



Implementing Pay-As-You-Drive Vehicle Insurance

Policy Options

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By

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Abstract

Vehicle insurance is generally considered a fixed cost with respect to vehicle use. Motorists do not usually perceive insurance cost savings when they reduce mileage. Pay-As-You-Drive (PAYD) pricing converts insurance to a variable cost with respect to vehicle travel, so premiums are directly related to annual mileage. PAYD pricing makes vehicle insurance more actuarially accurate (premiums better reflect the claim costs of each vehicle) and gives motorists a new opportunity to save money when they reduce their mileage. It can help achieve several public policy objectives including equity, road safety, consumer savings and choice, congestion reduction, facility cost savings, energy savings and environmental protection. This paper describes and evaluates PAYD, based on North American research and experience. It indicates that PAYD pricing is technically and economically feasible, and can provide significant benefits to motorists and society.

Description

Pay-As-You-Drive Insurance (PAYD, also called *Distance-Based Vehicle Insurance*, *Mileage-Based Insurance*, *Per-Kilometer Premiums* and *Insurance Variabilization*) means that a vehicle's insurance premiums are based directly on how much it is driven. The more you drive the more you pay and the less you drive the more you save. This is done by changing the unit of exposure (i.e., how premiums are measured) from the vehicle-year to the vehicle-kilometer or vehicle-minute. Existing rating factors are incorporated so higher-risk motorists pay more per unit than lower-risk drivers. For example, a £360 annual premium becomes 2p per kilometer, and a £1,260 annual premium becomes 7p per kilometer (assuming 18,000 average annual kilometers).

Pay-As-You-Drive can be optional, so motorists would choose which unit of exposure they want, just as consumers now choose different rate structures for telephone and Internet service.

Current insurance pricing is comparable to an all-you-can-eat restaurant: the incentive is to maximize consumption in order to get your money's worth. This tends to result in waste and gluttony. PAYD is comparable to an à la carte restaurant, where you pay for just what you eat, and so have an incentive to limit your consumption to just what you really want. As a result, PAYD insurance makes driving more affordable and efficient.

What would be the consequences if gasoline were sold like vehicle insurance?

With gasoline sold by the car-year, vehicle owners would make one annual advance payment which allows them to draw gasoline unrestricted at a company's fuel stations. Prices would be based on the average cost of supplying gasoline to similar motorists.

Unmetered fuel would cause a spiral of increased fuel consumption, mileage, and overall vehicle costs, including externalities such as accident risk, congestion and pollution. Motorists who use less fuel than average would find this unfair and unaffordable, and so would drop out of the system, but those who use more fuel than average would defend it because they enjoy benefits.

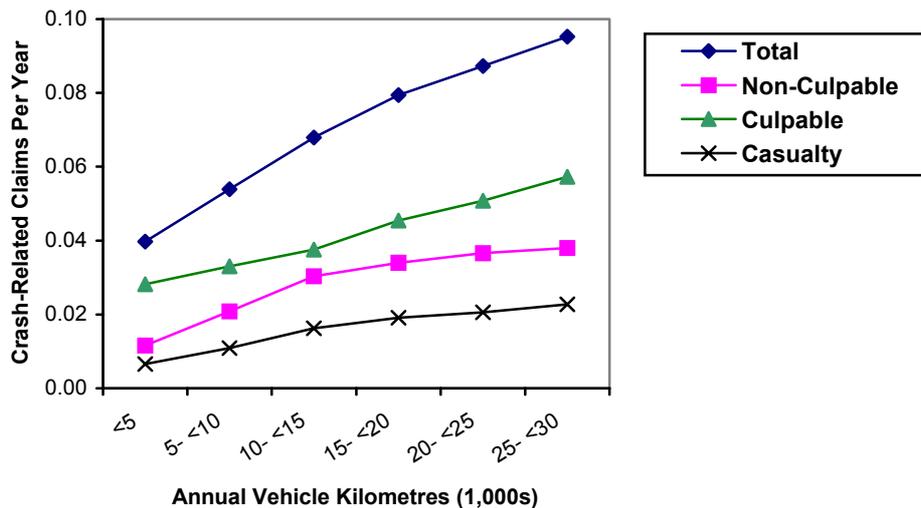
Such a system would be irrational. It is comparable to current insurance pricing.

Justifications for Pay-As-You-Drive Insurance

Vehicle insurance is a significant portion of total vehicle costs, averaging hundreds of pounds per vehicle-year. Insurance is currently considered a fixed cost with respect to vehicle use; a reduction in mileage does not usually provide a comparable reduction in insurance premiums.

