

T E S T I M O N Y

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*Effects of an Auto-Choice
Automobile Insurance Plan
on Costs and Premiums*

Stephen Carroll

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Preface

This publication contains the written statement of Stephen Carroll delivered on March 19, 1997 to the Joint Economic Committee of the United States Congress. 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.

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Effects of a Choice Automobile Insurance Plan

Statement submitted to the Joint Economic Committee of the United States Congress

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, drivers 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 for less

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.

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 drivers could realize the savings that would result from electing the no-fault option without infringing on the rights of drivers who valued their tort compensation rights over cost reductions. But, in practice, how much would a choice plan reduce the premiums that motorists who chose no-fault pay? Would motorists 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 The plan we analyzed, proposed by Jeffrey O'Connell and Michael Horowitz (O'Connell, et al., 1993), is the most extreme version of choice—motorists who elect ANF may never sue, nor be sued, for noneconomic loss. As such, the results of this analysis suggest the upper bound on the savings that can be accomplished in each tort state via the choice approach.

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.

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

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.

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 drivers, 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 drivers who elect either the current system or ANF under the choice system and the "break-even premiums" for each class of driver. Finally, we calculate relative savings under choice as the percentage difference between the break-even premium under choice for drivers 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.

Key Findings

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

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.

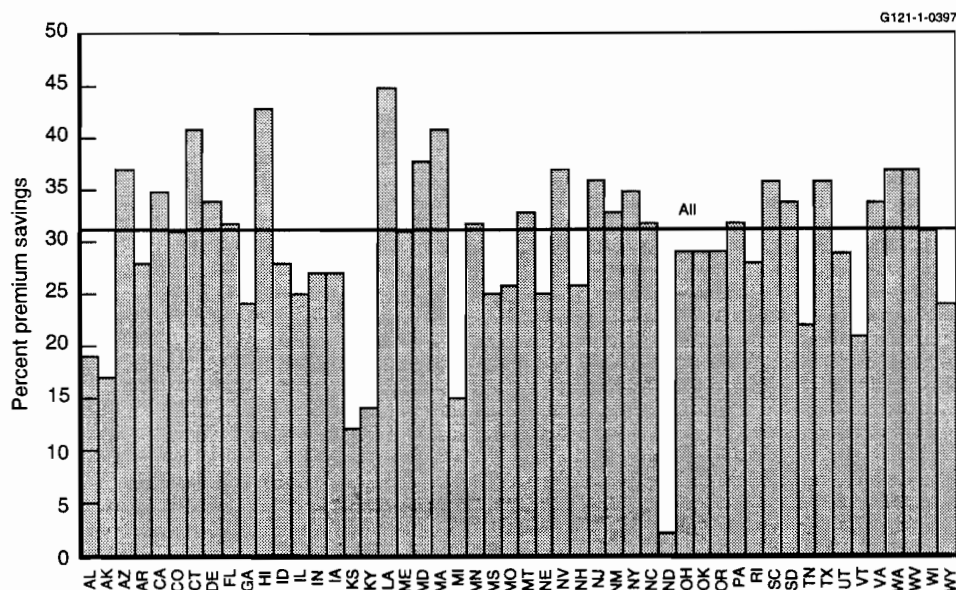


Figure 1--Under Choice, Motorists Who Switch Could Save 30 Percent on Premiums

In most states, we estimate that the costs of compensating accident victims on behalf of drivers who elect ANF would generally be about 60 percent less than what they would be under the current insurance system in each state.⁹ 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 drivers who are willing to waive their tort rights to save about 30 percent on their automobile insurance premiums, on average.¹⁰ (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 drivers would save more, or less, depending on the coverages and policy limits they would have purchased if the ANF option were not available.)

⁹Results 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.

¹⁰In four no-fault states, these savings are considerably lower. Drivers in these states who choose ANF will pay about 30 percent less than what they pay for personal injury coverage under the current no-fault system, which translates into a 15 percent reduction in a driver's total auto insurance premium.

