Why the Standard Automobile Insurance Market
Breaks Down in Low-Income Zip Codes

A per-mile analysis of Texas auto insurance
based on testimony before the
Texas House Committee on Insurance
April 6 and 13, 1999

Report to the Texas House Committee on Insurance

by

Patrick Butler, Ph.D., Insurance Project Director
National Organization for Women
Washington, DC
and
Texas NOW
Austin, TX

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Executive summary

**Per-mile insurance option** In April 1999 Rep. Lon Burnam introduced testimony before the House Insurance Committee on HB 3099—the per-mile option act—“to make insurance more affordable and accessible to the people that we represent.” Instead of having to pay a fixed premium (i.e., fixed charge) for each car, policyholders could choose to insure cars at cents-per-mile rates. Supporters testified that the option would eliminate the extra profits companies now get from low mileage drivers—predominantly women, older drivers, and lower income drivers. But we must also examine how the option might affect other problems.

This report reviews testimony on some dozen bills and applies the option as a remedy to problems identified. These problems were emphatically summarized by an **insurance company president** who told the Committee that “Consumers are angry about the cost of car insurance. They are angry about lack of availability. People don’t like to get rejected, they don’t like to get cancelled.” He was referring particularly to the unprofitable situation companies say characterizes low income areas in Texas. This situation was confirmed by a **former Austin insurance agent** who testified that she “wrote no policies [east of I-35]…. [and] was the most profitable agent in the region State Farm had.”

When the Committee asked industry representatives to explain why the standard (i.e., lower cost) companies like State Farm refuse to sell in low income areas, they merely repeated that these zip codes are less profitable because they produce higher losses. But this report rejects the industry's implication that low income drivers are less careful. On the contrary, the report finds that the industry practice of charging a fixed premium per car actually makes market failures inevitable.

**Problems in higher income zip codes** Key to understanding why the standard market breaks down in low income zip codes is understanding why it does not break down in higher income zip codes. In higher income areas profits are maintained at the expense of owners of cars driven less than average mileage. Despite a wide range in how much cars are exposed on the road to risk of accident, premiums vary at most by a discount or surcharge. Consequently, companies make extra profits on some customers. As one witness pointed out, while cars are not running “there's no possible way they're going to cause an accident and there's no way they're going to cost the insurance any money.” Thus the company makes pure profit—has a zero loss ratio—on premiums received for insuring idled cars. Testimony for the per-mile option on behalf of lower mileage groups quoted **insurers** on the profitability of women “because her use of the car is substantially less” and how it was possible to “make a killing on older drivers” because “they hardly drive at all.”

Another source of extra profits is extra cars. A witness described his household of two drivers with five cars noting that “we can only have two on the street at one time if we are not together, yet
we pay in excess of $2,000 for insurance.” This witness backed a bill for changing from car to
driver insurance. Unfortunately a fixed premium for each driver would mean that companies would
not only get extra profits from incapacitated and low-mileage drivers, but also from households with
more drivers than cars. Per-driver premiums, therefore, might become a greater problem in low
income areas than inaccessibility of the standard insurance market.

**Market breakdown** A fixed premium for each car puts financial pressure on owning cars. Any increase in this pressure—or reduction in income—leads some households to reduce the
number of cars they own. The cars sold first, of course, are those least essential to household needs
and therefore driven the least. This departure of least-driven cars from a company's class pool
causes the pool's miles-per-car average to rise. Furthermore, household drivers now must share
remaining cars, which also causes average mileage to rise. More driving of each car again raises
losses and premiums which applies further pressure to decrease car owning and insuring. And in
some circumstances this cycle repeats itself in a mileage-premium cost-price spiral.

In higher income zip codes many drivers can afford extra cars and most drivers—with a need to
protect savings—keep liability insurance on even their least-driven cars. In low income zip codes,
however, very few households can insure extra cars. Instead it is usual for drivers to share cars,
which sets up the mileage-premium upward cost spiral described above. Owing to this cost spiral—
not to less care by low income drivers—mileage and losses are higher per insured car and most cars
driven low mileage are uninsured.

**Uninsured cars** Compelling owners of uninsured cars to buy insurance as a way to lower
premiums is theoretically correct because it forces premiums for cars driven low mileage into the
insurance pools. But the focus on compulsion tends to incorrectly scapegoat uninsured cars as
responsible for more than their share of accidents. Just the opposite is true. A former Utah state
representative described to the Committee a database comparison showing that “23% of the citizens
that had registered their vehicle did not have insurance,” but only “9% of people that we checked
that get involved in accidents don't have insurance.”

This must mean—unless the drivers of uninsured cars are much more careful than average—that
uninsured cars are underrepresented on the road and average less than half of the mileage averaged
by insured cars. Therefore, if enforcement could be made 100 percent successful and a premium be
paid for every registered car, the average mileage per insured car would come down and would
bring losses and premiums down with it. Insurance companies would still make extra profits on
cars driven less than average, profits they would use to compete in lowering premiums for the
benefit of desirable—and usually higher-mileage—customers. But trying to force those who can’t
afford it to subsidize a lower premium for those who don’t need it is not a feasible remedy.

**Remedy** As a remedy, the per-mile option obviously would end the extra profits insurance
companies now make from premiums paid for cars idled or driven low mileage. Only actual use of
a car, with its odometer turning, would earn its insurer prepaid premium at a cents-per-mile rate.

The benefit to owners of cars driven low mileage was affirmed by an insurance industry attorney, but he objected to HB 3099 on the premise that companies will voluntarily meet the need. As a case in point, he described a per-mile option that Progressive Insurance recently began marketing in Texas. Rather than using the odometer, however, it uses a Global Positioning Satellite (GPS) system to track car location. Unfortunately, this requires expensive computer and radio equipment ill-suited for monitoring older and idled cars, and introduces a new risk to travel privacy that some customers may not welcome. (By offering its GPS per-mile option to all its policyholders, however, Progressive presumably could meet the HB 3099 requirement even though some might prefer the odometer version.)

Proposing the usual industry remedy for consumer anger about cost, insurance company officials testified in favor of two bills to allow them more freedom in setting premium rates. But they were not able to answer confidently the Committee's question on behalf of House colleagues: “If this happens, what's going to happen to my constituents? ... I want to know if the rates will go down?” Where HB 3099 is concerned, however, this essential question can be answered with certainty: Without exception, everyone who chooses the per-mile option would be able to lower their premium for a car by driving it less than the average mileage of its class. For example, a company may offer owners of cars in a class a choice between a $500-a-car premium and a 5-cents-a-mile premium. Everyone in the class expecting to put less than 10,000 miles on the car in the coming year would save by choosing the per-mile option. (Driving it only 7,000 miles would cost $350—a 30% saving over the $500 unlimited mileage option.)

**Compliance with mandatory insurance** The Committee was concerned that the per-mile option would be “giving people a new way to circumvent the mandatory law. Just simply buy the cheapest per-mile policy you can buy, tamper with your odometer, nobody ever catches it and you’ve escaped the provisions of the law.” This report finds, however, that those choosing the per-mile option as a new way to escape insurance expense would experience a significant increase in risk of being caught and punished. Odometer readings, which are systematically reported to the state as part of the annual safety inspection, would serve to detect those cars driven the highest mileages illegally without insurance thus proving the multiple violations that now call for the greatest punishment. Evidence of tampering added to the inspection report could lead to the criminal prosecution provided for by state and federal law against odometer fraud.

By improving affordability, the per-mile option would lessen resistance by legislators to a state database supplied with company information for each car they have insured on the date or mileage intervals covered. The database would determine whether or not each mile driven between annual inspections had been insured. Moreover, a database would eliminate the need to verify insurance randomly through traffic stops, which an insurance agent described as harassing his low income
clients: “We’re in an area that many times our authorities stop them because they have older cars knowing they don’t have insurance and write them a ticket. It just seems unfair.” By ending the need for random enforcement with its risk of bias, database monitoring could give greater attention to owners of newer cars that testimony indicated are also driven without insurance.

**Solving consumer anger** Availability of the per-mile option would work to reduce consumer anger in three markets—households with extra cars, low mileage drivers, and residents of low-income zip codes. But anger at car insurance extends beyond these three markets to the broad market consisting of owners of cars that are driven average mileage and more. Legislators were understandably concerned about how a law requiring companies to offer the per-mile option (HB 3099) might affect all constituent groups. The Committee asked an *industry official* about this when he was describing Progressive’s per-mile option. He replied that “You wouldn’t want to offer that to somebody who is driving 50 to 60,000 miles a year. It just wouldn’t be cost effective.”

In deciding that fixed premiums are more cost effective for high mileage driving, Progressive may be relying on the fact that such driving is done mostly on Interstate highways where the risk of accident is less. Therefore, the company might be choosing fixed premiums for such customers as a way of recognizing the lower per-mile cost of insuring this kind of travel and as a way of avoiding the equipment and administrative costs of its proprietary GPS per-mile system.

Universal availability of the per-mile option under law, however, would directly provide car owners in all markets with the information they need to choose between unlimited and measured mileage. Per-mile costing would confirm that, like other miles driven, each Interstate mile transfers a statistically certain cost to the insurance company because accidents do happen on Interstates. Awareness of per-mile cost would help an owner planning to drive a car 20,000 to 30,000 miles in the next policy year to decide whether or not convenience makes it worth paying the same fixed premium as someone who drives a car 50,000 to 60,000 miles a year. Per-mile premiums would provide a new transparency to the underlying cost, a transparency that would empower consumers, dissolve their anger at fixed premiums, and motivate auto insurers to engage in price competition based on measured visible cost.
1. Introduction

a. Identifying multiple problems caused by per-car premium rates

During two April, 1999 hearings, the Texas House Committee on Insurance considered some dozen bills designed to reduce the cost of automobile insurance and the number of uninsured cars. Testimony on the bills affirmed that people living in low income areas are more likely to be branded as “non-standard” and to have to pay a higher premium than if they lived elsewhere. Asked to explain why, industry representatives merely blamed higher losses without naming any cause. In fact, their inability to come up with an explanation became an issue for committee members when considering HB 1092 (to regulate county mutual premiums).

Mr. Jay Thompson (an attorney representing the Association of Fire and Casualty Companies in Texas, AFAC): There’s loss data on every coverage. There is zip code data by coverage and you can find that.

Rep. Glenn Lewis: But Jay…it is very difficult to convince a lot of us that those things are based on losses and [also that] the fact that where the premiums are higher happens to be in low income and minority communities….is purely coincidence.

