IN CRASHES OF VARIOUS MAKES AND MODELS**



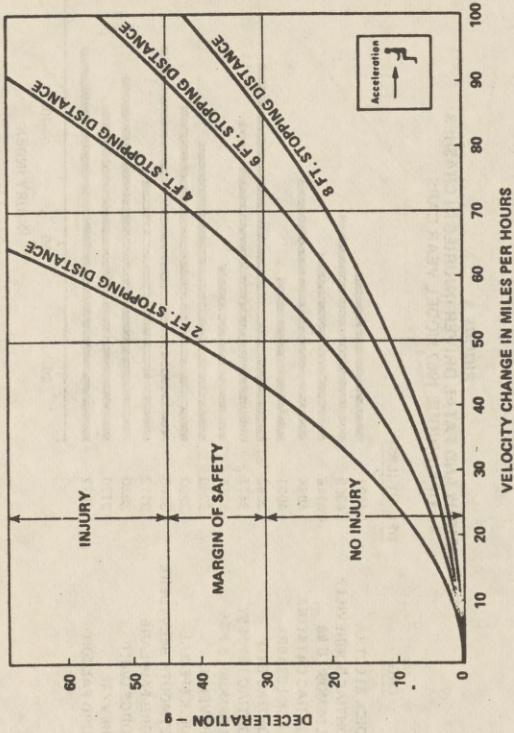
SOURCE:  
 ADAPTED FROM DR. B. J. CAMPBELL, UNIVERSITY OF NORTH CAROLINA  
 HIGHWAY SAFETY RESEARCH CENTER U. S. SENATE TESTIMONY 1970,  
 AND PRESENTED IN THE ISSUES IN HIGHWAY LOSS REDUCTION  
 PROCEEDINGS OF IIHS 1970 SYMPOSIUM, 1970.

FIGURE 3  
SERIOUS AND FATAL DRIVER INJURIES IN CRASHES  
OF VARIOUS 1967 MODEL YEAR CARS



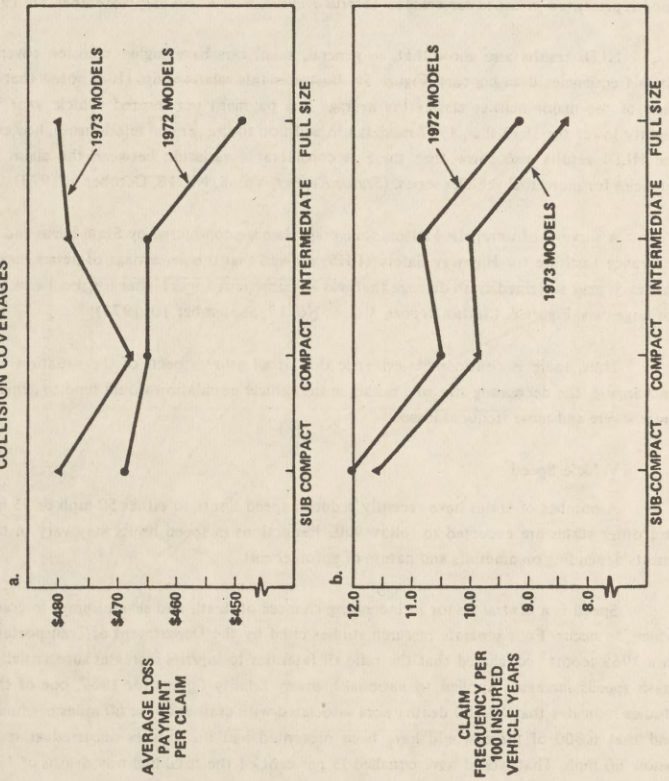
SOURCE:  
ADAPTED FROM B. J. CAMPBELL, UNIVERSITY OF NORTH CAROLINA; HIGHWAY  
SAFETY RESEARCH CENTER, "DRIVER INJURY IN AUTOMOBILE ACCIDENTS  
INVOLVING CERTAIN CAR MODELS," 1970. PRESENTED IN "DETERMINING THE  
RELATIONSHIP BETWEEN VEHICLE VARIABLES AND POLICY LOSS EXPERIENCE,"  
IIHS REPORT, 1970.

FIGURE 4  
A FIRST APPROXIMATION OF THE RELATIONSHIP BETWEEN  
VELOCITY CHANGE, G's AND OCCURRENCE OF INJURY FOR SEATED,  
PROPERLY PACKAGED ADULTS DECELERATING FORWARD



SOURCE: ADAPTED FROM WILLIAM HADDON, JR., M.D., "A LOGICAL FRAMEWORK FOR CATEGORIZING HIGHWAY SAFETY PHENOMENA AND ACTIVITY", THE JOURNAL OF TRAUMA, PP 193-207, 1972.

FIGURE 5  
LOSS PAYMENT SUMMARY BY MARKET CLASS — 1973 AND 1972 MODELS —  
COLLISION COVERAGES



SOURCE: ADAPTED FROM "AUTOMOBILE INSURANCE LOSSES, COLLISION COVERAGES, INITIAL RESULTS FOR 1973 MODELS COMPARED WITH 1972 MODELS", HLDI RESEARCH REPORT R13-1, SEPTEMBER 1973.

relationships. In addition to the general relationship there is, however, considerable variation between individual vehicle series. (*Status Report*, Vol. 8, No. 18, October 5, 1973)

Studies have also shown that small cars tend to be *more* frequently involved in crashes than larger cars. The previously mentioned study from the University of Michigan showed that "small cars . . . are overrepresented in single vehicle accidents," without being underrepresented in car-to-car crashes. (*Status Report*, Vol. 8, No. 22, November 27, 1973)

HLDI results also show that, in general, small cars have higher collision coverage claim frequencies than big cars. Figure 5b illustrates this relationship. (It is noted that for each of the major market classes the average loss payment per insured vehicle year was slightly lower for 1973 than 1972 models.) In addition to the general relationship, however, the HLDI results also show that there is considerable variation between the claim frequencies for individual vehicles series. (*Status Report*, Vol. 8, No. 18, October 5, 1973)

A survey<sup>6</sup> of unrepaired automobile crash damage conducted by State Farm and the Insurance Institute for Highway Safety (IIHS) showed that the percentage of passenger cars that each year sustained crash damage that was left unrepaired was higher for small cars than for large cars, Figure 6. (*Status Report*, Vol. 8, No. 17, September 10, 1973)

Thus, there is considerable evidence that, if all other aspects of the situation were unchanging, the decreasing size of the cars in the vehicle population would tend to generate more severe and more frequent losses.

#### Vehicle Speed

A number of states have recently reduced speed limits to either 50 mph or 55 mph and other states are expected to follow suit. Reductions in speed limits may vary in their results depending on amounts and nature of enforcement.

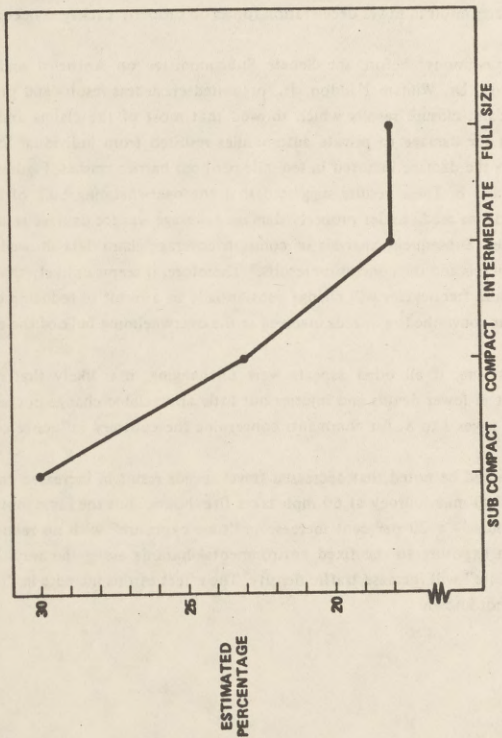
Speed is a central factor in increasing chances of death and severe injury in crashes which do occur. Four separate research studies cited by the Department of Transportation in a 1969 report<sup>7</sup> concluded that the ratio of fatalities to injuries increases substantially as crash speeds increase. Applied to national highway fatality figures for 1967, one of these studies indicates that 12,100 deaths were associated with crashes above 60 miles per hour — and that 6,800 of these would have been prevented had the crashes occurred at speeds below 60 mph. That would have equalled 13 per cent of the total highway deaths of 1967. (*Status Report*, Vol. 5, No. 22, December 15, 1970)

<sup>6</sup>"A Survey of Unrepaired Automobile Crash Damage. I. 1968-1972 Models." J. Casassa, II, B. O'Neill, I. Miller and S. Stone, Insurance Institute for Highway Safety report, September, 1973.

<sup>7</sup>"Maximum Safe Speed for Motor Vehicles." Office of Research and Program Synthesis, National Highway Safety Bureau, Department of Transportation, January 31, 1969.

IIHS DECEMBER, 1973

FIGURE 6  
ESTIMATED PERCENTAGES OF PASSENGER CARS  
THAT EACH YEAR SUSTAINED CRASH DAMAGE THAT  
WAS LEFT UNREPAIRED



SOURCE: ADAPTED FROM "A SURVEY OF UNREPAIRED AUTOMOBILE CRASH DAMAGE. I. 1968-1972 MODELS," J. CASASSA, II, B. O'NEILL, I. MILLER AND S. STONE, IIHS REPORT, SEPTEMBER, 1973.

Speed is a factor also in postcrash aggravation to the extent that higher speeds heighten the possibility of fire following a crash, contribute to greater severity of wreckage, and increase difficulty, time, and hazard of extricating injured occupants. The precise nature and degree of speed's role in postcrash complications, however, is at present quantitatively unknown.

As in the case of vehicle size, the basic laws of physics provide some of the reasons for the relationship between speed and crash severity. Figure 4 shows that reductions in crash velocities result in lower deceleration forces on properly packaged occupants.

In testimony<sup>8</sup> before the Senate Subcommittee on Antitrust and Monopoly in October 1969, Dr. William Haddon, Jr., presented crash test results and property damage insurance claim closure results which showed that most of the claims and claim closure dollars paid for damage to private automobiles resulted from individual losses that were smaller than the damage incurred in ten-mile-per-hour barrier crashes, Figures 7a and b, and Figures 8a and b. These results suggested that the overwhelming bulk of both the dollar losses and claims made under property damage coverage was for damage resulting from low speed crashes. Subsequent analysis of collision coverage claim data showed that the same situation obtains and the conclusion results.<sup>9</sup> Therefore, it seems unlikely that average claim sizes and claim frequencies will change substantially as a result of reducing travel speeds to levels still far above the low speeds involved in the overwhelming bulk of the crashes.

Therefore, if all other aspects were unchanging, it is likely that reduced speeds would result in fewer deaths and injuries but little appreciable change in crash frequencies. (See above, pages 1 to 8 for comments concerning the contrary influence of vehicle size.)

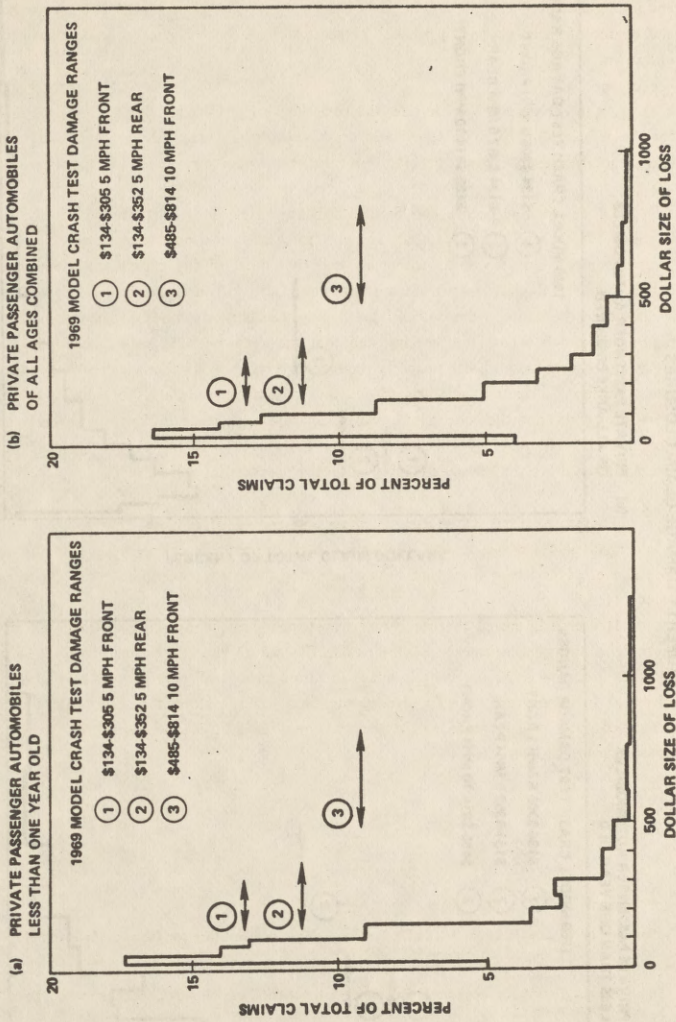
It should be noted that decreased travel speeds result in increased travel times; for example, a 300 mile journey at 60 mph takes five hours, but the same journey at 50 mph takes six hours -- a 20 per cent increase in "time exposure" with no reductions in miles driven or in exposure to the fixed environmental hazards along the way. This increased "time exposure" will increase traffic density. The effect of this increase in "time exposure" on losses is not known.

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<sup>8</sup>Testimony of William Haddon, Jr., M.D., President, Insurance Institute for Highway Safety, Before the Senate Subcommittee on Antitrust and Monopoly, October 6, 1969.

<sup>9</sup>"Some Recent Results in Lognormal Parameter Estimation Using Grouped and Ungrouped Data." B. O'Neill and W.T. Wells, *Journal of the American Statistical Association*, Vol. 67 (March, 1972), pp. 76-80.

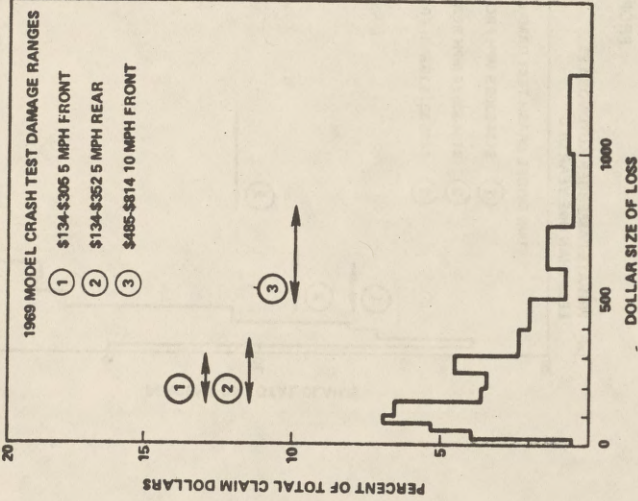
FIGURE 7  
PROPERTY DAMAGE CLAIM CLOSURES



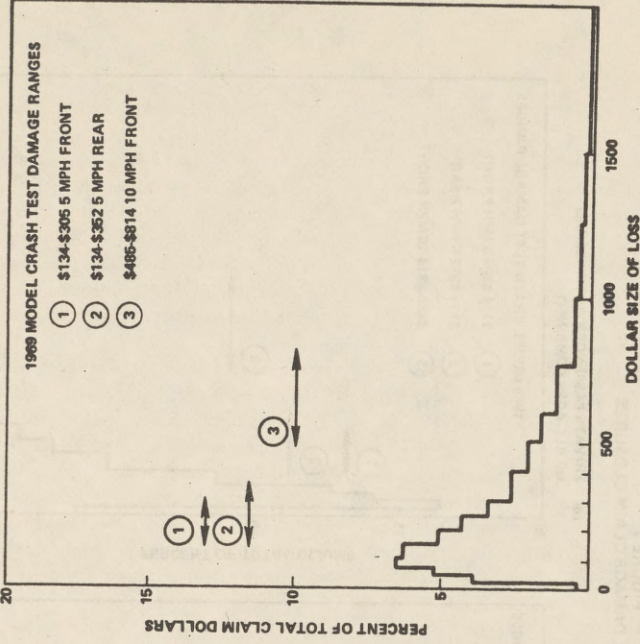
SOURCE: ADAPTED FROM TESTIMONY OF WILLIAM HADDON, JR., M.D., PRESIDENT, INSURANCE INSTITUTE FOR HIGHWAY SAFETY BEFORE THE SENATE SUBCOMMITTEE ON ANTITRUST AND MONOPOLY, OCTOBER, 1969.

FIGURE 8  
PROPERTY DAMAGE CLAIM CLOSURES

(a) PRIVATE PASSENGER AUTOMOBILES  
LESS THAN ONE YEAR OLD



(b) PRIVATE PASSENGER AUTOMOBILES  
OF ALL AGES COMBINED



SOURCE: ADAPTED FROM TESTIMONY OF WILLIAM HADDON, JR., M.D., PRESIDENT  
INSURANCE INSTITUTE FOR HIGHWAY SAFETY BEFORE THE SENATE  
SUBCOMMITTEE ON ANTITRUST AND MONOPOLY, OCTOBER, 1969.

## ASPECTS THAT MAY CHANGE

### Passenger Car Mileage

Passenger car mileage may decrease. It is likely that substantial decreases in vehicle mileage would result in some reduction in highway losses. It is not possible, at this time, however, to scientifically predict what, if any, these reductions would be. It is not known, for example, what sorts of mileage (e.g., relatively low risk freeway or toll road travel versus other travel) would be reduced. Also there is no simple relationship between vehicle mileage and highway losses; for example, for a number of years the annual death rate per 100,000,000 miles has been declining despite dramatic increases in vehicle mileage.

It is important to note, however, the reduced energy supplies do not automatically imply that there will be reductions in the miles traveled. For example, a Department of Transportation Study<sup>10</sup> found that a 3,990 pound car would use approximately nine gallons of gasoline traveling 100 miles at 70 mph whereas a 2,050 pound vehicle would use less than four gallons of gasoline traveling the same distance at 50 mph — a 60 per cent decrease in fuel consumption. In other words, a smaller car traveling at lower speeds could consume substantially smaller quantities of gasoline than a larger car at higher speeds on the same journey. In addition, as noted previously, the fuel saving involved in the case of the smaller car *might*, in turn, be used in such a way as to result in an increase in overall miles driven.

### Vehicle Occupancy Rates

Vehicle occupancy rates may increase. Increased occupancy rates would mean that the chances of injury in a given crash are increased. In addition, it is probable that increased occupancy rates in small cars adversely affect the braking and handling characteristics to a much greater extent than increased occupancy rates in larger cars. Therefore, the combination of small cars and higher occupancy rates could tend to increase crash frequencies.

### Different Speed Limits for Trucks and Cars

As an energy saving measure, President Nixon has proposed a 50 mph speed limit for automobiles and a 55 mph limit for trucks, trailers and buses. If implemented, this could increase highway losses, because of the substantial gap between the braking abilities of passenger cars and larger vehicles. In a 1971 paper<sup>11</sup> Dr. William Haddon, Jr., pointed out

<sup>10</sup>“The Effect of Speed on Automobile Gasoline Consumption Rates.” U.S. Department of Transportation, Federal Highway Administration, October, 1973.

<sup>11</sup>“Reducing Truck and Bus Losses — Neglected Countermeasures.” W. Haddon, Jr. Delivered January 13, 1971 at the Automotive Engineering Congress, Society of Automotive Engineers, Detroit, Michigan.

that the "actual braking performance of heavy trucks is commonly two to three times worse than that of passenger cars." Even when cars were commonly traveling faster than trucks — a situation tending to reduce the results and implications of the difference in braking abilities — the inadequate braking performance of trucks has been responsible for serious losses. For example, Haddon cited a November 1969 crash (documented by the National Transportation Safety Board) on the New Jersey Turnpike in which "one after another huge truck was unable to stop in a short enough distance and plowed into the vehicles and people ahead." If trucks are traveling faster than passenger cars the already major discrepancies in braking performance become even more pronounced and under these circumstances, more crashes of this tragic type can be expected. (*Status Report*, Vol. 6, No. 1, January 18, 1971)

#### **Motorcycle and Bicycle Usage**

Motorcycle and bicycle usage may increase. This would probably accelerate the present trend of sharply increasing losses being generated by these modes of transport.

#### **Supplemental Gasoline Containers**

The use of supplemental gasoline containers may increase. This could lead to increases in vehicle and other fire losses. Several serious incidents of this nature have already been reported by the press.

#### **Age of Vehicle Population**

The average age of the vehicles in use may increase if people disproportionately use older vehicles because of their better gasoline consumption. The Ford Motor Company<sup>12</sup> has prepared figures showing that a typical 1965 standard size sedan in normal driving would produce 15 miles per gallon whereas a comparable 1973 model, which weighed considerably more, had a larger engine and also had emission controls, would produce only 12 miles per gallon.

The effect of a change in the average age of vehicles in use is uncertain, although many of the older vehicles would not be designed and constructed to satisfy the more recent federal motor vehicle safety standards.

#### **Restrictions on Young Drivers**

It is possible that the amount of non-essential driving done by young drivers may be reduced. For example, some high schools have already proposed that student parking lots be closed to students' cars. And in the event of severe gasoline shortages, more essential family

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<sup>12</sup>"How Much Has Mileage Changed," *Automotive Engineering*, July 1973.

auto use needs would presumably take priority over non-essential driving by youthful family members.

Since young drivers in general have a very high involvement rate in crashes of all types it is possible that substantial reductions in the amount of driving by youthful operators would result in lower crash rates.

#### Restraint Usage

Restraint usage in 1974 model vehicles may increase. Very informal preliminary indications are that the interlock and inertial reel harnesses are being worn at a somewhat higher rate than restraint systems in earlier model year cars.

#### Street Lighting

Street lighting and external building lights may be reduced. This could lead to an increase in nighttime urban crashes, especially those involving pedestrians and bicycles.

#### The Economy

Gross National Product and Industrial Index of Production may go down in 1974. There is a strong correlation between total annual motor vehicle deaths and the Industrial Index of Production, and, separately, the GNP. The reasons for this correlation are not understood but it appears to be independent of most of the vehicle-related measures that contribute to both of the economy indicators. A slowdown or recession in the economy in 1974 may, therefore, be accompanied by a reduction in motor vehicle deaths. Whether this correlation would hold under highly unusual circumstances is, however, unknown.

#### MEASURING CHANGES

Several possible indicators could be used to measure some of the effects of the energy shortage on highway losses. However, at the present time, no single indicator or data source would be able to provide a definitive measure of the effects of the energy shortage.

It is important to note that simple before-and-after comparisons can be very misleading. For example, Campbell and Ross in a 1968 study<sup>13</sup> of the widely publicized "Connecticut Crackdown on Speeding" showed, after a very detailed analysis that there was

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<sup>13</sup> "The Connecticut Crackdown on Speeding: Time Series Data in Quasi-Experimental Analysis." D.C. Campbell and H.L. Ross, *Law and Society Review*, 3, 33-53, August 1968.

"no unequivocal proof" that fatality reductions were due to the crackdown. Nonetheless, the governor of the state had earlier claimed success on the basis of simple before-and-after comparison. Ideally, results obtained after a change in presumably relevant factors should be compared with a series of corresponding results from several prior years, lest mistakes in judgment result from reliance for analysis on short term fluctuations.

A further complicating factor in assessing the effects of the energy shortage is the possibility of the so-called "Hawthorne effect." It has been known since the classic studies of workers in the Hawthorne plant of Western Electric in the 1920's that people often change their behavior or claimed behavior in the desired direction as a result of being studied rather than as a result of the changed conditions. Such changes, however, are usually only temporary. Therefore, caution is necessary before interpreting any early changes in losses, if such occur, as being indicative of real trends due to the energy shortage.

#### Holiday Death Totals

The number of motor vehicle deaths occurring in any holiday period are usually available very soon after the holiday.

Reductions in deaths occurring during the 1973 Thanksgiving holiday compared with the same holiday in 1972 have already been widely quoted in the press as an indication that the energy shortage has already begun to reduce motor vehicle deaths. Such conclusions are premature.

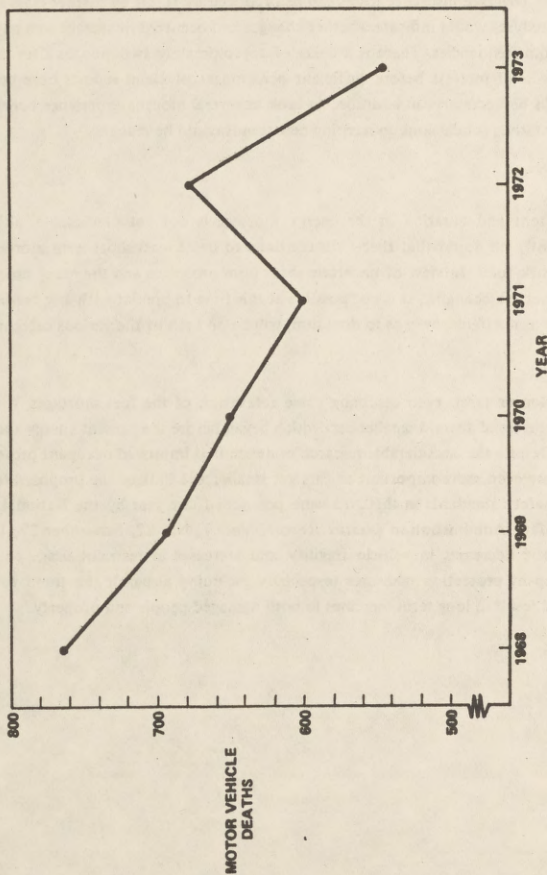
Figure 9 shows the Thanksgiving holiday deaths for the last six years; it is clear from this figure that, with the exception of 1972, there has been a consistent downward trend in these deaths and it appears that 1972, rather than 1973, was the unusual year since the deaths were higher in 1972 than would have been predicted on the basis of the figures of previous years. Furthermore, the reported 1973 total appears to be on the declining trend line established by the data for the prior years, *except for 1972*.

Holiday fatality figures are also complicated because holidays are, by definition, not typical of other periods. It is probable, therefore, that their amounts and types of driving are also not typical. This is likely to be particularly true for the Thanksgiving holiday.

#### Turnpike Statistics

Various turnpike authorities publish statistics concerning crashes that occur on the turnpikes, and these are usually available soon after the calendar period in question. These statistics suffer from a similar deficiency as the holiday fatality figures; that is, they reflect the losses resulting from very special types of driving, and therefore cannot be generalized.

FIGURE 9  
THANKSGIVING HOLIDAY MOTOR VEHICLE DEATHS\*



\*IMMEDIATE DEATHS, THOSE OCCURRING BY MIDNIGHT ON THE LAST DAY OF THE HOLIDAY PERIOD.

SOURCE: 1968-1972 DATA, ACCIDENT FACTS, 1973 EDITION,  
NATIONAL SAFETY COUNCIL  
1973 DATA, PUBLIC INFORMATION DEPARTMENT,  
NATIONAL SAFETY COUNCIL

### National Safety Council Statistics

The National Safety Council's monthly publication, *Traffic Safety*, publishes monthly national fatality statistics. There is usually a three-month delay in these figures, e.g., December fatality figures usually appear in the March issue.

### Highway Loss Data Institute Results

Collision coverage insurance losses can be produced by HLDI by market class and by month. Such analyses would indicate whether changes had occurred in average loss payment amounts or claim frequencies. There is a delay of approximately two months after the end of a given month of interest before sufficient percentages of claim reports have been received. It would be necessary, in addition, to look at several months experience before any sound, even tentative, conclusions concerning new trends could be reached.