Research indicates that within existing price categories, annual claims increase with annual vehicle mileage, as illustrated in Figure 1. Mileage is just one of several factors that affect crash rates. It would not improve actuarial accuracy (i.e., how well prices reflect insurance costs for each type of vehicle) to use mileage *instead* of other rating factors, for example, to charge all motorists the same per-mile insurance fee, but accuracy improves significantly if annual mileage is incorporated *in addition* to existing factors. Any other price structure overcharges low-mileage motorists and undercharges high-mileage motorists.

Figure 1 Crash Rates by Annual Vehicle Mileage (Litman, 2001)



Crashes per vehicle tend to increase with annual mileage. This data was created by matching annual mileage data collected at vehicle inspection stations with annual insurance claims data for more than 700,000 vehicle-years, in British Columbia.

Pay-As-You-Drive insurance reflects the principle that prices should be based on costs. It gives consumers a new way to save money by returning to individual motorists the insurance cost savings that result when they drive less. Motorists who continue their current mileage would be no worse off on average than they are now, while those who reduce their mileage save money.

Pay-As-You-Drive pricing can help achieve several public policy goals, including efficiency, equity, safety and environmental protection. Potential benefits are listed on the next page.

Implementing Pay-As-You-Drive Vehicle Insurance

Pay-As-You-Drive Insurance can provide the following benefits:

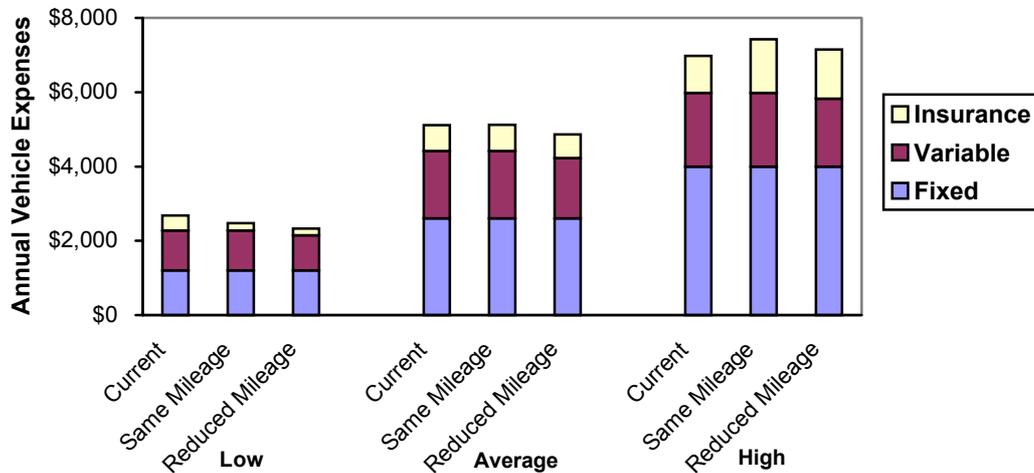
- *Consumer savings.* The average motorist is predicted to save 30-50 Pounds annually per vehicle. These savings represent the reductions in insurance compensation costs that are returned to individual motorists who reduce their driving, and therefore reduce their chance of a claim.
- *Economic Efficiency.* Pay-As-You-Drive Insurance conveys to drivers the true costs they impose and allows motorists a chance to save money by reducing these costs. It reflects the principle that prices should reflect costs.
- *Increased fairness.* Current insurance pricing overcharges motorists who drive less than average and undercharge those who drive more than average each year in a price category.
- *Progressive.* Since lower-income motorists tend to drive less than average, current insurance pricing is regressive. It forces lower-income motorists on average to subsidize the insurance costs of higher-income motorists.
- *Increased affordability.* Pay-As-You-Drive pricing vehicle insurance more affordable. It allows more lower-income households to insure a vehicle, and makes it more cost effective for households of any income class to insure an extra vehicle that is seldom driven, such as an old truck used for errands or a recreational vehicle.
- *Reduced Uninsured Driving.* In some jurisdictions, a significant portion of vehicles are uninsured because of high premium costs, and because owners do not consider it cost effective to insure a low annual mileage vehicle. PAYD pricing makes insurance more affordable, which can help reduce this problem.
- *Reduced Need for Cross-Subsidies.* Pay-As-You-Drive pricing reduces the need to overcharge low-risk drivers in order to provide “affordable” unlimited-mileage insurance coverage to higher-risk motorists.
- *Reduced vehicle travel.* Pay-As-You-Drive Insurance is predicted to reduce vehicle travel by more than 10%, making this one of the most effective TDM strategies currently proposed. It reduces traffic congestion, road and parking facility costs, accident risk, pollution emissions, consumer costs, and urban sprawl.
- *Congestion reduction.* PAYD can significantly reduce traffic congestion. For example, modeling in the Los Angeles, California region indicates that a 2¢ per vehicle-mile fee in would reduce total vehicle trips by 4.1%, but congestion delay would decline by a much larger 10.5% (Harvey and Deakin, 1997, Table B9). This suggests that PAYD insurance applied to all vehicles in a large urban area can reduce congestion delays by 15-25%.
- *Increased safety.* Vehicle crashes should decline even more than mileage (a 10% mileage reduction is predicted to reduce crashes by 12-15%) because higher-risk motorists (who currently pay high premiums per vehicle-year) would pay higher per-mile fees, and would therefore have the greatest incentive to reduce their driving.
- *Emission reduction.* PAYD can reduce energy consumption and pollution emissions.