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

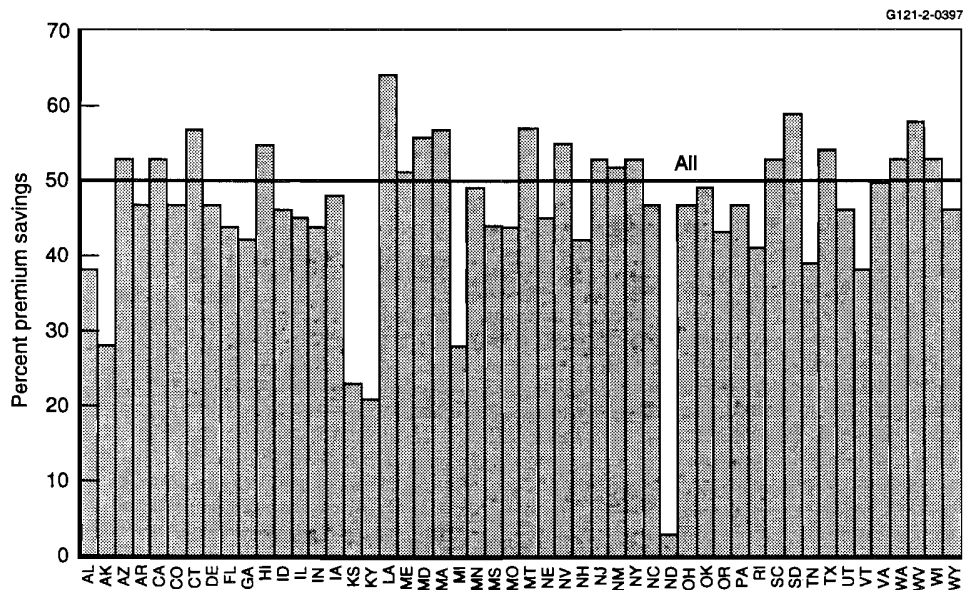


Figure 2--Motorists Who Had Only Mandatory Coverages Could Save 50 Percent Under Choice

Thus, the choice plan offers drivers 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 drivers 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 reductions in auto insurance premiums, relative to the current system, that would be available to drivers who elect to remain in their state's current system.

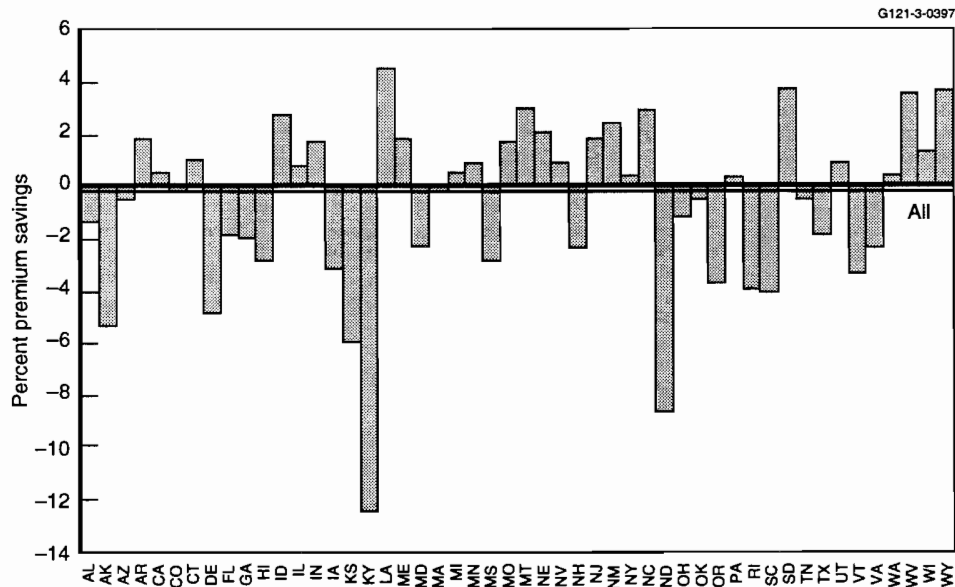


Figure 3--Motorists Who Choose the Current System Are Generally Not Affected

In most states, the costs of compensating victims on behalf of drivers who choose to remain in the current system under choice might increase, but probably by no more than 10 percent, and it is likely that the costs would decrease.¹¹

Effects of the Choice Plan on Compensation Outcomes

Our analysis found that the effects of the choice plan on an individual insured driver depend on that driver's choice of insurance type and are insensitive to the choices made by other drivers. Thus, the savings that will accrue to a driver who opts for ANF are largely independent of the number

¹¹In four no-fault states, drivers who preferred to retain their current no-fault plan would pay 15 percent more for personal injury coverage than under the current system. That would imply a 5-10 percent increase in a driver's total auto insurance premium.

of other drivers in the state who selected that option. Of course, aggregate statewide savings depend on the fraction of drivers who elect the ANF option. For purposes of the illustrations below, we assume the fractions of insured and uninsured drivers who select the ANF option and show the effects of the choice plan on compensation outcomes.

Figure 4 draws on the results for California to illustrate the effects of the choice plan on compensation outcomes. The dark bars illustrate how \$1,000 in compensation costs would be distributed in California under the current (tort) system. The lighter bars illustrate how these compensation costs would be affected by the choice plan, assuming that 50 percent of insured drivers switch to no-fault and 50 percent of uninsured drivers purchase no-fault. The dollar figure attached to each of the bars indicates how much of the \$1,000 would be spent in each cost category.

For purposes of this comparison, we count all dollars paid accident victims as compensation for economic loss until they have been fully compensated for their economic loss; we include as compensation for noneconomic loss only the amounts paid victims in excess of their economic losses. The

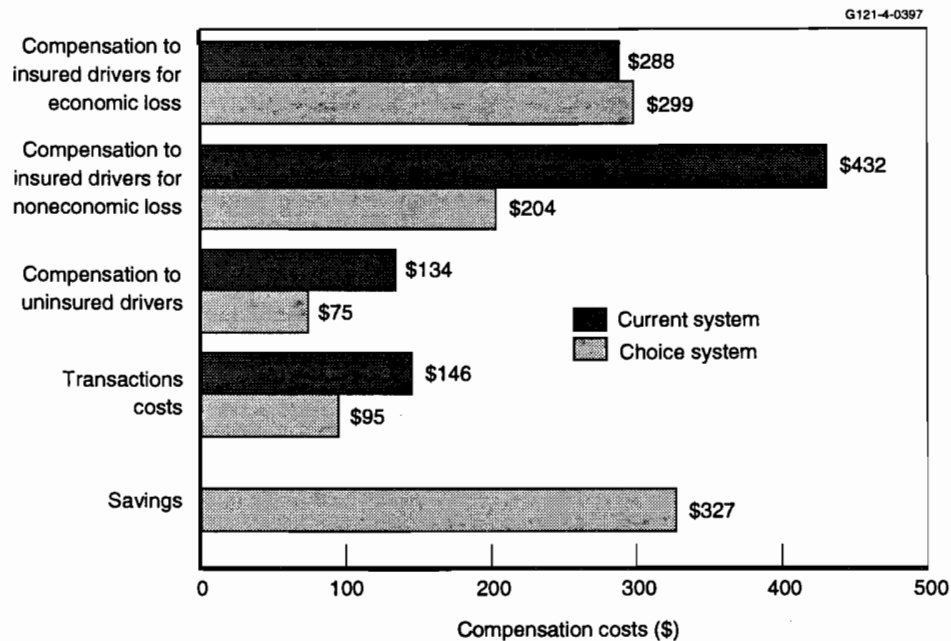


Figure 4--How \$1,000 in Compensation Costs Would Be Distributed in California: Tort vs. Choice
(Assumes 50 percent of all drivers select no-fault option)

compensation figures are gross in that they show the amount paid to accident victims in compensation without regard for any legal fees or costs they must pay out of this amount.

Out of each \$1,000 spent in the current system, slightly less than \$300 would be paid in compensation for economic loss to victims who have purchased insurance. Under choice, the total amount of compensation paid these victims for economic loss would be very similar. However, some victims would receive less compensation for economic loss under the choice plan compared with the compensation they would have received under the current system, while other victims would receive more.

About \$430 of each \$1,000 spent in the current system would be paid to insured victims in compensation for noneconomic loss. Under choice, the amount of compensation paid these victims for noneconomic loss would be cut to the extent that drivers switch to no-fault. Drivers who stay in the current system under choice would receive essentially the same compensation for noneconomic loss as under the current system. Those who switch to no-fault would receive no compensation for noneconomic loss. In the example, we assume that half of the insured drivers under the current system stay in the current system and half switch to no-fault. Consequently, the amount paid these victims in compensation for noneconomic loss is roughly halved under choice.

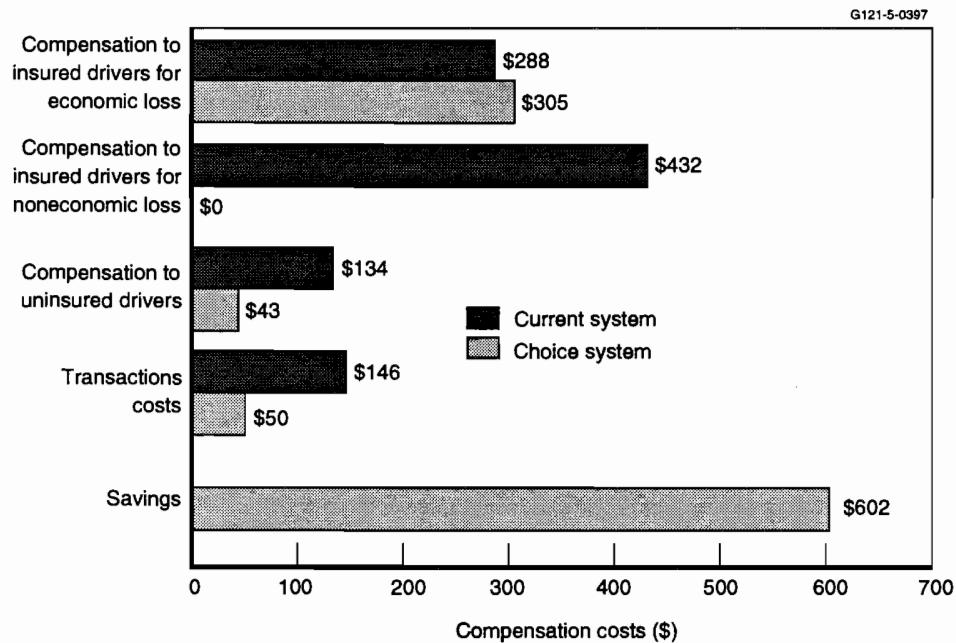
The costs of compensating uninsured motorists under the current system account for about \$130 of each \$1,000 spent. The choice plan would cut these costs by about 45 percent. Uninsured drivers under the current system who switch to no-fault under choice waive compensation for noneconomic loss in return for being assured compensation of economic loss. Uninsured drivers under choice who are "lucky" enough to be injured in an accident with someone who opted for the current system under choice receive the same compensation they would have received under the current system. But uninsured drivers under choice who are injured in an accident with someone who opted for ANF under choice are compensated only for their economic loss in excess of the mandated personal injury protection insurance limit.

Insurers' transaction costs—defense fees and allocated loss adjustment expenses—account for about \$146 out of each \$1,000 under the current system. These costs would be cut by about one-third under the choice plan for these assumed parameters because there would be no need to debate either negligence or noneconomic losses. Note that the O'Connell/Horowitz plan provides legal fees to ANF drivers who seek compensation for economic

losses in excess of their personal injury insurance policy limits. Because this provision allows victims representation at no cost to themselves, we assume victims will generally secure representation, even on small claims.

As the last bar in Figure 4 suggests, the no-fault option under a choice plan would save nearly \$330 out of every \$1,000 of compensation costs for automobile accident victims in California. These savings would result from reductions in the amount of compensation paid accident victims for noneconomic loss and the associated transactions costs.

Figure 5 provides another perspective on the same picture. It shows the distribution of compensation costs under the assumption that all insured drivers and half of the uninsured drivers in the state select the no-fault option. Not surprisingly, the savings under this assumption are considerably larger.



**Figure 5—How \$1,000 in Compensation Costs
Would Be Distributed in California:
Tort vs. Choice**
(Assumes all insured drivers and 50 percent of uninsured drivers
select no-fault option))

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 drivers 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 drivers 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 drivers 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 drivers who elect ANF under choice will fall dramatically and that the cost of insuring drivers 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 drivers 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 drivers, the adoption of a choice plan would allow

- *Drivers* who are willing to waive their tort rights to save approximately 30 percent, on average, on their automobile insurance premiums;
- *Drivers* 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 (%)		
			Drivers Who Retain Current Insurance	Drivers Who Select ANF Under Choice	
10	20	0	-0.57	69.0	
		10	-0.56	66.1	
		20	-0.55	62.6	
	50	0	0	-1.42	66.9
			10	-1.40	64.0
			20	-1.39	60.5
	80	0	0	-2.26	64.7
			10	-2.24	61.8
			20	-2.22	58.4
20	20	0	0.45	69.9	
		10	0.45	67.2	
		20	0.44	63.8	
	50	0	0	1.12	68.1
			10	1.11	65.4
			20	1.10	62.0
	80	0	0	1.80	66.3
			10	1.78	63.6
			20	1.76	60.2
30	20	0	1.37	70.8	
		10	1.36	68.1	
		20	1.34	64.9	
	50	0	0	3.42	69.2
			10	3.39	66.6
			20	3.36	63.4
	80	0	0	5.48	67.7
			10	5.43	65.1
			20	5.38	61.9

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