Rep. Miguel Wise: In fact most of us think it is intellectually dishonest to come over here and tell us that there is no red-lining or green-lining because it's due to the money, whether you are making a profit. When you don’t have the number of [standard] companies available in the poor districts that you have in the affluent parts of Houston.

Despite such skepticism, nobody pressed industry representatives to answer the obvious question: Are poor people really less careful drivers? The current lack of explanation for the higher losses claimed by the industry implicitly says “yes” and defames drivers living in low income areas as less careful than those living in higher income areas. But a good case can be made for a non-invidious reason. We begin by assuming until insurers prove otherwise on a per-mile basis that driving care is not related to income level or zip code. (Economic theory actually predicts more care when insurance is minimal or absent.) Key to understanding why the standard market breaks down in low income zip codes is understanding why it does not break down in higher income zip codes.

In higher income zip codes, however, market stability comes at the expense of owners of cars driven less than average. These customers are seen as a source of extra profit by insurers, who sometimes refer to landing their business as “skimming the cream.” Because these people, along with many who drive average mileage and more, think their premiums are too high, legislators feel pressured to propose remedies. But often the remedies for higher income zip codes—such as increasing punishment of owners of uninsured cars, or allowing companies complete freedom in setting premiums—would aggravate problems for people living in low income zip codes. Such conflicts would be avoided by identifying a single cause—and remedy—for the problems in both
low and higher income zip codes. The cause identified in this report is the practice of charging a fixed premium per car for all the miles you can drive it, and the remedy proposed is making per-mile rates available to everyone who wants them, as HB 3099 would do.

b. Mandating a per-mile option — HB 3099

Law and commerce have long used odometers as the essential measuring device for resale value, rental and leasing charges, warranty limits, mechanical breakdown insurance, and cents-per-mile tax deductions or reimbursements for business or government travel. Motor vehicle insurers have also long made the vehicle-mile exposure unit available as the premium measure at cents-per-mile rates for some commercial vehicles. Under pain of civil and criminal punishment, each mile a motor vehicle travels must be permanently recorded on its odometer. On the basis of this well-established feasibility, the Per-Mile Auto Insurance Option Bill, HB 3099, would require auto insurers to provide owners with two payment options: 1) Continue paying a fixed per-car class premium based on the class's experienced cost per car-year; or 2) Opt within the same classification to pay premiums according to miles recorded on the car's odometer (or other measuring device) at a cents-per-mile rate based on the class's experienced cost per car-mile.

c. Using a per-mile measure of cost and profit

The per-mile rate of automobile risk transfer is actuarially justified by self-evident facts. The activity that statistically produces traffic accidents is not owning a car but using it. While not in use a car transfers no risk and hence no cost to an insurance company for providing driving coverages (liability, collision, med-pay, and PIP). (Theft, hail, and flooding are non-driving 24 hour coverages.) Each mile a car travels entails risk of accident and therefore transfers a statistical—but very real—cost to the company that insures it.

Number of miles of a car's exposure to accident risk is inherently its owner's decision and therefore must be measured individually. In contrast, because accidents are random, the cost per mile of accident risk is inherently an average characteristic of a large group of many cars. (Of course, any small group of cars will show an “average” accident cost per mile—or per year—but the average will vary widely each time it is measured and therefore is worse than useless for insurance purposes—a consequence of ignoring the Law of Large Numbers, see p. 28.) An insurance company can only determine a reliable cents-per-mile cost for a well-defined class of cars by dividing the total class accident cost by the class's total accumulated mileage over the time period in which the accidents occurred. The actual cents-per-mile price charged thus would evaluate the risk of driving in money terms for the class's car owners.

The per-mile measure of insurance cost explains why the number of insurance claims historically varies directly with large-scale determinants of driving amount—driving, and therefore
claims, always decrease with a sharp rise in unemployment or the price of gasoline. It also provides a non-invidious explanation of why men at every age average more accident involvements than women the same age do: in every driver age group, men average proportionately more miles of driving. That is, although per-mile accident rates vary by driver age, men and women the same age have virtually the same per-mile accident rates.

d. Considering testimony – List of House Bills

The per-mile analysis is applied in the next section to problems brought out in testimony by car owners living in higher income zip codes. The findings on these problems are then used in Section 3 to explain the cause of problems in low income zip codes. Section 4 describes stereotyping problems fostered by using fixed premiums and categorizing loss costs by car-year. The last section examines testimony on proposed remedies, and shows how each problem would be solved by universal availability of per-mile premiums. The auto insurance bills discussed on April 6 and 13, 1999 and included in this analysis are:

- HB 267 April 13, Reps. Wolens, Brimer (to sample car registrations to pick owners required to provide evidence of insurance; to have insurers verify the evidence; and to fine the owners of cars not insured).
- HB 476, April 13, Rep. Chavez (to change from per-car to per-driver premiums).
- HB 805, April 6, Rep. J. Jones (to freeze premiums for older drivers who qualify).
- HB 1092, April 6, Rep. Burnam (to apply to county mutual (non-standard) companies the state class plan and a separate county-by-county premium band system, as applied currently only to standard companies).
- HB 1637, April 6, Rep. Dutton (to allow standard companies to use their own zip code and other premium profiles the way only county mutual (non-standard) companies are currently allowed to do).
- HB 1908, April 13, Rep. Chavez (to extend from one to four months the period for which companies must guarantee liability coverage—and for which they may collect full payment—when issuing insurance proof to satisfy the state’s safety inspection, registration, and driver’s license requirements).
- HB 2772, April 13, Rep. Bonnen (to repeal penalties for violating mandatory insurance law, but to allow driver of an uninsured car to sue only for monetary damages—not for pain and suffering).
- HB 2793, April 13, Reps. Gutierrez, West, Cuellar, Thompson, J. Moreno (to set up a state database of insurance company policyholders for systematically checking all registered cars for insurance).
- HB 3017, April 6, Rep. Smithee (to allow standard companies to use their own zip code and other premium profiles, the way only county mutual (non-standard) companies are currently allowed to do, but with each new premium rate subject to review and disapproval after taking effect).
- HB 3095, April 13, Reps. Burnam, Dukes, Olivo, Capelo, McClendon (to prohibit use of credit history to brand car owners as less-careful drivers; to require companies to insure qualified applicants; to set TAIPA premiums at 1.5 times benchmark premiums; to sample registrations for insurance).
- HB 3099, April 6, Rep. Burnam (to require all companies to provide per-mile premiums as an option to per-car premiums).

The Committee later approved HB 476 five to one (considered in Calendars) and HB 2793 six to one (failed to pass to engrossment), and left the rest pending. An index of bills, legislators, subjects, and witnesses concludes the report, page 36.
2. What angers car owners in higher income zip codes

a. Large differences in the profit made on each customer — Table 1

Currently, companies insure private automobiles for premiums paid in advance that allow unlimited mileage to be subsequently driven. Even though a company may apply a mileage surcharge (or discount) according to unverifiable representations on the application or renewal form of what the Texas Manual (Rule 74G) calls “estimated [future] odometer mileage,” the company does no back billing (or refunding) at the end of the policy period regardless of how many miles (or few or even none) a car’s odometer may actually have recorded. As a consequence, the company charges insureds in the same class nearly identical premiums for a lot of driving and for no driving. Testimony on April 6 and 13 pointed to this problem under a number of common household arrangements. Consideration of hypothetical cases before looking at the actual ones will aid understanding of the problems—and payoffs.

Table 1 presents six cases to show how different arrangements strongly affect the amount of premium companies can collect for insuring 20,000 vehicle miles total under a hypothetical $500 base premium. The most simple arrangement is one car traveling the entire distance in a year, Case A. Dividing premium by vehicle miles traveled (VMT) shows that the company collects 2.5 cents a mile in this case. However when a household uses two cars to drive 20,000 miles in a year, or takes two years to drive the same distance in one car, then the amount the company collects arbitrarily jumps from 2.5 cents to 4 or 5 cents a mile, as shown by Cases B and C.

Consumers represented by these first three common cases probably sense such gross inconsistencies, but they complain to legislators about premiums seen as arbitrary taxes on car ownership apparently falling equally on everyone. The legislative response generally seeks to roll back this insurance “car tax” 10% or 20% for everyone—for Case A as well as for Case C—

<table>
<thead>
<tr>
<th>Case</th>
<th>Annual mileage per vehicle</th>
<th>Vehicles used to travel 20,000 miles</th>
<th>Years taken to travel 20,000 miles</th>
<th>Annual Premium per vehicle</th>
<th>Total premium collected for 20,000 VMT</th>
<th>Premium collected per VMT (= d / 20,000 miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>20,000</td>
<td>1</td>
<td>1</td>
<td>$500</td>
<td>$ 500</td>
<td>2.5 cents</td>
</tr>
<tr>
<td>B</td>
<td>10,000</td>
<td>2</td>
<td>1</td>
<td>400*</td>
<td>800</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>10,000</td>
<td>1</td>
<td>2</td>
<td>500</td>
<td>1,000</td>
<td>5</td>
</tr>
<tr>
<td>D</td>
<td>6,667</td>
<td>1</td>
<td>3</td>
<td>400**</td>
<td>1,200</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>4,000</td>
<td>5</td>
<td>1</td>
<td>320***</td>
<td>1,600</td>
<td>8</td>
</tr>
<tr>
<td>F</td>
<td>2,000</td>
<td>1</td>
<td>10</td>
<td>400**</td>
<td>4,000</td>
<td>20</td>
</tr>
</tbody>
</table>

* 20% multi-car discount applied to $500 base annual premium. ** 20% low estimated future mileage discount applied. *** Both discounts applied.
through measures like tort reform. This analysis questions instead why for cars within the same risk class there should be a wide range of charges per mile—not by 10% or 20% but by 100% or 200%.

The last three cases (D, E, and F) illustrate situations brought out in testimony. These cases show that the company would be collecting from 6 cents up to 20 cents a mile for the same insurance. The company is obviously collecting much more in total premium—and much more per mile—for the same risk transferred to it and so is making much more profit from owners of cars driven low mileages. Any payoff to consumers goes to those using a single car to travel high annual mileage—as in Case A. The important question of why insurance companies often compete for such apparently low-profit, Case A customers is examined below in Section 3c (p. 17).

b. Having to pay for insurance while a car is inoperable

Companies profit most from insuring cars not being driven. Periods of non-use between occasions when the car is driven can result in low annual mileage, as in Cases E and F, Table 1. A company continuously collects premium on a parked car without possibility of cost. For this reason, a number of witnesses supported Representative Norma Chavez's bill to Insure the Driver (HB 476). The state chairman of the Texas Motorcycle Rights Association (TMRA) explained why.

Mr. H. W. “Sputnik” Strain: When you own several vehicles, some of which will never be driven during the year, but if you don’t keep license and stickers on them, it would be against the law to have them setting in your front yard, it makes it kind of tough. So, since those vehicles there’s no possible way they’re going to cause an accident, and there’s no way they’re going to cost the insurance any money, why should you be required then in turn to give the insurance money?

Another TMRA witness also questioned having to pay for insurance on idle vehicles.

Mr. Dean Maltzberger: A few years back I bought an old junked out motorcycle, literally the frame was over here and the wheel over there….In order to get a title transferred over, I had to have insurance on it. I couldn't afford to fix it….It was a year before it was rolling, but I paid a couple of hundred bucks of insurance to get it in my name. I'm the same way about cars….But why do I have to buy insurance on them when they are not even running and won't be for the next six months?

Neither witness speculated about what companies do with the pure profit from months of premiums they collect on dismantled cars.

Because cars are not driven for extended periods for many reasons, insurance companies throughout the country usually provide an option for interrupting the insurance coverage on cars that will be parked continuously for at least 30 days. Although Texas regulations allow the option, Mr. Maltzberger's insurer may not have made it available to him. At least one major company is not making it available to its several million policyholders in Texas.
c. Losing the option to suspend insurance

State Farm policyholders cannot get a refund in Texas for the time one of their cars is idle, according to testimony by the National Organization for Women’s insurance project director in support of HB 3099.

**Dr. Patrick Butler:** [T]here is a provision that has been standard in insurance for years and years and years called suspension of coverage….The premiums are just pro-rated for the days [the car] has been withdrawn from service. That is provided for in the Texas Manual [Rule 45]. There’s a form for withdrawal from service and a form for reinstatement….[But the] State Farm manual….reads 'not available' under Rule 45.

The State Farm manuals for other states such as Pennsylvania, California, and New Jersey currently make this option available to customers who are savvy enough to ask for it. But in Texas, the company has guaranteed for itself risk-free income as pure profit while cars it insures are not used even for months at a time.

Such profits usually do not show up on company books because cars generally go out of service in response to individual events such as illness or overseas travel. Occasionally, however, these profits are very noticeable because events occur which cause the driving of many cars to be simultaneously reduced or interrupted. In the 1970s insurance commissioners in some states attempted to get refunds of windfall profits insurance companies made during the Middle East energy crises. Gasoline price increases and shortages curtailed driving which abruptly reduced the number of insurance claims companies paid. Testimony described how the Middle East crisis in 1990 also reduced or interrupted the use of many cars and how State Farm used its suspension-of-insurance provision to refund some of the windfall profits it produced.

**Dr. Butler:** One of the interesting things that happened during Desert Shield was a lot of people picked up from their civilian life and went overseas to the Middle East. How did the insurers handle that? Well, State Farm in Virginia impounded the cars [on military bases] before they would suspend coverage.

He noted that other companies made different provisions for the profits made on presumed non-use of cars owned by military personnel. The owner's period of service in the Middle East determined the refund amount.

**Dr. Butler:** GEICO and [probably] some of the other companies made a premium refund whether or not the cars continued to be driven while their owners were overseas.

In fact, to make these military service refunds legal in Texas, the 72nd Legislature had to add an exception to the law prohibiting discrimination among policyholders in refunding windfall profits.
Insurance Code Arts. 5.08 and 5.09:...This article does not prohibit an insurer...from distributing to policyholders who are on active duty in the United States Armed Forces any estimated profits resulting from service by those policyholders in any foreign country in a combat theater of operations at any time after January 1, 1990. [Emphasis added.]

Although the Texas code now facilitates the refunding of such pure profits under the sort of unusual circumstance that idled thousands of cars for a patriotic cause, the code does nothing about the day-to-day pure profits made when individual cars are routinely idled. In fact, the Desert Shield profits were hugely augmented by the overall reduction in driving and insurance claims in response to the 1990-1991 recession and the jump in gasoline prices from $1 to $1.50 in late 1990.

However, neither the noticeable nor the unseen extra profits from widespread or individual reductions in driving would be possible with odometer-measured premiums. Insurance companies would earn prepaid premium only while each car is in actual use. Furthermore, company income would automatically grow whenever the economy is good or gasoline is cheap and people start driving more. By proportioning company income to amount of driving, per-mile premiums would automatically preclude the profit windfalls—and shortfalls—that are inherent in charging fixed premiums.

**d. Low-mileage drivers having to pay for unlimited mileage**

Even if the legislature required that insurance companies offer (and publicize) a suspension option for cars continuously idle for a month or more, this crude arrangement would not solve many problems. Some cars are needed for daily use, but are still driven only short distances. Several organizations and individuals testified in support of the per-mile option, HB 3099, on behalf of low mileage drivers. These drivers are seen by insurance companies as opportunities for high profit according to testimony by the president of NOW in Texas.

**Attorney Jeanne Sommerfeld:** As insurers have long known, there are three major groups of drivers who are 'safer' and more profitable because they average lower mileages and produce fewer accidents and claims. They are: 1) owners of older cars, 2) women drivers, and 3) older drivers.

She quoted a company's chief underwriter speaking at an industry conference on classification plans who said that “the young female, god bless her, is obviously a better insurance risk than her male counterpart if only because her use of the car is substantially less.” Attorney Sommerfeld also quoted from the transcript of a Pennsylvania rate discrimination case the sworn testimony of a company expert on how one company “made a killing on older drivers” because “they hardly drive at all.” Austin resident Richard Kallerman also testified in support of the per-mile option bill to give retirees on fixed incomes a way to reduce insurance expense the same way they now save on gasoline. His own situation illustrated the current problem.
Rep. Joe Moreno: Just out of curiosity, about how many miles do you average a year?
Mr. Kallerman: Oh, six or seven thousand. Rep. Moreno: This would be good for you?

Many older drivers would be represented by the low-mileage/high-profit Cases D and F in Table 1 (p. 8). Department of Public Safety data presented by Representative Jesse Jones (in support of his HB 805 to protect older drivers from premium increases) showed that older drivers have fewer speeding tickets and accident involvements. Because they drive less and thus become more profitable as a group, the benefit of retaining these customers increases for insurance companies. A former State Farm agent (in discussing HB 1092) observed how companies encourage retention:

Dr. Colleen Aycock: People are also powered into buying products. Because they are fearful of leaving regardless of the risk. They feel they have built up some longevity with that company that buys them something in the future.

e. Having to pay a premium for each car when cars outnumber drivers

Support for the insure-the-driver bill (HB 476) was mainly expressed by Texans in households with more cars than drivers. Using the same logic as previous TMRA speakers that no risk is transferred to insurers from inoperable cars, another member pointed to the insurance company's low risk per-car but high total premium owing solely to his household's driving arrangements.

Mr. Brian Schmidt: My wife and I are the only two drivers in our household because we are the only two people in our household. We own an old Mercedes, a street-rider, an old El Camino, a motorcycle, and her new Subaru. That’s five vehicles. We can only have two on the street at a time if we are not together. Yet we are paying in excess of $2,000 a year for insurance because of the specialty vehicles involved here.

The profit a company can make on households with more cars than drivers is suggested by Case E in Table 1 (p. 8), in which five cars are used to drive 20,000 miles at a cost of $1,600 in premium, i.e., 8 cents a mile. An industry attorney excused this profiteering by citing the possible risk to the company that households might allow other drivers extensive use of their extra cars.

Rep. Burnam: Mr. Geiger, is there any actuarial information available that would indicate one way or the other that people that have multiple vehicles, obviously you get a certain number primarily for recreational purposes, is there any indication that they are more inclined or less inclined to be a risk, or have accidents?

Attorney Richard Geiger (representing AFACT): … I don’t know any data that would answer the question you’re talking about. If you own five vehicles, are you a greater risk? Well you are technically a greater risk because all five could be on the highway at any one time. Because they could be operated with your permission by anybody.

As the TMRA members recognized, the insurance company's problem of not knowing how much—if at all—extra cars are being driven would be eliminated by HB 476. With a change from per-car to per-driver premium rates, the number of vehicles would become irrelevant, and the number of drivers would determine a household's total cost. Each driver would pay a premium for 24-hour, year-round insurance that must include unlimited mileage. (Paying by-the-mile would not be possible because drivers don't wear odometers.)

However, even though paying by-the-driver instead of by-the-car would reduce costs for households with extra cars, it could increase costs for households with extra drivers, including low income households where several drivers must share a car. (This effect was cited as a potential problem in neutral testimony on the bill by Consumers Union attorney Rob Schneider.) Although HB 476 would justifiably reduce the cost of auto insurance for households represented by TMRA members, it could worsen the current problem of high cost in low income zip codes.

3. What angers car owners in low income zip codes

a. Being branded as non-standard as shown by the Birnbaum study

The association of higher premium rates with low income areas was quantified in a study commissioned by Rep. Burnam, who, as a remedy, sponsored HB 1092 to regulate the premiums of county mutual (i.e., non-standard) companies. Testifying in support of the bill, the study's author summarized his findings:

Economist Birny Birnbaum: If you live in a low income area, you are 3 to 4 times more likely to pay higher rates for auto insurance than if you live in a higher income area. And this pattern holds in urban areas, large urban areas, small urban areas, and rural areas.

He concluded from the pattern shown by his study that the standard

[r]e-regulated companies systematically deny insurance to consumers who live in poor and minority neighborhoods.…County mutuals [non-standard, non-regulated companies] target that [market]…The rates are much higher…. [B]ecause of the systematic denial, consumers who live in poor and minority neighborhoods who are least able to afford insurance end up paying not just a higher percentage of their income, but a higher absolute dollar amount.

During subsequent discussion of HB 1092, it was suggested to the attorney opposing the bill on behalf of the company association AFAC{T}, that belief in stereotypes biases the assignment of costs.
Rep. Lewis: [L]et me say this to clarify….Where the discrimination comes in is that there are certain stereotypes and currently held beliefs where they believe that in these communities that losses are going to be higher when actually there is no data to support that. But because they believe it, it's going to be true.

Attorney Jay Thompson: But we have that data, we know where the losses are and the department collects both premium data by zip code and loss data.

Rep. Lewis: But you have people in those communities who have never filed a claim. You have no loss experience with these people. But because they live in this community they pay the high rate.

Rep. Lewis was on firm ground in assuming that belief in stereotypes biases loss data. This results from the subjective nature of assigning liability based on fault. If fault happens to be a judgment call in an accident involving two cars—one from a low-income and the other from a higher-income zip code—the blame and liability cost are more likely to go to the class pool of the low income area. To eliminate the possibility of this bias would require careful reform of the liability system for motor vehicle accidents, a reform that necessitates acknowledging that insurance loss data refer to class pools—not individuals—and also that the individual car's share of class losses is measured by the miles of exposure to risk it adds to the class pool.

The pooling basis for insurance means that an individual's claim cost—or freedom from claim cost—only has predictive meaning as an element making up a class's loss data. In this regard, attorney Thompson would agree with three principles that are essential to insurance: 1) the whole class shares the costs of the unlucky few; 2) who these few will be cannot be known in advance; and 3) in predicting this year's loss experience for setting the class premium, a company must use the overall cost record of the entire class in past years—as attorney Thompson later confirmed by citing the Law of Large Numbers (see p. 28). However, he might not agree that how the whole class shares the costs of the unlucky few should be apportioned by-the-mile instead of by-the-car.

The basic principle that auto insurance record-keeping currently ignores is that a car not being driven contributes no cost to its class pool—as Mr. Strain of TMRA maintained (p. 9). Thus, cars driven little—even the few that have occasioned claims—contribute much less cost to the class than the cars in the pool driven a lot, including the cars driven by high-mileage drivers who have been lucky. By ignoring these measurable differences in cost and charging the same one-size-fits-all premium for insuring every car in the class, insurance companies are actually causing market breakdown.

Because attorney Thompson as an authoritative source failed to state a cause for the higher losses he cited, by default he fed the stereotype that low-income drivers are less careful. Doubts about this invidious assumption were expressed not only by Rep. Lewis, but also by witnesses speaking on other bills. For example, a Consumers Union lawyer did so when testifying against HB 2772 (to repeal penalties for driving an uninsured car to be replaced by loss of some rights to sue).
Attorney Rob Schneider: We have seen study after study—studies by the Department of Insurance, by the Office of Public Insurance Counsel (OPIC), by non-profit groups—that drivers who live in low income and minority zip codes tend to pay more for insurance and there does not seem to be a corresponding increase in the risk that those drivers present.

Consumers may also be relegated to non-standard companies if they only buy minimum insurance. This connection was brought out in questioning the president of the non-standard company Progressive County Mutual on his support of HB 1637 for deregulating standard companies.

Rep. Dora Olivo: Do you know…the numbers that you have that you sell pure liability insurance to?….
Mr. William Graves: It’s probably about 50%, maybe slightly more, liability only policies….
Rep. Olivo: Ok, 50%. How many of those in the 50% range are high risk?
Mr. Graves: Could I ask what you mean by high risk?
Rep. Olivo: You charge a little bit more because they have this factor that you’re looking at.
Mr. Graves: …I would suspect though that liability-only policies typically characterize someone who does not need to buy physical damage insurance because either their car is very old, or it doesn’t have a note on it, the lien-holder doesn’t require it, or people who simply cannot afford it and don’t have to buy it. So I would tell you in general that liability-only policies are more characteristic of non-standard business than standard business.

Car owners refused access to insurance from nationally advertised standard companies are left to speculate about what the real reason is and who is to blame.

b. Being rejected by standard agents as unprofitable

The sponsor of HB 1092 to regulate county mutual premiums questioned a former State Farm agent about denying insurance to applicants from zip codes believed to be unprofitable.

Rep. Burnam: Dr. Aycock, I have talked to agents in Fort Worth and was told that underwriting guidelines are unintentionally discriminatory. Would you speak to that as far as your own experience?
Dr. Colleen Aycock: Underwriting guidelines are very clear…I was routinely and systematically…told to discriminate against people…for the fear of not being profitable. That’s how an agent discriminates. An agent doesn’t say because you’re black or white or green I’m not going to write your business. My agency was a stone’s throw from the Capitol, [but] I never wrote business East of I-35…There were no State Farm agents East of I-35.
Rep. Burnam: And you didn’t have an aggressive marketing system East of I-35?
Dr. Aycock: [pause] What’s the antithesis of that? I had an aggressive de-marketing system.
Rep. Burnam: Oh, a de-marketing system.
Dr. Aycock: I had a series of plays and moves. You have to have that.
Rep. Burnam: A series of subtle plays and moves that it would be very difficult sometimes for the individual that experienced that to put their finger on exactly what happened. But their general sense in the community that they live in it is happening.
Dr. Aycock: They would know that they’re being discriminated against.
Agent commissions work in two ways. First, agents get a percentage of the premium their
clients pay, and second, the percentage increases (as profit-sharing) when the ratio of losses to
premiums collected is low in aggregate for their clients. The incentive is to seek some clients as a
source of high premium total and others as a probable source (because losses are random) of a low
ratio of losses to premiums.

Another committee member continued the line of questioning about agent incentives.

Rep. Lewis: [T]he seed was firmly planted in your mind that the business over there East of I-35 was
not profitable? You couldn’t make a profit there?

Dr. Aycock: It wasn’t a seed. It was very loud and clear….You were told not to write business over
there….I was generally told that the business was unprofitable….I wrote no policies [east of I-35]
first, second, and third….I was the most profitable agent in the region State Farm had.

This testimony indicates that State Farm tells its agents to deny insurance in certain areas, but lets
them decide how to go about doing it. However, the company does strongly warn agents that data
on losses segregated by zip code show that people living in lower income areas cost companies
more per car to cover. Therefore selling to them through a standard company rather than at higher
premiums through a non-standard company would adversely affect profit-sharing commissions
based on a low ratio of losses to premiums. Although agents would like to sell as much insurance
as possible, selling to customers from certain areas would directly affect the agent's earnings in a
negative way.

Apparently not all State Farm agents are denying auto insurance in low income zip codes. One
committee member questioned Mr. Birnbaum's report and pointed to evidence in his district

Rep. Eugene Seaman: There’s a State Farm agency in the poorest minority neighborhood and they
are writing the people there and I can name the names of the agents. And that’s their market.

To the extent that Dr. Aycock's experience is general, however, it shows that some companies and
agents avoid these zip codes. It does not explain, however, why losses appear to be greater in low
income than in higher income areas.

c. Seeing unavailable low premiums in TDI consumer guides — Table 2

In developing an explanation, we refer to the reality of the situation described above by former
agent Aycock. In the current Texas Department of Insurance's (TDI) consumer's guide for Travis
County, shoppers living on both sides of I-35 in Austin see a wide range of premiums for which
they apparently qualify. Table 2 shows the current State Farm premium, $344 per car year,
bracketed by Southern Insurance's $208 at the low end of the guide and Dairyland County Mutual's
$744 at the top. Why should anyone who fits the published class profile pay more than $208? The
short answer is that using zip code and other confidential profiles (the underwriting guidelines)—as
Table 2. Range in premiums and per-mile returns to insurers, Travis County

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry's informal designation †</th>
<th>Premium per car-year†</th>
<th>Amount company collects for each vehicle mile traveled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Insurance</td>
<td>Preferred</td>
<td>$208 -30%</td>
<td>3.3 cents 2.1 cents 1.0 cents</td>
</tr>
<tr>
<td>State Farm Mutual</td>
<td>Standard</td>
<td>$344 +15%</td>
<td>5.5 cents 3.4 cents 1.7 cents</td>
</tr>
<tr>
<td>Dairyland CM</td>
<td>Non-standard</td>
<td>$744 +150%</td>
<td>11.9 cents 7.4 cents 3.7 cents</td>
</tr>
</tbody>
</table>

* From the TDI Official Rate Guide 1999-2000 (on web June 1, 2000). Minimum coverage, Class 1B, Adult drivers, Use: "Driven to and from work more than 50% of the time." ** Car-year premium reduced 20% for Class 1A, Use: "Pleasure only." † Used in TDI Guide to caution buyers that non-standard (synonymous with county mutual, CM) companies generally have higher premiums. However, unlike standard companies, CM premiums are neither confined to within 30% of the state-set county benchmark nor class rated by the state. CM premiums may vary widely by zip code within each county, and some are within the benchmark band and may be less than some standard company premiums. †† The benchmark is $298.

Dr. Aycock testified above (p. 15)—agents reject applicants who do not "qualify" for the company premium level. But what is the cost basis for the confidential profiles that causes agents to reject car owners living in low income zip codes as unprofitable?

We begin the analysis by calculating in Table 2 the per-mile value of each company's premium at three driving amounts: 5,000, 10,000, and 20,000 miles. Next, by taking 10,000 miles as the average of all Travis County cars in the Adult driver class, and State Farm's $344 as the average premium over all companies for this class, we can assume for the purpose of analysis that the average premium per mile of insurance protection provided must be about 3.4 cents, as the shaded value in Table 2 indicates. In other words, this yield covers costs and provides a reasonable profit.

The diagonal made by the shaded values separates unprofitable yields (2.1 cents per mile and less) to the upper right from the high-profit values to the lower left (5.5 cents per mile and more). Consequently, cars covered by a company at its particular premium level that produce less than about 3 cents a mile would be individually unprofitable for agent and company. If marketing auto insurance were as simple as this, Southern Insurance would use profiles to select cars probably driven 5,000 miles or less, and State Farm would attempt to exclude cars driven more than 10,000 miles a year. Companies with high premiums like Dairyland County Mutual would target high mileage customers rejected by the companies with lower premiums.

But what does a major company like State Farm do with the extra profits made on cars driven less than the break-even mileage for its premium? To bring in more premium volume, they use the extra profits from the lower-mileage cars to price compete for higher-mileage cars. However, such competition is targeted, as economist Birnbaum explained when testifying for HB 1092:
[T]he standard insurers by and large view their target market as affluent consumers with two cars who are going to buy homeowners insurance and stuff like that….There isn’t a corresponding number of standard companies that target the poor and minority areas. It’s a market failure.

Affluent consumers also tend to drive a lot. But for the reasons cited by economist Birnbaum, State Farm would want to insure even the high-mileage cars of customers with the other insurance needs. To secure a large share of this market, therefore, State Farm needs to mix lower mileage cars into each class pool—skim the cream—to create the profitable average mileage. That has been called the art of underwriting.