Equity Impacts

Current vehicle insurance pricing significantly overcharges motorists who drive their vehicles less than average each year, and undercharges those who drive more than average within each price class. PAYD pricing is fairer than current pricing, because premiums more accurately reflect insurance claim costs.

Since lower-income motorists drive their vehicles significantly less on average than higher-income motorists, PAYD is progressive. PAYD pricing benefits lower-income drivers who otherwise might be unable to afford vehicle insurance. It benefits lower income communities that currently have unaffordably high insurance rates. PAYD would provide significant savings to workers during periods of unemployment, when they no longer need to commute.

Figure 2 *Current and PAYD Annual Costs Compared (Litman, 2001)*



This figure compares the costs of Usage-Based Premiums for Low, Average and High mileage vehicles. “Current” refers to vehicles with fixed-price insurance. “Same Mileage” refers to vehicles with Usage-Based Premiums that do not reduce annual mileage. “Reduced Mileage” assumes a 10% reduction.

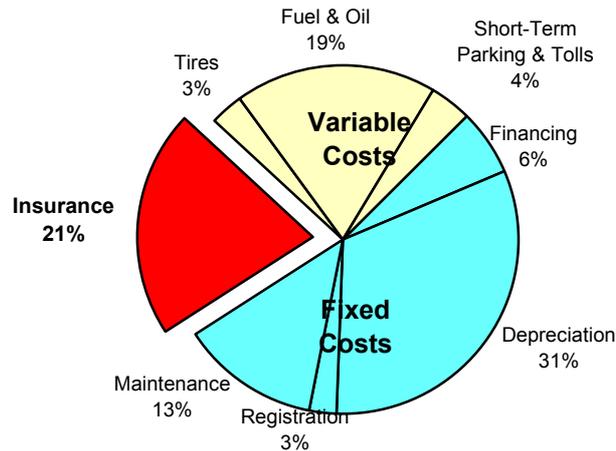
Figure 2 illustrates the financial impacts of PAYD pricing on different types of motorists. A low-cost, low-mile vehicle such as might be owned by a low-income motorist saves \$225, an 8.4% reduction in total vehicle expenses. An average motorist saves \$64 annually in insurance costs if vehicle travel declines 10% as expected. A high-mileage motorist pays \$331 more per year, a 4.7% increase in total vehicle expenses.

Some people raise concerns that particular groups (such as rural residents) will be disadvantaged by distance-based price structure, but this will not occur if premiums reflect geographic location. If so, only rural residents who drive more than average among rural residents would pay more, and half of all rural residents would pay less. For example, if rural vehicles are driven an average of 25,000 kms a year, a rural motorist who drives their car “only” 20,000 kms would save money.

Consumer Impacts

Figure 3 illustrates the typical distribution of vehicle expenses in North America. They probably are not much different in the UK. Although UK fuel prices are much higher than in the US, UK fuel efficiency is also much higher and vehicles are driven less each year, so total annual fuel expenditures per vehicle are similar.

Figure 3 *Distribution of Automobile Expenses (Litman, 2001)*



This figure illustrates the distribution of financial costs for an intermediate size car. Based on North American data.

Ownership expenses (vehicle financing, depreciation, fixed maintenance and registration fees) represent more than half of all costs. When insurance is treated as a fixed cost, more than two-thirds of total vehicle expenses are fixed. If insurance is converted to a variable cost, variable cost increase to nearly half of total costs. Converting from current to PAYD vehicle insurance pricing is equivalent to increasing fuel prices by more than 50%, in terms of the incentive it provides to reduce vehicle use, but this is not a new fee at all, simply a different way to pay for an existing fee.