### SUMMARY

The extent and duration of the energy shortage is not yet predictable, although there is apparently no doubt that there will continue to be at least short term shortages of gasoline and truck fuels. In view of uncertain short term prospects and the many aspects of the situation that are changing, it is not possible at this time to predict with any confidence what the short term effects, even as to direction, will be on each of the various categories of highway losses.

In the longer term, even assuming some relaxation of the fuel shortages, it seems probable that the trend toward smaller cars which began before the present energy shortage will continue. Despite the considerable research evidence that improved occupant protection measures become even more important as cars get smaller, the bulk of the proposed federal motor vehicle safety standards in this area were postponed last year by the National Highway Traffic Safety Administration (*Status Report*, Vol. 7, No. 22, November 27, 1972). Without dramatic decreases in vehicle fragility and increases in restraint usage or other improved occupant protection measures (especially including airbags), the trend towards smaller cars will result in long term increases in both damaged people and property.

## EXCERPT

STATUS REPORT

Report No. \_\_\_\_\_  
 by \_\_\_\_\_  
 Month \_\_\_\_\_

## INSURANCE INSTITUTE for HIGHWAY SAFETY

Watergate Office Building  
 2600 Virginia Avenue, N. W.  
 Washington, D. C. 20037

Vol. 5, No. 6

April 2, 1970

CRASH-RELATED LOSS DATA GIVEN TO SENATE

Large, heavy cars are substantially safer for occupants in crashes than small, light ones -- and for all sizes, federally-required equipment in newer models is paying off to the benefit of crash occupants.

That was the import of data presented at recent hearings of the Senate Antitrust and Monopoly Subcommittee by Dr. B. J. Campbell, director of the University of North Carolina Highway Safety Research Center. Campbell's findings were reinforced by a Department of Transportation report to the subcommittee on preliminary results of a DOT-funded study by New York State of injuries associated with crashes of 31 makes of cars covering the model years 1965-1968. The study began in mid-1968.

Dr. Campbell said data such as his would help potential car buyers to "assess the risk and weigh it with the alternative values" before purchasing a particular vehicle.

"It should be of more than passing interest to drivers to know that in the event of a crash their chance of a serious or fatal injury is associated with the car they are driving," Campbell observed, "and that depending on their choice, the 'odds' could be reduced 50 per cent or increased 100 per cent."

Using an injury severity index of 100 as the average frequency of driver injury for all cars in his study, which was based on crash reports for 270,697 cars, Campbell found there were 13 models with driver injury rates lower than average:

<u>Year</u>	<u>Make</u>	<u>Index</u>	<u>Sample Size</u>
1960	Standard Ford	84	1813
1962	Big Pontiac	60	318
1962	Standard Oldsmobile	52	569
1964	Standard Chevrolet	88	2961
1966	Big Oldsmobile	<50	102
1966	Standard Oldsmobile	51	207
1966	Standard Chevrolet	83	1355

The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies and the National Association of Independent Insurers, which represent companies writing most of the nation's automobile insurance.

-2-

<u>Year</u>	<u>Make</u>	<u>Index</u>	<u>Sample Size</u>
1967	Big Buick	<50	135
1967	Small Oldsmobile	54	237
1968	Big Pontiac	<50	115
1968	Standard Pontiac	<50	188
1968	Standard Chevrolet	76	789
1968	Chevelle	77	664

Thirteen cars with a higher than average injury index were:

<u>Year</u>	<u>Make</u>	<u>Index</u>	<u>Sample Size</u>
1960	Corvair	191	365
1961	Corvair	147	505
1962	Corvair	197	181
1962	Chevy II	152	543
1962	Fairlane	131	585
1963	Fairlane	139	782
1964	Valiant	154	345
1964	Small Dodge	158	200
1965	Chevy II	189	179
1965	Valiant	167	217
1966	Valiant	160	143
combined	VW Type II (Bus)	219	195
combined	VW Type I (Regular)	141	4286

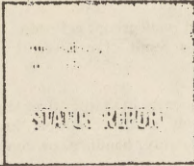
Campbell said that for all cars covered in his study, "Later model cars (which have more crash safety features) show up better than earlier model cars." Significantly lower levels of serious injury, he indicated, were associated with the newer models than the old. He also stressed that his data were not directed at questions of crash frequency by make, model, age or size of the studied cars.

The New York State findings submitted by DOT to the subcommittee showed that "the light cars generally experienced a higher percentage of severe accidents (non-collision or rollover) and generally had a higher percentage of drivers under 30," according to the federal agency. DOT said it wanted further analyses to determine "the degree to which the higher percentage occurrence of severe injuries in light cars was due to their weight and . . . due to a driving population which gets into more severe accidents."

The report included this table from the New York State study:

<u>Crash-Involved Size Group</u>	<u>Average Weight, lbs.</u>	<u>Per Cent Occurrence of Serious or Fatal Injury</u>
1. Domestic "luxury" regular	4,800	3.1
2. Domestic "intermediate"	3,700	4.0
3. Domestic "economy" regular	3,400	5.2
4. Domestic compact	2,800	6.4
5. Foreign compact	1,900	9.6
Combined	-	5.5

EXCERPT



## INSURANCE INSTITUTE for Highway Safety

Vol. 8, No. 22

November 27, 1973

### Small Car Hazards Reported

The current increase in small car sales "will lead to a greater number of injuries," including fatal and crippling injuries, a University of Michigan research group has warned.

The group based its conclusion on an extensive analysis of crash injury data from national and local crash investigation files. Its analysis showed, it said, that the following rule should be applied to new cars in crashes:

"... once involved in an accident, the chance of injury in this car increases at the rate of about 2.5 per cent for each decrease of 100 pounds in vehicle weight."

The analysis also indicated that smaller cars are involved in single vehicle crashes at a significantly higher rate than larger cars, and in other crashes at about the same rate as larger cars.

The warning and the rule were contained in a report (HIT Lab Reports, Vol. 3, No. 9) written by James O'Day, D. Henry Golomb and Peter Cooley of the University's Highway Safety Research Institute (HSRI).

Their conclusions underscore similar, earlier research findings, including those reported by the New York State Department of Motor Vehicles and the Insurance Institute for Highway Safety, that occupants of compact and smaller size cars are substantially more vulnerable to death and serious injury in crashes than occupants of sedan and larger size cars. (See *Status Report*, Vol. 6, No. 21, Nov. 16, 1971.)

The HSRI report stressed that the higher levels of crash injury associated with small cars is not a result of more occupants in such cars. In fact, it found that the "average number of occupants in *small cars* is slightly lower than in *large cars*," rather than higher.

#### Inside

- |   |  |
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| • Breath Tester Standard Ignores Expert Advice ... Page 3             | • Grate Hazards Cited By Center For Auto Safety ... Page 6 |
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The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers and several individual insurance companies.

It also found "little difference in the use of restraints by the *large* and *small* groups defined in this study. One must conclude that the increase in injuries is most probably a result of car weight and protection offered by interior size, rather than from these other factors."

As to the widespread notion that smaller cars are involved less frequently in crashes than larger ones, the HSRI report noted that in single vehicle crashes covered by the study, smaller cars were "over-represented," possibly "because of their drivers; or perhaps because of stability, handling, or control characteristics; or because of a combination of the two."

The report also suggested that an auto population solely of smaller cars, when compared with an identical size auto population solely of larger cars, would produce both more crashes, and more injuries per crash. There would be "about 50 more injury accidents per 10,000 reported accidents" for the smaller car population and the number of injuries would be "somewhat higher," it found.

For its definition of "small cars," the study used a conservative grouping that included "essentially all mini-cars, nearly all of the compacts, and the lighter half of the intermediates. The *large car* group includes the remaining half of the intermediates, and all full-size vehicles." The data were based on crash files primarily for the 1968-1970 period. "Later accident data will be available in the near future," the report said. "With such data the relative safety of the American 2000-2500 pound vehicle can be more accurately assessed."

the highway  
loss reductions

## STATUS REPORT

# INSURANCE INSTITUTE for Highway Safety

Vol. 6, No. 21

November 16, 1971

## Tests Show Small-Car Dangers

Occupants of so-called "economy cars" face dangers in crashes that are "far greater" than those faced by occupants of larger-size cars, according to filmed results of an exploratory crash test program made public today by the Insurance Institute for Highway Safety.

Dr. William Haddon, Jr., president of the Institute, said in a statement accompanying release of the test results that the discrepancy between crash protection afforded by smaller cars and that offered by larger, family sedan-type cars is a "tragically widespread" kind of intervehicular incompatibility that "should be of particular concern to society because of the sizable human damage it is producing."

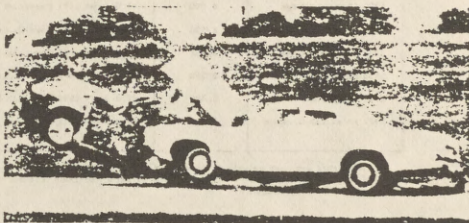
The test series consisted of six two-car head-on crashes, with each car traveling at speeds between 40 and 50 miles per hour — speeds much lower than those allowed and often driven on newer highways today. Each test involved the crash of a small car with a sedan-size car. Seven of the cars were 1972 models; the other five were 1971's, four of which were not instrumented with dummies. Both cars in each crash test were made or marketed by the same company — General Motors, Ford Motor Company, Chrysler or American Motors.

Haddon termed the tests "particularly timely" since "domestic manufacturers, in an effort to compete with the sales of small imported cars, have vigorously entered the field of small car production and marketing . . ."

(cont'd. on page 2)

### Head-On

1972 Ford Pinto (left) and 1972 Ford Galaxie at actual moment of impact in a medium-speed crash test. More photos, crash result highlights inside.



The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers and several individual insurance companies.

"The public is being heavily exposed to advertising information extolling the purchase-price and operating economies claimed for these cars, but it is not being given vital information about their distinct safety hazards," Haddon noted. He cited estimates that small car sales will represent 50 per cent of all new car sales before 1980.

"As the share of these small cars in the total vehicle population continues to expand on U. S. highways, they can be expected to become involved in a commensurately increasing share of collisions, including collisions with such larger cars as the traditional family sedan," he said.

The relative lack of crashworthiness of smaller cars in their collisions with larger ones must be viewed, Haddon said, in the context of a "modern day highway environment that mixes large, intermediate and small vehicles at speeds comparable to and often considerably higher than those in the 40 to 50 mile per hour tests" conducted by the Institute.

(cont'd. on page 3)

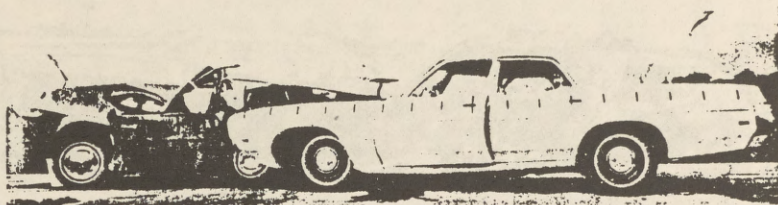
*In Brief*

### How The Tests Were Run

Each test in the medium-speed crash test program involved a head-on crash of a small-size car and a sedan-size car, each traveling between 40 and 50 miles per hour, with a speed differential never larger than four miles per hour in any given test. The test cars were "driven" into each other by test drivers using remote control drive units in nearby "command" cars. In the initial tests — of 1971 Chevrolets and 1971 Fords — the cars were not equipped with dummies; anthropometric dummies were installed in the outboard front seating position of each of the cars in all other tests. Following are the models tested, their weights and their speeds:

SMALL CARS			SEDAN CARS		
MODEL	WEIGHT LBS. <sup>a</sup>	MPH	MODEL	WEIGHT LBS. <sup>a</sup>	MPH
1971 Chevrolet Vega	2,300	43.0 ←→	1971 Chevrolet Impala	4,197	43.3
1971 Ford Pinto	2,108	46.5 ←→	1971 Ford Galaxie	3,973	43.0
1972 Chevrolet Vega	2,536	47.3 ←→	1972 Chevrolet Impala	4,363	46.4
1972 Ford Pinto	2,390	46.3 ←→	1972 Ford Galaxie	4,189	44.7
1971 Dodge Colt	2,368	47.4 ←→	1972 Plymouth Fury	4,208	46.4
1972 American Gremlin	2,885	43.4 ←→	1972 American Ambassador	3,914	44.7

<sup>a</sup>All weights are curb weights as advertised, with the weight of remote control drive units (between 50 and 100 pounds each) added for all cars, and the weight of dummies (215 pounds each) also added for all 1972 cars and the 1971 Dodge Colt.



**SMALLER CAR**  
1972 Ford Pinto

**LARGER CAR**  
1972 Ford Galaxie

#### OCCUPANT PACKAGE

Roof caved in; right door latch broke, door opened; windshield tore loose, fell into passenger compartment onto dummy; rear window popped out.

#### COMPARTMENT INTERIOR

Lap and shoulder belts broke; non-adjustable head restraint would not position fully behind dummy's head.

#### TEST DUMMY

Head impacted roof, sun visor, windshield, dashboard; lacerations on forehead, right side of face, nose, left hand, right thigh; glass splinters in face; legs pinned under dashboard.

Abrasions on right forearm; lacerations on right palm.

#### OTHER

Battery smashed; fuel tank ruptured, leaked.

Battery smashed.

(cont'd. from page 2)

The problem would not be solved simply by removing larger vehicles from the highway, he said. The "vulnerability of small-car passenger compartments and the amounts of exposure to hazard they permit their occupants . . . cannot be explained away by the size and weight of larger vehicles. We believe, rather, that the relative lack of crashworthiness of small cars is substantially inherent in their design — in the amounts and kinds of spaces and structures they use to shield, or not to shield, their occupants from injury and death," he said.

(cont'd. on page 4)



**SMALLER CAR**  
1972 American Gremlin

**LARGER CAR**  
1972 American Ambassador

#### COMPARTMENT INTERIOR

Shoulder belt latch broke; nonadjustable head restraint would not fully position behind dummy's head.

Shoulder belt anchor tore out of roof; adjustable head restraint would not fully position behind dummy's head.

#### TEST DUMMY

Head impacted roof, sun visor, windshield, dashboard; face severely lacerated; legs pinned under dashboard.

Head impacted sun visor, dashboard.

#### OTHER

Battery smashed.

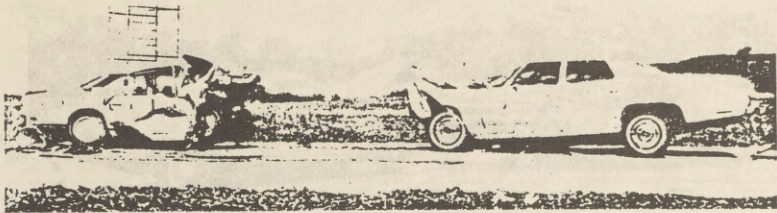
Battery smashed.

(cont'd. from page 3)

Haddon noted that "smaller cars increasingly common on today's highways are characterized by sizes, weights and designs that are much less adequate even than currently produced larger cars in terms of:

- "Provision of sufficient energy-absorbing structure, external to the passenger compartment itself, to guarantee maximum attenuation of crash forces by means of adequately planned compression or crushing.
- "Maintenance of the integrity of the passenger compartment itself — the package within which the human cargo is located.
- "Protection of the passenger compartment from intrusion by outside objects, such as hoods.
- "Provision of sufficient space within the passenger compartment to keep belted occupants from impacting damaging structure — roof pillars and beams, for example — and also to allow enough spatial depth for padding and other passive restraints."

(cont'd. on page 5)



SMALLER CAR  
1972 Chevrolet Vega

LARGER CAR  
1972 Chevrolet Impala

#### COMPARTMENT INTERIOR

Nonadjustable head restraint would not position fully behind dummy's head.

Adjustable head restraint would not position fully behind dummy's head.

#### TEST DUMMY

Head impacted windshield, dashboard; dummy beheaded; legs pinned under dashboard; glass splinters in face; chin, forehead lacerated; arm cut; battery acid on shirt.

Head impacted dashboard, heel of right hand lacerated.

#### OTHER

Battery smashed, acid entered passenger compartment.

Battery smashed.

The Institute's test results are consistent with findings in a New York state study, carried out in 1968 for the U. S. Department of Transportation, that compared injuries from crashes of 420,000 various-size automobiles. The study found a "strong association" between "the weight of a car and the per cent of accidents in which there was a fatality or serious injury in that type of car."

A preliminary report to the Department of Transportation on the New York state study included the following table:

<u>Crash-Involved Size Group</u>	<u>Average Weight</u>	<u>Per Cent Occurrence of Serious or Fatal Injury</u>
1. Domestic "luxury" regular	4,800	3.1
2. Domestic "intermediate"	3,700	4.0
3. Domestic "economy" regular	3,400	5.2
4. Domestic compact	2,800	6.4
5. Foreign compact	1,900	9.6
Combined	-	5.5

(cont'd. on page 6)



**SMALLER CAR**  
1971 Dodge Colt

**LARGER CAR**  
1972 Plymouth Fury

#### OCCUPANT PACKAGE

Windshield partially tore loose, draped into passenger compartment.

#### COMPARTMENT INTERIOR

Lap belt buckle unlatched; shoulder harness strap broke; adjustable head restraint would not position fully behind dummy's head, flew out of car in crash.

Shoulder harness strap broke; adjustable head restraint would not position fully behind dummy's head, pushed into "down" position in crash.

#### TEST DUMMY

Head impacted sun visor, header, windshield; head lacerated; glass splinters in face; legs jammed under dashboard, broke at hip joint.

Head impacted dashboard.

#### OTHER

Battery smashed.

Battery smashed.

(cont'd. from page 5)

In describing the Institute's medium-speed crash test series Haddon pointed out that, although "the tests were not meant to show whether or not a car's safety components were in compliance with the (federal motor vehicle safety) standards," they "may well indicate where standards require toughening."

The film and Haddon's statement identified, for example, head restraints that could not be positioned fully behind the test dummy's head, one head restraint that flew out of the car in a crash, shoulder and lap belts and latches that broke or otherwise failed, three windshields that fell into the passenger compartments of

(cont'd. on page 7)

(cont'd. from page 6)

their small cars, and one windshield — that of the 1971 Chevrolet Vega — that was penetrated by the car's hood "like a horizontal meat cleaver."

Data and films from the crash tests have been supplied to the National Highway Traffic Safety Administration, National Transportation Safety Board, Federal Trade Commission and the manufacturers of the vehicles tested.

\*\*\*

'Meat Axe Effect'

### Test Shows Need For Rule

The National Highway Traffic Safety Administration will find in the outcome of the crash test of the 1971 Chevrolet Vega and Chevrolet Impala strong support for moving forward with its plan, now in the Advance Notice of Proposed Rule-making stage (Docket No. 69-17), to set a standard prohibiting penetration of automobile windshields by their hoods in crashes.

As in this crash, hood penetration of windshields in guillotine fashion exacerbated in small cars, which give the front-seat occupants less room between their heads and the windshield. A person riding in the crash-tested 1971 Vega would have been impacted transversely by the hood edge.

Since November 1969, the NHTSA has kept its advance notice docket open. Both foreign and domestic auto manufacturers' submissions to the docket indicate that the auto industry supports adoption of such a standard. The next step — issuance by NHTSA of a Notice of Proposed Rulemaking — has not yet been taken.

Meanwhile, the agency's accident investigation division has submitted a report of an analysis of 716 serious, real-world crashes looked at by NHTSA multi-disciplinary accident investigation teams. In 467 of these, damage was sustained by the fronts of vehicles.



From this sample the investigation division discovered that in 33 of the crashes the rear edge of the hood penetrated the windshield — 4.6 per cent of all the crashes and 7.1 per cent of those with frontal damage. It also found that 44 of the 46 occupants in those cars involved with hood penetration of the windshield were front-seat occupants — that is, those most exposed to the lethal meat-axe effect.

### *Test Report Available*

Single copies of the report detailing the Institute's medium-speed crash test program may be obtained by writing, "Medium Speed Tests," Communications Department, Insurance Institute for Highway Safety, Watergate 600, Washington, D. C. 20037.

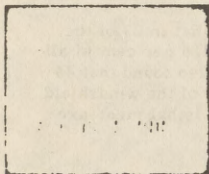
Inquiries as to availability and cost of the crash test film should be addressed to "Test Films," Insurance Institute for Highway Safety, at the above address.

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#### **INSURANCE INSTITUTE for HIGHWAY SAFETY**

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EXCERPT

## INSURANCE INSTITUTE for Highway Safety

Vol. 8, No. 18

October 5, 1973

### 1973 Models: Claims Less Frequent, Higher

A new report released by the Highway Loss Data Institute indicates that in general 1973 model cars are producing fewer collision claims but higher payments per claim than their 1972 model counterparts.

"These results," the report said, "are consistent with evidence suggesting that certain 1973 model bumpers, while reducing the amount of damage resulting from very low speed crashes to amounts less than the collision coverage deductible, also possibly either maintain or augment the cost to repair the damage produced by crashes at somewhat more rapid speeds."

The 1973 model cars were the first to be covered by the National Highway Traffic Safety Administration's standard 215 which requires only that bumpers prevent damage to safety related components and only in very low speed crashes — five miles per hour front-into-barrier and 2.5 miles per hour rear-into-barrier.

The report, which draws on insurance collision coverage data from six companies, compared series of 1973 models with 1972 models as to their claim frequency per 100 insured vehicle years, their average loss payments per claim, and their average loss payments per insured vehicle year. Both the 1973 and 1972 model year data were obtained from the same period — September 1972 through July 1973 — from the same six insurance companies.

"In six of the seven market classes with results for both 1973 and 1972 models, the claim frequencies were lower for the 1973 models than the corresponding 1972 models. The percentage reductions ranged from -4% for sub compact and expensive specialty models to -9% for the full size and luxury models. Specialty models showed no change in results between the two model years.

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The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers and several individual insurance companies.

"In six of the seven market classes, the average loss payment per claim was higher for the 1973 models than for the corresponding 1972 models. The percentage increases ranged from 1% for the compact models to 7% for the full size models. In the luxury models there was a -2% decrease in the average loss payment.

"The average loss payments per insured vehicle year were lower for the 1973 models than the corresponding 1972 models in five of the seven market classes. The percentage decreases ranged from -2% for sub compact and full size models to -12% for luxury models. Expensive specialty models showed no change between the two model years, and specialty models showed a 3% increase.

"Among the seven market classes with results from both model years, the average loss payment per insured vehicle for the 1973 models ranged from \$40 for the full size models to \$75 for the specialty models. The corresponding 1972 model results ranged from \$41 for the full size models to \$73 for the specialty models. The claim frequencies for the 1973 models ranged from 8.4 for the full size models to 14.4 for the specialty models. The corresponding 1972 model results ranged from 9.2 for the full size models to 14.4 for the specialty models. The average loss payments for the 1973 models ranged from \$468 for the compacts to \$526 for the expensive specialty models. The corresponding 1972 model results ranged from \$449 for the full size models to \$528 for the luxury models."

The summary results presented in the tables on pages three and four have been standardized to adjust for different mixes of operator ages and deductibles among the vehicle series. The full report includes extensively-detailed information for combinations of operator age groups and deductibles.

*(Cont'd on page 4)*

The report also provides the following results for 20 popular, 1972 and 1973 model year series — five each in the four most common market classes of sub compact, compact, intermediate and full size. (The greater exposure of any particular series, the more confidence may be placed in the results shown for it.) Results for "All" vehicle series (listed below and on page four) include the 20 series (listed below), plus all other private passenger vehicle series from the 13 makes.

AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR, CLAIM FREQUENCIES AND  
AVERAGE LOSS PAYMENT BY MAKE AND SERIES — 1973 AND 1972 MODELS — COLLISION COVERAGES

MARKET CLASS, MAKE/SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)		AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR		CLAIM FREQUENCY PER 100 INSURED VEHICLE YEARS		AVERAGE LOSS PAYMENT PER CLAIM	
	1972	1973	1972	% Change	1972	% Change	1972	% Change
All Series	777,911	288,890	\$50	\$49 - 2	10.7	10.1 - 6	\$465	\$484 + 4
<b>Sub Compact</b>								
Ford Pinto S.W.	7,679	8,254	55	48 - 13	11.8	10.9 - 8	463	441 - 5
Volkswagen Beetle	29,485	12,098	49	49 0	10.9	11.2 + 3	445	439 - 1
Ford Pinto	35,058	9,002	65	60 - 8	13.8	12.3 - 11	473	485 + 3
AMC Gremlin	8,520	4,107	71	65 - 8	13.3	12.6 - 5	535	518 - 3
Chevrolet Vega	26,056	10,677	53	67 +26	11.6	12.6 + 9	454	533 +17
<b>Compact</b>								
Dodge Dart Swinger	12,214	3,541	41	30 -27	9.2	7.8 -15	445	382 -14
Plymouth Valiant Duster	19,261	6,748	60	45 -25	12.1	10.7 -12	493	424 -14
Chevrolet Nova	30,701	11,626	43	46 + 7	9.9	8.9 -10	434	515 +19
AMC Hornet	4,024	2,665	55	53 - 4	12.1	10.7 -12	451	498 +10
Ford Maverick-2 Dr.	22,069	5,217	50	61 +22	10.3	12.5 +21	485	468 + 1
<b>Intermediate</b>								
Buick Century-2 Dr.*	10,780	5,566	46	39 -15	10.2	8.4 -18	453	468 + 3
Chevrolet Monte Carlo	17,595	8,750	57	47 -18	11.7	10.7 - 9	490	442 -10
Chevrolet Chevelle-2 Dr.	21,394	5,583	54	47 -13	10.4	9.5 - 9	516	499 - 3
Ford Torino-2 Dr.	20,364	5,783	57	51 -11	12.5	11.8 - 6	457	434 - 5
Oldsmobile Cutlass-2 Dr.	20,180	9,140	55	55 0	11.4	9.9 -13	483	557 +15
<b>Full Size</b>								
Pontiac Catalina	17,823	6,229	34	33 - 3	7.5	7.4 - 1	450	449 0
Chevrolet Caprice	13,733	6,282	35	34 - 3	8.0	7.4 - 8	432	458 + 6
Chevrolet Impala	43,918	8,221	36	36 0	8.4	8.4 0	427	430 + 1
Oldsmobile Delta 88	19,128	6,604	35	41 +17	8.5	7.5 -12	412	548 +33
Ford LTD	31,565	11,976	47	51 + 9	10.0	9.4 - 6	466	544 +17

\*Corresponds to 1972 Skylark-2 door models.

The following chart graphically shows the comparative results by market class:

LOSS PAYMENT SUMMARY BY MARKET CLASS - 1973 AND 1972 MODELS - COLLISION COVERAGES

MARKET CLASS	CLAIM FREQUENCY PER 100 INSURED VEHICLE YEARS			AVERAGE LOSS PAYMENT PER CLAIM			AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR		
	1972	1973	% Change	1972	1973	% Change	1972	1973	% Change
All Series	10.7	10.1	- 6	\$465	\$484	+ 4	\$ 50	\$ 49	- 2
Sub Compact	12.1	11.6	- 4	469	480	+ 2	57	56	- 2
Compact	10.5	9.9	- 6	465	468	+ 1	49	46	- 6
Intermediate	10.8	10.0	- 7	465	478	+ 3	50	48	- 4
Full Size	9.2	8.4	- 9	449	480	+ 7	41	40	- 2
Luxury	11.1	10.1	- 9	528	517	- 2	59	52	-12
Specialty	14.4	14.4	0	510	522	+ 2	73	75	+ 3
Expensive Specialty	12.9	12.4	- 4	502	526	+ 5	65	65	0
Sports	15.1 (insufficient data)			850 (insufficient data)			128 (insufficient data)		

The HLDI report is the organization's second. (See *Status Report*, Vol. 8, No. 12, June 15, 1973.) It was based on more than 100,000 collision coverage claims and on collision coverages involving more than 280,000 insured vehicle years of exposure for passenger cars of the 1973 model year and more than 770,000 vehicle years of exposure for those of the 1972 model year. In the future, HLDI plans to publish loss results during the first year of availability of the involved vehicles, to include additional makes, and to base the results on larger volumes of data from additional companies.

HLDI (pronounced "hildy") was formed in December, 1972, as an outgrowth of a special data project initiated earlier by the Insurance Institute for Highway Safety. (See *Status Report*, Vol. 8, No. 1, Jan. 3, 1973.) It is a nonprofit organization that gathers, processes and provides the public with insurance data concerned with human and economic losses resulting from highway crashes.

The membership of the board represents the eight insurance companies - Allstate Insurance Co., The Hartford Insurance Group, The Home Insurance Co., Kemper Insurance Group, Liberty Mutual Insurance Co., Nationwide Mutual Insurance Co., State Farm Mutual Automobile Insurance Co. and The Travelers Insurance Co. - that are supplying data to HLDI. The financial support for HLDI is provided by the eight companies and by the Insurance Institute for Highway Safety, which in turn is supported by most automobile insurers either directly or through their trade associations. The new report is based on collision coverages - that is, insurance that covers damage to the insured vehicle itself - supplied by six of the companies: Allstate, The Home, Kemper, Liberty, Nationwide and State Farm.

The full report, entitled *Automobile Insurance Losses, Collision Coverages, Initial Results for 1973 Models Compared with 1972 Models*, (Research Report R73-1, September 1973) is available in single copies by writing to "R73-1," Highway Loss Data Institute, Watergate 600, Washington, D.C. 20037. It includes detailed discussion of the data analysis employed in the study.

# INSURANCE INSTITUTE

## for Highway Safety

Vol. 8, No. 17

September 10, 1973

### Widespread Unrepaired Damage Found

Each year nearly one out of every five recent-model cars is left with unrepaired scars of a run-of-the-mill crash, a new study released by the Insurance Institute for Highway Safety has revealed.

Analyzing the results of primarily suburban parking lot surveys in nine major U.S. metropolitan areas, the study concludes that the commonness of unrepaired damage to recent-year automobiles "strongly" indicates that minor damage producing crashes are "not rare events that only deviant drivers experience, but in fact are very common events experienced by a majority of the vehicles and their drivers."

Since such unrepaired damage "may result from crashes that are not reported to the public agencies or insurers, any evaluation of the real-world effectiveness of vehicle designs intended to reduce low speed crash damage *must* take into account this type of damage," in addition to damage that is reported and repaired following the crash, the study stresses.

Results of the study were presented by Brian O'Neill, an IHS research staff member, at a National Highway Traffic Safety Administration public hearing in Washington, D.C. At the hearing NHTSA officials heard comments from industry and the public on NHTSA's effort to develop a standard that would eliminate damage to automobiles in low speed crashes. Such a standard is required by the Motor Vehicle Information and Cost Savings Act of 1972.

The surveys underlying the study were conducted in parking lots in the metropolitan areas of Atlanta, Chicago, Cleveland, Dallas, Denver, Detroit, Minneapolis-St. Paul, St. Louis and Washington, D.C. Vehicles of the 1968 through 1972 model years — vehicles, that is, manufactured prior to the effective date of federal safety standards affecting bumper designs — were examined, and their unrepaired damage appraised. Damage judged not to be the result of a collision was excluded.

Highlights of the study included the following:

- **Damage by Market Class:** The estimated percentage of cars that each year sustained crash damage that was left unrepaired was highest among smaller cars and lowest among luxury and expensive specialty cars. By market class, the figures were: subcompacts, 30 per cent; compacts, 23 per cent; intermediate, 18 per cent; full size, 18 per cent; luxury, 13 per cent; specialty and sports, 20 per cent; expensive specialty, 13 per cent; and station wagons, 21 per cent.

"The extent to which they [the variations between classes] may reflect differences in crash frequencies, variations in the designed-in delicateness of the vehicles themselves, and/or variations in owner maintenance practices is unknown," the study says.

- **Damage by Age:** The older the car, the higher were both the frequency and dollar values of its unrepaired damage. The observed percentages of cars with unrepaired crash damage were 15 per cent for 1972 models, 28 per cent for 1971 models, 42 per cent for 1970 models, 52 per cent for 1969 models and 58 per cent for 1968 models. The average estimated cost per damaged car to fix the damage was \$74 for 1972 models, \$75 for 1971 models, \$91 for 1970 models, \$105 for 1969 models, and \$115 for 1968 models.

(Cont'd on page 51)

Status Report

September 10, 1973

### **Corner Damage Predominates**

An analysis of unrepaired damage survey data from two major metropolitan areas has found a high involvement of automobile corners and rear ends in such damage — high enough to “strongly suggest that, despite the claims of auto manufacturers and others to the contrary, these areas of the car are very vulnerable to damage and also very frequently involved in damage producing crashes.”

(For details of such claims, see *Status Report*, Vol. 7, No. 3, Feb. 14, 1972, “Data Dispute GM, DOT Back Bumper Claims,” and Vol. 8, No. 2, Jan. 15, 1973, “GM Claims Little Damage Around the Corner.”)

The analysis, discussed in the study released by IIHS, uses data from the surveys in the Washington, D.C. and Atlanta areas. It finds that in both front and rear end unrepaired damage, corner damage substantially outweighed front and rear center damage, and that rear end damage of all kinds outweighed front end damage of all kinds.

“These results show that the rear ends of the automobiles were, in general, more frequently damaged than the front ends. Between 34 per cent and 41 per cent of the damaged locations were on front ends compared with between 43 per cent and 49 per cent on rear ends. Comparing front centers and rear centers alone, the frequency of rear end damage was again higher than front end damage: front center damage ranged from 10 per cent to 14 per cent and rear center damage from 17 per cent to 20 per cent.

“Corner damage was very common for all model years; between 52 per cent and 54 per cent of the damage locations were on the corners of the vehicles.”

A breakdown of the results by model year follows:

#### DISTRIBUTION OF UNREPAIRED CRASH DAMAGE BY LOCATION OF DAMAGE ON THE VEHICLE BY MODEL YEAR — ATLANTA AND WASHINGTON, D.C. METROPOLITAN AREAS June — October 1972

LOCATION OF DAMAGE	MODEL YEAR				
	1968	1969	1970	1971	1972
Front, Center	11%	11%	12%	10%	14%
Corner, Front	24%	23%	24%	24%	27%
ALL FRONT	35%	34%	36%	34%	41%
Rear, Center	18%	18%	20%	18%	17%
Corner, Rear	28%	29%	29%	28%	26%
ALL REAR	46%	47%	49%	46%	43%
ALL CORNERS	54%	52%	53%	52%	53%
ALL SIDES	19%	19%	14%	18%	16%

(Cont'd from page 6)

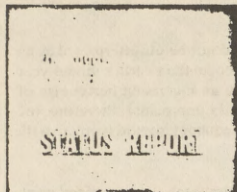
These declines in damage values and frequencies for newer cars "should not be misinterpreted as an indication that the more recent model year automobiles are less costly to repair than earlier model year automobiles," the study warns. It says the decline is because "there will be an increasing percentage of older cars involved in more than one crash in which the damage is subsequently unrepaired; therefore, the amount and hence the dollar value of unrepaired crash damage as well as its frequency should increase with the age of the vehicle."

• **Damage by Metropolitan Area:** The estimated percentages of cars that each year sustained crash damage left unrepaired ranged from a low of 10 per cent in the Cleveland and St. Louis areas to a high of 40 per cent in the Washington, D.C. area, with the following between: Dallas, 14 per cent; Minneapolis-St. Paul, 15 per cent; Detroit, 18 per cent; Atlanta, 23 per cent; Chicago, 24 per cent; and Denver, 36 per cent. "The precise reasons for these wide variations between metropolitan areas are not known," the study notes, adding that a similar survey conducted in 1970 by Ford Motor Co. "also indicated wide variations between metropolitan areas in the percentages of vehicles observed with unrepaired crash damage."

The study says that "subsequent reports in this series will compare the real world frequencies and amounts of unrepaired crash damage to 1973 and later model year vehicles with the experience of earlier models." Such data, it notes, "provide one of the important measures for evaluating the extent to which vehicle manufacturers are reducing the designed-in susceptibility of their vehicles to damage in low speed (0 to 20 miles per hour) collisions."

The study's authors were James Casassa, II, of the research department of State Farm Mutual Automobile Insurance Co., Brian O'Neill, of the IIHS research staff, and Irwin Miller and Sandra Stone, of Arthur D. Little, Inc. Surveys on which the study is based were conducted by State Farm, IIHS, Arthur D. Little, Inc., and the Independent Automotive Damage Appraisers Association, during June-October, 1972.

Copies of the study are available by writing "Unrepaired Damage," Insurance Institute for Highway Safety, Watergate 600, Washington, D.C. 20037.



## INSURANCE INSTITUTE for Highway Safety

Vol. 5, No. 22

December 15, 1970

### NHSB IGNORES ITS OWN STUDY IN SPEED CONTROL PLAN

The National Highway Safety Bureau has proposed that speed limits be built into highway vehicles — but at a ceiling higher than the bureau's own experts earlier recommended as an absolute maximum.

Starting Oct. 1, 1972, the bureau's three-part proposal would:

- 1) Set 95 miles per hour as the speed ceiling that must be built into all new vehicles — cars, trucks, buses, multi-purpose vehicles and motorcycles;
- 2) Set 85 miles per hour as the highest speed that could be shown on a vehicle's speedometer;
- 3) Require that as a vehicle entered the 81-85 mile per hour speed range its horn would sound and warning lights flash until the speed dropped below that point.

In announcing the proposal, the bureau suggested that building speed limits into cars could mean less expensive vehicles, because it "may result in substantial reduction in the cost of manufacturing vehicle power plants."

The bureau cited in its announcement a Cornell Aeronautical Research Laboratory study showing that at speeds over 80 miles per hour, 509 of 2,948 "unbelted exposed persons," or 17.3 per cent, were killed. However, it offered no evidence to suggest how its proposed masking of speedometers above 85 miles per hour, or the sounding of horns and blinking of warning lights in the 81-85 miles per hour range, would reduce crash losses.

A forerunner of the new proposal was the bureau's 1967 "advance notice" of intent to publish a speed control standard for new vehicles. Response to the notice was almost entirely from auto manufacturers and muscle car proponents — and was almost entirely in opposition. This contrasted with the results of a CBS television poll, conducted the same year, showing that 52 per cent of 1,081 surveyed drivers would favor built-in speed-limiting devices.

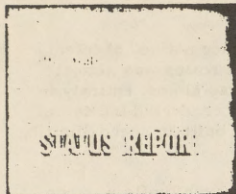
Evidence that 95 miles per hour would be excessively high for such limits was contained in a little-publicized NHTSB report released in early 1969 and entitled, "Maximum Safe Speed for Motor Vehicles." (Copies are available on request, for \$1, by writing the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.) That report, not referred to in the new bureau proposal, pointed out that:

- No maximum posted speed limit in the United States exceeds 80 miles per hour. (Two states, it reports, have no posted limits.)
- Based on an examination of crash data in one surveyed state, "fatalities might be reduced in the order of 13 per cent if the speed maximum were set as low as 60 miles per hour," and with a 70 mile per hour maximum, an "eight per cent (fatalities cut) might be achievable" — but for crash speeds above 80 miles per hour, available data are "inadequate for the purpose of quantifying hazard-casualty-speed relationships." (The report noted that an eight per cent reduction in fatalities for the nation because of a 70 mile per hour speed maximum would mean 4,000 lives per year.)
- Even for a "fully restrained occupant who has been packaged to provide large areal distribution and controlled acceleration rates of the crash forces up to a peak of about 40 G's" — such as with an effective air bag system — the "maximum crash speed that can be tolerated without exceeding the human injury threshold . . . (is) about 85 miles per hour." (G forces experienced by an occupant in a 95 mile per hour crash would be 25 per cent greater than in an otherwise identical crash at 85 miles per hour.)
- The "majority of foreign cars" — but "only two domestic models" — surveyed in the report had maximum speed capabilities lower than 90 miles per hour.

A major contributor to the 1969 report was Col. John Stapp, a bureau official renowned for his research in high-speed crash survivability.

A vehicle speed performance ceiling above 90 miles per hour, Stapp said in the report, would be "a gratuitous promotional extravagance and a total waste for the law abiding consumer." Stapp urged — and the report concluded by recommending — that the bureau adopt a standards-making strategy "to control (speed) at 90 miles per hour as a beginning and work down as public acceptance grows and more evidence is gathered to show the additional payoff at lower maximum speeds."

Comments on the proposal (docket 1-19) may be sent to: Docket Section, National Highway Safety Bureau, Room 4223, 400 Seventh Street, S. W., Washington, D. C. 20591. Closing date for comments is Feb. 26, 1971.



## INSURANCE INSTITUTE for Highway Safety

Vol. 6, No. 1

January 18, 1971

### SAFETY COUNTERMEASURES URGED FOR TRUCKS, BUSES

The former director of the National Highway Safety Bureau has urged attention to five countermeasures which, he said, have been neglected in efforts to reduce highway losses due to truck and bus crashes.

In a paper delivered this month in Detroit, Michigan, to the Automotive Engineering Congress of the Society of Automotive Engineers, Dr. William Haddon, Jr., president of the Insurance Institute for Highway Safety, said he had picked the five as "especially noteworthy" because "each (is) comprised of a situation contributing prominently to such losses and, correspondingly, of the analogous countermeasures . . . (and) because each is being either largely ignored or, at best, inadequately handled both in the private and public sectors."

1. Heavy trucks and buses are incapable of braking to a stop in the same distance as automobiles, he said, even though it is "a logical, necessary performance requirement for all vehicles" that they have the same braking ability. "Actual braking performance of heavy trucks is commonly two to three times worse than that of passenger cars," Haddon said. He cited a "multivehicular holocaust" Nov. 29, 1969, on the New Jersey Turnpike

in which "one after another huge truck was unable to stop in a short enough distance and plowed into the vehicles and people ahead." There is no adequate federal standard for truck braking rates, he noted.

2. ". . . For trucks, most roads in effect have no guardrails," he said. Since this is "a situation not likely to improve rapidly, I believe that we can expect increased numbers of . . . disasters in which so-called guardrails fail properly to retain impacting vehicles, especially trucks."

3. Another situation which, he said, "pleads for energetic correction" is the failure to design trucks so that "hazardous cargoes do not spill in crashes at the maximum operating speeds for which the vehicles involved are designed." Haddon said absence of such crash design contributes "greatly to highway losses, and this, too, I believe, will continue for some time to worsen."

4. Concerning buses, he said that "the failure to prevent most, if not virtually all injuries of any severity to crashing bus passengers must be attributed to inadequacies in . . . design," particularly since bus dimensions, their maximum speeds and the available technology and hardware could be applied to proper packaging of bus occupants.

5. A California study, he said, has indicated that "alcohol use by drivers of lighter trucks appears to be a very major problem . . . Strong countermeasure development and implementation and evaluation directed at this light truck operation part of the overall alcohol and highway safety problem, each supported by thoroughly competent research, are long overdue, and nowhere substantially present."

EXCERPT

## INSURANCE INSTITUTE for Highway Safety

Vol. 7, No. 22

November 27, 1972

### NHTSA Plans Extensive Vehicle Rule Delays

In an "update" of its "Program Plan for Motor Vehicle Safety Standards," the National Highway Traffic Safety Administration has quietly postponed projected effective dates for more than 25 new safety standards, amendments to existing safety standards and regulations by a combined total of more than 30 years.

The agency eased a revised schedule of its projected rulemaking activity into a public docket file with no official signature, official letter of transmittal or annotation as to where the document originated. Although the file is open to public inspection, it is seldom reviewed by other than motor vehicle industry representatives.

Virtually the only major rule to escape the widespread postponements is NHTSA's passive restraint rule. That rule is currently under court review because of auto maker dissatisfaction with its requirements. (See *Status Report*, Vol. 7, No. 5, March 13, 1972.)

NHTSA issued its first "program plan" in August, 1970. A revised plan was issued two months later. A third revision was published and circulated in October, 1971. The October, 1971, version of NHTSA's projected rulemaking activity said that the publication is intended as a "guideline and working document." It said that the schedules in the plan "represent the best estimates" of NHTSA's timetable, and cautions that those plans "are subject to change at any time."

#### Inside

- NHTSA Proposes Auto Makers Supply VIN's . . . Page 3
- NHTSA Conducting 63 Defect Probes, 15 Are Two Years Old . . . Page 4
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- New York Court Halts Attempt To Speed Traffic Prosecutions . . . Page 11
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The current revision in the plan, which reflects across-the-board delays, is dated Nov. 1, 1972. According to an official stamp on the document, it was placed in the public file Nov. 8, 1972.

A Nov. 6, 1972, story in *Automotive News*, by Helen Kahn, a veteran Washington and Detroit reporter, had said that the automobile rulemaking "atmosphere in Washington is expected to be considerably more relaxed" during the next four years.

In addition to the blanket postponements, NHTSA has altogether dropped plans to upgrade its exterior protection standard (FMVSS 215). The standard is now aimed at

The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers

protecting a limited number of "safety related" items from damage during low speed crashes. In its October, 1971, "program plan," the agency said it expected to extend "the scope of the no-damage requirements to any subsystem of the vehicle that (when damaged) may adversely affect the vehicle's safe operation." The new revision gives no schedule for issuing property damage standards mandated by the "Motor Vehicle Information and Cost Savings Act." (See *Status Report*, Vol. 7, No. 19, Oct. 16, 1972.) However, a safety administration official told *Status Report* that the agency "is working on that now."

The most noteworthy safety standard postponements include:

- A four year delay (Sept. 1, 1976, to Sept. 1, 1980) in the effective date of a new standard that would be aimed at protection of pedestrians and cyclists when they are hit by a motor vehicle. The planned rule is directed at improving vehicle exteriors in order to "reduce injury levels to pedestrians and cyclists during initial vehicle impacts and if possible . . . control his trajectory to reduce the severity of secondary impacts," NHTSA said in its October, 1971, "program plan."

- A delay of almost two years (Jan. 1, 1973, to Sept. 1, 1974) on an amendment to the consumer information regulation on vehicle stopping distance that would give consumers information on wet pavement stopping performance.

- A delay of almost two years (Sept. 1, 1972, to May 1, 1974) on a new consumer information regulation that would "provide the consumer with qualitative information to assist him in making an informed choice when purchasing tires." (See *Status Report*, Vol. 6, No. 18, Oct. 4, 1971.)

In the National Traffic and Motor Vehicle Safety Act of 1966, the Congress mandated that NHTSA issue a uniform quality grading system for motor vehicle tires. The law called for that standard to be issued before 1969.

- A two year delay (Sept. 1, 1973, to Sept. 1, 1975) in a new standard that would seek "to deter and limit excessive speeds" by limiting the maximum attainable speed of a vehicle and by using visible and audible warnings as a vehicle approaches that speed. (See *Status Report*, Vol. 5, No. 22, Dec. 15, 1970.)

- A two year delay (Sept. 1, 1975, to Sept. 1, 1977) in "major revisions and additions to the present requirements for defrosting, defogging, wiping and washing systems" (FMVSS 103 and 104).

- A two year delay (Sept. 1, 1975, to Sept. 1, 1977) in a new standard to require "installation of spray protectors where existing vehicle structure permits spray produced by the vehicle's wheels to impair the visibility of following traffic."

- A one year delay (Sept. 1, 1973, to Sept. 1, 1974) in applying indirect visibility standards (mirrors) to trucks, buses, multipurpose passenger vehicles and motorcycles.

- A one year delay (Sept. 1, 1976, to Sept. 1, 1977) is also anticipated for improvements in indirect visibility (mirrors) on passenger cars (FMVSS 111).

- A one year delay (Sept. 1, 1973, to Sept. 1, 1974) in the effective date of a new standard to "specify requirements for passenger seats in buses." The new rule is supposed to carry requirements for "strengthened seats and seat anchorages, seat back protection and increased seat back height."

- A one year delay (Sept. 1, 1973, to Sept. 1, 1974) in an amendment that would combine "seat and head restraint performance requirements and upgrade(s) these performance requirements."

- A one year delay (Aug. 15, 1973, to Sept. 1, 1974) for passenger cars and a four year delay (Sept. 1, 1977) for forward control vehicles (such as vans) on an amendment to upgrade protection for drivers against impacts with steering assemblies.

APPENDIX CTHE ENERGY CRISIS AND HIGHWAY SAFETY

The energy crisis promises to exert significant effects on highway safety, but at this point no one is quite sure just how profound or far reaching those effects will be.

Like many agencies and individuals, the Highway Safety Research Center is studying the problem and in the near future will conduct further studies into some aspects of the energy-safety issue.

"Already," says HSRC Director Dr. B. J. Campbell, "some assumptions can be made regarding the impact of gasoline shortages on highway safety."

For example, Dr. Campbell points out, a reduction in highway speeds "probably will save some lives, but we also must consider the possibility that on some highways the accident frequency will increase."

"At least two studies have indicated that drivers who drive as much as 15 miles per hour below or above posted speed limits are involved in a great many more accidents than drivers who adhere closely to the posted limits," says HSRC researcher Forrest Council.

With a sharp reduction in speed limits many drivers will continue to drive on highways such as interstates as fast as they did before speed limits were

Projected amendments to other existing standards that have been postponed include: Occupant Protection in Interior Impact (FMVSS 201), Child Restraint Systems (FMVSS 213), Windshield Mounting (FMVSS 212), Steering Control Rearward Displacement (FMVSS 204), Motor Vehicle Brake Fluid (FMVSS 116), Brake Hoses and Brake Hose Assemblies (FMVSS 106), Retreaded Tires (for vehicles other than passenger cars) (FMVSS 117), New Pneumatic Tires for Passenger Cars (FMVSS 109) and New Lighting Systems (FMVSS 108).

Other projected or postponed new standards for which planned effective dates have been postponed include: Windshield Zone Intrusion, (for vehicles other than passenger cars), Gaseous Fuel System Equipment for Motor Vehicles, Motorcycle Rider Protection Systems, Motorcycle Headgear, Tires, Rims and Wheels (for vehicles other than passenger cars), Direct Fields of View and Passenger Car Tire Traction.

APPENDIX C - Page 2

reduced. "If this happens on a large scale," says Mr. Council, "we will probably have an increase in the accident frequency on many highways."

Mr. Council believes the intensity of the enforcement effort will be a major factor in obtaining uniform speeds on highways where speed limits are sharply reduced.

Another aspect to consider, says Dr. Campbell, is that accidents occurring at lower speeds probably will result in fewer deaths and fewer severe injuries. In addition, some crashes that would have occurred at higher speeds might not occur at lower speeds. "Thus, a modest reduction in deaths and the frequency of severe injuries can reasonably be anticipated," says Dr. Campbell.

At the national level, some safety administrators are urging greater use of smaller vehicles. "Certainly," says Dr. Campbell, "the widespread use of smaller cars will result in less energy consumption. However, we should approach the transition with our eyes open in our expectations for improved safety."

It is not certain that the use of smaller vehicles -- especially the sub-compacts -- by all the driving population will result in improved highway safety. One study already completed by HSRC indicates that persons in a small car suffer more severe injuries in a collision -- even with another vehicle of comparable size.

APPENDIX C - Page 3

HSRC points out that the transition will be gradual with small cars and standard-size models sharing highway space for some time to come. "During this interim, we can surely expect a worsening of the safety situation," says Dr. Campbell. "And even when and if the change to smaller cars is completed, we cannot be sure that we will experience highway safety gains -- only an improvement in the usage of gasoline."

In the near future, HSRC will conduct a study of crashes involving newer model small cars in an effort to better understand the full impact of a mass changeover to smaller cars by American drivers.

The Accident Reporter  
University of North Carolina  
Highway Safety Research Center  
December 1973

APPENDIX DMemoranda Concerning InsuranceAspects of Operation of Car Pools

One of the earliest reactions of Americans to the energy crisis is a rapidly growing use of car pools. This development has the potential of bringing about significant savings in the nation's gasoline supplies. But it has raised some questions.

As these pools increase, many drivers are expressing concern as to whether or not this development will affect their automobile insurance coverage.

Automobile insurance policies do provide coverage for the types of car pools that are now being formed by individuals in response to the energy crisis. In fact, thousands of drivers have been members of car pools for years, and their regular insurance policies have provided insurance and will continue to do so.

Car pools usually take one of two forms. In one, members of the pool take turns using their cars. In the other, one pool member uses his car for transportation with the other participants sharing expenses. Auto insurance applies to these pool arrangements, just as it would to similar pools now being formed.

The National Association of Insurance Commissioners has been assured by the members of its industry advisory committee that it is their intent to interpret liberally the insurance coverage for car pool operations.

Since the use of car pools may substantially increase the potential for loss arising out of an accident, car pool participants are advised to review the limits of all coverages under their present policies to make certain that they have adequate protection.

Motorists should be aware that an individual's auto insurance coverage could be affected if it is clear that the transportation arrangement takes on the aspect of a commercially operated venture for profit. If a motorist has concern about his arrangement, he should consult with his agent or insurance company.

SPECIAL NOTE

Individual regulators will want to give consideration to situations peculiar to their states. Among these would be the existence of guest statutes or other special statutes relating to motor vehicles and their operations.

APPENDIX ETHE EFFECT OF STATE REGULATION ON AUTOMOBILE INSURANCE RATES

Prior to a United States Supreme Court decision in 1944, rates for property and liability insurance, including automobile insurance, were developed for the most part by companies acting collectively through rating bureaus and used uniformly by the member companies of the bureaus.

The Supreme Court decision, which declared that these types of insurance involved interstate commerce and hence were subject to Federal anti-trust laws, led to the passage by the Congress of the McCarran Act. This law, in effect, gave to the states the right to regulate these types of insurance, as long as they did so effectively. This led to the approval by the National Association of Insurance Commissioners of model rating laws, which, most importantly, require that rates not be "inadequate, excessive or unfairly discriminatory". All states adopted state rate regulatory laws, with most being of a prior approval type, with the result that a viable system for the regulation of property and liability insurance rates was established in all states and the District of Columbia. The impact of these laws and changing economic circumstances was to create a climate under which competition, along with insurance department supervision and regulation, controlled rates in the public interest.

In recent years the laws of a number of states have been modified so that currently some 17 states have so-called "open competition" rating laws under which price competition among insurers is relied upon to an even greater extent to assure that the rates meet the statutory standards that they not be "inadequate, excessive or unfairly discriminatory". Monitoring by insurance

departments of the rates being charged by individual insurers provides a check on the propriety of the rates and the effectiveness of competition in controlling them. Studies that have been made by insurance departments and others confirm that this is so.

Following is a set of questions and answers designed to give more specific information on the subject of state regulation and competition:

Q. Do state insurance regulators have the authority to mandate rate reductions for individual companies?

A. Under the rate regulatory laws automobile insurance rates must not be "excessive, inadequate or unfairly discriminatory". One of the principal purposes of state rate regulation was to create a mechanism so that regulators could prospectively disapprove excessive rates. In order to do so the laws require that the Commissioners afford the insurer an appropriate hearing. Evidence must be adduced to demonstrate that the rates subject to challenge are, in fact, excessive based upon appropriate data concerning the loss and expense experience of the insurer.

Q. Administrative hearings take time, particularly if followed by appellate proceedings. Isn't there a quick way to pass along savings that may result from the energy crisis?

A. A constantly expanding competitive market for automobile insurance has provided the best possible monitor of rate excessiveness. The forces that have worked so well in the past should bring about rate reductions at the earliest possible date

if pricing judgments in this direction can be vindicated by the experience and the judgment of insurers.

Dr. Frederick D. Crane in his treatise "Automobile Insurance Rate Regulation" enumerates the conditions adopted by the Attorney General's National Committee to Study the Antitrust Laws so as to arrive at a definition of the term "workable competition".

"According to the Committee, the economic definition of workable competition concentrates on the effective limits it sets on the power of a seller, or group of sellers acting in concert, over their price". Ten factors are listed which are "considered some of the more important" in determining whether workable competition exists. They relate to: (1) number of sellers, (2) entry, (3) independence of rivals, (4) preclusive practices, (5) growth, (6) incentives to competitive moves, (7) product differentiation, (8) pricing, (9) excess capacity and (10) price discrimination. The Committee noted that the first three are the most important".

Dr. Crane comments in detail as to the application of these factors to the automobile insurance business and then concludes that, "The majority of the tests of workable competition are met by the automobile insurance industry without question or qualification", and that, "On the basis of this analysis the conclusion is reached that currently there is workable competition in automobile insurance.....". Since this treatise was prepared, there has been a substantial increase in price competition in the automobile insurance field under the "open competition" rating laws which have been adopted.

- Q. How competitive is the automobile insurance business? Is it true that two or three companies dominate the business?
- A. The largest writer of automobile insurance wrote only 11.2 percent of the total countrywide premium in 1972, and there was vigorous competition to obtain or retain a portion of the market. The second largest company accounted for only 9.1 percent, and the next 18 insurers divided 36.6 percent of the market. The third group wrote 3.4 percent and the 18th group only 1.1 percent. The remaining 43.1 percent was written by over 600 insurers.
- Q. If competition exists today in the automobile insurance business, why do some prospective insurance buyers end up being insured by Automobile Insurance Plans (i.e. Assigned Risk Plans)?
- A. Countrywide, less than 5% of the insureds find themselves outside the voluntary insurance market. And, although this lack of availability is of great concern to both regulatory officials and to insurers, it is nonetheless evidence of a healthy competitive climate for the remaining 95%, who are able to select insurance coverage freely from a wide number of suppliers.

Indeed, sophisticated underwriting programs, coupled with modern classification techniques, have refined competition to the point that "shopping" for automobile insurance is commonplace. The same techniques that permit insurers to identify and price desirable risks competitively also permit them to identify risks with a high propensity for loss. It is this latter group which

for the most part populates the residual market. A very high percentage of assigned risks will be brand new drivers, the very young, the very old and, of course, those individuals with a history of traffic violations and/or automobile accidents.

It should be noted that insurance rates for those in the residual market are subject to rigid rate regulatory approvals by the states since rates for this group are not competitively determined. Indeed, historically rate levels for this group are subsidized by the voluntary market and in virtually all jurisdictions rates are promulgated which produce a "break even" situation or a measureable loss.

Q. What is to prevent insurance companies from taking advantage of their own policyholders by maintaining present automobile insurance rates even though the energy crisis may produce drastic reductions in the number of automobile insurance claims?

A. If loss experience improves, insurers have every incentive to become more competitive rather than less so. The expectation of improved profit margins will cause every insurer to try to increase its share of the market in order to maximize its profit.

There is one sure way to attract new customers and that is to offer them a lower price for their insurance coverage.

In addition to aggressive price competition, insurers may also compete by product improvement and innovation. During the present uncertainty about the energy crisis, evidence of both kinds of competitive activity has begun to surface. For example:

- 1) In addition to mutual companies that normally pay dividends, a number of stock and mutual companies have already announced their intention to embark on a dividend program for their policyholders in order to pass along premium reductions which may be attributable to the energy crisis.
- 2) Programs have been adopted to inform policyholders of existing rating rules which call for premium reductions for reduced usage.
- 3) New rating programs have been adopted which recognize reduced use of automobiles during the energy crisis and give the assurance of immediate premium reductions.
- 4) Assurance has been given by the industry that companies will interpret automobile liability policies broadly so as to protect their policyholders in car pool situations.
- 5) Underwriting and rating rules to encourage greater use of car pools are being adopted.

Many of these actions will result in policyholder savings and reduced company income. With the resulting decrease in premium income, companies will be competing aggressively to develop new income. This is necessary because much of the companies' expense is fixed and would not be reduced along with the reduction in premium income.

- Q. What effect does the Economic Stabilization Program have on automobile insurance rate levels?
- A. The Economic Stabilization Program has not affected rate decreases but has imposed limitations upon the normal development of indicated rate increases. The major limitation has been on the projection of inflationary trends. Restrictions were also placed on the allowable increase in the provisions in the rates for other acquisition costs, general expenses and underwriting profits.
- Q. What information does the Cost of Living Council have available to them regarding private passenger automobile insurance rate changes?
- A. The Cost of Living Council has established procedures which require large insurers (over \$150,000,000 in earned premium volume) to report changes to them. This requires prenotification of increases greater than five percent which affect more than \$1,000,000 in premium and quarterly reporting of all changes, both increases and decreases, which affect more than \$250,000 in premium.
- Q. What insurance data does the Cost of Living Council have available to enable them to monitor private passenger automobile insurance rate levels?
- A. In addition to the reporting of rate changes, the Cost of Living Council has established a quarterly reporting procedure for large insurers, which requires state premium and loss data for private passenger automobile insurance for those states with more than \$1,000,000 in premium and in which rates have not been revised during the last four quarters. If the Cost of Living Council concludes from this data that a particular insurance company's rates were excessive in a state, they can notify the particular state regulator of their findings and submit the statistical data in support of their conclusion.

# PROOF COPY

SOME HARD DATA RELATIVE TO HIGHWAY LOSSES  
IN DAMAGED PEOPLE AND PROPERTY  
AND  
CHANGES THAT MIGHT RESULT FROM THE ENERGY SHORTAGE

December 11, 1973

Insurance Institute for Highway Safety  
Watergate Six Hundred  
Washington, D.C. 20037

INTRODUCTION

Several measures that have been proposed or suggested to conserve energy could affect highway losses in damaged people and property. A number of people and organizations have suggested that these measures will result in substantial reductions in such losses. However, since both the long and short term prospects with respect to energy supplies, and in particular gasoline and truck fuels, are still very uncertain as are many other aspects of the situation, it is not now possible to predict with accuracy what the effects of the energy shortage will be on each of the various categories of highway losses, or even the direction in which each will move.

The purpose of this document is to present known facts and results concerning several especially well documented aspects of the situation that are changing and that might change, but not to speculate on the overall effect.

ASPECTS THAT ARE CHANGINGVehicle Size

The proportion of small (subcompact, compact and import) cars in the population of all vehicles has been increasing for several years. In 1969, approximately 20 percent of the new passenger cars registered were small cars, and in 1973 this proportion will have increased to approximately 40 percent. Sales reports for the first months of the 1974 model year suggest that this trend is being accelerated by the energy shortage. Furthermore, since small cars generally have lower gasoline consumption rates than larger cars, it is probable that families with more than one car will tend to use the smaller of their cars for a greater proportion of their driving than in the past. Therefore, the energy shortage should result in relative increases in small car mileage.

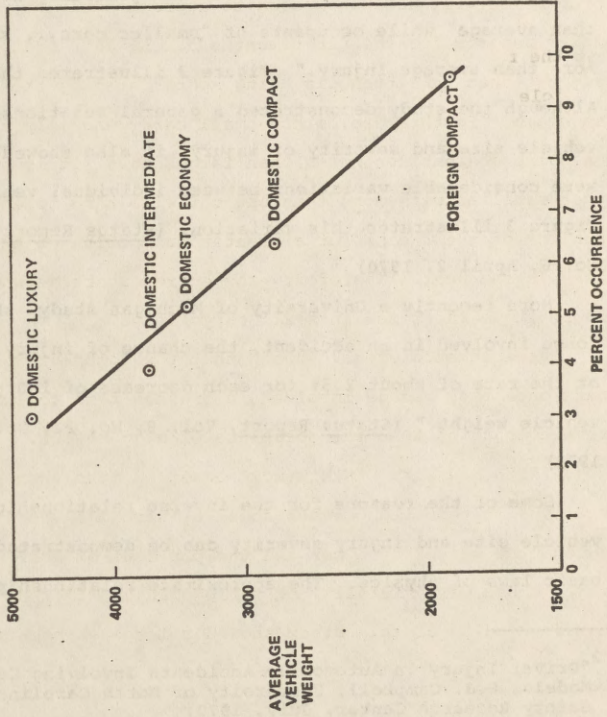
Research studies have shown that the occupants of smaller cars, once they become involved in crashes tend to sustain more severe injuries than the occupants of bigger cars.

A 1968 New York State study<sup>1</sup> based on more than 400,000 vehicles in reported crashes found a "strong association" between "the weight of a car and the per cent of accidents in which there was a fatality or serious injury in that type of car." Results of this study showed a large exponential increase

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<sup>1</sup>1968 New York state study, prepared for the Department of Transportation. (Submission for the Record by U.S. Department of Transportation to U.S. Subcommittee on Antitrust and Monopoly, March 10, 1970.)

FIGURE 1  
PERCENT OF ACCIDENT-INVOLVED VEHICLES  
IN WHICH  
THE MOST SERIOUS INJURY WAS FATAL OR SERIOUS



SOURCE: ADAPTED FROM NEW YORK STATE HIGHWAY DEPARTMENT STUDY CONDUCTED FOR DOT AND PRESENTED IN "KEY ISSUES IN HIGHWAY LOSS REDUCTION," PROCEEDINGS OF IIHS 1970 SYMPOSIUM, 1970.

in the percent of serious or fatal injuries with decreasing vehicle weight. This relationship is illustrated in Figure 1: (IIHS Status Report, Vol. 5, No. 6, April 2, 1970. See attached story)

A 1970 study<sup>2</sup> by the University of North Carolina concluded that occupants of "larger cars... show generally less injury than average" while occupants of "smaller cars... show generally more than average injury." Figure 2 illustrates these results. Although the study demonstrated a general relationship between vehicle size and severity of injury, it also showed that there were considerable variations between individual vehicle series. Figure 3 illustrates this variation. (Status Report, Vol. 5, No. 6, April 2, 1970)

More recently a University of Michigan study<sup>3</sup> showed that "once involved in an accident, the chance of injury... increases at the rate of about 2.5% for each decrease of 100 pounds in vehicle weight." (Status Report, Vol. 8, No. 22, November 27, 1973)

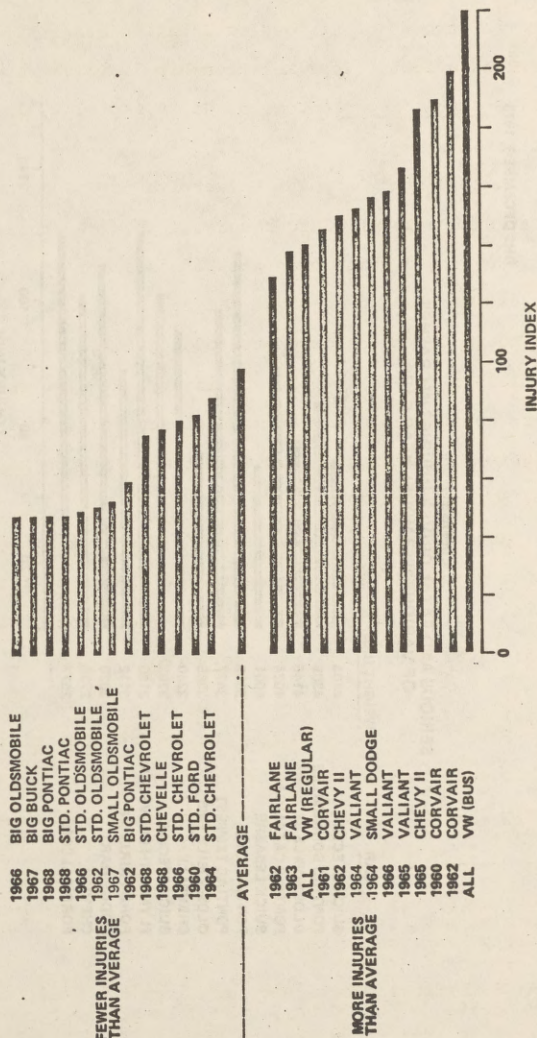
Some of the reasons for the inverse relationship between vehicle size and injury severity can be demonstrated using the basic laws of physics. The approximate relationship between

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<sup>2</sup>"Driver Injury in Automobile Accidents Involving Certain Car Models, B.J. Campbell, University of North Carolina, Highway Safety Research Center, July, 1970.

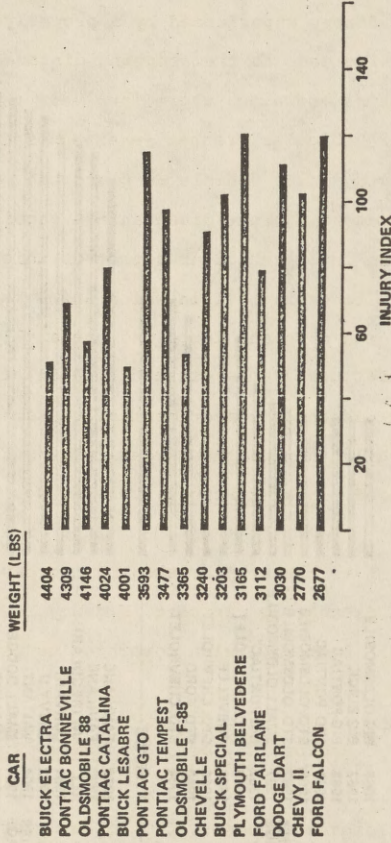
<sup>3</sup>"A Statistical Description of Large and Small Car Involvement in Accidents," J. O'Day, D.H. Golomb, and P. Cooley, HIT Lab Reports, Vol. 3, No. 9, University of Michigan, May, 1973.

FIGURE 2  
SERIOUS DRIVER INJURIES  
IN CRASHES OF VARIOUS MAKES AND MODELS



SOURCE:  
ADAPTED FROM DR. B. J. CAMPBELL, UNIVERSITY OF NORTH CAROLINA  
HIGHWAY SAFETY RESEARCH CENTER U. S. SENATE TESTIMONY, 1970,  
AND PRESENTED IN "KEY ISSUES IN HIGHWAY LOSS REDUCTION"  
PROCEEDINGS OF IIHS 1970 SYMPOSIUM, 1970.

FIGURE 3  
SERIOUS AND FATAL DRIVER INJURIES IN CRASHES  
OF VARIOUS 1967 MODEL YEAR CARS



SOURCE:  
ADAPTED FROM B. J. CAMPBELL, UNIVERSITY OF NORTH CAROLINA, HIGHWAY SAFETY RESEARCH CENTER, "DRIVER INJURY IN AUTOMOBILE ACCIDENTS INVOLVING CERTAIN CAR MODELS", 1970, AND PRESENTED IN "DETERMINING THE RELATIONSHIP BETWEEN VEHICLE VARIABLES AND POLICY LOSS EXPERIENCE", IIHS REPORT, 1970.

velocity change, stopping distance and deceleration was presented in a 1971 paper by Haddon<sup>4</sup>. This relationship is shown in Figure 4. This figure shows that for any given velocity change, the g forces experienced by a properly packaged occupant substantially increase as the stopping distance decreases.

These reasons and also, where involved, the mass differentials in inter-vehicular crashes -- as opposed to those only involving a single vehicle -- place the occupants of smaller vehicles at a great disadvantage once crashes are initiated. The inter-vehicular aspect of this was demonstrated by filmed IIHS tests in 1971 in which six separate pairs of vehicles, in each case one large and one small car produced by the same manufacturer, were crashed head on at about 48 mph. In each case the passenger compartment of the smaller car was demolished, while that of the larger remained intact and virtually unchanged. (Status Report, Vol. 6, No. 21, November 16, 1971)

In addition to the studies showing increasing injury severities with decreasing car size, Highway Loss Data Institute (HLDI) results<sup>5</sup> from collision coverage insurance data indicate

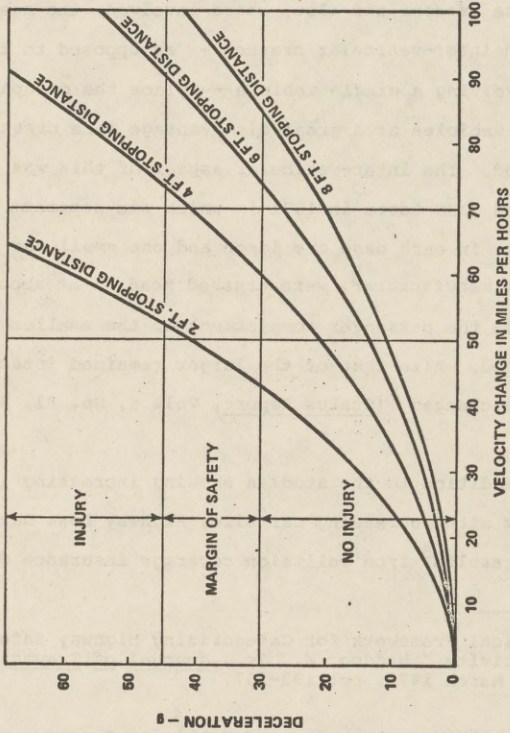
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<sup>4</sup>"A Logical Framework for Categorizing Highway Safety Phenomena and Activity." Haddon, W., Jr., Journal of Trauma, Vol. 12, No. 3, March 1972, pp. 193-207.

<sup>5</sup>"Automobile Insurance Losses, Collision Coverages. Initial Results for 1973 Models Compared with 1972 Models." Highway Loss Data Institute Research Report HLDI R73-1, September, 1973.

IIHS DECEMBER, 1973

FIGURE 4  
A FIRST APPROXIMATION OF THE RELATIONSHIP BETWEEN  
VELOCITY CHANGE  $g$ 's & OCCURRENCE OF INJURY FOR SEATED,  
PROPERLY PACKAGED ADULTS DECELERATING FORWARD



SOURCE: ADAPTED FROM WILLIAM HADDON, JR., M.D., "A LOGICAL FRAMEWORK FOR CATEGORIZING HIGHWAY SAFETY PHENOMENA AND ACTIVITY", THE JOURNAL OF TRAUMA, pp 183-207, 1972.

that overall average loss payments per claim tend to decrease slightly with increasing vehicle size for the 1972, but not the 1973, models. Figure 5a illustrates these relationships. In addition to the general relationship there is, however, considerable variation between individual vehicle series. (Status Report, Vol. 8, No. 18, October 5, 1973)

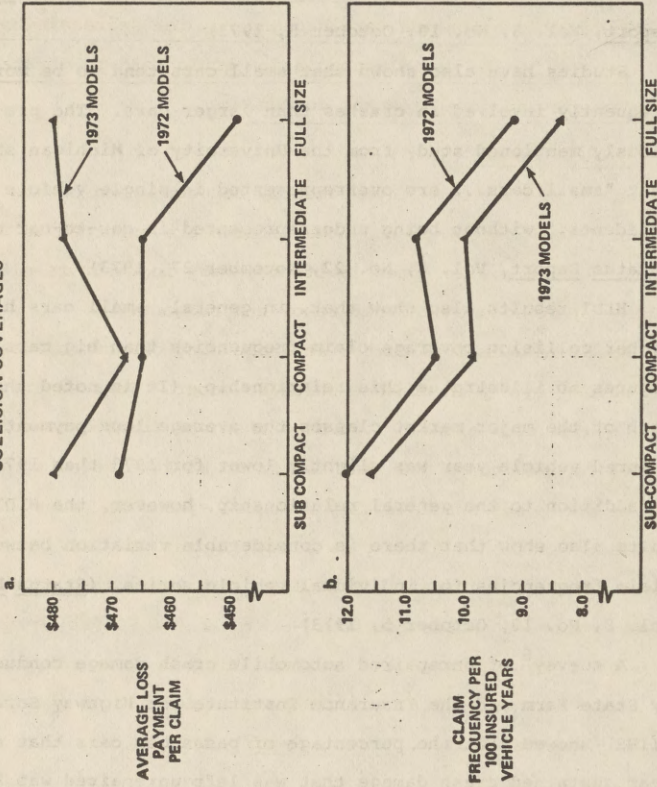
Studies have also shown that small cars tend to be more frequently involved in crashes than larger cars. The previously mentioned study from the University of Michigan showed that "small cars... are overrepresented in single vehicle accidents," without being underrepresented in car-to-car crashes. (Status Report, Vol. 8, No. 22, November 27, 1973)

HLDI results also show that, in general, small cars have higher collision coverage claim frequencies than big cars. Figure 5b illustrates this relationship. (It is noted that for each of the major market classes the average loss payment per insured vehicle year was slightly lower for 1973 than 1972 models.) In addition to the general relationship, however, the HLDI results also show that there is considerable variation between the claim frequencies for individual vehicle series. (Status Report, Vol. 8, No. 18, October 5, 1973)

A survey<sup>6</sup> of unrepaired automobile crash damage conducted by State Farm and the Insurance Institute for Highway Safety (IIHS) showed that the percentage of passenger cars that each year sustained crash damage that was left unrepaired was higher

<sup>6</sup>"A Survey of Unrepaired Automobile Crash Damage. I. 1968-1972 Models." J. Casassa, II, B. O'Neill, I. Miller and S. Stone. Insurance Institute for Highway Safety report, September, 1973.

FIGURE 5  
LOSS PAYMENT SUMMARY BY MARKET CLASS - 1973 AND 1972 MODELS -  
COLLISION COVERAGES



SOURCE: ADAPTED FROM "AUTOMOBILE INSURANCE LOSSES, COLLISION COVERAGES, INITIAL RESULTS FOR 1973 MODELS COMPARED WITH 1972 MODELS", HLDI RESEARCH REPORT R73-1, SEPTEMBER 1973.

for small cars than for large cars, Figure 6. (Status Report, Vol. 8, No. 17, September 10, 1973)

Thus, there is considerable evidence that, if all other aspects of the situation were unchanging, the decreasing size of the cars in the vehicle population would tend to generate more severe and more frequent losses.

#### Vehicle Speed

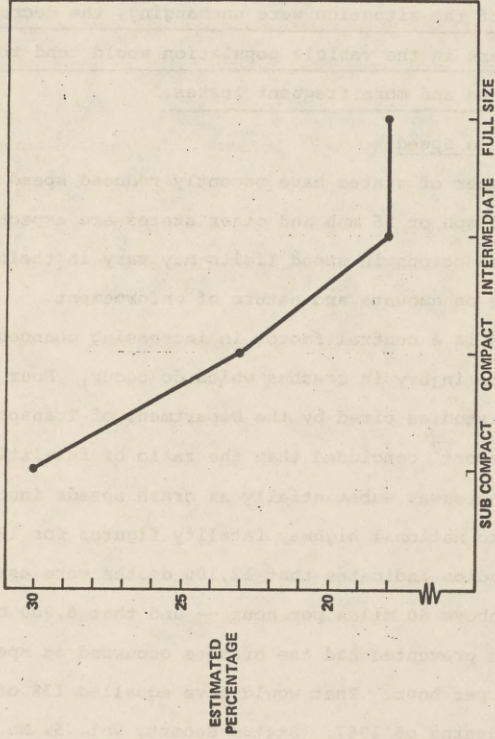
A number of states have recently reduced speed limits to either 50 mph or 55 mph and other states are expected to follow suit. Reductions in speed limits may vary in their results depending on amounts and nature of enforcement.

Speed is a central factor in increasing chances of death and severe injury in crashes which do occur. Four separate research studies cited by the Department of Transportation in a 1969 report<sup>7</sup> concluded that the ratio of fatalities to injuries increases substantially as crash speeds increase. Applied to national highway fatality figures for 1967, one of these studies indicates that 12,100 deaths were associated with crashes above 60 miles per hour -- and that 6,800 of these would have been prevented had the crashes occurred at speeds below 60 miles per hour. That would have equalled 13% of the total highway deaths of 1967. (Status Report, Vol. 5, No. 22, December 15, 1970)

<sup>7</sup> "Maximum Safe Speed for Motor Vehicles. Office of Research and Program Synthesis, National Highway Safety Bureau, Department of Transportation, January 31, 1969.

IHS DECEMBER, 1973

FIGURE 6  
ESTIMATED PERCENTAGES OF PASSENGER CARS  
THAT EACH YEAR SUSTAINED CRASH DAMAGE THAT  
WAS LEFT UNREPAIRED



SOURCE: ADAPTED FROM "A SURVEY OF UNREPAIRED AUTOMOBILE CRASH  
DAMAGE, I, 1968-1972 MODELS"

IHS REPORT, SEPTEMBER, 1973

Speed is a factor also in postcrash aggravation to the extent that higher speeds heighten the possibility of fire following a crash, contribute to greater severity of wreckage, and increase difficulty, time, and hazard of extricating injured occupants. The precise nature and degree of speed's role in postcrash complications, however, is at present quantitatively unknown.

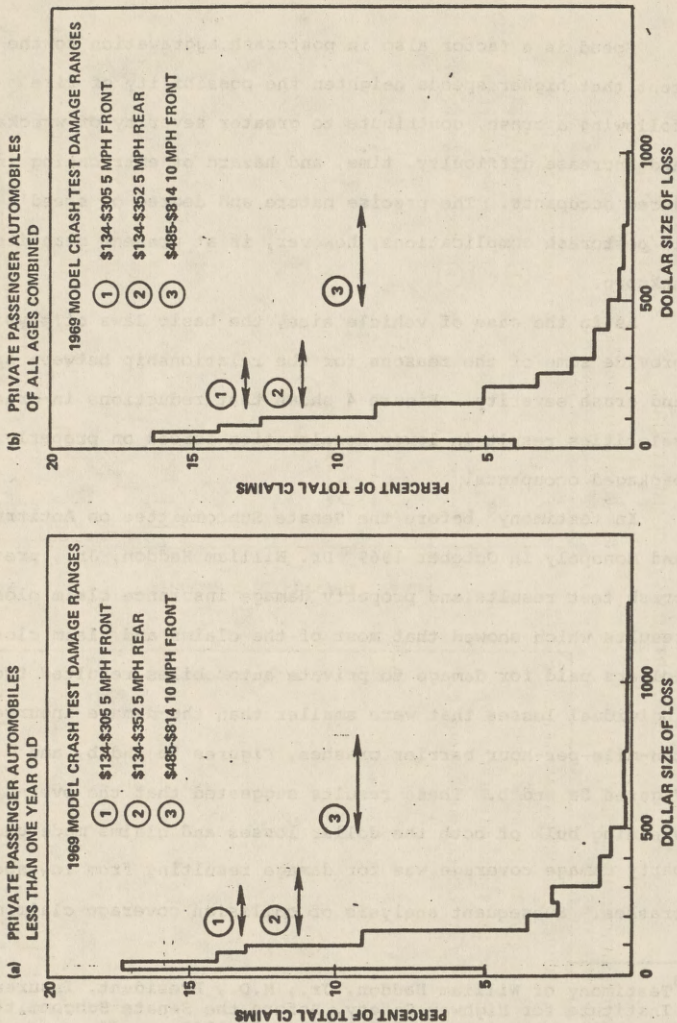
As in the case of vehicle size, the basic laws of physics provide some of the reasons for the relationship between speed and crash severity. Figure 4 shows that reductions in crash velocities result in lower deceleration forces on properly packaged occupants.

In testimony<sup>8</sup> before the Senate Subcommittee on Antitrust and Monopoly in October 1969, Dr. William Haddon, Jr., presented crash test results and property damage insurance claim closure results which showed that most of the claims and claim closure dollars paid for damage to private automobiles resulted from individual losses that were smaller than the damage incurred in ten-mile-per-hour barrier crashes, Figures 7a and b, and Figures 8a and b. These results suggested that the overwhelming bulk of both the dollar losses and claims made under property damage coverage was for damage resulting from low speed crashes. Subsequent analysis of collision coverage claim data

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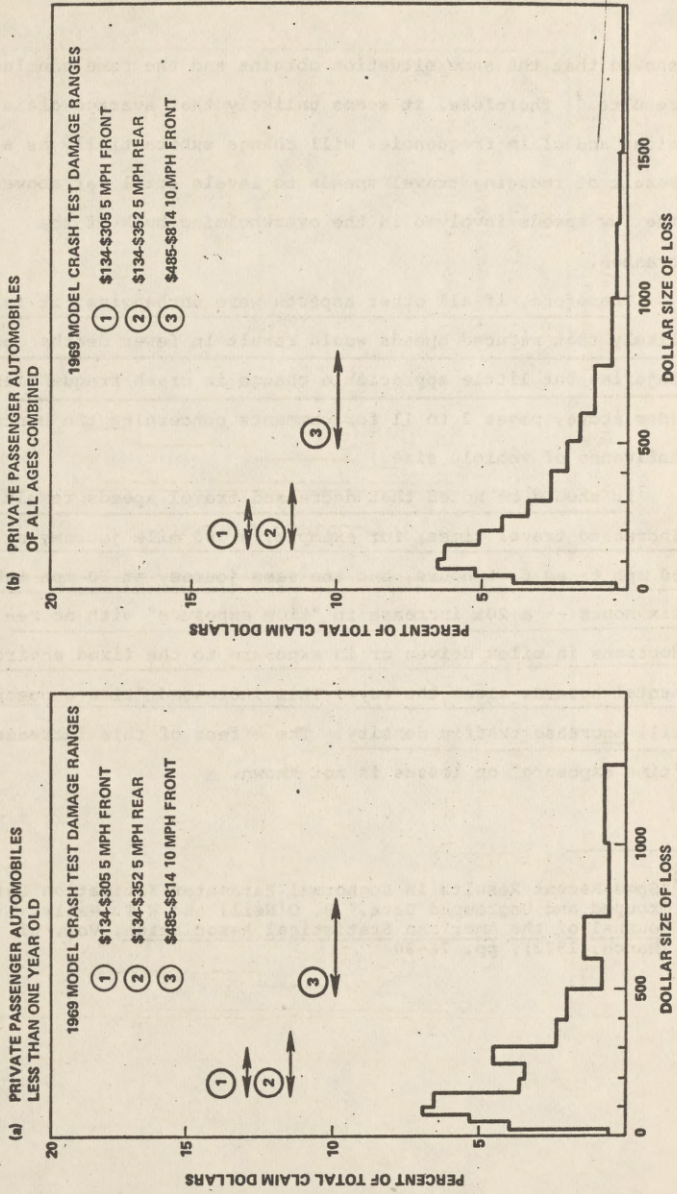
<sup>8</sup>Testimony of William Haddon, Jr., M.D., President, Insurance Institute for Highway Safety, Before the Senate Subcommittee on Antitrust and Monopoly, October 6, 1969.

FIGURE 7  
PROPERTY DAMAGE CLAIM CLOSURES



SOURCE: ADAPTED FROM TESTIMONY OF WILLIAM HADDON, JR., M. D., PRESIDENT, INSURANCE INSTITUTE FOR HIGHWAY SAFETY BEFORE THE SENATE SUBCOMMITTEE ON ANTITRUST AND MONOPOLY OCTOBER, 1969

FIGURE 8  
PROPERTY DAMAGE CLAIM CLOSURES



SOURCE: ADAPTED FROM TESTIMONY OF WILLIAM HADDON, JR., M. D., PRESIDENT, INSURANCE INSTITUTE FOR HIGHWAY SAFETY BEFORE THE SENATE SUBCOMMITTEE ON ANTITRUST AND MONOPOLY OCTOBER, 1969

showed that the same situation obtains and the same conclusion results.<sup>9</sup> Therefore, it seems unlikely that average claim sizes and claim frequencies will change substantially as a result of reducing travel speeds to levels still far above the low speeds involved in the overwhelming bulk of the crashes.

Therefore, if all other aspects were unchanging, it is likely that reduced speeds would result in fewer deaths and injuries but little appreciable change in crash frequencies.

(See above, pages 2 to 11 for comments concerning the contrary influence of vehicle size.)

It should be noted that decreased travel speeds result in increased travel times; for example, a 300 mile journey at 60 mph takes five hours, but the same journey at 50 mph takes six hours -- a 20% increase in "time exposure" with no reductions in miles driven or in exposure to the fixed environmental hazards along the way. This increased "time exposure" will increase traffic density. The effect of this increase in "time exposure" on losses is not known.

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<sup>9</sup>"Some Recent Results in Lognormal Parameter Estimation Using Grouped and Ungrouped Data." B. O'Neill and W.T. Wells, Journal of the American Statistical Association, Vol. 67 (March, 1972), pp. 76-80.

ASPECTS THAT MAY CHANGEPassenger Car Mileage

Passenger car mileage may decrease. It is likely that substantial decreases in vehicle mileage would result in some reduction in highway losses. It is not possible, at this time, however, to scientifically predict what, if any, these reductions would be. It is not known, for example, what sorts of mileage (e.g., relatively low risk freeway or toll road travel versus other travel) would be reduced. Also there is no simple relationship between vehicle mileage and highway losses; for example, for a number of years the annual death rate per 100,000,000 miles has been declining despite dramatic increases in vehicle mileage.

It is important to note, however, the reduced energy supplies do not automatically imply that there will be reductions in the miles traveled. For example, a Department of Transportation Study<sup>10</sup> found that a 3,990 pound car would use approximately nine gallons of gasoline traveling 100 miles at 70 mph whereas a 2,050 pound vehicle would use less than four gallons of gasoline traveling the same distance at 50 mph -- a 60% decrease in fuel consumption. In other words, a smaller car traveling at lower speeds could consume substantially smaller quantities of gasoline than a larger car at higher

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<sup>10</sup>"The Effect of Speed on Automobile Gasoline Consumption Rates, U.S. Department of Transportation, Federal Highway Administration, October, 1973.

speeds on the same journey. In addition, as noted previously, the fuel saving involved in the case of the smaller car might, in turn, be used in such a way as to result in an increase in overall miles driven.

#### Vehicle Occupancy Rates

Vehicle occupancy rates may increase. Increased occupancy rates would mean that the chances of injury in a given crash are increased. In addition, it is probable that increased occupancy rates in small cars adversely affect the braking and handling characteristics to a much greater extent than increased occupancy rates in larger cars. Therefore, the combination of small cars and higher occupancy rates could tend to increase crash frequencies.

#### Different Speed Limits for Trucks and Cars

As an energy saving measure, President Nixon has proposed a 50 mph speed limit for automobiles and a 55 mph limit for trucks, trailers and buses. If implemented, this could increase highway losses, because of the substantial gap between the braking abilities of passenger cars and larger vehicles. In a 1971 paper<sup>11</sup> Dr. William Haddon, Jr., pointed out that the "actual braking performance of heavy trucks is commonly two to three times worse than that of passenger cars." Even when cars

<sup>11</sup>"Reducing Truck and Bus Losses -- Neglected Countermeasures," Haddon, W., Jr. Delivered January 13, 1971 at the Automotive Engineering Congress, Society of Automotive Engineers, Detroit, Michigan.

were commonly traveling faster than trucks -- a situation tending to reduce the results and implications of the difference in braking abilities -- the inadequate braking performance of trucks has been responsible for serious losses. For example, Haddon cited a November 1969 crash (documented by the National Transportation Safety Board) on the New Jersey Turnpike in which "one after another huge truck was unable to stop in a short enough distance and plowed into the vehicles and people ahead." If trucks are traveling faster than passenger cars the already major discrepancies in braking performance become even more pronounced and under these circumstances, more crashes of this tragic type can be expected. (Status Report, Vol. 6, No. 1, January 18, 1971)

#### Motorcycle and Bicycle Usage

Motorcycle and bicycle usage may increase. This would probably accelerate the present trend of sharply increasing losses being generated by these modes of transport.

#### Supplemental Gasoline Containers

The use of supplemental gasoline containers may increase. This could lead to increases in vehicle and other fire losses. Several serious incidents of this nature have already been reported by the press.

#### Age of Vehicle Population

The average age of the vehicle population may begin to increase if people disproportionately retain older vehicles. The

effect of this is uncertain, although many of the older vehicles would not be designed and constructed to satisfy the more recent federal motor vehicle safety standards.

#### Restraint Usage

Restraint usage in 1974 model vehicles may increase. Very informal preliminary indications are that the interlock and inertial reel harnesses are being worn at a somewhat higher rate than restraint systems in earlier model year cars.

#### Street Lighting

Street lighting and external building lights may be reduced. This could lead to an increase in nighttime urban crashes, especially those involving pedestrians and bicycles.

#### The Economy

Gross National Product and Industrial Index of Production may go down in 1974. There is a strong correlation between total annual motor vehicle deaths and the Industrial Index of Production, and, separately, the GNP. The reasons for this correlation are not understood but it appears to be independent of most of the vehicle-related measures that contribute to both of the economy indicators. A slowdown or recession in the economy in 1974 may, therefore, be accompanied by a reduction in motor vehicle deaths. Whether this correlation would hold under highly unusual circumstances is, however, unknown.

MEASURING CHANGES

Several possible indicators could be used to measure some of the effects of the energy shortage on highway losses. However, at the present time, no single indicator or data source would be able to provide a definitive measure of the effects of the energy shortage.

It is important to note that simple before-and-after comparisons can be very misleading. For example, Campbell and Ross in a 1968 study<sup>12</sup> of the widely publicized "Connecticut Crackdown on Speeding" showed after a very detailed analysis that there was "no unequivocal proof" that fatality reductions were due to the crackdown. Nonetheless, the governor of the state had earlier claimed success on the basis of simple before-and-after comparison. Ideally, results obtained after a change in presumably relevant factors should be compared with a series of corresponding results from several prior years, lest mistakes in judgment result from reliance for analysis on short term fluctuations.

A further complicating factor in assessing the effects of the energy shortage is the possibility of the so-called "Hawthorne effect." It has been known since the classic studies of workers in the Hawthorne plant of Western Electric

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<sup>12</sup>"The Connecticut Crackdown on Speeding: Time Series Data in Quasi-Experimental Analysis," Campbell, D.C. and Ross, H.L., Law and Society Review, 3, 33-53, August 1968.

in the 1920's that people often change their behavior or claimed behavior in the desired direction as a result of being studied rather than as a result of the changed conditions.

Such changes, however, are usually only temporary. Therefore, caution is necessary before interpreting any early changes in losses, if such occur, as being indicative of real trends due to the energy shortage.

#### Holiday Death Totals

The number of motor vehicle deaths occurring in any holiday period are usually available very soon after the holiday.

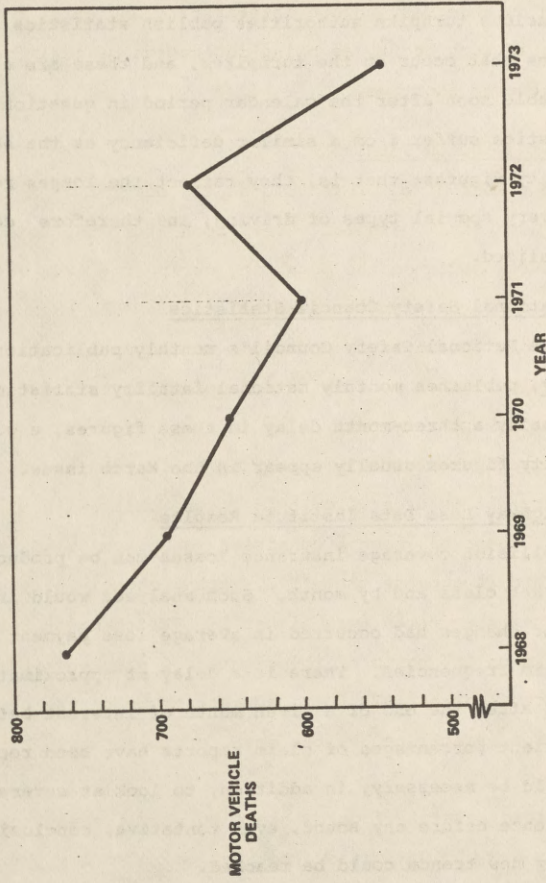
Reductions in deaths occurring during the 1973 Thanksgiving holiday compared with the same holiday in 1972 have already been widely quoted in the press as an indication that the energy shortage has already begun to reduce motor vehicle deaths. Such conclusions are premature.

Figure 9 shows the Thanksgiving holiday deaths for the last six years; it is clear from this figure that, with the exception of 1972, there has been a consistent downward trend in these deaths and it appears that 1972, rather than 1973, was the unusual year since the deaths were higher in 1972 than would have been predicted on the basis of the figures of previous years. Furthermore, the reported 1973 total appears to be on the declining trend line established by the data for the prior years, except for 1972.

Holiday fatality figures are also complicated because holidays are, by definition, not typical of other periods. It

IIHS DECEMBER, 1973

FIGURE 9  
THANKSGIVING HOLIDAY MOTOR VEHICLE DEATHS\*



\* IMMEDIATE DEATHS, THOSE OCCURRING BY MIDNIGHT ON THE LAST DAY OF THE HOLIDAY PERIOD.

is probable, therefore, that their amounts and types of driving are also not typical. This is likely to be particularly true for the Thanksgiving holiday.

#### Turnpike Statistics

Various turnpike authorities publish statistics concerning crashes that occur on the turnpikes, and these are usually available soon after the calendar period in question. These statistics suffer from a similar deficiency as the holiday fatality figures; that is, they reflect the losses resulting from very special types of driving, and therefore cannot be generalized.

#### National Safety Council Statistics

The National Safety Council's monthly publication, Traffic Safety, publishes monthly national fatality statistics. There is usually a three-month delay in these figures, e.g., December fatality figures usually appear in the March issue.

#### Highway Loss Data Institute Results

Collision coverage insurance losses can be produced by HLDI by market class and by month. Such analyses would indicate whether changes had occurred in average loss payment amounts or claim frequencies. There is a delay of approximately two months after the end of a given month of interest before sufficient percentages of claim reports have been received. It would be necessary, in addition, to look at several months experience before any sound, even tentative, conclusions concerning new trends could be reached.

SUMMARY

The extent and duration of the energy shortage is not yet predictable, although there is apparently no doubt that there will continue to be at least short term shortages of gasoline and truck fuels. In view of uncertain short term prospects and the many aspects of the situation that are changing, it is not possible at this time to predict with any confidence what the short term effects, even as to direction, will be on each of the various categories of highway losses.

In the longer term, even assuming some relaxation of the fuel shortages, it seems probable that the trend toward smaller cars which began before the present energy shortage will continue. Despite the considerable research evidence that improved occupant protection measures become even more important as cars get smaller, the bulk of the proposed federal motor vehicle safety standards in this area were postponed last year by the National Highway Traffic Safety Administration (Status Report Vol. 7, No. 22, November 27, 1972). Without dramatic decreases in vehicle fragility and increases in restraint usage or other improved occupant protection measures (especially including airbags), the trend towards smaller cars will result in long term increases in both damaged people and property.

## EXCERPT

**STATUS REPORT**

Report  
by  
Highway Safety

**INSURANCE INSTITUTE for HIGHWAY SAFETY**

Watergate Office Building  
2600 Virginia Avenue, N. W.  
Washington, D. C. 20037

Vol. 5, No. 6

April 2, 1970

CRASH-RELATED LOSS DATA GIVEN TO SENATE

Large, heavy cars are substantially safer for occupants in crashes than small, light ones -- and for all sizes, federally-required equipment in newer models is paying off to the benefit of crash occupants.

That was the import of data presented at recent hearings of the Senate Antitrust and Monopoly Subcommittee by Dr. B. J. Campbell, director of the University of North Carolina Highway Safety Research Center. Campbell's findings were reinforced by a Department of Transportation report to the subcommittee on preliminary results of a DOT-funded study by New York State of injuries associated with crashes of 31 makes of cars covering the model years 1965-1968. The study began in mid-1968.

Dr. Campbell said data such as his would help potential car buyers to "assess the risk and weigh it with the alternative values" before purchasing a particular vehicle.

"It should be of more than passing interest to drivers to know that in the event of a crash their chance of a serious or fatal injury is associated with the car they are driving," Campbell observed, "and that depending on their choice, the 'odds' could be reduced 50 per cent or increased 100 per cent."

Using an injury severity index of 100 as the average frequency of driver injury for all cars in his study, which was based on crash reports for 270,697 cars, Campbell found there were 13 models with driver injury rates lower than average:

<u>Year</u>	<u>Make</u>	<u>Index</u>	<u>Sample Size</u>
1960	Standard Ford	84	1813
1962	Big Pontiac	60	318
1962	Standard Oldsmobile	52	569
1964	Standard Chevrolet	88	2961
1966	Big Oldsmobile	<50	102
1966	Standard Oldsmobile	51	207
1966	Standard Chevrolet	83	1355

The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies and the National Association of Independent Insurers, which represent companies writing most of the nation's automobile insurance.

-2-

<u>Year</u>	<u>Make</u>	<u>Index</u>	<u>Sample Size</u>
1967	Big Buick	<50	135
1967	Small Oldsmobile	54	237
1968	Big Pontiac	<50	115
1968	Standard Pontiac	<50	188
1968	Standard Chevrolet	76	789
1968	Chevelle	77	664

Thirteen cars with a higher than average injury index were:

<u>Year</u>	<u>Make</u>	<u>Index</u>	<u>Sample Size</u>
1960	Corvair	191	365
1961	Corvair	147	505
1962	Corvair	197	181
1962	Chevy II	152	543
1962	Fairlane	131	585
1963	Fairlane	139	782
1964	Valiant	154	345
1964	Small Dodge	158	200
1965	Chevy II	189	179
1965	Valiant	167	217
1966	Valiant	160	143
combined	VW Type II (Bus)	219	195
combined	VW Type I (Regular)	141	4286

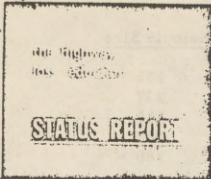
Campbell said that for all cars covered in his study, "Later model cars (which have more crash safety features) show up better than earlier model cars." Significantly lower levels of serious injury, he indicated, were associated with the newer models than the old. He also stressed that his data were not directed at questions of crash frequency by make, model, age or size of the studied cars.

The New York State findings submitted by DOT to the subcommittee showed that "the light cars generally experienced a higher percentage of severe accidents (non-collision or rollover) and generally had a higher percentage of drivers under 30," according to the federal agency. DOT said it wanted further analyses to determine "the degree to which the higher percentage occurrence of severe injuries in light cars was due to their weight and . . . due to a driving population which gets into more severe accidents."

The report included this table from the New York State study:

<u>Crash-Involved Size Group</u>	<u>Average Weight, lbs.</u>	<u>Per Cent Occurrence of Serious or Fatal Injury</u>
1. Domestic "luxury" regular	4,800	3.1
2. Domestic "intermediate"	3,700	4.0
3. Domestic "economy" regular	3,400	5.2
4. Domestic compact	2,800	6.4
5. Foreign compact	1,900	9.6
Combined	-	5.5

EXCERPT



## INSURANCE INSTITUTE for Highway Safety

Vol. 8, No. 22

November 27, 1973

### Small Car Hazards Reported

The current increase in small car sales "will lead to a greater number of injuries," including fatal and crippling injuries, a University of Michigan research group has warned.

The group based its conclusion on an extensive analysis of crash injury data from national and local crash investigation files. Its analysis showed, it said, that the following rule should be applied to new cars in crashes:

"... once involved in an accident, the chance of injury in this car increases at the rate of about 2.5 per cent for each decrease of 100 pounds in vehicle weight."

The analysis also indicated that smaller cars are involved in single vehicle crashes at a significantly higher rate than larger cars, and in other crashes at about the same rate as larger cars.

The warning and the rule were contained in a report (HIT Lab Reports, Vol. 3, No. 9) written by James O'Day, D. Henry Golomb and Peter Cooley of the University's Highway Safety Research Institute (HSRI).

Their conclusions underscore similar, earlier research findings, including those reported by the New York State Department of Motor Vehicles and the Insurance Institute for Highway Safety, that occupants of compact and smaller size cars are substantially more vulnerable to death and serious injury in crashes than occupants of sedan and larger size cars. (See *Status Report*, Vol. 6, No. 21, Nov. 16, 1971.)

The HSRI report stressed that the higher levels of crash injury associated with small cars is not a result of more occupants in such cars. In fact, it found that the "average number of occupants in *small cars* is slightly lower than in *large cars*," rather than higher.

#### Inside

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| ● Breath Tester Standard Ignores Expert Advice ... Page 3             | ● Grate Hazards Cited By Center For Auto Safety ... Page 6 |
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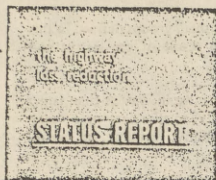
The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers

It also found "little difference in the use of restraints by the *large* and *small* groups defined in this study. One must conclude that the increase in injuries is most probably a result of car weight and protection offered by interior size, rather than from these other factors."

As to the widespread notion that smaller cars are involved less frequently in crashes than larger ones, the HSRI report noted that in single vehicle crashes covered by the study, smaller cars were "over-represented," possibly "because of their drivers; or perhaps because of stability, handling, or control characteristics; or because of a combination of the two."

The report also suggested that an auto population solely of smaller cars, when compared with an identical size auto population solely of larger cars, would produce both more crashes, and more injuries per crash. There would be "about 50 more injury *accidents* per 10,000 reported accidents" for the smaller car population and the number of injuries would be "somewhat higher," it found.

For its definition of "small cars," the study used a conservative grouping that included "essentially all mini-cars, nearly all of the compacts, and the lighter half of the intermediates. The *large car* group includes the remaining half of the intermediates, and all full-size vehicles." The data were based on crash files primarily for the 1968-1970 period. "Later accident data will be available in the near future," the report said. "With such data the relative safety of the American 2000-2500 pound vehicle can be more accurately assessed."



## INSURANCE INSTITUTE for Highway Safety

Vol. 6, No. 21

November 16, 1971

### Tests Show Small-Car Dangers

Occupants of so-called "economy cars" face dangers in crashes that are "far greater" than those faced by occupants of larger-size cars, according to filmed results of an exploratory crash test program made public today by the Insurance Institute for Highway Safety.

Dr. William Haddon, Jr., president of the Institute, said in a statement accompanying release of the test results that the discrepancy between crash protection afforded by smaller cars and that offered by larger, family sedan-type cars is a "tragically widespread" kind of intervehicular incompatibility that "should be of particular concern to society because of the sizable human damage it is producing."

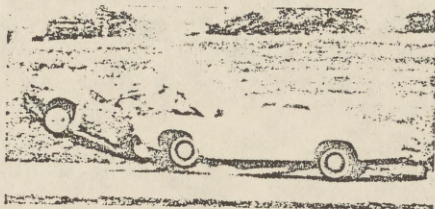
The test series consisted of six two-car head-on crashes, with each car traveling at speeds between 40 and 50 miles per hour — speeds much lower than those allowed and often driven on newer highways today. Each test involved the crash of a small car with a sedan-size car. Seven of the cars were 1972 models; the other five were 1971's, four of which were not instrumented with dummies. Both cars in each crash test were made or marketed by the same company — General Motors, Ford Motor Company, Chrysler or American Motors.

Haddon termed the tests "particularly timely" since "domestic manufacturers, in an effort to compete with the sales of small imported cars, have vigorously entered the field of small car production and marketing . . ."

(cont'd. on page 2)

#### Head-On

1972 Ford Pinto (left) and 1972 Ford Galaxie at actual moment of impact in a medium-speed crash test. More photos, crash result highlights inside.



The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers and several individual insurance companies.

"The public is being heavily exposed to advertising information extolling the purchase-price and operating economies claimed for these cars, but it is not being given vital information about their distinct safety hazards," Haddon noted. He cited estimates that small car sales will represent 50 per cent of all new car sales before 1980.

"As the share of these small cars in the total vehicle population continues to expand on U.S. highways, they can be expected to become involved in a commensurately increasing share of collisions, including collisions with such larger cars as the traditional family sedan," he said.

The relative lack of crashworthiness of smaller cars in their collisions with larger ones must be viewed, Haddon said, in the context of a "modern day highway environment that mixes large, intermediate and small vehicles at speeds comparable to and often considerably higher than those in the 40 to 50 mile per hour tests" conducted by the Institute.

(cont'd. on page 3)

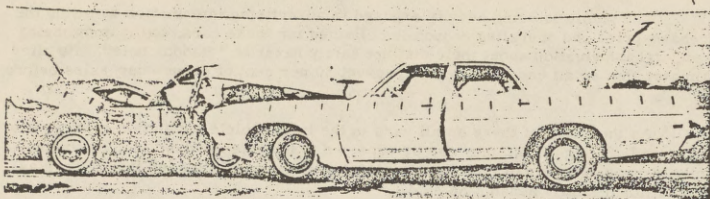
*In Brief*

### *How The Tests Were Run*

Each test in the medium-speed crash test program involved a head-on crash of a small-size car and a sedan-size car, each traveling between 40 and 50 miles per hour, with a speed differential never larger than four miles per hour in any given test. The test cars were "driven" into each other by test drivers using remote control drive units in nearby "command" cars. In the initial tests — of 1971 Chevrolets and 1971 Fords — the cars were not equipped with dummies; anthropometric dummies were installed in the outboard front seating position of each of the cars in all other tests. Following are the models tested, their weights and their speeds:

SMALL CARS			SEDAN CARS		
MODEL	WEIGHT LBS.*	MPH	MODEL	WEIGHT LBS.*	MPH
1971 Chevrolet Vega	2,300	43.0	→ 1971 Chevrolet Impala	4,107	43.2
1971 Ford Pinto	2,108	46.5	← 1971 Ford Galaxie	3,973	43.0
1972 Chevrolet Vega	2,326	47.2	← 1972 Chevrolet Impala	4,362	48.4
1972 Ford Pinto	2,390	46.5	← 1972 Ford Galaxie	4,188	44.7
1971 Dodge Colt	2,368	47.4	← 1972 Plymouth Fury	4,208	49.4
1972 American Gremlin	2,885	43.4	← 1972 American Ambassador	3,914	44.7

\*All weights are curb weights as advertised, with the weight of remote control drive units (between 90 and 100 pounds each) added for all cars, and the weight of dummies (215 pounds each) also added for all 1972 cars and the 1971 Dodge Colt.



SMALLER CAR  
1972 Ford Pinto

LARGER CAR  
1972 Ford Galaxie

#### OCCUPANT PACKAGE

Roof caved in; right door latch broke, door opened; windshield tore loose, fell into passenger compartment onto dummy; rear window popped out.

#### COMPARTMENT INTERIOR

Lap and shoulder belts broke; non-adjustable head restraint would not position fully behind dummy's head.

#### TEST DUMMY

Head impacted roof, sun visor, windshield, dashboard; lacerations on forehead, right side of face, nose, left hand, right thigh; glass splinters in face; legs pinned under dashboard.

Abrasions on right forearm; lacerations on right palm.

#### OTHER

Battery smashed; fuel tank ruptured, leaked.

Battery smashed.

(cont'd. from page 2)

The problem would not be solved simply by removing larger vehicles from the highway, he said. The "vulnerability of small-car passenger compartments and the amounts of exposure to hazard they permit their occupants . . . cannot be explained away by the size and weight of larger vehicles. We believe, rather, that the relative lack of crashworthiness of small cars is substantially inherent in their design — in the amounts and kinds of spaces and structures they use to shield, or not to shield, their occupants from injury and death," he said.

(cont'd. on page 4)



SMALLER CAR  
1972 American Gremlin

LARGER CAR  
1972 American Ambassador

#### COMPARTMENT INTERIOR

Shoulder belt latch broke; nonadjustable head restraint would not fully position behind dummy's head.

Shoulder belt anchor tore out of roof; adjustable head restraint would not fully position behind dummy's head.

#### TEST DUMMY

Head impacted roof, sun visor, windshield, dashboard; face severely lacerated; legs pinned under dashboard.

Head impacted sun visor, dashboard.

#### OTHER

Battery smashed.

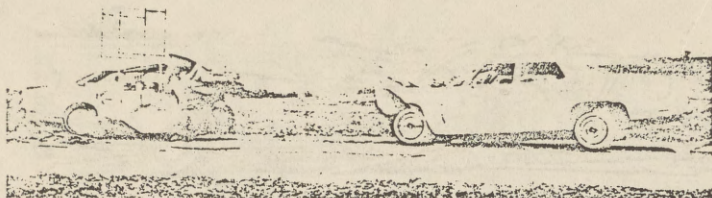
Battery smashed.

(cont'd. from page 3)

Haddon noted that "smaller cars increasingly common on today's highways are characterized by sizes, weights and designs that are much less adequate even than currently produced larger cars in terms of:

- "Provision of sufficient energy-absorbing structure, external to the passenger compartment itself, to guarantee maximum attenuation of crash forces by means of adequately planned compression or crushing.
- "Maintenance of the integrity of the passenger compartment itself — the package within which the human cargo is located.
- "Protection of the passenger compartment from intrusion by outside objects, such as hoods.
- "Provision of sufficient space within the passenger compartment to keep belted occupants from impacting damaging structure — roof pillars and beams, for example — and also to allow enough spatial depth for padding and other passive restraints."

(cont'd. on page 5)



SMALLER CAR  
1972 Chevrolet Vega

LARGER CAR  
1972 Chevrolet Impala

#### COMPARTMENT INTERIOR

Nonadjustable head restraint would not position fully behind dummy's head.

Adjustable head restraint would not position fully behind dummy's head.

#### TEST DUMMY

Head impacted windshield, dashboard; dummy beheaded; legs pinned under dashboard; glass splinters in face; chin, forehead lacerated; arm cut; battery acid on shirt.

Head impacted dashboard, heel of right hand lacerated.

#### OTHER

Battery smashed, acid entered passenger compartment.

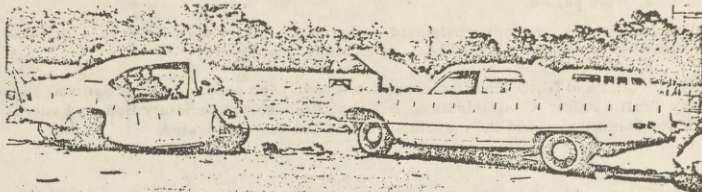
Battery smashed.

The Institute's test results are consistent with findings in a New York state study, carried out in 1968 for the U.S. Department of Transportation, that compared injuries from crashes of 420,000 various-size automobiles. The study found a "strong association" between "the weight of a car and the per cent of accidents in which there was a fatality or serious injury in that type of car."

A preliminary report to the Department of Transportation on the New York state study included the following table:

<u>Crash-Involved Size Group</u>	<u>Average Weight</u>	<u>Per Cent Occurrence of Serious or Fatal Injury</u>
1. Domestic "luxury" regular	4,800	3.1
2. Domestic "intermediate"	3,700	4.0
3. Domestic "economy" regular	3,400	5.2
4. Domestic compact	2,800	6.4
5. Foreign compact	1,900	9.6
Combined	-	5.5

(cont'd. on page 6)



SMALLER CAR  
1971 Dodge Colt

LARGER CAR  
1972 Plymouth Fury

#### OCCUPANT PACKAGE

Windshield partially tore loose, draped into passenger compartment.

#### COMPARTMENT INTERIOR

Lap belt buckle unlatched; shoulder harness strap broke; adjustable head restraint would not position fully behind dummy's head, flew out of car in crash.

Shoulder harness strap broke; adjustable head restraint would not position fully behind dummy's head, pushed into "down" position in crash.

#### TEST DUMMY

Head impacted sun visor, header, windshield; head lacerated; glass splinters in face; legs jammed under dashboard, broke at hip joint.

Head impacted dashboard.

#### OTHER

Battery smashed.

Battery smashed.

(cont'd. from page 5)

In describing the Institute's medium-speed crash test series Haddon pointed out that, although "the tests were not meant to show whether or not a car's safety components were in compliance with the (federal motor vehicle safety) standards," they "may well indicate where standards require toughening."

The film and Haddon's statement identified, for example, head restraints that could not be positioned fully behind the test dummy's head, one head restraint that flew out of the car in a crash, shoulder and lap belts and latches that broke or otherwise failed, three windshields that fell into the passenger compartments of

(cont'd. on page 7)

(cont'd. from page 6)

their small cars, and one windshield — that of the 1971 Chevrolet Vega — that was penetrated by the car's hood "like a horizontal meat cleaver."

Data and films from the crash tests have been supplied to the National Highway Traffic Safety Administration, National Transportation Safety Board, Federal Trade Commission and the manufacturers of the vehicles tested.

\* \* \*

### 'Meat Axe Effect'

#### Test Shows Need For Rule

The National Highway Traffic Safety Administration will find in the outcome of the crash test of the 1971 Chevrolet Vega and Chevrolet Impala strong support for moving forward with its plan, now in the Advance Notice of Proposed Rule-making stage (Docket No. 69-17), to set a standard prohibiting penetration of automobile windshields by their hoods in crashes.

As in this crash, hood penetration of windshields in guillotine fashion exacerbated in small cars, which give the front-seat occupants less room between their heads and the windshield. A person riding in the crash-tested 1971 Vega would have been impacted transversely by the hood edge.

Since November 1969, the NHTSA has kept its advance notice docket open. Both foreign and domestic auto manufacturers' submissions to the docket indicate that the auto industry supports adoption of such a standard. The next step — issuance by NHTSA of a Notice of Proposed Rulemaking — has not yet been taken.

Meanwhile, the agency's accident investigation division has submitted a report of an analysis of 716 serious, real-world crashes looked at by NHTSA multi-disciplinary accident investigation teams. In 467 of these, damage was sustained by the fronts of vehicles.



From this sample the investigation division discovered that in 33 of the crashes the rear edge of the hood penetrated the windshield — 4.6 per cent of all the crashes and 7.1 per cent of those with frontal damage. It also found that 44 of the 46 occupants in those cars involved with hood penetration of the windshield were front-seat occupants — that is, those most exposed to the lethal meat-axe effect.

### *Test Report Available*

Single copies of the report detailing the Institute's medium-speed crash test program may be obtained by writing, "Medium Speed Tests," Communications Department, Insurance Institute for Highway Safety, Watergate 600, Washington, D. C. 20037.

Inquiries as to availability and cost of the crash test film should be addressed to "Test Films," Insurance Institute for Highway Safety, at the above address.

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EXCERPT

STATUS REPORT

## INSURANCE INSTITUTE for Highway Safety

Vol. 8, No. 18

October 5, 1973

### 1973 Models: Claims Less Frequent, Higher

A new report released by the Highway Loss Data Institute indicates that in general 1973 model cars are producing fewer collision claims but higher payments per claim than their 1972 model counterparts.

"These results," the report said, "are consistent with evidence suggesting that certain 1973 model bumpers, while reducing the amount of damage resulting from very low speed crashes to amounts less than the collision coverage deductible, also possibly either maintain or augment the cost to repair the damage produced by crashes at somewhat more rapid speeds."

The 1973 model cars were the first to be covered by the National Highway Traffic Safety Administration's standard 215 which requires only that bumpers prevent damage to safety related components and only in very low speed crashes — five miles per hour front-into-barrier and 2.5 miles per hour rear-into-barrier.

The report, which draws on insurance collision coverage data from six companies, compared series of 1973 models with 1972 models as to their claim frequency per 100 insured vehicle years, their average loss payments per claim, and their average loss payments per insured vehicle year. Both the 1973 and 1972 model year data were obtained from the same period — September 1972 through July 1973 — from the same six insurance companies.

"In six of the seven market classes with results for both 1973 and 1972 models, the claim frequencies were lower for the 1973 models than the corresponding 1972 models. The percentage reductions ranged from -4% for sub compact and expensive specialty models to -9% for the full size and luxury models. Specialty models showed no change in results between the two model years.

#### Inside

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The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers and several individual insurance companies.

"In six of the seven market classes, the average loss payment per claim was higher for the 1973 models than for the corresponding 1972 models. The percentage increases ranged from 1% for the compact models to 7% for the full size models. In the luxury models there was a -2% decrease in the average loss payment.

"The average loss payments per insured vehicle year were lower for the 1973 models than the corresponding 1972 models in five of the seven market classes. The percentage decreases ranged from -2% for sub compact and full size models to -12% for luxury models. Expensive specialty models showed no change between the two model years, and specialty models showed a 3% increase.

"Among the seven market classes with results from both model years, the average loss payment per insured vehicle for the 1973 models ranged from \$40 for the full size models to \$75 for the specialty models. The corresponding 1972 model results ranged from \$41 for the full size models to \$73 for the specialty models. The claim frequencies for the 1973 models ranged from 8.4 for the full size models to 14.4 for the specialty models. The corresponding 1972 model results ranged from 9.2 for the full size models to 14.4 for the specialty models. The average loss payments for the 1973 models ranged from \$468 for the compacts to \$526 for the expensive specialty models. The corresponding 1972 model results ranged from \$449 for the full size models to \$528 for the luxury models."

The summary results presented in the tables on pages three and four have been standardized to adjust for different mixes of operator ages and deductibles among the vehicle series. The full report includes extensively-detailed information for combinations of operator age groups and deductibles.

*(Cont'd on page 4)*

The report also provides the following results for 20 popular 1972 and 1973 model year series — five each in the four most common market classes of sub compact, compact, intermediate and full size. (The greater exposure of any particular series, the more confidence may be placed in the results shown for it.) Results for "All" vehicle series (listed below and on page four) include the 20 series (listed below), plus all other private passenger vehicle series from the 13 makes.

## Status Report

AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR, CLAIM FREQUENCIES AND  
AVERAGE LOSS PAYMENT BY MAKE AND SERIES — 1973 AND 1972 MODELS — COLLISION COVERAGES

MARKET CLASS, MAKE/SERIES	TOTAL EXPOSURE (INSURED VEHICLE YEARS)		AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR			CLAIM FREQUENCY PER 100 INSURED VEHICLE YEARS			AVERAGE LOSS PAYMENT PER CLAIM		
	1972	1973	1972	1973	% Change	1972	1973	% Change	1972	1973	% Change
			\$50	\$49	- 2	10.7	10.1	- 6	\$465	\$484	+ 4
All Series	777,911	288,890									
<b>Sub Compact</b>											
Ford Pinto S.W.	7,679	8,254	55	48	-13	11.8	10.9	- 8	463	441	- 5
Volkswagen Beetle	29,485	12,098	49	49	0	10.9	11.2	+ 3	445	439	- 1
Ford Pinto	35,058	9,002	65	60	- 8	13.8	12.3	-11	473	485	+ 3
AMC Gremlin	8,520	4,107	71	65	- 8	13.3	12.6	- 5	535	518	- 3
Chevrolet Vega	26,056	10,677	53	67	+26	11.6	12.6	+ 9	454	533	+17
<b>Compact</b>											
Dodge Dart Swinger	12,214	3,541	41	30	-27	9.2	7.8	-15	445	382	-14
Plymouth Valiant Duster	19,261	6,748	60	45	-25	12.1	10.7	-12	493	424	-14
Chevrolet Nova	30,701	11,626	43	46	+ 7	9.9	8.9	-10	434	515	+19
AMC Hornet	4,024	2,665	55	53	- 4	12.1	10.7	-12	451	498	+10
Ford Maverick-2 Dr.	22,069	5,217	50	61	+22	10.3	12.5	+21	485	488	+ 1
<b>Intermediate</b>											
Buick Century-2 Dr.*	10,780	5,566	46	39	-15	10.2	8.4	-18	453	468	+ 3
Chevrolet Monte Carlo	17,595	8,750	57	47	-18	11.7	10.7	- 9	490	442	-10
Chevrolet Chevelle-2 Dr.	21,394	5,583	54	47	-13	10.4	9.5	- 9	516	499	- 3
Ford Torino-2 Dr.	20,364	5,783	57	51	-11	12.5	11.8	- 6	457	434	- 5
Oldsmobile Cutlass-2 Dr.	20,180	9,140	55	55	0	11.4	9.9	-13	483	557	+15
<b>Full Size</b>											
Pontiac Catalina	17,823	6,229	34	33	- 3	7.5	7.4	- 1	450	449	0
Chevrolet Caprice	13,713	6,282	35	34	- 3	8.0	7.4	- 8	432	458	+ 6
Chevrolet Impala	43,918	8,221	36	36	0	8.4	8.4	0	427	430	+ 1
Oldsmobile Delta 88	19,128	6,604	35	41	+17	8.5	7.5	-12	412	548	+33
Ford LTD	31,565	11,976	47	51	+ 9	10.0	9.4	- 6	466	544	+17

\*Corresponds to 1972 Skyhawk-2 door models.

October 5, 1973

The following chart graphically shows the comparative results by market class:

LOSS PAYMENT SUMMARY BY MARKET CLASS - 1973 AND 1972 MODELS - COLLISION COVERAGES

MARKET CLASS	CLAIM FREQUENCY PER 100 INSURED VEHICLE YEARS			AVERAGE LOSS PAYMENT PER CLAIM			AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR		
	1972	1973	% Change	1972	1973	% Change	1972	1973	% Change
All Series	10.7	10.1	- 6	\$465	\$484	+ 4	\$ 50	\$ 49	- 2
Sub Compact	12.1	11.6	- 4	469	480	+ 2	57	56	- 2
Compact	10.5	9.9	- 6	465	468	+ 1	49	46	- 6
Intermediate	10.8	10.0	- 7	465	478	+ 3	50	48	- 4
Full Size	9.2	8.4	- 9	449	480	+ 7	41	40	- 2
Luxury	11.1	10.1	- 9	528	517	- 2	59	52	-12
Specialty	14.4	14.4	0	510	522	+ 2	73	75	+ 3
Expensive Specialty	12.9	12.4	- 4	502	526	+ 5	65	65	0
Sports	15.1 (insufficient data)			850 (insufficient data)			128 (insufficient data)		

The HLDI report is the organization's second. (See *Status Report*, Vol. 8, No. 12, June 15, 1973.) It was based on more than 100,000 collision coverage claims and on collision coverages involving more than 280,000 insured vehicle years of exposure for passenger cars of the 1973 model year and more than 770,000 vehicle years of exposure for those of the 1972 model year. In the future, HLDI plans to publish loss results during the first year of availability of the involved vehicles, to include additional makes, and to base the results on larger volumes of data from additional companies.

HLDI (pronounced "hildy") was formed in December, 1972, as an outgrowth of a special data project initiated earlier by the Insurance Institute for Highway Safety. (See *Status Report*, Vol. 8, No. 1, Jan. 3, 1973.) It is a nonprofit organization that gathers, processes and provides the public with insurance data concerned with human and economic losses resulting from highway crashes.

The membership of the board represents the eight insurance companies - Allstate Insurance Co., The Hartford Insurance Group, The Home Insurance Co., Kemper Insurance Group, Liberty Mutual Insurance Co., Nationwide Mutual Insurance Co., State Farm Mutual Automobile Insurance Co. and The Travelers Insurance Co. - that are supplying data to HLDI. The financial support for HLDI is provided by the eight companies and by the Insurance Institute for Highway Safety, which in turn is supported by most automobile insurers either directly or through their trade associations. The new report is based on collision coverages - that is, insurance that covers damage to the insured vehicle itself - supplied by six of the companies: Allstate, The Home, Kemper, Liberty, Nationwide and State Farm.

The full report, entitled *Automobile Insurance Losses, Collision Coverages, Initial Results for 1973 Models Compared with 1972 Models*, (Research Report R73-1, September 1973) is available in single copies by writing to "R73-1," Highway Loss Data Institute, Watergate 600, Washington, D.C. 20037. It includes detailed discussion of the data analysis employed in the study.

*Status Report*

October 5, 1973

## INSURANCE INSTITUTE for Highway Safety

Vol. 8, No. 17

September 10, 1973

### Widespread Unrepaired Damage Found

Each year nearly one out of every five recent-model cars is left with unrepaired scars of a run-of-the-mill crash, a new study released by the Insurance Institute for Highway Safety has revealed.

Analyzing the results of primarily suburban parking lot surveys in nine major U.S. metropolitan areas, the study concludes that the commonness of unrepaired damage to recent-year automobiles "strongly" indicates that minor damage producing crashes are "not rare events that only deviant drivers experience, but in fact are very common events experienced by a majority of the vehicles and their drivers."

Since such unrepaired damage "may result from crashes that are not reported to the public agencies or insurers, any evaluation of the real-world effectiveness of vehicle designs intended to reduce low speed crash damage *must* take into account this type of damage," in addition to damage that is reported and repaired following the crash, the study stresses.

Results of the study were presented by Brian O'Neill, an IIHS research staff member, at a National Highway Traffic Safety Administration public hearing in Washington, D.C. At the hearing NHTSA officials heard comments from industry and the public on NHTSA's effort to develop a standard that would eliminate damage to automobiles in low speed crashes. Such a standard is required by the Motor Vehicle Information and Cost Savings Act of 1972.

The surveys underlying the study were conducted in parking lots in the metropolitan areas of Atlanta, Chicago, Cleveland, Dallas, Denver, Detroit, Minneapolis-St. Paul, St. Louis and Washington, D.C. Vehicles of the 1968 through 1972 model years — vehicles, that is, manufactured prior to the effective date of federal safety standards affecting bumper designs — were examined, and their unrepaired damage appraised. Damage judged not to be the result of a collision was excluded.

Highlights of the study included the following:

- **Damage by Market Class:** The estimated percentage of cars that each year sustained crash damage that was left unrepaired was highest among smaller cars and lowest among luxury and expensive specialty cars. By market class, the figures were: subcompacts, 30 per cent; compacts, 23 per cent; intermediate, 18 per cent; full size, 18 per cent; luxury, 13 per cent; specialty and sports, 20 per cent; expensive specialty, 13 per cent; and station wagons, 21 per cent.

"The extent to which they [the variations between classes] may reflect differences in crash frequencies, variations in the designed-in delicateness of the vehicles themselves, and/or variations in owner maintenance practices is unknown," the study says.

- **Damage by Age:** The older the car, the higher were both the frequency and dollar values of its unrepaired damage. The observed percentages of cars with unrepaired crash damage were 15 per cent for 1972 models, 28 per cent for 1971 models, 42 per cent for 1970 models, 52 per cent for 1969 models and 58 per cent for 1968 models. The average estimated cost per damaged car to fix the damage was \$74 for 1972 models, \$75 for 1971 models, \$91 for 1970 models, \$105 for 1969 models, and \$115 for 1968 models.

(Cont'd on page 8)

### *Corner Damage Predominates*

An analysis of unrepaired damage survey data from two major metropolitan areas has found a high involvement of automobile corners and rear ends in such damage — high enough to “strongly suggest that, despite the claims of auto manufacturers and others to the contrary, these areas of the car are very vulnerable to damage and also very frequently involved in damage producing crashes.”

(For details of such claims, see *Status Report*, Vol. 7, No. 3, Feb. 14, 1972, “Data Dispute GM, DOT Back Bumper Claims,” and Vol. 8, No. 2, Jan. 15, 1973, “GM Claims Little Damage Around the Corner.”)

The analysis, discussed in the study released by IIHS, uses data from the surveys in the Washington, D.C. and Atlanta areas. It finds that in both front and rear end unrepaired damage, corner damage substantially outweighed front and rear center damage, and that rear end damage of all kinds outweighed front end damage of all kinds.

“These results show that the rear ends of the automobiles were, in general, more frequently damaged than the front ends. Between 34 per cent and 41 per cent of the damaged locations were on front ends compared with between 43 per cent and 49 per cent on rear ends. Comparing front centers and rear centers alone, the frequency of rear end damage was again higher than front end damage; front center damage ranged from 10 per cent to 14 per cent and rear center damage from 17 per cent to 20 per cent.

“Corner damage was very common for all model years; between 52 per cent and 54 per cent of the damage locations were on the corners of the vehicles.”

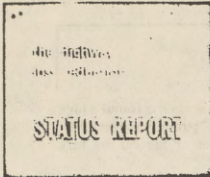
A breakdown of the results by model year follows:

#### DISTRIBUTION OF UNREPAIRED CRASH DAMAGE BY LOCATION OF DAMAGE ON THE VEHICLE BY MODEL YEAR — ATLANTA AND WASHINGTON, D.C. METROPOLITAN AREAS June — October 1972

LOCATION OF DAMAGE	MODEL YEAR				
	1968	1969	1970	1971	1972
Front, Center	11%	11%	12%	10%	14%
Corner, Front	24%	23%	24%	24%	27%
ALL FRONT	35%	34%	36%	34%	41%
Rear, Center	18%	18%	20%	18%	17%
Corner, Rear	28%	29%	29%	28%	26%
ALL REAR	46%	47%	49%	46%	43%
ALL CORNERS	54%	52%	53%	52%	53%
ALL SIDES	19%	19%	14%	18%	16%

*Status Report*

September 10, 1973



## INSURANCE INSTITUTE for Highway Safety

Vol. 5, No. 22

December 15, 1970

### NHSB IGNORES ITS OWN STUDY IN SPEED CONTROL PLAN

The National Highway Safety Bureau has proposed that speed limits be built into highway vehicles — but at a ceiling higher than the bureau's own experts earlier recommended as an absolute maximum.

Starting Oct. 1, 1972, the bureau's three-part proposal would:

- 1) Set 95 miles per hour as the speed ceiling that must be built into all new vehicles — cars, trucks, buses, multi-purpose vehicles and motorcycles;
- 2) Set 85 miles per hour as the highest speed that could be shown on a vehicle's speedometer;
- 3) Require that as a vehicle entered the 81-85 mile per hour speed range its horn would sound and warning lights flash until the speed dropped below that point.

In announcing the proposal, the bureau suggested that building speed limits into cars could mean less expensive vehicles, because it "may result in substantial reduction in the cost of manufacturing vehicle power plants."

The bureau cited in its announcement a Cornell Aeronautical Research Laboratory study showing that at speeds over 80 miles per hour, 509 of 2,948 "unbelted exposed persons," or 17.3 per cent, were killed. However, it offered no evidence to suggest how its proposed masking of speedometers above 85 miles per hour, or the sounding of horns and blinking of warning lights in the 81-85 miles per hour range, would reduce crash losses.

(Cont'd from page 6)

These declines in damage values and frequencies for newer cars "should not be misinterpreted as an indication that the more recent model year automobiles are less costly to repair than earlier model year automobiles," the study warns. It says the decline is because "there will be an increasing percentage of older cars involved in more than one crash in which the damage is subsequently unrepaired; therefore, the amount and hence the dollar value of unrepaired crash damage as well as its frequency should increase with the age of the vehicle."

● **Damage by Metropolitan Area:** The estimated percentages of cars that each year sustained crash damage left unrepaired ranged from a low of 10 per cent in the Cleveland and St. Louis areas to a high of 40 per cent in the Washington, D.C. area, with the following between: Dallas, 14 per cent; Minneapolis-St. Paul, 15 per cent; Detroit, 18 per cent; Atlanta, 23 per cent; Chicago, 24 per cent; and Denver, 36 per cent. "The precise reasons for these wide variations between metropolitan areas are not known," the study notes, adding that a similar survey conducted in 1970 by Ford Motor Co. "also indicated wide variations between metropolitan areas in the percentages of vehicles observed with unrepaired crash damage."

The study says that "subsequent reports in this series will compare the real world frequencies and amounts of unrepaired crash damage to 1973 and later model year vehicles with the experience of earlier models." Such data, it notes, "provide one of the important measures for evaluating the extent to which vehicle manufacturers are reducing the designed-in susceptibility of their vehicles to damage in low speed (0 to 20 miles per hour) collisions."

The study's authors were James Casassa, II, of the research department of State Farm Mutual Automobile Insurance Co., Brian O'Neill, of the IIHS research staff, and Irwin Miller and Sandra Stone, of Arthur D. Little, Inc. Surveys on which the study is based were conducted by State Farm, IIHS, Arthur D. Little, Inc., and the Independent Automotive Damage Appraisers Association, during June-October, 1972.

Copies of the study are available by writing "Unrepaired Damage," Insurance Institute for Highway Safety, Watergate 600, Washington, D.C. 20037.

A forerunner of the new proposal was the bureau's 1967 "advance notice" of intent to publish a speed control standard for new vehicles. Response to the notice was almost entirely from auto manufacturers and muscle car proponents — and was almost entirely in opposition. This contrasted with the results of a CBS television poll, conducted the same year, showing that 52 per cent of 1,081 surveyed drivers would favor built-in speed-limiting devices.

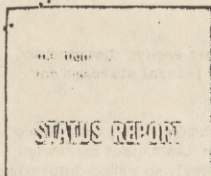
Evidence that 95 miles per hour would be excessively high for such limits was contained in a little-publicized NHTSB report released in early 1969 and entitled, "Maximum Safe Speed for Motor Vehicles." (Copies are available on request, for \$1, by writing the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.) That report, not referred to in the new bureau proposal, pointed out that:

- No maximum posted speed limit in the United States exceeds 80 miles per hour. (Two states, it reports, have no posted limits.)
- Based on an examination of crash data in one surveyed state, "fatalities might be reduced in the order of 13 per cent if the speed maximum were set as low as 60 miles per hour," and with a 70 mile per hour maximum, an "eight per cent (fatalities cut) might be achievable" — but for crash speeds above 80 miles per hour, available data are "inadequate for the purpose of quantifying hazard-casualty-speed relationships." (The report noted that an eight per cent reduction in fatalities for the nation because of a 70 mile per hour speed maximum would mean 4,000 lives per year.)
- Even for a "fully restrained occupant who has been packaged to provide large areal distribution and controlled acceleration rates of the crash forces up to a peak of about 40 G's" — such as with an effective air bag system — the "maximum crash speed that can be tolerated without exceeding the human injury threshold . . . (is) about 85 miles per hour." (G forces experienced by an occupant in a 95 mile per hour crash would be 25 per cent greater than in an otherwise identical crash at 85 miles per hour.)
- The "majority of foreign cars" — but "only two domestic models" — surveyed in the report had maximum speed capabilities lower than 90 miles per hour.

A major contributor to the 1969 report was Col. John Stapp, a bureau official renowned for his research in high-speed crash survivability.

A vehicle speed performance ceiling above 90 miles per hour, Stapp said in the report, would be "a gratuitous promotional extravagance and a total waste for the law abiding consumer." Stapp urged — and the report concluded by recommending — that the bureau adopt a standards-making strategy "to control (speed) at 90 miles per hour as a beginning and work down as public acceptance grows and more evidence is gathered to show the additional payoff at lower maximum speeds."

Comments on the proposal (docket 1-19) may be sent to: Docket Section, National Highway Safety Bureau, Room 4223, 400 Seventh Street, S.W., Washington, D. C. 20591. Closing date for comments is Feb. 26, 1971.



## INSURANCE INSTITUTE for Highway Safety

Vol. 6, No. 1

January 18, 1971

### SAFETY COUNTERMEASURES URGED FOR TRUCKS, BUSES

The former director of the National Highway Safety Bureau has urged attention to five countermeasures which, he said, have been neglected in efforts to reduce highway losses due to truck and bus crashes.

In a paper delivered this month in Detroit, Michigan, to the Automotive Engineering Congress of the Society of Automotive Engineers, Dr. William Haddon, Jr., president of the Insurance Institute for Highway Safety, said he had picked the five as "especially noteworthy" because "each (is) comprised of a situation contributing prominently to such losses and, correspondingly, of the analogous countermeasures . . . (and) because each is being either largely ignored or, at best, inadequately handled both in the private and public sectors."

1. Heavy trucks and buses are incapable of braking to a stop in the same distance as automobiles, he said, even though it is "a logical, necessary performance requirement for all vehicles" that they have the same braking ability. "Actual braking performance of heavy trucks is commonly two to three times worse than that of passenger cars," Haddon said. He cited a "multivehicular holocaust" Nov. 29, 1969, on the New Jersey Turnpike

in which "one after another huge truck was unable to stop in a short enough distance and plowed into the vehicles and people ahead." There is no adequate federal standard for truck braking rates, he noted.

2. ". . . For trucks, most roads in effect have no guardrails," he said. Since this is "a situation not likely to improve rapidly, I believe that we can expect increased numbers of . . . disasters in which so-called guardrails fail properly to retain impacting vehicles, especially trucks."

3. Another situation which, he said, "pleads for energetic correction" is the failure to design trucks so that "hazardous cargoes do not spill in crashes at the maximum operating speeds for which the vehicles involved are designed." Haddon said absence of such crash design contributes "greatly to highway losses, and this, too, I believe, will continue for some time to worsen."

4. Concerning buses, he said that "the failure to prevent most, if not virtually all injuries of any severity to crashing bus passengers must be attributed to inadequacies in . . . design," particularly since bus dimensions, their maximum speeds and the available technology and hardware could be applied to proper packaging of bus occupants.

5. A California study, he said, has indicated that "alcohol use by drivers of lighter trucks appears to be a very major problem . . . . Strong countermeasure development and implementation and evaluation directed at this light truck operation part of the overall alcohol and highway safety problem, each supported by thoroughly competent research, are long overdue, and nowhere substantially present."

protecting a limited number of "safety related" items from damage during low speed crashes. In its October, 1971, "program plan," the agency said it expected to extend "the scope of the no-damage requirements to any subsystem of the vehicle that (when damaged) may adversely affect the vehicle's safe operation." The new revision gives no schedule for issuing property damage standards mandated by the "Motor Vehicle Information and Cost Savings Act." (See *Status Report*, Vol. 7, No. 19, Oct. 16, 1972.) However, a safety administration official told *Status Report* that the agency "is working on that now."

The most noteworthy safety standard postponements include:

- A four year delay (Sept. 1, 1976, to Sept. 1, 1980) in the effective date of a new standard that would be aimed at protection of pedestrians and cyclists when they are hit by a motor vehicle. The planned rule is directed at improving vehicle exteriors in order to "reduce injury levels to pedestrians and cyclists during initial vehicle impacts and if possible . . . control his trajectory to reduce the severity of secondary impacts," NHTSA said in its October, 1971, "program plan."
- A delay of almost two years (Jan. 1, 1973, to Sept. 1, 1974) on an amendment to the consumer information regulation on vehicle stopping distance that would give consumers information on wet pavement stopping performance.
- A delay of almost two years (Sept. 1, 1972, to May 1, 1974) on a new consumer information regulation that would "provide the consumer with qualitative information to assist him in making an informed choice when purchasing tires." (See *Status Report*, Vol. 6, No. 18, Oct. 4, 1971.)

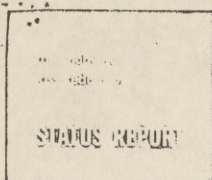
In the National Traffic and Motor Vehicle Safety Act of 1966, the Congress mandated that NHTSA issue a uniform quality grading system for motor vehicle tires. The law called for that standard to be issued before 1969.

- A two year delay (Sept. 1, 1973, to Sept. 1, 1975) in a new standard that would seek "to deter and limit excessive speeds" by limiting the maximum attainable speed of a vehicle and by using visible and audible warnings as a vehicle approaches that speed. (See *Status Report*, Vol. 5, No. 22, Dec. 15, 1970.)
- A two year delay (Sept. 1, 1975, to Sept. 1, 1977) in "major revisions and additions to the present requirements for defrosting, defogging, wiping and washing systems" (FMVSS 103 and 104).
- A two year delay (Sept. 1, 1975, to Sept. 1, 1977) in a new standard to require "installation of spray protectors where existing vehicle structure permits spray produced by the vehicle's wheels to impair the visibility of following traffic."
- A one year delay (Sept. 1, 1973, to Sept. 1, 1974) in applying indirect visibility standards (mirrors) to trucks, buses, multipurpose passenger vehicles and motorcycles.
- A one year delay (Sept. 1, 1976, to Sept. 1, 1977) is also anticipated for improvements in indirect visibility (mirrors) on passenger cars (FMVSS 111).
- A one year delay (Sept. 1, 1973, to Sept. 1, 1974) in the effective date of a new standard to "specify requirements for passenger seats in buses." The new rule is supposed to carry requirements for "strengthened seats and seat anchorages, seat back protection and increased seat back height."
- A one year delay (Sept. 1, 1973, to Sept. 1, 1974) in an amendment that would combine "seat and head restraint performance requirements and upgrade(s) these performance requirements."
- A one year delay (Aug. 15, 1973, to Sept. 1, 1974) for passenger cars and a four year delay (Sept. 1, 1977) for forward control vehicles (such as vans) on an amendment to upgrade protection for drivers against impacts with steering assemblies.

Projected amendments to other existing standards that have been postponed include: Occupant Protection in Interior Impact (FMVSS 201), Child Restraint Systems (FMVSS 213), Windshield Mounting (FMVSS 212), Steering Control Rearward Displacement (FMVSS 204), Motor Vehicle Brake Fluid (FMVSS 116), Brake Hoses and Brake Hose Assemblies (FMVSS 106), Retreaded Tires (for vehicles other than passenger cars) (FMVSS 117), New Pneumatic Tires for Passenger Cars (FMVSS 109) and New Lighting Systems (FMVSS 108).

Other projected or postponed new standards for which planned effective dates have been postponed include: Windshield Zone Intrusion, (for vehicles other than passenger cars), Gaseous Fuel System Equipment for Motor Vehicles, Motorcycle Rider Protection Systems, Motorcycle Headgear, Tires, Rims and Wheels (for vehicles other than passenger cars), Direct Fields of View and Passenger Car Tire Traction.

EXCERPT



## INSURANCE INSTITUTE for Highway Safety

Vol. 7, No. 22

November 27, 1972

### NHTSA Plans Extensive Vehicle Rule Delays

In an "update" of its "Program Plan for Motor Vehicle Safety Standards," the National Highway Traffic Safety Administration has quietly postponed projected effective dates for more than 25 new safety standards, amendments to existing safety standards and regulations by a combined total of more than 30 years.

The agency eased a revised schedule of its projected rulemaking activity into a public docket file with no official signature, official letter of transmittal or annotation as to where the document originated. Although the file is open to public inspection, it is seldom reviewed by other than motor vehicle industry representatives.

Virtually the only major rule to escape the widespread postponements is NHTSA's passive restraint rule. That rule is currently under court review because of auto maker dissatisfaction with its requirements. (See *Status Report*, Vol. 7, No. 5, March 13, 1972.)

NHTSA issued its first "program plan" in August, 1970. A revised plan was issued two months later. A third revision was published and circulated in October, 1971. The October, 1971, version of NHTSA's projected rulemaking activity said that the publication is intended as a "guideline and working document." It said that the schedules in the plan "represent the best estimates" of NHTSA's timetable, and cautions that those plans "are subject to change at any time."

#### Inside

- NHTSA Proposes Auto Makers Supply VIN's . . . Page 3
- NHTSA Conducting 63 Defect Probes, 15 Are Two Years Old . . . Page 4
- Columnist Hits Auto Makers on Safety Belt Comfort . . . Page 10
- New York Court Halts Attempt To Speed Traffic Prosecutions . . . Page 11
- DOT Moves Toward Highway Standards For Federal Agencies . . . Page 11

The current revision in the plan, which reflects across-the-board delays, is dated Nov. 1, 1972. According to an official stamp on the document, it was placed in the public file Nov. 8, 1972.

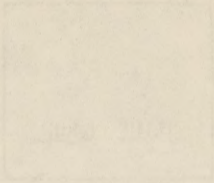
A Nov. 6, 1972, story in *Automotive News*, by Helen Kahn, a veteran Washington and Detroit reporter, had said that the automobile rulemaking "atmosphere in Washington is expected to be considerably more relaxed" during the next four years.

In addition to the blanket postponements, NHTSA has altogether dropped plans to upgrade its exterior protection standard (FMVSS 215). The standard is now aimed at

The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses—deaths, injuries and property damage—resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurers and several individual insurance companies.

INSURANCE TRUST

of the Trust



Trust Agreement

This Trust Agreement is made this 1st day of January, 1925, between the undersigned parties...

The undersigned parties hereby agree to create and maintain a trust for the benefit of the children of the first-named party...

The trust shall be administered by the trustee named herein, who shall have full power to invest the trust property...

The trustee shall have the right to pay to the children of the first-named party such portions of the trust income...

The trust shall terminate upon the death of the last surviving child of the first-named party...

The trustee shall be bound by the provisions of this agreement and shall not be liable for the acts of the trust property...

Witness my hand and seal this 1st day of January, 1925.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1st day of January, 1925.

Notary Public for the State of New York

INDUSTRY ADVISORY COMMITTEE  
REPORT TO THE  
SPECIAL N.A.I.C. TASK FORCE  
ON THE  
ENERGY CRISIS  
AND  
INSURANCE RELATED MATTERS

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"INFLATION - THE OTHER CRISIS"

February 15, 1974

Industry Advisory Committee Report  
to the Special N.A.I.C. Task Force  
on the Energy Crisis and Insurance Related Matters

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"INFLATION - THE OTHER CRISIS"

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APPENDICES

- A. Private Passenger Automobile Liability Insurance Average Paid Claim Costs,  
the Consumer Price Indices and Indices of Automobile Insurance Related  
Components.
- B. Annual Percentage Changes in the Average Paid Claim Costs and the Related  
Data.

## INFLATION - THE OTHER CRISIS

I. Introduction

Since the impact of the energy crisis on automobile insurance first became a matter of concern and speculation by both public officials and consumers, the emphasis has been on the possible reduction in the frequency of accidents and insurance claims resulting from those accidents.

However, frequency of claims is only part of the story behind the losses paid by automobile insurance companies; the average cost of settling the claims is equally important.

In the previous reports on automobile insurance submitted by the Industry Advisory Committee to the Special N.A.I.C. Task Force on the Energy Crisis the then available facts and figures were presented and their significance was analyzed. An "Accelerated Monitoring System" designed to provide, as quickly as possible, measures of the trends in automobile insurance claims attributable to the energy crisis was proposed by the Industry and has been approved by the Task Force and implemented by companies insuring nearly 60% of the private passenger automobiles in the country. The first report will be submitted on April 15, 1974.

In the meantime, the effects of inflation on the costs of all of the things for which automobile insurance pays - hospital rooms, physicians' and surgeons' fees, automobile parts, automobile repair labor rates, etc. - have become more pronounced. The costs of these items are increasing at an accelerating rate and the forecasts of economists make it clear that no reversal of these trends can be expected in the near future.

## II. Summary

This report shows that:

1. In spite of the continued effects of inflation on the costs of those items paid for by automobile insurance, automobile insurance rates have actually declined during the period in which the Economic Stabilization Program has been in effect.
2. Trends in automobile insurance claim costs track closely with trends in related external costs, such as those of medical and surgical treatment and automobile repairs--both parts and labor.
3. Costs--of claims and the things the claim dollar pays for--have been climbing steadily. While the Economic Stabilization Program brought about a temporary slowdown in 1972 in the rates of increase of those costs, they have been rising with increasing acceleration since mid-1972.
4. Economists forecast a continuation of inflation at a high rate with no sign of a slackening during the first half of 1974, which inevitably will force automobile insurance claim costs up at an even greater rate.

The conclusion is that the inevitable increase in claim costs may well offset possible reductions in accident and claim frequency attributable to the energy crisis. As a result, not only may rate reductions not be warranted, but increases in automobile insurance rates may in fact be needed to keep pace with inflationary pressures.

III. Automobile Insurance Rates and the Economic Stabilization Program

It is most significant to note that the cost of automobile insurance has not contributed to the increase in the cost of living since August, 1971 when the Economic Stabilization Program was instituted. Indeed, it is the only item among those being considered in this study that has declined. The following table compares figures for the Consumer Price Index and various component indices as published by the Bureau of Labor Statistics of the U. S. Department of Labor for August, 1971 and December 1973:

CONSUMER PRICE INDEX  
(1967 = 100.0)

	<u>August</u> <u>1971</u>	<u>December</u> <u>1973</u>	<u>Percent</u> <u>Change</u>
Cost of Living (All items)	122.1	138.5	+13.4%
Medical Care	130.0	141.4	+ 8.8
Physicians' Fees	131.2	140.8	+ 7.3
Hospital Rooms (semi-private)	165.8	186.4	+12.4
Auto Repairs and Maintenance	131.0	145.9	+11.4
Auto Insurance Rates	142.6	137.4	- 3.6

The conclusion is inescapable that the cost of automobile insurance as of the end of 1973 had fallen substantially behind the cost of those items paid for by automobile insurance. Although the degree and impact on a state by state and company by company basis can only be determined by appropriate actuarial analyses, the inference is clear that many of the automobile insurance rates currently charged are not, in fact, adequate even before the prospective effects of accelerating inflation are taken into account.

IV. Trends in Automobile Insurance Claim Costs and Related Data

Following are five graphs showing the trends in the average costs of settling Private Passenger Automobile Bodily Injury Liability and Property Damage Liability claims, based upon the experience of companies reporting to Insurance Services Office, from the beginning of 1970 to the most recent date for which such data are available, as compared to non-insurance cost data, as follows:

Bodily Injury Liability Average Claim Costs and

- the Medical Care Index of the Consumer Price Index
- the Physicians' Fees Index of the C.P.I.
- the Hospital Rooms (semi-private) Index of the C.P.I.

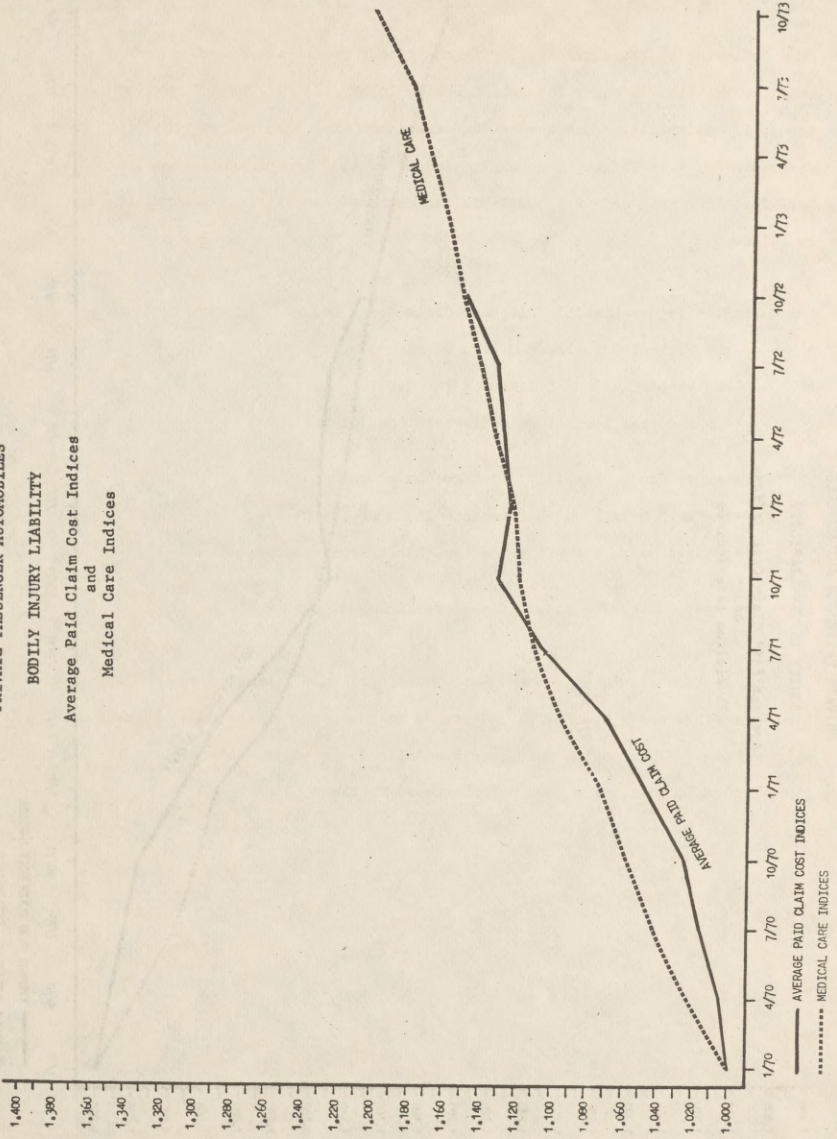
Property Damage Liability Average Claim Costs and

- the Auto Repair and Maintenance Index of the C.P.I.
- indices of Auto Parts Prices and Labor Repair Rates

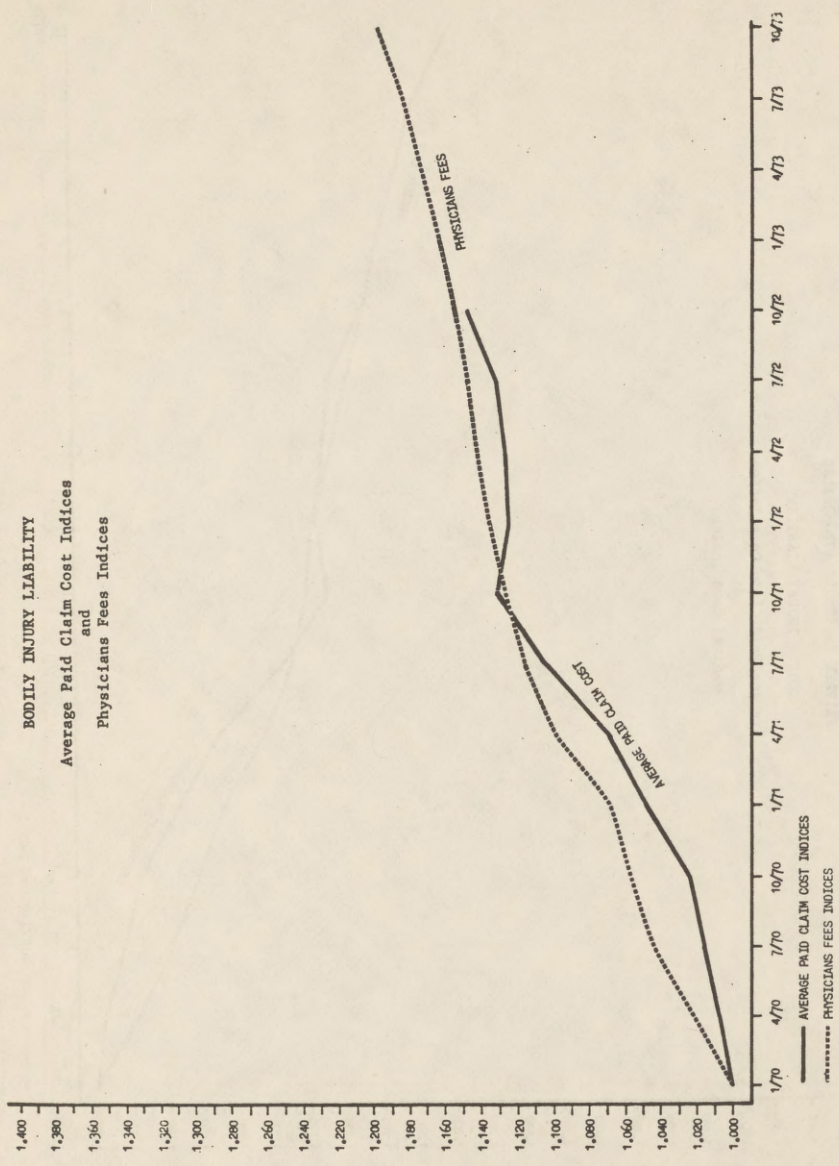
The data underlying these graphs are included in Appendix A.

Examination of these graphs clearly shows that the trends in automobile insurance claim costs track with the trends in the costs of the other items and that the external data, which are available for periods subsequent to the insurance data, indicate a continued increase in claim costs.

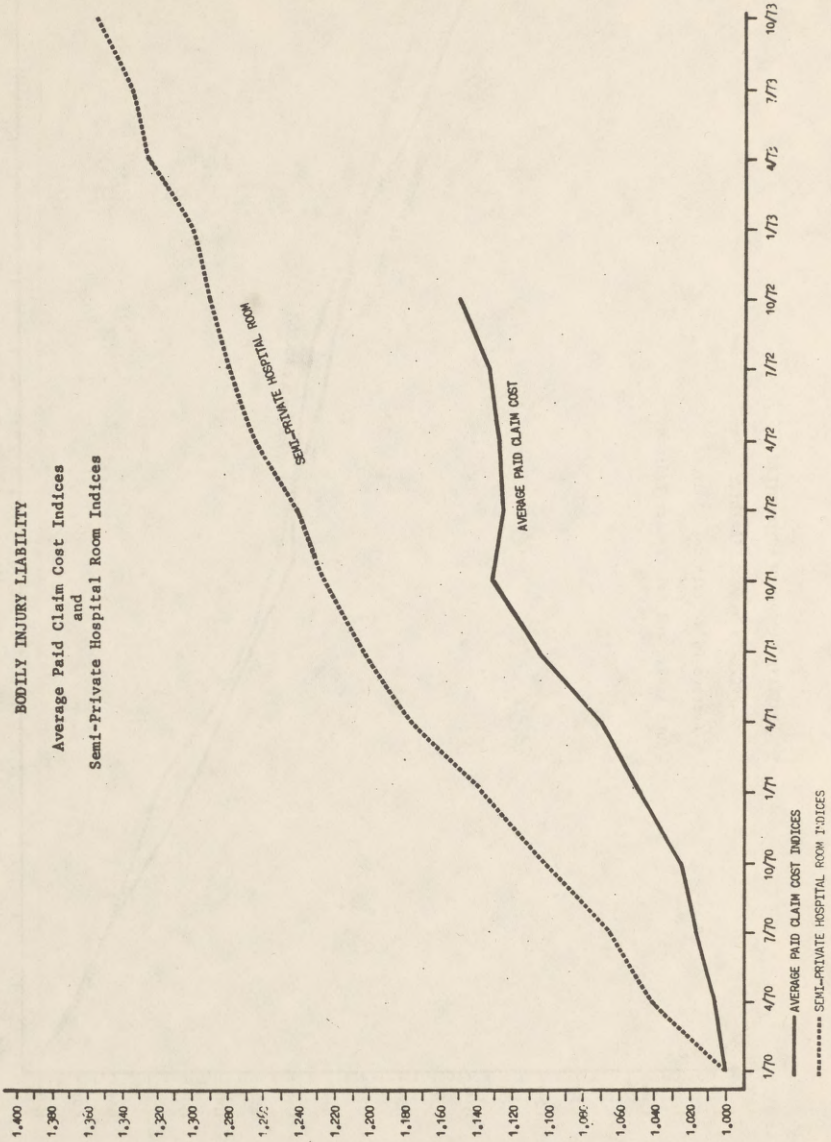
PRIVATE PASSENGER AUTOMOBILES  
 BODILY INJURY LIABILITY  
 Average Paid Claim Cost Indices  
 and  
 Medical Care Indices



PRIVATE PASSENGER AUTOMOBILES  
 BODILY INJURY LIABILITY  
 Average Paid Claim Cost Indices  
 and  
 Physicians Fees Indices

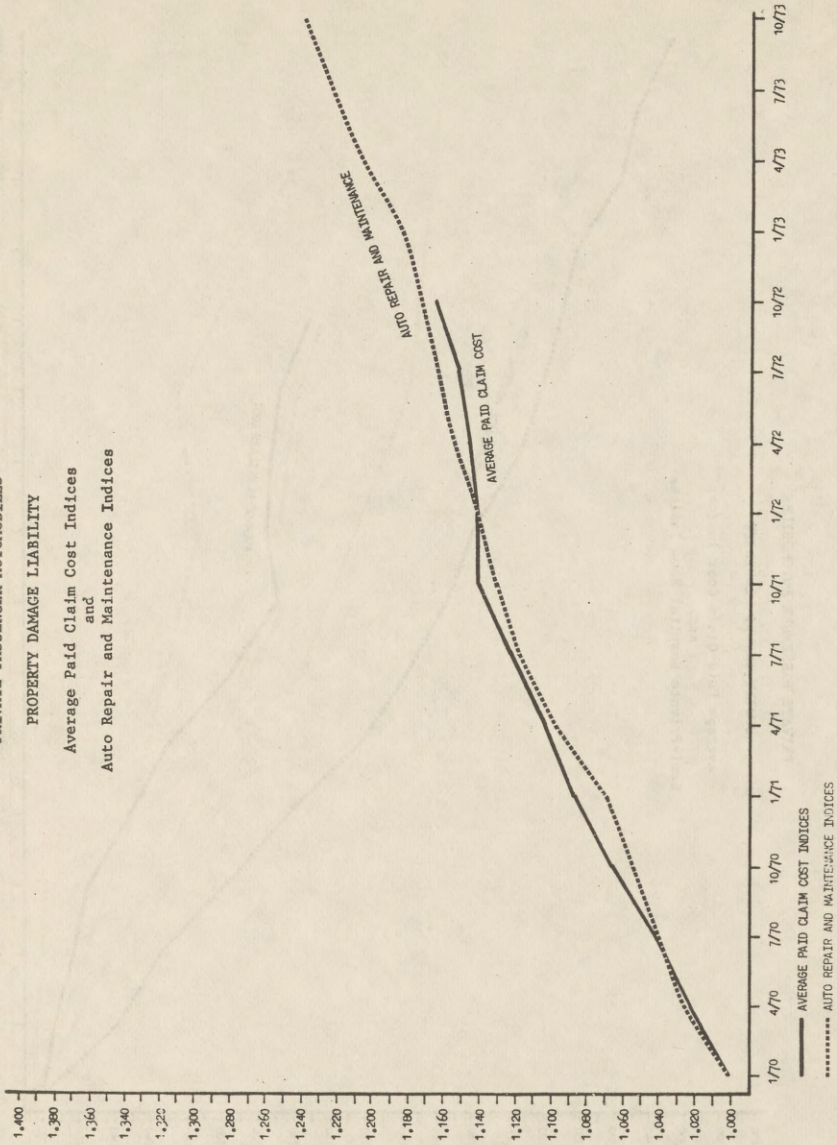


PRIVATE PASSENGER AUTOMOBILES  
 BODILY INJURY LIABILITY  
 Average Paid Claim Cost Indices  
 and  
 Semi-Private Hospital Room Indices

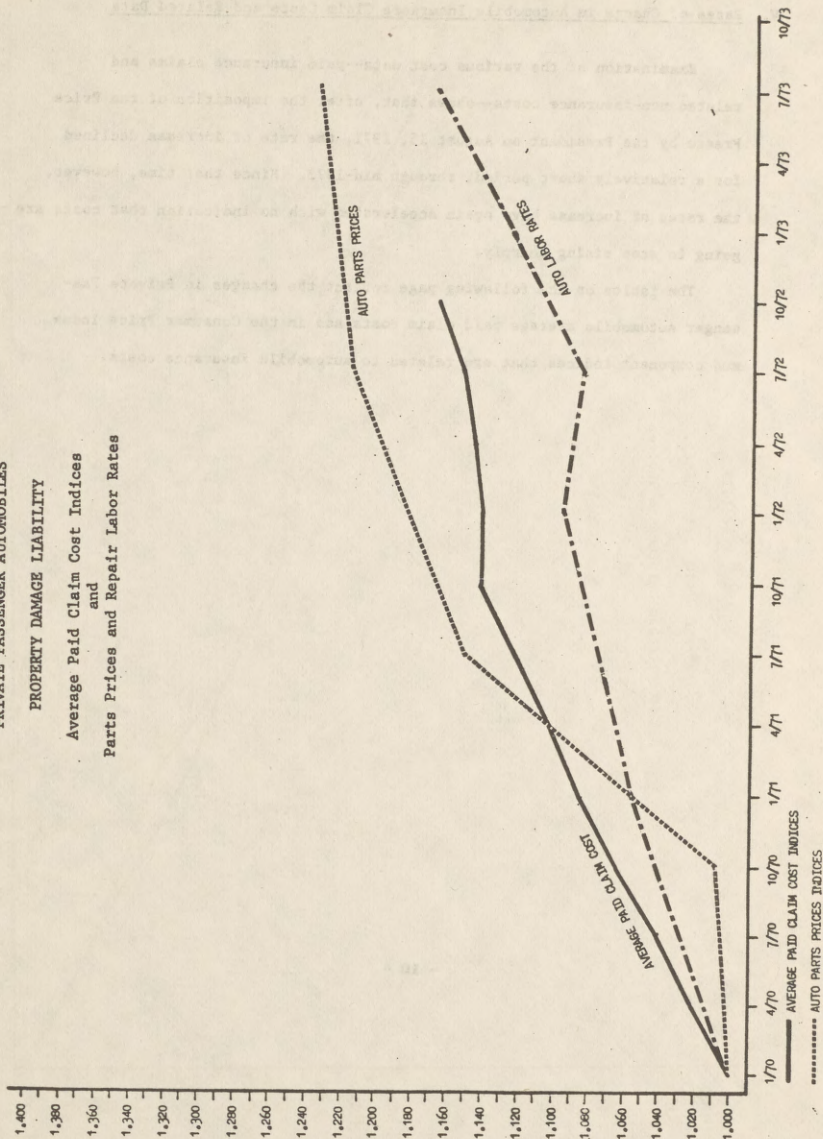


PRIVATE PASSENGER AUTOMOBILES  
PROPERTY DAMAGE LIABILITY

Average Paid Claim Cost Indices  
and  
Auto Repair and Maintenance Indices



PRIVATE PASSENGER AUTOMOBILES  
 PROPERTY DAMAGE LIABILITY  
 Average Paid Claim Cost Indices  
 and  
 Parts Prices and Repair Labor Rates



V. Rates of Change in Automobile Insurance Claim Costs and Related Data

Examination of the various cost data--paid insurance claims and related non-insurance costs--shows that, after the imposition of the Price Freeze by the President on August 15, 1971, the rate of increase declined for a relatively short period, through mid-1972. Since that time, however, the rates of increase have again accelerated with no indication that costs are going to stop rising sharply.

The tables on the following page reflect the changes in Private Passenger Automobile average paid claim costs and in the Consumer Price Index and component indices that are related to automobile insurance costs.

Rates of Change in Private Passenger Automobile  
Average Paid Claim Costs

	2nd quarter 1970 to 2nd quarter 1971	2nd quarter 1971 to 2nd quarter 1972	3rd quarter 1971 to 3rd quarter 1972	4th quarter 1971 to 4th quarter 1972	1st quarter 1972 to 1st quarter 1973
B.I. Liability	+9.3%	-2.2%	+0.9%	+1.3%	+6.2%
P.D. Liability	+8.3	+1.0	+1.3	+2.2	+4.3

Rates of Change in Consumer Price Index  
and in Automobile Insurance Related Components

	July 1970 to July 1971	July 1971 to July 1972	July 1972 to July 1973	December 1972 to December 1973
Consumer Price Index (all items)	+ 4.4%	+3.0%	+5.7%	+8.8%
Medical Care	+ 6.6	+2.6	+3.5	+5.2
Physicians' Fees	+ 6.9	+2.8	+3.1	+4.0
Hospital Rooms (semi-private)	+12.9	+6.1	+3.9	+5.7
Auto Repairs & Maintenance	+7.6	+3.8	+5.4	+6.7

(Refer to Appendix B for the details of the data included in the above tables.)

VI. 1974 Economic Forecasts

For the year ending December, 1973 the Consumer Price Index increased 8.8%, up from an increase of 5.7% for the year ending July, 1973 and an increase of only 3.4% for the year ending December, 1972 (see Appendix B, Sheet 4).

Although the size of the increase in the Consumer Price Index for All Items can be blamed in some measure on the increase in food prices, the prices of those things that affect automobile insurance claim costs have also been increasing at increasing annual rates as was shown in the table above.

What about 1974?

The official Administration forecast is that inflation will continue at a high rate during the first half of the year but that the rise should slow to an annual rate of about 4½% in the second half of the year.

However, other economic experts are less optimistic.

Mr. Herbert Stein, Chairman of the President's Council of Economic Advisors, said recently of the inflation problem, "It's been a hard fight and going to be a hard fight for a long time". He said there were "no instant solutions".

Newsweek Magazine quoted one government economist as stating "Maybe what we have done through controls is to shift inflation from 1973 to 1974 - hard as that is to believe when you consider the size of inflation last year".

Mr. Sydney L. Jones, Assistant Secretary of Commerce for Economic Affairs, is quoted by the Associated Press as saying that Americans will be faced with a sagging economy and a high inflation rate of between 9 and 10 per cent in the months ahead.

There is no disagreement that the current high rate of inflation will continue for the near future, with the Administration hopeful that things will improve during the second half of the year. Meantime the Administration is taking steps to

eliminate controls under the Economic Stabilization Program and is considering steps - including increased governmental spending, a primary cause of inflation - to shore up the economy and forestall an economic recession.

The conclusion: there is every expectation that automobile insurance claim costs will continue to rise at an increasing rate in the near future because of the impact of unrelenting inflationary pressures.

Year	1961	1962	1963	1964	1965	1966
1961	1.00	1.00	1.00	1.00	1.00	1.00
1962	1.00	1.00	1.00	1.00	1.00	1.00
1963	1.00	1.00	1.00	1.00	1.00	1.00
1964	1.00	1.00	1.00	1.00	1.00	1.00
1965	1.00	1.00	1.00	1.00	1.00	1.00
1966	1.00	1.00	1.00	1.00	1.00	1.00
1967	1.00	1.00	1.00	1.00	1.00	1.00
1968	1.00	1.00	1.00	1.00	1.00	1.00
1969	1.00	1.00	1.00	1.00	1.00	1.00
1970	1.00	1.00	1.00	1.00	1.00	1.00
1971	1.00	1.00	1.00	1.00	1.00	1.00
1972	1.00	1.00	1.00	1.00	1.00	1.00
1973	1.00	1.00	1.00	1.00	1.00	1.00
1974	1.00	1.00	1.00	1.00	1.00	1.00
1975	1.00	1.00	1.00	1.00	1.00	1.00
1976	1.00	1.00	1.00	1.00	1.00	1.00
1977	1.00	1.00	1.00	1.00	1.00	1.00
1978	1.00	1.00	1.00	1.00	1.00	1.00
1979	1.00	1.00	1.00	1.00	1.00	1.00
1980	1.00	1.00	1.00	1.00	1.00	1.00

## PRIVATE PASSENGER AUTOMOBILES

## BODILY INJURY LIABILITY

Average Paid Claim Cost Indices  
and  
Medical Care Indices

(1)	(2)	(3)	(4)	(5)	(6)
<u>Year Ended Quarter</u>	<u>Average Date of Payment</u>	<u>Average Paid Claim Cost*</u>	<u>Index to 1/1/70</u>	<u>Medical Care CPI #</u>	<u>CPI Index to 1/1/70</u>
6/30/70	1/1/70	\$1,237	1.000	116.0	1.000
9/30/70	4/1/70	1,246	1.007	118.7	1.023
12/31/70	7/1/70	1,258	1.017	120.9	1.042
3/31/71	10/1/70	1,268	1.025	122.7	1.058
6/30/71	1/1/71	1,298	1.049	124.6	1.074
9/30/71	4/1/71	1,323	1.070	127.2	1.097
12/31/71	7/1/71	1,369	1.107	129.0	1.112
3/31/72	10/1/71	1,400	1.132	130.0	1.121
6/30/72	1/1/72	1,393	1.126	130.3	1.123
9/30/72	4/1/72	1,396	1.129	131.6	1.134
12/31/72	7/1/72	1,401	1.133	132.6	1.143
3/31/73	10/1/72	1,423	1.150	133.5	1.151
	1/1/73			134.7	1.161
	4/1/73			136.0	1.172
	7/1/73			137.2	1.183
	10/1/73			139.5	1.203

\* Based on the experience of companies reporting to Insurance Services Office for \$10,000 Basic Limits for the year ending on the date in column (1).

† Medical Care CPI determined by interpolation of monthly indices, for example:

December 1969 Index = 115.6    January 1970 Index = 116.3  
 1/1/70 Index = (Dec. '69 + Jan. '70) ÷ 2 = 116.0

## PRIVATE PASSENGER AUTOMOBILES

## BODILY INJURY LIABILITY

Average Paid Claim Cost Indices  
and  
Physicians Fees Indices

(1) Year Ended Quarter	(2) Average Date of Payment	(3) Average Paid Claim Cost*	(4) Index to 1/1/70	(5) Physicians Fees CPI #	(6) CPI Index to 1/1/70
6/30/70	1/1/70	\$1,237	1.000	116.6	1.000
9/30/70	4/1/70	1,246	1.007	119.2	1.022
12/31/70	7/1/70	1,258	1.017	121.8	1.045
3/31/71	10/1/70	1,268	1.025	123.5	1.059
6/30/71	1/1/71	1,298	1.049	125.8	1.079
9/30/71	4/1/71	1,323	1.070	128.3	1.100
12/31/71	7/1/71	1,369	1.107	130.1	1.116
3/31/72	10/1/71	1,400	1.132	131.6	1.129
6/30/72	1/1/72	1,393	1.126	132.3	1.135
9/30/72	4/1/72	1,396	1.129	133.1	1.142
12/31/72	7/1/72	1,401	1.133	134.0	1.149
3/31/73	10/1/72	1,423	1.150	134.5	1.154
	1/1/73			135.6	1.163
	4/1/73			136.8	1.173
	7/1/73			138.1	1.184
	10/1/73			139.8	1.199

\* Based upon the experience of companies reporting to Insurance Services Office for \$10,000 Basic Limits for the year ending on the date in column (1).

# Physicians Fees CPI determined by interpolation of monthly indices, for example:

December 1969 Index = 116.3    January 1970 Index = 116.8  
 1/1/70 Index = (Dec. '69 + Jan. '70) ÷ 2 = 116.6

PRIVATE PASSENGER AUTOMOBILES  
BODILY INJURY LIABILITY  
Average Paid Claim Cost Indices  
and  
Semi-Private Hospital Room Indices

(1) Year Ended Quarter	(2) Average Date of Payment	(3) Average Paid Claim Cost*	(4) Index to 1/1/70	(5) Semi-Private Hospital Room CPI #	(6) CPI Index to 1/1/70
6/30/70	1/1/70	\$1,237	1.000	136.0	1.000
9/30/70	4/1/70	1,246	1.007	141.7	1.042
12/31/70	7/1/70	1,258	1.017	144.8	1.065
3/31/71	10/1/70	1,268	1.025	149.9	1.102
6/30/71	1/1/71	1,298	1.049	154.7	1.138
9/30/71	4/1/71	1,323	1.070	160.1	1.177
12/31/71	7/1/71	1,369	1.107	163.7	1.204
3/31/72	10/1/71	1,400	1.132	166.9	1.227
6/30/72	1/1/72	1,393	1.126	168.8	1.241
9/30/72	4/1/72	1,396	1.129	172.5	1.268
12/31/72	7/1/72	1,401	1.133	174.4	1.282
3/31/73	10/1/72	1,423	1.150	175.7	1.292
	1/1/73			177.0	1.301
	4/1/73			180.5	1.327
	7/1/73			181.6	1.335
	10/1/73			184.4	1.356

\* Based upon the experience of companies reporting to Insurance Services Office for \$10,000 Basic Limits for the year ending on the date in Column (1).

# Semi-Private Hospital Room CPI determined by interpolation of monthly indices, for example:

December 1969 Index = 135.0    January 1970 Index = 136.9  
 1/1/70 Index = (Dec. '69 + Jan. '70) ÷ 2 = 136.0

PRIVATE PASSENGER AUTOMOBILES  
PROPERTY DAMAGE LIABILITY  
Average Paid Claim Cost Indices  
and  
Auto Repair and Maintenance Indices

(1) <u>Year Ended Quarter</u>	(2) <u>Average Date of Payment</u>	(3) <u>Average Paid Claim Cost*</u>	(4) <u>Index to 1/1/70</u>	(5) <u>Auto Repair and Maintenance CPI #</u>	(6) <u>CPI Index to 1/1/70</u>
6/30/70	1/1/70	\$268	1.000	116.0	1.000
9/30/70	4/1/70	274	1.022	119.0	1.026
12/31/70	7/1/70	279	1.041	120.8	1.041
3/31/71	10/1/70	285	1.065	122.4	1.055
6/30/71	1/1/71	291	1.086	124.1	1.070
9/30/71	4/1/71	296	1.104	127.5	1.099
12/31/71	7/1/71	301	1.123	129.9	1.120
3/31/72	10/1/71	306	1.142	131.3	1.132
6/30/72	1/1/72	306	1.142	132.5	1.142
9/30/72	4/1/72	307	1.146	134.2	1.157
12/31/72	7/1/72	309	1.153	135.1	1.165
3/31/73	10/1/72	313	1.168	136.4	1.176
	1/1/73			137.6	1.186
	4/1/73			140.4	1.210
	7/1/73			142.3	1.227
	10/1/73			144.1	1.242

\* Based upon the experience of companies reporting to Insurance Services Office for the year ending on the date in Column (1).

† Auto Repair & Maintenance CPI determined by interpolation of monthly indices, for example:

December 1969 Index = 115.2    January 1970 Index = 116.8  
 1/1/70 Index = (Dec. '69 + Jan. '70) ÷ 2 = 116.0

PRIVATE PASSENGER AUTOMOBILES  
PROPERTY DAMAGE LIABILITY  
Average Paid Claim Cost Indices  
and  
Automobile Parts Prices

(1)	(2)	(3)	(4)	(5)
Year Ended Quarter	Average Date of Payment	Average Paid Claim Cost*	Index to 1/1/70	Parts Prices # Index to 1/1/70
6/30/70	1/1/70	\$268	1.000	1.000
9/30/70	4/1/70	274	1.022	
12/31/70	7/1/70	279	1.041	1.010
3/31/71	10/1/70	285	1.065	
6/30/71	1/1/71	291	1.086	
9/30/71	4/1/71	296	1.104	
12/31/71	7/1/71	301	1.123	1.153
3/31/72	10/1/71	306	1.142	
6/30/72	1/1/72	306	1.142	
9/30/72	4/1/72	307	1.146	
12/31/72	7/1/72	309	1.153	1.216
3/31/73	10/1/72	313	1.168	
	7/1/73			1.238

\* Based on the experience of companies reporting to Insurance Services Office for the year ending on the date in Column (1).

# Based on an index developed by the State Farm Mutual Automobile Insurance Co. using prices for a selected number of automobile parts, weighted to reflect the frequency of their replacement as a result of crashes, for each of the seven most recent model years in each case.

PRIVATE PASSENGER AUTOMOBILES  
PROPERTY DAMAGE LIABILITY  
Average Paid Claim Cost Indices  
and  
Auto Repair Labor Rates

(1)	(2)	(3)	(4)	(5)	(6)
<u>Year Ended Quarter</u>	<u>Average Date of Payment</u>	<u>Average Paid Claim Cost*</u>	<u>Index to 1/1/70</u>	<u>Auto Repair Labor Rates#</u>	<u>Labor Rates Index to 1/1/70</u>
6/30/70	1/1/70	\$268	1.000	\$7.87	1.000
9/30/70	4/1/70	274	1.022		
12/31/70	7/1/70	279	1.041		
3/31/71	10/1/70	285	1.065		
6/30/71	1/1/71	291	1.086	8.32	1.057
9/30/71	4/1/71	296	1.104		
12/31/71	7/1/71	301	1.123		
3/31/72	10/1/71	306	1.142		
6/30/72	1/1/72	306	1.142	8.63	1.097
9/30/72	4/1/72	307	1.146		
12/31/72	7/1/72	309	1.153	8.54	1.085
3/31/73	10/1/72	313	1.168		
	1/1/73			8.88	1.128
	7/1/73			9.21	1.170

\* Based on the experience of companies reporting to Insurance Services Office for the year ending on the date in Column (1).

# Countrywide average developed by the Allstate Insurance Co. using figures reported by their regional offices of average labor rates from a sampling of repair shops in each region.

PRIVATE PASSENGER AUTOMOBILES  
BODILY INJURY LIABILITY

Average Paid Claim Cost Data by quarter  $\phi$

(1) <u>Quarter Ended</u>	(2) <u>Average Date of Payment</u>	(3) <u>Average Paid Claim Cost</u>	(4) <u>Annual % Change</u>
3/31/70	2/15/70	\$1233	—
6/30/70	5/15/70	1294	—
9/30/70	8/15/70	1235	—
12/31/70	11/15/70	1265	—
3/31/71	2/15/71	1276	+ 3.5 $\%$
6/30/71	5/15/71	1414	+ 9.3
9/30/71	8/15/71	1346	+ 9.0
12/31/71	11/15/71	1441	+13.9
3/31/72	2/15/72	1396	+ 9.4
6/30/72	5/15/72	1383	- 2.2
9/30/72	8/15/72	1358	+ 0.9
12/31/72	11/15/72	1460	+ 1.3
3/31/73	2/15/73	1482	+ 6.2

$\phi$  Source: The experience of companies reporting to Insurance Services Office  
countrywide excluding Conn., Del., Fla., Ill., Md., Mass., N.J., Ore., and P.R.

PRIVATE PASSENGER AUTOMOBILES  
PROPERTY DAMAGE LIABILITY

## Average Paid Claim Cost Data by Quarter †

<u>(1)</u> <u>Quarter</u> <u>Ended</u>	<u>(2)</u> <u>Average Date</u> <u>of Payment</u>	<u>(3)</u> <u>Average Paid</u> <u>Claim Cost</u>	<u>(4)</u> <u>Annual %</u> <u>Change</u>
3/31/70	2/15/70	\$266	-
6/30/70	5/15/70	277	-
9/30/70	8/15/70	283	-
12/31/70	11/15/70	293	-
3/31/71	2/15/71	288	+8.3%
6/30/71	5/15/71	300	+8.3
9/30/71	8/15/71	306	+8.1
12/31/71	11/15/71	314	+7.2
3/31/72	2/15/72	304	+5.6
6/30/72	5/15/72	303	+1.0
9/30/72	8/15/72	310	+1.3
12/31/72	11/15/72	321	+2.2
3/31/73	2/15/73	317	+4.3

† Source: The experience of companies reporting to Insurance Services Office  
countrywide excluding Florida and Massachusetts.

## UNDERLYING EXTERNAL TREND DATA

CONSUMER PRICE INDEX  $\emptyset$ 

1967 = 100.0

	All Items	
	Index	Annual % Change
<u>1970</u>		
January	113.3	
February	113.9	
March	114.5	
April	115.2	
May	115.7	
June	116.3	
July	116.7	
August	116.9	
September	117.5	
October	118.1	
November	118.5	
December	119.1	
<u>1971</u>		
January	119.2	+5.2
February	119.4	+4.8
March	119.8	+4.6
April	120.2	+4.3
May	120.8	+4.4
June	121.5	+4.5
July	121.8	+4.4
August	122.1	+4.4
September	122.2	+4.0
October	122.4	+3.6
November	122.6	+3.5
December	123.1	+3.4

 $\emptyset$  Source: Monthly Labor Review (Bureau of Labor Statistics)

## UNDERLYING EXTERNAL TREND DATA

## CONSUMER PRICE INDEX §

1967 = 100.0

	All Items	
	<u>Index</u>	<u>Annual % Change</u>
<u>1972</u>		
January	123.2	+3.4
February	123.8	+3.7
March	124.0	+3.5
April	124.3	+3.4
May	124.7	+3.2
June	125.0	+2.9
July	125.5	+3.0
August	125.7	+2.9
September	126.2	+3.3
October	126.6	+3.4
November	126.9	+3.5
December	127.3	+3.4
<u>1973</u>		
January	127.7	+3.7
February	128.6	+3.9
March	129.8	+4.7
April	130.7	+5.1
May	131.5	+5.5
June	132.4	+5.9
July	132.7	+5.7
August	135.1	+7.5
September	135.5	+7.4
October	136.6	+7.9
November	137.6	+8.4
December	138.5	+8.8

§ Source: Monthly Labor Review (Bureau of Labor Statistics)

## UNDERLYING EXTERNAL TREND DATA

CONSUMER PRICE INDEX  $\$$ 

1967 = 100.0

	Medical Care		Semi-Private Hospital Rooms		Physicians Fees	
	Index	Annual % Change	Index	Annual % Change	Index	Annual change
1969						
December	115.6		135.0		116.3	
1970						
January	116.3		136.9		116.8	
February	117.1		138.9		117.4	
March	118.2		140.8		119.0	
April	119.1		142.5		119.4	
May	119.7		142.9		120.3	
June	120.5		143.6		121.6	
July	121.3		146.0		121.9	
August	122.0		147.8		122.6	
September	122.6		149.2		123.3	
October	122.8		150.5		123.7	
November	123.4		151.9		124.6	
December	124.2	7.4%	153.8	13.9%	125.7	8.1
1971						
January	124.9	7.4	155.5	13.6	125.9	7.8
February	125.8	7.4	157.4	13.3	126.6	7.8
March	126.8	7.3	159.2	13.1	128.0	7.6
April	127.5	7.1	161.0	13.0	128.5	7.6
May	128.1	7.0	161.7	13.2	129.2	7.4
June	128.6	6.7	162.6	13.2	129.9	6.8
July	129.3	6.6	164.8	12.9	130.3	6.9
August	130.0	6.6	165.8	12.2	131.2	7.0
September	130.4	6.4	166.8	11.8	131.5	6.7
October	129.6	5.5	167.0	11.0	131.7	6.5
November	129.7	5.1	167.0	9.9	132.0	5.9
December	130.1	4.8	167.9	9.2	132.2	5.2

Source: Monthly Labor Review (Bureau of Labor Statistics)

## UNDERLYING EXTERNAL TREND DATA

CONSUMER PRICE INDEX  $\phi$ 

1967 = 100.0

	Medical Care		Semi-Private Hospital Rooms		Physicians Fees	
	Index	Annual % Change	Index	Annual % Change	Index	Annual % Change
<u>1972</u>						
January	130.5	+4.5	169.6	+9.1	132.3	+5.1
February	131.0	+4.1	171.1	+8.7	132.6	+4.7
March	131.4	+3.6	172.2	+8.2	132.9	+3.8
April	131.7	+3.3	172.7	+7.3	133.2	+3.7
May	132.0	+3.0	173.2	+7.1	133.3	+3.2
June	132.4	+3.0	173.8	+6.9	133.9	+3.1
July	132.7	+2.6	174.9	+6.1	134.0	+2.8
August	132.9	+2.2	175.3	+5.7	134.2	+2.3
September	133.1	+2.1	175.6	+5.3	134.4	+2.2
October	133.9	+3.3	175.8	+5.3	134.6	+2.2
November	134.1	+3.4	176.0	+5.4	134.8	+2.1
December	134.4	+3.3	176.3	+5.0	135.4	+2.4
<u>1973</u>						
January	134.9	+3.4	177.6	+4.7	135.7	+2.6
February	135.3	+3.3	178.9	+4.6	136.1	+2.6
March	135.8	+3.3	180.1	+4.6	136.7	+2.9
April	136.2	+3.4	180.8	+4.7	136.9	+2.8
May	136.6	+3.5	181.0	+4.5	137.5	+3.2
June	137.0	+3.5	181.4	+4.4	138.0	+3.1
July	137.3	+3.5	181.8	+3.9	138.2	+3.1
August	137.6	+3.5	182.5	+4.1	138.6	+3.3
September	138.3	+3.9	183.6	+4.6	139.6	+3.9
October	140.6	+5.0	185.2	+5.3	139.9	+3.9
November	140.9	+5.1	185.8	+5.6	140.3	+4.1
December	141.4	+5.2	186.4	+5.7	140.8	+4.0

 $\phi$  Source: Monthly Labor Review (Bureau of Labor Statistics)

## UNDERLYING EXTERNAL TREND DATA

CONSUMER PRICE INDEX  $\phi$ 

1967 = 100.0

<u>Auto Repair &amp; Maintenance</u>		
<u>1969</u>	<u>Index</u>	<u>Annual % Change</u>
December	115.2	
<u>1970</u>		
January	116.8	
February	117.6	
March	118.7	
April	119.2	
May	119.9	
June	120.4	
July	121.1	
August	121.5	
September	122.1	
October	122.7	
November	123.2	
December	123.7	7.4%
<u>1971</u>		
January	124.4	6.5
February	125.8	7.0
March	127.0	7.0
April	127.9	7.3
May	128.4	7.1
June	129.4	7.5
July	130.3	7.6
August	131.0	7.8
September	131.2	7.5
October	131.3	7.3
November	131.6	6.8
December	131.9	6.6

 $\phi$  Source: Monthly Labor Review (Bureau of Labor Statistics)

## UNDERLYING EXTERNAL TREND DATA

## CONSUMER PRICE INDEX †

1967 = 100.0

-Auto Repair & Maintenance

<u>1972</u>	<u>Index</u>	<u>Annual % Change</u>
January	133.1	+7.0
February	133.6	+6.2
March	134.0	+5.5
April	134.3	+5.0
May	134.6	+4.8
June	134.9	+4.3
July	135.2	+3.8
August	135.7	+3.6
September	136.3	+3.9
October	136.4	+3.9
November	136.6	+3.8
December	136.8	+3.7
<u>1973</u>		
January	138.4	+4.0
February	139.3	+4.3
March	140.1	+4.6
April	140.7	+4.8
May	141.4	+5.1
June	142.1	+5.3
July	142.5	+5.4
August	142.9	+5.3
September	143.8	+5.5
October	144.4	+5.9
November	144.9	+6.1
December	145.9	+6.7

† Source: Monthly Labor Review (Bureau of Labor Statistics)