Why can't the national companies duplicate this pooling in low-income areas? Briefly stated, even if they decided to target these areas, owners of cars driven few miles simply can not afford to pay the subsidy that fixed premiums provide for insuring cars driven many miles. And unaffordable premiums for cars driven low mileage can also lead to further breakdown in affordability.

d. Being blamed for market breakdown

Premiums currently put financial pressure on owning and insuring cars, rather than putting pressure on driving them—the activity that produces accidents. Any increase in pressure on ownership (or a drop in income) leads some consumers to cut the amount of insurance where possible and eventually to reduce the number of cars they own, or at least insure. The cars sold first, or whose insurance is allowed to lapse, are the marginal cars—those least essential to household needs and therefore driven the least. Selling and lapsing both take more premium than mileage (more $ than VMT) out of the company's class pool thus causing the pool's average mileage per insured car to rise. Furthermore, while the resulting reduction in car availability tends to cut the mileage of drivers who now must share cars, having multiple drivers nevertheless causes the mileage per insured car to increase. More driving of each car in turn raises the cost to insurance companies, who respond by raising premiums, which applies more pressure to decrease car owning and insuring. And in some circumstances, this cycle repeats itself in a market death spiral.

The death spiral does not occur in higher income zip codes because people usually have good incentives for keeping cars insured and can afford to do so. Most have a real need for liability insurance to protect assets and savings and, therefore, tend to keep even their least-driven cars insured. The presence of cars in an insurance pool that are driven low annual mileage holds down the average mileage of the pool and hence the company's cost per car. Owners of cars driven lower mileages—such as typical members of NOW and TMRA, plus retirees who are driving less—are generally able to pay the premium without foregoing necessities, but that is not the case for owners of low mileage cars in low income areas.

In low-income zip codes, fewer assets means that there is less general incentive for buying liability insurance. For some there would be a need to protect assets in case of being blamed for an
accident, but the only cars that would tend to be kept insured are those driven the most. Owners of these high-use cars also have the more immediate very real risk of fines, license suspension, and confiscation of car, etc. for being caught driving an uninsured car. Rather than each driver insuring a car, low income drivers will tend to lapse insurance on less-driven cars and to share a car that is still insured when a longer trip is involved.

Car pooling was described as a response to implementing an insurance enforcement database in Nevada (in support of Rep. Gutierrez's database bill, HB 2793).

Agent Hank Martin:  [P]eople car-pool together….[T]hey'll have six people going to a construction site together, instead of six trucks that are all uninsured in Nevada, in Las Vegas.

But it should be noted that by causing more driving to be concentrated on fewer insured cars, increased enforcement may also tend to accelerate the death spiral of insurance affordability.

Thus, owing to the death spiral effect, when Rep. Lewis questioned the cost basis of higher premiums in low-income zip codes, industry attorney Thompson was able to respond accurately that “we have that data, we know where the losses are and the department collects both premium data by zip code and loss data.” But the reason for higher losses per insured car is market breakdown caused by unlimited-mileage premiums, not by stereotypically less-careful low-income drivers. Unaffordable premiums are the fault of the automobile insurance industry—not the fault of the drivers whom the industry lets take the blame.
4. What angers some car owners in all zip codes

a. Being overcharged for insuring an older car

As with zip codes, insurance companies are constantly testing other profiles for their ability to lower premiums for a target market by raising them for less desirable—and easily stereotyped—groups. (Credit profiling apparently produces the result desired, as indicated by industry testimony against HB 3095’s restrictions on such profiling.) The testing process, however, is not at all even-handed: it follows the “heads I win, tails you lose” rule. If a test shows—contrary to the result desired—that using a certain profile would lower premiums for a non-target group at the cost-justified expense of the target group, a company will definitely not adopt that profile. An example of this process was described by attorney Jeanne Sommerfeld, president of Texas NOW, in testimony supporting HB 3099 (to mandate a per-mile option).

She told the Committee that when the industry planned 35 years ago to begin charging higher premiums for old cars—evidently based on the invidious belief that owners of old cars are less careful—a preliminary test discovered instead that the reverse was true: new cars produce more claims because on average they are driven twice as many miles. Attorney Sommerfeld quoted a description of this discovery from a modern professional textbook. The description and interpretation was written by actuary/attorney Daniel McNamara a Fellow and past president of the Casualty Actuarial Society and a former president of the Insurance Services Office (ISO).

[A] 1963-1964 study by one of the predecessors of Insurance Services Office…showed, contrary to the prevailing belief at that time, that newer automobiles had a higher frequency of accidents leading to liability claims than the frequency associated with older automobiles. This fact was not [subsequently] reflected in the rating system.

By not publicly correcting the “prevailing belief” that drivers of old cars are much less careful, auto insurers are still both overcharging and defaming them. Attorney Sommerfeld concluded that by offering this example, actuary/attorney McNamara—as an industry and professional leader—is advising other insurance professionals that marketing goals, and the stereotypes that support them, should prevail over solid cost statistics proving the stereotypes wrong. As he put it in the textbook,

the basic justification of relativities among classes must recognize that the use of statistics should be leavened with a liberal dose of common sense.

Attorney Sommerfeld told the Committee that same common-sense solicitude actuary/attorney McNamara advises for customers with newer cars explains why companies limit profiling by driver sex to cars with young drivers out of solicitude for adult men. The selective profiling by driver sex
of one in five cars ignores the consistent, approximately 2:1 ratio of men's to women's annual mileage and consequent accident frequency within each driver age group from 17 to 70. The correct response to this fact would not be to profile all cars consistently by driver sex—and car age—as a way to assess group differences in average mileage. Rather, providing a per-mile option would proportion premiums to individual odometer miles measuring the car's actual on the road exposure to accident risk.

The tendency to ascribe less careful driving to certain groups based on stereotypes continues despite statistical proof to the contrary. According to information brought out in testimony, the strong focus on catching and punishing owners and drivers of uninsured cars exaggerates the perception of their responsibility for insurance costs.

b. Being scapegoated for owning an uninsured car

The public pressure on government to make all car owners buy liability insurance seems to be based on two ideas. The first is that having all registered cars covered by insurance would decrease premium levels. The second idea is that drivers of uninsured cars cause a disproportionate share of accidents. While the first is correct in principle, the second is not in fact. Understanding the error of the second idea should guide strategizing to achieve full insurance compliance.

The idea that uninsured drivers cause a large share of accidents was apparently being expressed to the Committee by the sponsor of HB 267 (to fine owners of uninsured cars found by sampling registrations).

Rep. Steven Wolens: I am so disgusted with the number of people who drive without insurance.... About a year and a half ago... some idiot ran right into me and smashed my car....and drove away. ...I got his license [number], but there was nothing I could do because he didn’t have insurance. I could try to sue him, but, as you know, would get nothing out of it. What can I do to fix this because it happens to so many people I know?

This idea was also apparent in the concluding remark by the president of TMRA in support of HB 476 (to insure the driver).

Mr. H. W. Strain: And you will see an increase in the number of people who have insurance. We’re tired quite frankly of being run over by people who don’t have insurance.

However, despite any negative assumptions about people who own uninsured cars, these cars are under-represented in accident involvement relative to the number registered, at least in Utah. This came out in testimony by a former Utah state representative in support of HB 2793 to set up a database similar to Utah's in Texas. He described the situation when the Utah database was implemented in 1995.
Mr. Kelly Atkinson: When I asked as a [state] representative what the uninsured motorists population was in the state of Utah, I was told by insurance companies that it was 3%. . . .[T]he Commissioner of Public Safety told me it can’t be 5% [sic] because at the time of accidents 9% of people we checked that get involved in accidents don’t have insurance. When we did our first cross reference against those vehicles that were registered against those vehicles that had insurance, 23% of the citizens that had registered their vehicle did not have insurance.

Thus the Utah database showed that while over one-fifth (23%) of registered vehicles were uninsured, this large fraction produced less than one-tenth (9%) of the total involved in reported accidents and evidently one-twentieth (3% or 5%) of the insurance claims. Unless it is assumed that drivers of uninsured cars are much more careful than average, the under-representation of uninsured cars in accidents strongly indicates that these cars are also under-represented on the road. The average mileage of uninsured cars, which includes many zero mileages, must be about half the average mileage of insured cars, which also includes zero mileages—for example Mr. Maltzenger's dismantled but insured cars and motorcycles (p. 9).

In response to this evidence of low accident involvement by uninsured cars, insurers might object that they find as a separate insurance sub-class, “no-priors”—cars without prior insurance—produce more claims per car than the overall class pools to which they are assigned. (Consequently, standard companies often redirect no-prior-insurance applicants to a non-standard subsidiary with a higher premium level for their class.) Although, judging from the Utah experience, the average mileage of uninsured cars appears to be much less than the average for insured cars, some uninsured cars undoubtedly are driven more than the average for insured cars. But in any class or category of cars that can be established, few are driven the average mileage of the group.

The decisions to lapse insurance on a car and to insure one anew are two different decisions generally involving quite different amounts of driving. Insurance is allowed to lapse on cars being more lightly used—or not used at all. In contrast, insurance will be newly sought on cars for which more driving is planned. As a subgroup, therefore, no-priors are likely to be driven more than the average mileage for the insurance group they are entering. These newly insureds are not at all representative of the low average mileage of uninsured cars overall.

If insurance could be compelled for all uninsured cars, it is ironic that because of their low average mileage much of the new premium would be extra profit. Through underwriting profiles, insurance companies would probably mix such profitable new business into class pools as they now do. Such mixing currently allows companies to lower their premiums and compete for more affluent customers whose cars are usually driven more miles than average. At present, the owners of uninsured cars are not less-careful scapegoats but actually representatives of markets badly served by per-car premiums.
5. Attaining healthy markets

a. Diagnosing the causes of consumer anger

The foregoing discussion identifies three markets that are badly served by per-car premiums: 1) Households where cars outnumber drivers; 2) Low mileage drivers; and 3) Residents of low-income zip codes. However, even high mileage consumers in markets targeted by standard companies appear to resent the car-tax nature of premiums. Such general dissatisfaction was a major point of the testimony by Mr. William Graves, president of Progressive County Mutual. In support of HB 1637, he explained why standard companies need to be given freedom from premium regulation in order to be able to serve all markets well, as Progressive has presumably been doing in Texas as a non-regulated, non-standard company. He told how the Nader-backed 1988 so-called voters revolt referendum in California (Proposition 103) was a wake up call to Progressive: “that referendum hurt us so badly because it dropped so many regulations and politicized the process out there so badly that we in fact virtually withdrew from that state.” He applied the California experience to current Texas markets.

Mr. Graves: But the lesson we took from that was where there’s smoke, there’s fire. Consumers are angry about the cost of car insurance. They are angry about lack of availability. People don’t like to get rejected, they don’t like to get cancelled. And if we don’t as an industry do something to solve consumer anger about car insurance, the government is going to take over the business…. And that’s why I’m in favor of this bill because I think that’s the best way to get that healthy marketplace working here in Texas.

He did not mention that auto insurers formerly had pointed to California as a model of minimum regulation, but his lesson was that the industry lost its free hand there by not serving all markets well. Despite the California lesson, however, the industry's prescription for achieving a healthy marketplace in Texas through deregulating premiums does not address any of the market failures defined above. A sense of these omissions was apparent in skepticism by some committee members that greater freedom for companies to set and change premiums would have a beneficial effect across all market segments.

b. Deregulating premiums

In response to the reluctance of standard companies to sell in low-income areas, insurance companies backed two deregulation bills that would allow them to set premiums by zip code. State Farm, for example, would no longer have to use $344 (Table 2, p. 17) for all of Travis County and consequently have to reject applications from those living east of I-35 as they do now. Instead the standard companies like State Farm could set the premium level at $744 for that area just as non-
standard Dairyland County Mutual currently does.

One deregulation bill, Chairman Smith's HB 3017, would establish a file-and-use system as used in other states. It would require regulatory review after a company began using new premiums to assure that they were not, in the usual terms of state insurance rate regulation law, “excessive, inadequate, or unfairly discriminatory.” Rep. Wise questioned the Director of Government Affairs for Farmers Insurance Group about the effect on consumers.

Rep. Wise: If file-and-use is a win-win situation for the consumer and the industry, and from what I understand, although you can't say for certain, that there will be a rollback or a reduction in rates, would you all support a built-in rollback in this bill? Mr. Robert Huxel: No.

The other deregulation bill, HB 1637 sponsored by Representative Harold Dutton, would allow all auto insurers to set premiums freely by zip code (and other profiles), as only county mutual companies currently are allowed to do. The case for such freedom was argued by Mr. Huxel of Farmers Insurance.

Mr. Huxel: Under Texas law.... Harris County is one territory for me. I don’t know how many territories it is for [Progressive County Mutual], but I’m willing to bet it ain't one….They have that ability to slice and dice, for lack of a better term….We can look at this little portion here where it appears to be perhaps inner city Fort Worth is really a good risk area….We can split Tarrant County into two or three. There’s a chance…that we will be able to select the better business at a different rate level that doesn’t have to be all or nothing. We can compete because we can focus on what’s necessary. And beat the price.

Here Farmers Insurance asserted its own need to make adjustments to premiums, not on the basis of measured risk, but on whatever a competitor's premium may be for a target market. This pricing freedom would include being able to skim the low mileage cream in higher income zip codes of Harris and Tarrant Counties to keep premiums competitive in these markets. Legislators representing low-income areas were skeptical about the effects of allowing standard companies to subdivide county territories by zip code. Speaking on behalf of his House colleagues, Representative Craig Eiland pursued this question.

Rep. Eiland: This is a concern that has been expressed to me: “If this happens, what’s going to happen to my constituents.” “What’s going to happen to automobile insurance in Galveston?” “What’s going to happen in Friendswood?” “What’s going to happen in Dallas?” The answer right now is “We don't know.” Right?

Mr. Huxel: Correct....

Rep. Eiland: I want to know if the rates will go down, and what I anticipate the answer will be for most people “some rates will go down and some will go up, and some rates will stay the same.”

Mr. Huxel: That's absolutely true. I do not believe that the overall dollars that Farmers charges all insureds in all companies would decrease.

In agreement with Representative Eiland's concern about premium increases for some as a
consequence of any decreases for others, the Automobile Insurance Agents of Texas (AIAT) opposed the deregulation bill, HB 1637. Insurance agent William Murphy first pointed to standard companies today located outside the state of Texas “who are skimming by use of 1-800 numbers” the customers presumably in low income areas likely to transfer few miles of exposure to risk to the company “without having to meet the same licensing standards that those of us who office and operate here do.” He then questioned the benefits of deregulation to all markets.

Agent Murphy: I have heard testimony here today that...the standard companies and Progressive support competition and as a result of this bill they would be able to bring rates down for high risk and low income Texans. [But] [s]ince these standard companies and Progressive have either confidential underwriting guidelines and/or use credit rating and credit scoring to rate their customers, how does this benefit the consumers in Texas?

Rather than deregulation, AIAT recommended getting all cars insured as the way to affordable premiums for low-income consumers.

Agent Murphy: [W]e would respectfully request that you support with better enforcement the system that is in place today…. What impact would it be on rates if like the state of Nevada we only had a 2% uninsured motorist rate?

Accordingly, AIAT backed the database bill, HB 2793, to locate all owners of uninsured cars. It had been introduced in two or three previous legislatures but failed in part because of opposition by some legislators concerned about its effects on low-income drivers.

c. Using a database to identify uninsured cars

AIAT testimony in support of HB 2793 distinguished two kinds of owners who do not keep insurance on their cars.

Rep. Lewis: Mr. Martin, what do you see as the number one reason for the 25 to 30% non compliance rate we have in Texas? Is this because people simply can’t afford the insurance or because people make the conscious decision that they don’t want to buy it?

Insurance agent Hank Martin…. [T]here's 3 or 4 million drivers they come in, they're my ID cards. They just want to get the ID card. They get it one month a year….I personally believe that there is about 2.6 million of those 4 million uninsured that can afford it. They’re out there buying guns, or they're buying stuff at Walmart, they're living better than the insurance agent….

Rep. Lewis: So you think that about 2.6 million people out there who don’t carry insurance, affordability is not a problem for them. They just simply don’t want to be insured?

Agent Martin: That is correct.

The current method of randomly identifying uninsured cars through traffic law enforcement and accident investigation allows the estimated 2.6 million evaders by choice to gain significant savings. Although the dollar fines they are risking are about equal to the premium they save from not
insuring for 11 months each year, the fines risked are greatly discounted by the low probability of being caught by a traffic stop or an accident involvement. (A $300 fine imposed on average once every 10 years costs only $30 per year.) It is important to note, however, that some evaders by choice could be acting on principle because they are owners of cars that are registered but little used. They would correctly see that they have little accident risk to cover compared to paying a full 12 months of premium each year.

An insurance database would increase the frequency of checking all registered cars for compliance from once a year at the safety inspection to once a month by computer, or even continuously. But using a database could harm low-income drivers, as Rep. Lewis pointed out to the sponsor of HB 2793, Rep. Roberto Gutierrez.

**Rep. Lewis:** You’re talking about identifying these people so we can help them. That sounds good, but in reality that’s not what we’re doing. We want to identify these people who don’t have insurance because they can’t afford to pay for it. Who, by the way…would be charged more for insurance than people who lived, say, in The Colony, or somewhere like that. We want to identify them so we can charge them fines…. That’s my problem.

**Rep. Gutierrez:** I share the same problem with you…. But then we have those individuals that can afford it but they don’t want to buy it…. [W]e need to identify them.

Consumers Union, however, agreed with the reasoning of Rep. Lewis in its opposition to HB 2793.

**Attorney Rob Schneider:** [O]nce again like all the bills of this nature, we believe that in the interest in enforcement or monitoring should be tied to an increase in availability…. We believe that that’s the best way to lower the number of uninsured drivers in Texas.

In fact, meeting the affordability need was the primary purpose of Rep. Burnam’s sponsorship of the per-mile option, House Bill 3099. In presenting it to the committee, he began:

> Thank you, Mr. Chairman and members. It’s a pleasure that I offer you another option on looking at how to make insurance more affordable and accessible to the people that we represent.

The subsequent testimony for and against HB 3099 also prompted a description of another per-mile option recently introduced in Texas by a major insurance company.

**d. Prescribing a per-mile option**

Under HB 3099, insurers would use the car’s odometer, or even a dedicated meter, for calculating premiums. Testifying in support of HB 3099, Ms. Karen Akins, executive director of the Trans Texas Alliance of citizens groups involved with transportation issues, pointed out that it would especially benefit lower income motorists since they tend to drive less per year and they place a higher value on financial savings than wealthier households. National statistics show that low-income households make 20% fewer trips and travel 40% fewer miles than non-poor households.
She also said that a per-mile insurance incentive to reduce driving would “reduce energy consumption and vehicle emissions.” When questioned later about this point, an industry attorney testifying against HB 3099 agreed.

Rep. Senfronia Thompson: It seems like if a bill like this was implemented, it also would be doing something to clean up the air. Think about a non-attainment [of air quality standards]. For those persons that didn’t drive much, it might be encouraging.

Attorney Jay Thompson: Yes, it is. For the person that doesn’t drive a lot it could be a good deal for them. If you are driving a lot, maybe driving during high-density [times and in high density] areas, it may not be as good a deal as just paying fixed premiums.

In noting the lower appeal that saving by driving less would have for households who can afford to drive a lot, attorney Thompson also confirmed what Ms. Akins said about how savings through a per-mile option would be most valuable to low income households. However, his answer to Rep. Thompson was also referring to current marketing of a per-mile system, which he used as the basis for objecting to HB 3099.

A company per-mile option In fact, attorney Thompson objected to the bill because it would compel all companies to offer a per-mile option to their policyholders. He argued instead that insurance companies, as business opportunities, are identifying and meeting needs like the ones for per-mile premiums. His case in point was that Progressive County Mutual had voluntarily begun offering a per-mile option to a selected Houston market in 1998. (According to a news report, one of Progressive's mailings made its case in precisely 10 words. “You drive, you pay. You don't drive, you don't pay.”) Attorney Thompson described how the Progressive option works.

It does use a global positioning system [GPS] in the car. If you don’t have one, you have either to lease it from a company that Progressive provides. It tracks the car so that they know where the car is, where it’s been, what hours of the day it's driven and then they send a bill monthly…. If they don’t drive it at all, they’ll pay some amount. Then based upon their usage, of when they drive it and how many miles they drive, there would be a schedule of fees.