Motorists who continue their current mileage are no worse off on average with PAYD (excepting additional transaction costs). Mileage that is reduced represents low-value vehicle travel that consumers prefer to forego in exchange for financial savings. This reduced mileage provides crashes and insurance claim savings that are net benefits to society.

Travel Impacts

Pay-As-You-Drive insurance is predicted to reduce mileage 10-12% per participating vehicle, based on standard travel price elasticity values. Higher-risk motorists would pay larger per-mile premiums and so would have a greater incentive to reduce mileage. Optional PAYD is likely to attract 25-50% of policies during the first few years, with penetration increasing over time as it become more competitive compared with vehicle-year pricing. Total travel impacts depend on how widely it is available and how well it is promoted.

How It Is Implemented

Pay-As-You-Drive pricing is implemented by individual insurance companies, although regulatory changes may be needed to remove barriers. Governments can implement legislation to encourage insurers to offer PAYD pricing, and public-private projects can help pilot and promote this pricing option, as described in the case studies section below.

Several methods can be used to calculate and collect premiums. One is to have motorists prepay for the miles they expect to drive during the term of coverage (typically a year), either in a lump sum or in several payments. For example, some motorists might pay for 18,000 kilometers at the start of the term, while others might pay for just 5,000 kilometers at first, and make additional payments as needed. The total premium is calculated at the end of the term based on recorded mileage. Vehicle owners are credited for unused kilometers or pay any outstanding balance.

Another approach is for insurance companies to bill motorists based on their monthly vehicle mileage, similar to other utilities. This requires more frequent mileage data collection, such as the GPS-based system used by the Progressive insurance company described later.

Pay-As-You-Drive pricing requires verified mileage data. This can be collected in various ways. The simplest approach is to have brokers or vehicle owners report odometer readings, with random verification spot checks. The most sophisticated, such as the Progressive insurance company program, use GPS transponders to track a vehicle's driving (an increasing portion of new vehicles have factory-installed transponders). Another approach is to require odometer audits as described in the box below. This could provide data as accurate as other metered goods (such as electricity) at little extra cost.

Several obstacles must be overcome for broad PAYD implementation. The insurance industry has generally opposed PAYD pricing because it requires changing their practices, and may reduce long-term profits by reducing gross premiums. PAYD requires a network of odometer auditors and changes in the way fees are calculated, and so it is difficult for an individual insurance company to implement. Higher-mileage motorists tend to oppose mandatory PAYD because it would increase their costs. Most consumers are unfamiliar with its full benefits, and many are skeptical of change.

Odometer Audits

Odometer audits involve the collection of odometer data by a certified business. An odometer audit requires five steps:

1. Check speedometer and instrument cluster for indications of tampering.
2. Record tire size and check that it is within the specified range.
3. Attach a small seal to the ends of mechanical odometer cables to indicate if it has been removed. This is unnecessary on most newer vehicles with electronic speedometers.
4. Check odometer accuracy and calibrate with a dynamometer (this step is optional, or could be performed on a spot-check basis).
5. Record odometer reading and forward results to the vehicle licensing agency.

Audits would be performed when a vehicle's insurance is renewed, in most cases once a year. Odometer audits typically require 5 to 10 minutes, and less if performed with other vehicle servicing (tune ups, emission inspections, etc.). Existing vehicle service businesses and emission inspection stations could be certified as auditors, and some insurance agencies might offer free audits as a marketing strategy. Auditors could be certified by a government agency or by individual insurance companies or insurance professional organizations.

There are concerns that odometer fraud could be a problem, but odometer audits should provide data as accurate as that used in other common commercial transactions and more accurate than self-reported information now used for insurance pricing. Most tampering can be detected during audits and crash investigations, and fraud would void insurance coverage. Vehicle manufactures produce increasingly tamper-resistant odometers since leases, warranties and used-vehicle sales all rely on odometer readings. Audits would provide additional benefits, including accurate mileage information for used-vehicle buyers, and more accurate information for transportation planning.

Other systems could be used to measure vehicle use, including special on-board electronic meters and GPS-Based Pricing, but these add significant costs and raise privacy issues.

Research Requirements

Below are some issues to investigate to determine the effects and implementation requirements for PAYD in the UK or other jurisdictions.

1. Average annual insurance expenditures per vehicle, and what this represents as a portion of total vehicle costs.
2. Vehicle insurance regulatory environment, and whether there are legal or agency restrictions on PAYD pricing.
3. