

T E S T I M O N Y

RAND

*Effects of a Choice Automobile
Insurance Plan on Costs and
Premiums: Testimony Presented
to the Senate Commerce, Science,
and Transportation Committee,
July 1997*

Stephen Carroll

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However, this work has been updated to reflect findings using the most recent data available, that of 1992. The updated report, *The Effects of a Choice Automobile Insurance Plan on Insurance Costs and Compensation: An Updated Analysis*, by Stephen J. Carroll and Allan F. Abrahamse, MR-970-ICJ, is forthcoming and will be available by the end of April 1998. The report may be ordered from RAND on the Internet (order@rand.org) at that time. A summary of the updated report will be available on the ICJ's web page at

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Preface

This publication contains the written statement of Stephen Carroll delivered on July 17, 1997 to the Commerce, Science, and Transportation Committee of the United States Senate. The statement is based on several RAND Institute for Civil Justice studies of alternative approaches to compensating automobile accident victims for their personal injuries, but it does not necessarily reflect the views of RAND, of the Institute for Civil Justice, or of the Institute's Board or research sponsors.

The author summarizes previous RAND estimates of the effects of an automobile insurance plan that offers drivers a choice between their state's current automobile insurance plan and an absolute no-fault plan.

TESTIMONY PRESENTED TO THE SENATE
COMMERCE, SCIENCE, AND TRANSPORTATION COMMITTEE
STEPHEN CARROLL
JULY 17, 1997

SUMMARY

This testimony regarding the effects of a choice automobile insurance plan is based on several RAND Institute for Civil Justice studies of alternative approaches to compensating automobile accident victims for their personal injuries. These studies include an analysis of how a plan that offers a choice between tort and absolute no-fault (ANF) would affect the costs of private passenger auto insurance in each of the states in 1987, the most recent year for which data were available at the time of the study. The results summarized here reflect a subsequent analysis, requested by the Joint Economic Committee, of a modified choice plan.

In each state, we estimated the average costs auto insurers incur in compensating a representative sample of accident victims under the state's current system and the corresponding "break-even premium"--the premium an insurance company must charge insured policy owners, on average, to cover exactly what it pays in claims and associated transaction costs. We then estimated the average cost of compensating accident victims on behalf of policy owners who elect either the current system or ANF under the choice system and the "break-even premiums" for each class of policy owner. Finally, we calculated relative savings under choice as the percentage difference between the break-even premium under choice for policy owners who elect either option and the break-even premium under the current system.

Our analysis strongly suggests that the choice plan we examined can dramatically reduce the costs of personal injury coverages to policy owners who opt for ANF, relative to the costs of providing personal injury coverages to the same policy owners under their state's current auto insurance system.

In most states, we estimate that the costs of compensating accident victims on behalf of policy owners who elect ANF would generally be about 60 percent less than what they would be under the current insurance system in each state. If statewide auto insurance premiums are proportional to the costs insurers incur on behalf of those they insure, the adoption of a choice plan would allow policy owners who are willing to waive their tort rights to save about 30 percent on their automobile insurance premiums, on average. (Because coverages for personal injury and property damage each account for roughly half of total auto insurance compensation costs, a 60 percent reduction in the total costs of personal injury coverage should translate into a roughly 30 percent reduction in total auto insurance premiums. Individual policy owners would

save more, or less, depending on the coverages and policy limits they would have purchased if the ANF option were not available.)

We translated our estimates of average savings on compensation costs into reductions in average premiums for policy owners who purchase only mandated coverages, assuming that insurers' returns on investment income and profit margins are held constant. Policy owners who purchased only the coverage required by law could save 50 percent on their insurance premiums under a choice plan. Again, individual policy owners would realize greater or smaller savings depending on their insurance purchase decisions.

Our analysis also suggests that the choice plan we examined will have little effect on policy owners who opt to remain under their state's current auto insurance system. They will recover as much for their injuries and losses as they would under their state's current system, and our results suggest that there will not be any significant change in their insurance premiums.

The estimates presented above are based on the assumed values of four parameters: (1) the uninsured motorist rate under the current system, (2) the fraction of victims injured in single-car accidents, (3) the rate at which policy owners who would have been insured under the current system opt for ANF coverage, and (4) the rate at which drivers who would have gone uninsured under the current system opt for ANF coverage. To test the robustness of our results, we estimated the effects of the choice plan for a number of different sets of parameter values in each state.

Nothing in these estimates poses a serious threat to our main finding that the average cost of insuring policy owners who elect ANF under choice will fall dramatically and that the cost of insuring policy owners who choose to stay in the current system will be essentially unchanged.

Effects of a Choice Automobile Insurance Plan

Statement submitted to the Commerce Committee of the United States Senate

by
Stephen Carroll
Institute for Civil Justice, RAND¹

Mister Chairman and Members of the Committee, thank you for inviting me to participate in your hearings on Auto-Choice insurance. My name is Stephen Carroll; I am a Senior Economist in the Institute for Civil Justice at RAND. The views and conclusions presented here are my own and should not be interpreted as representing the views of RAND, of the Institute for Civil Justice, or of the Institute's Board or research sponsors.

Introduction

The rising costs of auto insurance covering personal injuries and dissatisfaction with a liability-based system for compensating auto accident victims have stimulated policy debates in numerous states and at the federal level for three decades. Numerous public and private individuals and organizations have proposed no-fault automobile insurance plans that offer cost savings and speedier, more certain compensation to auto accident victims. But, to obtain those benefits, accident victims have to be denied traditional tort rights unless the costs or nature of their injuries exceed a specified threshold. Many states confronted with this tradeoff have been unwilling to impose no-fault.

A *choice* approach to auto insurance was proposed as a response to this policy concern. Under a choice auto insurance system, policy owners elect to be insured under either the traditional system or a specified no-fault plan.² Those who opt for tort retain traditional tort compensation rights and liabilities. Those who choose no-fault neither recover, nor are liable to others, for noneconomic losses

¹Stephen Carroll is a senior economist at RAND. RAND is a nonprofit institution that helps improve public policy through research and analysis.

²A specific choice plan would specify the details of the no-fault plan that would be offered drivers as an alternative to the tort system.

for less serious injuries incurred in auto accidents.³ The plan does not affect existing insurance coverage for property damage resulting from auto accidents.

Giving motorists a choice of coverage has strong logical appeal. In principle, cost-sensitive policy owners could realize the savings that would result from electing the no-fault option without infringing on the rights of policy owners who valued their tort compensation rights over cost reductions. But, in practice, how much would a choice plan reduce the premiums that policy owners who chose no-fault pay? Would policy owners who opted for tort encounter lower or higher premiums?⁴

As an initial step toward understanding the effects of choice auto insurance on premiums, we estimated how a plan that offers a choice between tort and absolute no-fault (ANF) would affect the costs of auto insurance in each of the states in 1987.⁵ In earlier testimony before the Joint Economic Committee, I described our estimates of the effects of the plan initially proposed by Jeffrey O'Connell and Michael Horowitz (O'Connell, et al., 1993). Subsequently, Joint Economic Committee staff told us that the initial plan had been modified and asked us to analyze the modified version. The results I am summarizing today reflect this subsequent analysis (Abrahamse and Carroll, 1997).

We also estimated the effects of a corresponding choice plan on auto insurance costs in each of the states that had some form of no-fault auto insurance in 1987. In each of these states, we considered a plan offering a choice between the current no-fault plan and ANF.⁶ The results of these analyses suggest the upper bound on the savings that can be accomplished in each no-fault state if the no-fault approach is extended to its limit.

³The criteria for access to compensation for noneconomic loss would depend upon the specific no-fault plan offered.

⁴Kentucky has offered drivers a choice between the tort system and a \$1,000 threshold, no-fault plan since the 1970s. However, nearly all Kentucky drivers have opted for the no-fault alternative; for all practical purposes, Kentucky is a dollar threshold state. New Jersey, in 1989, and Pennsylvania, in 1990, have recently adopted plans that offer drivers a choice between the tort system and verbal threshold, no-fault. It is too soon to tell how either plan will affect premiums over the long term. In any case, at best these states' experiences only indicate how the particular plan each adopted worked in that particular context.

⁵Our data describe the outcomes of claims closed in 1987, the most recent year for which data were available when we conducted this study. Data for 1992 have recently become available, and we will use them to update the study later this year. The data used in this study reflect the insurance system in place in each state in 1987. For purposes of this analysis, *tort states* are those that relied on the traditional tort system in 1987. The analysis is described in detail in Abrahamse and Carroll, 1993.

⁶For purposes of this analysis, *no-fault states* are those that had a no-fault plan in 1987 and the *current plan* is the no-fault plan in place that year.

Approach

We focus on how the choice plan affects auto insurers' compensation costs, including both the amounts insurers pay out in compensation and the transaction costs they incur in providing that compensation.⁷ Because the choice plan has no effect on property damage coverages, we do not consider property damage in any of our estimates. We also do not consider the many other factors (e.g., insurers' overhead and profit margins and investment income) that play a role in determining insurance premiums.⁸

In each state, we estimate the average costs auto insurers incur in compensating a representative sample of accident victims under the state's current system and the corresponding "break-even premium"--the premium an insurance company must charge insured policy owners, on average, to cover exactly what it pays in claims and associated transaction costs. We then estimate the average cost of compensating accident victims on behalf of policy owners who elect either the current system or ANF under the choice system and the "break-even premiums" for each class of policy owner. Finally, we calculate relative savings under choice as the percentage difference between the break-even premium under choice for policy owners who elect either option and the break-even premium under the current system.

Because we focus on the relative costs of ANF and the current system in each state, any factors that proportionately affect costs under both the current system and the choice plan net out in the comparison. Our results are insensitive to changes in such factors over time.⁹

Key Findings

Our analysis strongly suggests that the choice plan we examined can dramatically reduce the costs of personal injury coverages to policy owners who opt for ANF, relative to the costs of providing personal injury coverages to the same policy owners under their state's current auto insurance system. Figure 1 shows our estimates for each state of the reductions in auto insurance premiums,

⁷Under the choice plan, claimants may recover reasonable attorney's fees for a claim for economic loss in excess of the mandated Personal Injury Protection insurance policy limits. The attorney's fees paid by insurers as a result of such claims are included in our estimates.

⁸We estimate the effects of the choice plan on the total costs of auto insurance. We do not attempt to estimate the plan's effects on the costs of any particular coverage. Specifically, we compare the average amount insurers pay per insured driver under all coverages in the current system to the average amount paid under all coverages on behalf of drivers who choose either the current system or ANF, respectively, under the choice plan.

⁹A detailed description of our approach is contained in Abrahamse and Carroll, 1997.

relative to the current system, that would be available to policy owners who elect the ANF option.

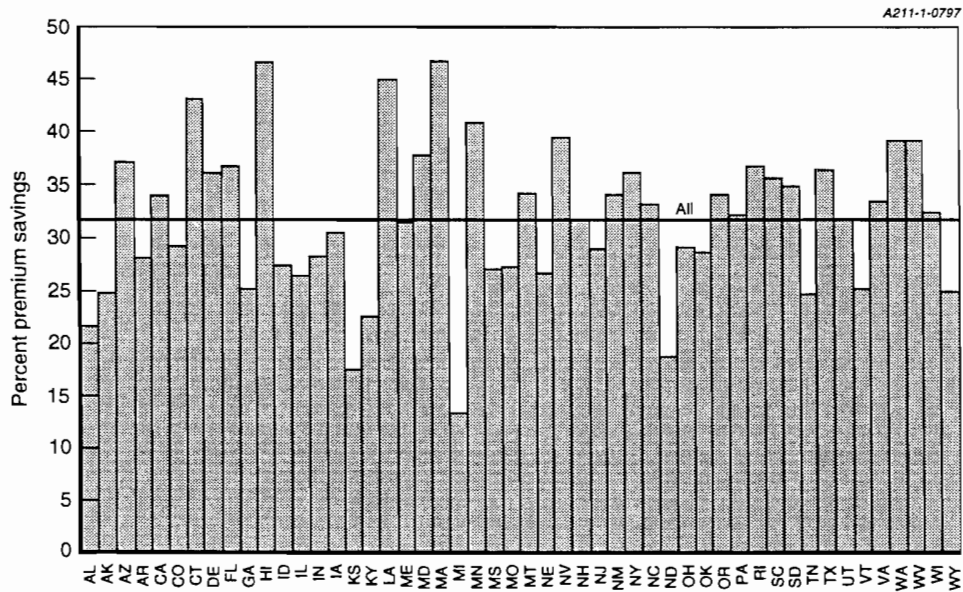


Figure 1--Under Choice, Policy Owners Who Switch Could Save 30 Percent on Premiums

In most states, we estimate that the costs of compensating accident victims on behalf of policy owners who elect ANF would generally be about 60 percent less than what they would be under the current insurance system in each state.¹⁰ If statewide auto insurance premiums are proportional to the costs insurers incur on behalf of those they insure, the adoption of a choice plan would allow policy owners who are willing to waive their tort rights to save about 30 percent on their automobile insurance premiums, on average. (Because coverages for personal injury and property damage each account for roughly half of total auto insurance compensation costs, a 60 percent reduction in the total costs of personal injury coverage should translate into a roughly 30 percent reduction in total auto insurance premiums. Individual policy owners would save more, or less, depending on the coverages and policy limits they would have purchased if the ANF option were not available.)

¹⁰Results vary from state to state. Some of this variation reflects differences among the states; some reflects variation in the sample drawn for each state. Results for smaller states are particularly sensitive to the latter. However, we feel that the consistency of results across the states provides firm support for our basic conclusions.

Figure 1 shows the average effects of the choice option on all policy owners who elect ANF. The affordability of auto insurance is a particular concern to low-income policy owners. Our data do not allow us to directly estimate the effects of the plan on low-income policy owners. However, we can estimate its relative effects on policy owners who purchase only the coverages required by law in their state's current system, as low income policy owners are most likely to do. Figure 2 translates our estimates of average savings on compensation costs into reductions in average premiums for policy owners who purchase only mandated coverages, assuming that insurers' returns on investment income and profit margins are held constant. Policy owners who purchased only the coverage required by law could save 50 percent on their insurance premiums under a choice plan. Again, individual policy owners would realize greater or smaller savings depending on their insurance purchase decisions.

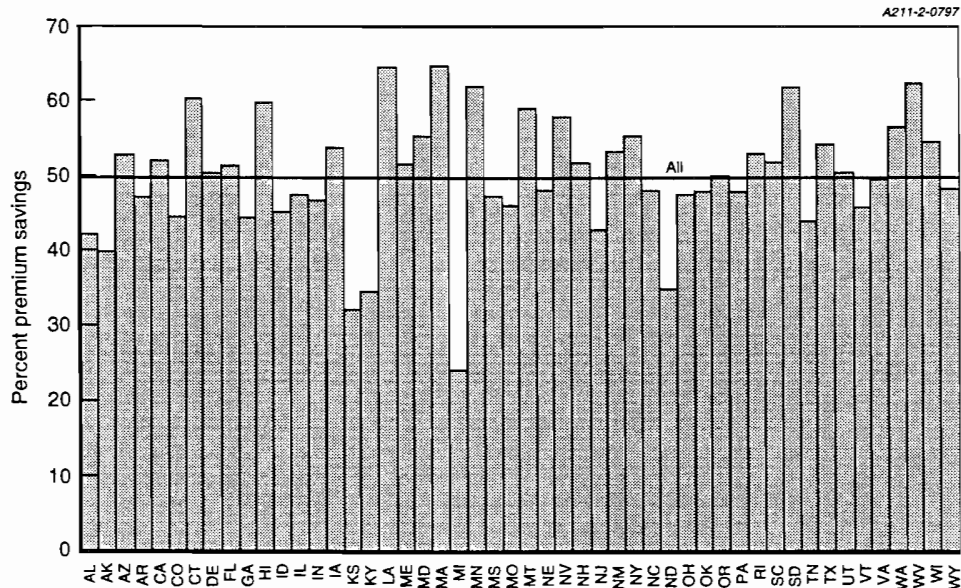


Figure 2--Policy Owners Who Had Only Mandatory Coverages Could Save 50 Percent Under Choice

Thus, the choice plan offers policy owners the opportunity to waive compensation for noneconomic loss if they are injured in exchange for much lower insurance premiums.

Our analysis also suggests that the choice plan we examined will have little effect on policy owners who opt to remain under their state's current auto insurance system. They will recover as much for their injuries and losses as they would

under their state's current system, and our results suggest that there will not be any significant change in their insurance premiums. Figure 3 shows our estimates for each state of the average change in auto insurance premiums, relative to the current system, for policy owners who elect to remain in their state's current system.

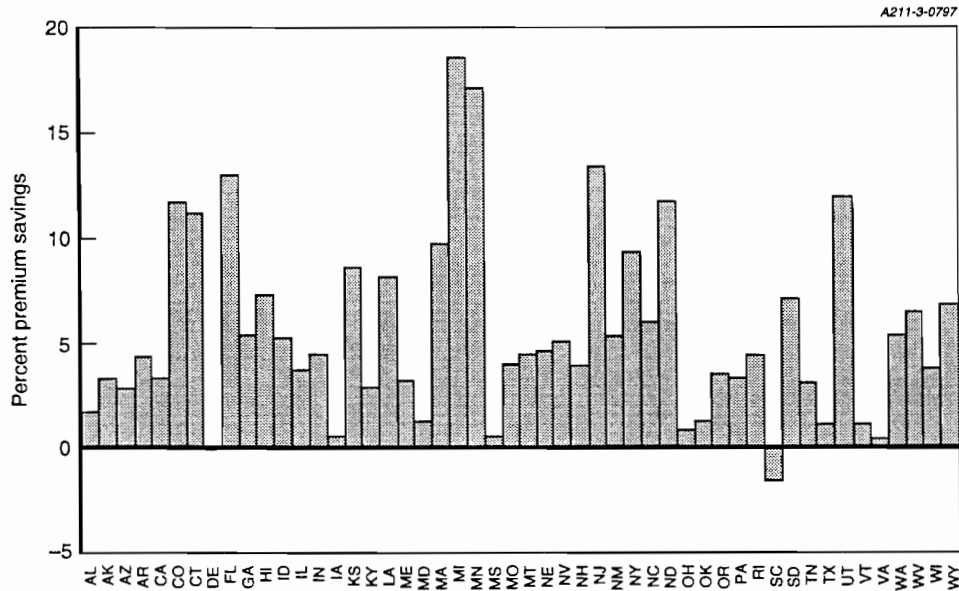


Figure 3--Policy Owners Who Choose the Current System Are Generally Not Affected

Sensitivity Analysis

The estimates presented above are based on the assumed values of four parameters: (1) the uninsured motorist rate under the current system, (2) the fraction of victims injured in single-car accidents, (3) the rate at which policy owners who would have been insured under the current system opt for ANF coverage, and (4) the rate at which drivers who would have gone uninsured under the current system opt for ANF coverage. To test the robustness of our results, we estimate the effects of the choice plan for a number of different sets of parameter values in each state. We made 81 different estimates for each state, varying the fraction of drivers uninsured under the current system (10, 20, or 30 percent), the fraction of victims injured in single-car accidents (0, 10, or 20 percent), the fractions of insured policy owners under the current system who switch to ANF under the proposed plan (20, 50, or 80 percent), and the fractions

of uninsured drivers under the current system who switch to ANF under the proposed plan (20, 50, or 80 percent).

Table 1 illustrates these analyses for cases in which the fractions of insured policy owners under the current system who switch to ANF under the proposed plan and the fractions of uninsured drivers under the current system who switch to ANF under the proposed plan are the same. It presents some of the sensitivity calculations for California.

Nothing in these estimates poses a serious threat to our main finding that the average cost of insuring policy owners who elect ANF under choice will fall dramatically and that the cost of insuring policy owners who choose to stay in the current system will be essentially unchanged.

Conclusions

Our results suggest that the choice plan can deliver on its promise to offer dramatically less expensive insurance to policy owners willing to give up access to compensation for noneconomic loss without affecting those who want to retain access to compensation for all their losses, both economic and noneconomic. If insurers pass their cost savings on to policy owners, the adoption of a choice plan would allow

- *Policy owners* who are willing to waive their tort rights to save approximately 30 percent, on average, on their automobile insurance premiums;
- *Policy owners* who prefer to retain their full tort rights to do so, at essentially the same costs as under their state's current system.

Table 1
Relative Savings Under Different Assumptions About Insurance: California

Uninsured Prior to Choice (%)	Switch Under Choice (%)	Single-Car Accidents (%)	Relative Savings (%)		
			Insured Policy Owners Who Retain Current Insurance	Insured Policy Owners Who Switch to ANF Under Choice	
10	20	0	2	70	
		10	2	68	
		20	1	64	
	50	0	4	68	
			10	4	66
			20	4	62
	80	0	6	66	
			10	6	63
			20	6	60
20	20	0	2	71	
		10	2	69	
		20	2	66	
	50	0	6	69	
			10	6	67
			20	6	63
	80	0	10	67	
			10	10	64
			20	10	61
30	20	0	3	72	
		10	3	69	
		20	3	66	
	50	0	8	70	
			10	8	67
			20	8	64
	80	0	13	68	
			10	13	65
			20	13	62

RAND ICJ Studies of Choice Insurance

Abrahamse, A., and S. J. Carroll, *The Effects of a Choice Auto Insurance Plan Under Consideration by the Joint Economic Committee of the United States Congress*, DRU-1609-ICJ, 1997.

Abrahamse, A., and S. J. Carroll, *The Effects of a Choice Auto Insurance Plan on Insurance Costs*, MR-540-ICJ, RAND: Santa Monica, CA, 1995.

O'Connell, J., S. J. Carroll, M. Horowitz, and A. Abrahamse, *Consumer Choice in the Auto Insurance Market*, RP-254, RAND: Santa Monica, CA, 1994. (Reprinted from the Maryland Law Review, Vol. 52, 1993.)

O'Connell, J., S. J. Carroll, M. Horowitz, A. F. Abrahamse, and P. Jamieson, *The Comparative Costs of Allowing Consumer Choice for Auto Insurance in All Fifty States*, RP-518, RAND: Santa Monica, CA, 1995. (Reprinted from Maryland Law Review, Vol. 55, No. 1, 1996.)

O'Connell, J., S. J. Carroll, M. Horowitz, A. Abrahamse, and D. Kaiser, *The Costs of Consumer Choice for Auto Insurance in States Without No-Fault Insurance*, RP-442, RAND: Santa Monica, CA, 1995. (Reprinted from Maryland Law Review, Vol. 54, No. 2, 1995.)