Progressive's GPS option apparently ignores the factory-installed odometer, and requires installation of a computer to measure and radio report the car's usage to the company. The computer not only produces a history of how many miles the car has been driven, but in doing that also generates a longitude and latitude record of where and when it has been driven. Although having these capabilities can prove useful to consumers for navigation, crime deterrence, and other marketable functions, it does add the costs of tracking and communication as Mr. Thompson noted, and also creates for users a new risk of privacy loss.

Clearly, Progressive designed this option to develop a new—and upscale—market niche and not to meet broad unmet needs. Serving the needs of some households with more cars than drivers, for
example, raises the specter of mounting GPS computers on dismantled or otherwise idled cars to assure that they were still in the garage or yard and not out on the road transferring risk mile-by-mile to the insurance company. In short, this belated introduction of an elaborate per-mile premium system is consistent with the industry's historic indifference to the plight of consumers with cars driven less than average mileage.

**Law of large numbers** As a second objection to HB 3099, attorney Thompson criticized it on statistical grounds under the mistaken belief that it would require a new classification plan (or preclude classification entirely). But, according to the bill's language, the cents-per-mile insurance charge, in conformity with public policy expressed by insurance rate regulation law, must depend on statistically credible costs experienced by the car's current class. His criticism, however, emphasized a very important point about why insurers need to have large numbers of cars in each risk class.

**Attorney Thompson:** [Y]ou classify risk by drivers, territories, type of vehicle, and that’s an ongoing process. One thing that companies feel very comfortable with is the law of large numbers where you have some historical experience using a certain classification system. It makes it more predictable for them to know what their risks are that they assume.

In fact this need for predictable costs is one reason why HB 3099 specifies that the current broad classes be used but divided into two subclasses by the option chosen: the new per-mile subclass or the per-car subclass. (The other reason is to give car owners a clear choice in the same classification between per-mile and per-car premiums.) Ironically Dr. Butler questioned the basis of Progressive's GPS trial with just 200 customers because measuring an average insurance cost for reliably predicting a future cost requires an amount of loss data that can only be produced by a much larger number of cars.

**Dr. Butler:** [I]t would violate the law of large numbers, which he referred to. That in order to have credibility, in any kind of a classification, one has to have developed at least 10,000 car years now....[O]n a mileage basis, you have to have 200 million miles [of experience]....[A]n experimental system with 200 customers there is no way that can be credible unless those 200 customers can produce 1,000 claims, [which is] the actuarial standard for full credibility. You can [then] rely on those numbers to happen the same way year after year after year for that class of cars.

Because Progressive is using only a small fraction of the number of cars needed for measurement of insurance cost, its GPS trial can only be seen as a marketing test. Such small-scale tests are along the lines of the “slice and dice” profiling, that Mr. Huxel testified that Farmers Group would like to use in price competition with Progressive (p. 24). Consequently, should Progressive decide to withdraw its GPS option, that decision cannot be used to argue that there is no market need for cents-per-mile premiums based on credibly-measured cost. (Note added in May 2004: Progressive discontinued the GPS option in Texas in mid-2001, about two years after its introduction.)
**Impact of per-mile insurance on consumers** Regardless of what mileage measurement device a company might use in implementing HB 3099, the answer to every legislator's first question (asked by Rep. Eiland, p. 24)—What will this mean for the premiums my constituents pay?—can be given with certainty: Everyone who chooses the per-mile option under HB 3099 would be able to reduce their premium by driving a car less than the average mileage of its class. For example, a company may offer a choice between a $500-a-car premium and 5-cents-a-mile premium. Those expecting to drive a car less than 10,000 miles in the coming year would save under the per-mile option. (Driving it only 7,000 miles would cost $350—a 30% saving over the $500 unlimited mileage option.)

The possibility of saving insurance expense by driving less was brought up in AIAT testimony in favor of an enforcement database (HB 2793). Agent Martin argued (already quoted in part, p. 19) that car pooling would soften the impact on low income workers, as car pooling apparently did when a database was implemented in Nevada.

*Rep. Lewis:* We say you can stay on public assistance for a limited time. It's either work or starve. And in most places in this state, the lack of transportation makes it necessary for you to drive an automobile in order to work, don't you agree with that?

*Agent Martin:* [Yes]...But I would say in the states like Nevada, they have some of the same problems. What they find is people car-pool together, and they'll have three or four people riding together. Or they'll have six people going to a construction site together, instead of six trucks that are all uninsured.

*Rep. Lewis:* And they're all contributing to pay into the insurance no matter who the truck belongs to?

*Agent Martin:* ....That's what would happen. There would be more car pooling.

But this method of mitigating hardship caused by enforcement misses an essential point. Currently car pooling can save on gasoline and wear and tear, but not on the insurance for covering any cars left at home (or the parked trucks in the example above). In contrast, a per-mile option would greatly increase the incentive to car pool by allowing riders to divide the shared car's per-mile insurance expense without having the additional expense of paying premiums on their own cars.

**Two methods of payment** To leave insurance companies free to compete by making the per-mile option efficient and convenient for consumers, HB 3099 does not specify a method of metering and charging for miles driven. For example, Progressive's GPS option (described by attorney Thompson, p. 27), records the miles of insurance protection used in driving and *afterwards* bills for the miles monthly, as power companies do for the electricity already used. In contrast, HB 3099 envisions (but does not dictate) that car owners would buy insurance protection *in advance* as insured-miles added to the odometer reading, the same way they put gasoline as needed into the tank. In fact, this gasoline model for buying per-mile insurance follows the current practice of
paying in advance for car insurance. A company now earns the prepaid premium day-by-day while under the per-mile option it would earn the prepaid premium mile-by-mile as the odometer turns. HB 3099 also allows for fixed charges related to non-driving insurance and any administrative costs.

e. Enforcing compliance under a per-mile option

Although some legislators see restrained enforcement as a way to deal with the prohibitive expense of insurance for low income constituents, others see vigorous enforcement as a way to lower premiums and reduce the number of victims of collisions with uninsured cars. Legislators of both views would be concerned with the effect that a per-mile option might have on enforcement methods. The first part of this subsection considers effects on methods currently used. Then, because a per-mile option would answer some of the affordability objections to an insurance database that otherwise has considerable support (HB 2793), the second part considers how such a database would work with per-mile premiums.

1. Using current methods

The Chairman foresaw that the per-mile option would create a new enforcement problem.

Rep. Smithee: Mr. Butler, let me ask you. There is a problem. Let’s say you run into me, and you’ve got a liability policy with a company. They determine that you’ve run your odometer back so they void your insurance. It’s not you that gets hurt, it’s me.

Dr. Butler: That's correct...[I]n the case of the odometer being tampered with, it [would say] right in the contract they are no longer liable for coverage.

Rep. Smithee: But you are giving people a new way to circumvent the mandatory law. Just simply buy the cheapest per-mile policy you can buy, tamper with your odometer, nobody ever catches it and you’ve escaped the provisions of the law.

Dr. Butler: You’re uninsured....[Y]ou haven’t cost the insurance company anything.

Rep. Smithee: Yes, I know, but I’ve just broken the law, and all I care about is getting my driver’s license, my license plate, and a safety sticker. We’ve already got two problems the way they do it right now....People buy fake cards and they buy their auto insurance on installments, and so we’re giving them a third way to circumvent the law.

These ways of circumventing the law under a per-mile option would be: 1) Buy no miles of insurance at all, but instead use a fake ID card where proof of insured odometer miles is needed; 2) Buy only the minimum miles allowed for the first installment each year and when the odometer limit is reached, let the policy lapse; and 3) Buy the minimum miles but instead of lapsing have the odometer run back to show that the minimum mileage was all that was driven.

As Chairman Smithee recognized, the first two ways would differ little from current ways of evading the law. But compared with the current method of paying only one month of insurance each year and then lapsing the policy, using the second and third ways to circumvent the law with a per-mile policy would probably entail significantly greater risks of punishment. For example,
consider a hypothetical insurance evader under a per-mile option who at first just lapses when the first installment mileage is used up and later decides to conceal the lapsing by odometer tampering.

**More risky to lapse** Suppose the evader drives a car 15,000 miles a year and currently pays for one month of insurance each year to pass the safety inspection. When the per-mile option becomes available, the evader buys a minimum 2,000 miles of insurance starting at 50,000 miles and gets the car inspected before the odometer reaches 52,000 miles and the policy lapses. She buys no more insurance during the year. At the next annual inspection time, the odometer reads 65,000 miles. The evader again makes a minimum 2,000 mile purchase (with a different company) insuring from 65,000 to 67,000 miles and gets through the annual inspection. This pattern is entirely equivalent to the current one, which insurance agent Martin called “my ID cards” (p. 25). But what about the chance of punishment?

That chance is small at present. Even if companies or agents were required to report each new applicant whose car was currently uninsured, the state would have no proof, absent a ticket or reported accident, that the car was actually driven while uninsured. This uncertainty may explain the legislature's reluctance to identify and punish owners of motor vehicles who have not kept them continuously insured.

In the case of the hypothetical evader using per-mile premiums, however, the car's odometer would show that it had been driven illegally uninsured each year for 13,000 miles. This large mileage gap proves repeated violation of the law's purpose of keeping cars without insurance off the road. Instead of the premium-sized fine now levied on first time offenders caught driving an uninsured vehicle, the evader could face the larger fine, jail, and vehicle confiscation now specified for second and repeated offenses. With the prospect of greater punishment, evaders would have a stronger incentive either to comply with the law or to have the car's odometer tampered with to conceal the lapsing.

**Even more risky to conceal lapsing by odometer tampering** Assume that our hypothetical evader decides to continue the illegal course of purchasing only minimum insurance once a year, but also to have the odometer turned back to destroy the evidence of the large number of uninsured miles driven. When the odometer reaches 65,000 miles at annual inspection time, therefore, the evader pays $50 or so to a criminal expert to reset the reading to 52,000 to give the appearance of continuous insurance from 50,000 miles. The evader buys 2,000 miles more insurance—to 54,000 miles—in order to get the inspection sticker. Thus each year she repeats this pattern, she actually drives 15,000 miles, but her car's odometer reading increases by only 2,000 miles. The evader also has to decide whether to have the odometer tampered with only once or several times in order to reduce the chance of being caught during the year with a reading above or below the year's 2,000 mile paid interval (shown by the ID card and company record).

As subsequent testimony pointed out, however, this way of breaking the mandatory insurance
law by odometer fraud would also mean breaking federal and state odometer law.

Rep. Moreno: On the last page of your press advisory it says “as for cheating, the current odometer law is sufficient to deter fraud.” What is the current odometer law?

Dr. Butler: Current odometer law is any tampering with odometers—late model used cars with 60,000 miles, if their odometer is turned back to 30,000 miles, it would usually add something like $1500 to the price of the car. In response to that, Congress passed several anti-tampering laws in the early ’70s and most states followed up and bolstered that and the penalty can be one year in jail, costs and a $1500 fine. So that’s the current odometer law. And it doesn’t say for used cars, it says “tampering with the odometer with intent to defraud.”

(Note that the depreciation rate implied by this example is 5 cents a mile, which is roughly what gasoline costs and what insurance would cost per mile.) The Texas Transportation Code Ann. Sec. 727.002 augments the federal penalties cited with criminal penalties for tampering: Not more than two years in the county jail and/or a $1,000 fine. For a second or subsequent offense: Not less than 30 days and not more than two years in the county jail and a $2,000 fine.

Another point of fraud control is the transfer of title when vehicles are bought and sold. The Department of Transportation's Vehicle Titles and Registration Division currently maintains a database that includes odometer readings recorded on titles. The title application form contains the warning:

Transportation Code, Sec. 501.155, provides that falsifying information on title transfer documents is a third-degree felony offense punishable by not more than ten (10) years in prison or not more that one (1) year in a community correctional facility. In addition to imprisonment, a fine of up to $10,000 may also be imposed.

Experience with prosecuting individuals and businesses for having a criminal expert tamper with a gas, electric, or pay-per-view TV meter shows that they run the risk of being identified as a patron if the criminal is caught and offered a plea bargain. Furthermore, if patrons are caught, they can gain reduced punishment by aiding in arresting the criminal, which increases risk for criminals and pushes up their fee. (See generally, National Organization for Women, “Operation of an audited-mile/year automobile insurance system under Pennsylvania law,” Casualty Actuarial Society Forum, pp. 307-338, Summer, 1993. Reprints are available from NOW.) It also violates odometer law to disseminate information and devices to aid in tampering.

Increasing compliance Odometer tampering that voids liability insurance, as Chairman Smithen pointed out, would financially hurt victims of collisions with the at-fault uninsured cars and not the owners responsible for the tampering. But this unfortunate result is the same no matter how the cars came to be uninsured, whether by tampering or by just lapsing payment of premium. And the increase in affordability offered by the per-mile option—combined with more certain and severe punishment for mileage provably driven uninsured or for odometer tampering—should increase
compliance. But being checked once a year at safety inspection time, even combined with being subject to frequent spot checking on the road, may not be incentive enough. For maximizing compliance, the state may need to confirm that each car has had insurance for every mile driven between inspections. And to be feasible such confirmation probably requires that the state integrate annual odometer readings into an insurance database.

2. Using a database to identify uninsured miles driven

Currently, as an essential business practice, each company must know with certainty for what cars and dates it has sold insurance. Furthermore, because liability claims can appear long after an accident, a company must retain records for several years even for cars it is no longer insuring. In providing the per-mile option that HB 3099 would require, each company would have to add to its records the odometer readings of the mileage intervals for which it has sold insurance. Using these records, a company would confirm or deny the existence of insurance at a particular odometer reading (or on a particular date for the unlimited-mileage option).

A database law would require all companies to make the records for each car they have insured available to a central database for access only by state agencies. Each record for a car—by its Vehicle Identification Number (VIN)—would show an odometer interval (or date interval) of insurance for which a company received payment. Subsequent records for a car would add new intervals of paid insurance, and would also adjust previous intervals shortened by cancellation with premium refund or by transfer of insurance to another car when the insured car is sold.

**Checking for insurance** A state database would make checking for insurance significantly more efficient. Current problems it would solve were noted by agent Martin in testimony for the database bill (HB 2793).

If this is administered properly, the law enforcement officers and the courts will have direct access. And they don’t have to call the insurance agent, and they don’t have to call the company…. [I]t will eliminate a lot of the problems.

A database would also help with the ID card problem described by Rep. Norma Chavez in presenting HB 1908 (to increase the minimum term for issuing proof of insurance—ID cards). She told of her family's business as a full service gasoline, repair, and inspection station for safety and emissions testing in El Paso and said that

my inspectors are required by law to check and verify liability insurance before inspecting a car. And I can tell you I have seen things looking like it's been whited-out. I've seen things that look like they've been copied at Office Depot, and there's really not any kind of format that offers a standard format to know that people are trying to comply with the law.

By using the proposed insurance database to verify the data recorded by inspectors, the state would
be able to automatically screen for altered mileage limits (or date limits) and prosecute users of fraudulent ID cards. The state (Office of the Attorney General) could investigate physical evidence of odometer tampering if that is included in the inspection report.

**Detecting gaps in insurance** Paying for per-mile insurance in multiple intervals would be as routine as paying fixed premiums in multiple installments. And apparent gaps in coverage that result when drivers change cars or insurance companies between annual inspections would occur with per-mile as they do now with fixed-premium insurance. But a state database could automatically detect gaps in insurance and confirm coverage for each car-mile driven (or car-day elapsed).

As an example of the kind of history that would be expensive to trace without a state database, suppose the hypothetical evader (pp. 30-31) had reformed after changing to the per-mile option and had maintained continuous per-mile insurance. However, she does this through a series of different arrangements to cover the 15,000 annual miles her car is driven. After the original purchase from Company A of insurance for 50,000 to 52,000 miles (insurance she used initially to qualify the car for the state inspection), the reformed evader buys 4,000 miles of insurance twice from Company B (to 60,000 miles), and completes the year by buying 7,000 miles from Company C (to 67,000 miles). From the inspection records, the state would know to ask Company A and Company C for insurance confirmation for the 15,000 miles driven between inspections, leaving an 8,000-mile gap (52,000 to 60,000 miles) represented by the insurance purchased from Company B. But without a database, state investigators would have to appeal to—and probably anger in the process—the reformed evader for proof of Company B's insurance interval. Instead, the database supplied with the records of the insurance protection sold by all three companies would automatically show coverage for all of the 15,000 miles the car traveled during the year.

**Stopping cars in traffic** Law officers could use the database to spot check insurance for on-the-road enforcement. But unlike the systematic check at the annual safety inspection of every car's ID card, odometer reading, and odometer integrity, traffic stops would perpetuate the current use of discretionary spot checking for insurance. These stops raise a serious problem of unequal treatment of drivers, as described by an insurance agent from Harris County in testimony in favor of HB 1637 for premium deregulation.

Agent Frank Kosub: In the area that I serve, which are laborers, hospital workers, cafeteria workers, unemployed people, you know, a lot of people in my area are disabled, old....They are driving older cars, things of this nature. In fact we’re in an area that many times our authorities stop them because they have older cars knowing they don’t have insurance and write them a ticket. It just seems unfair.

In many instances, traffic stops are simply a sampling of the population on the road, selecting, for example, one car from all those with arguably defective equipment. However, the natural tendency to bias the sample by targeting certain profiles makes this method undesirable. The
formal efficiency of such bias against older cars ironically makes it easier for evaders who drive newer cars to escape detection. Using an insurance database to systematically detect all miles driven without insurance between inspection odometer readings would end the need to rely on traffic stops as a way to identify cars being driven without insurance. Although the drivers that agent Kosub described have little political and economic influence, they would be justifiably very angry at being singled out for traffic stops.

f. Solving consumer anger

This section began with testimony by the president of Progressive County Mutual (p. 23) telling the Committee that “if we don’t as an industry do something to solve consumer anger about car insurance, the government is going to take over the business.” Availability of the per-mile option, in fact, would work to reduce consumer anger in three markets—households with extra cars, low mileage drivers, and residents of low-income zip codes. Judging from news interviews with customers using the company's GPS per-mile option, Progressive is heeding its own prescription for heading off government takeover (or more regulation) by fixing the most influential of the three badly-served markets—households with extra cars. (For example, a Houston customer who owns four cars said: “I’m saving a lot of money. I use some of the cars intermittently, and when I do, I pay.”)

But anger at car insurance extends beyond the three markets—extra cars, low mileage, and low income—to the broader market consisting of owners of cars that are driven average mileage and more. Legislators were understandably concerned about whether a law requiring companies to offer the per-mile option (HB 3099) might adversely affect other constituent groups. One committee member asked attorney Thompson about this possibility when he was describing Progressive’s own per-mile option.

Rep. Senfronia Thompson: I kind of like this approach because…it looks like it's intended to drive down rates. What I’m concerned about is…[w]hile we’re trying to save money on this end, there may be some other factors that may take place that would drive the costs up, and we may not really be doing a favor.

Attorney Jay Thompson: For some people it would not be a favor.

Although attorney Thompson did not elaborate here, earlier he had cited for the Committee one type of driver for whom Progressive’s per-mile option would not be a favor.

Attorney Thompson: Obviously if you’re driving a large number of miles per year, it is not going to be cost effective. You wouldn’t want to offer that to somebody who is driving 50 to 60,000 miles a year. It just wouldn’t be cost effective.

In deciding that fixed rather than per-mile premiums are more cost effective for such high
mileage drivers, Progressive may be relying on the fact that high mileage often entails a predominance of driving on rural Interstate highways where the risk of accident per mile is less than on other types of roads. Therefore, the company would choose fixed premiums for such customers as a way of recognizing the lower per-mile cost of insuring this kind of travel along with the savings in administrative cost compared with the costs of equipment and the navigational and security services Progressive includes with its GPS per-mile option.

Universal availability of the per-mile option under law, however, would provide car owners in all markets with the price information they need to choose between unlimited and measured miles. Per-mile costing would confirm that, like other miles driven, each Interstate mile transfers a statistically certain cost to the insurance company because accidents do happen on Interstates. (For this reason public policy requires liability insurance for each mile driven on Interstates as well as elsewhere.) Awareness of per-mile cost would help a car owner expecting to drive 20,000 to 30,000 miles in the next policy year to decide whether or not convenience makes it worth paying virtually the same fixed premium as someone who drives a car 50,000 to 60,000 miles a year.

Per-mile premiums would provide transparency for the first time to underlying costs, both variable and fixed. As with the price of gasoline, consumers cannot expect to control the per-mile price of insurance, but they would readily understand why their expense increases with each mile put on the odometer. It is this new transparency that would empower consumers and dissolve their anger at arbitrary fixed premiums—whether termed standard or non standard—while at the same time motivating insurance companies to engage in per-mile price competition based on measured visible cost.

Index: bills, legislators, subjects, and witnesses

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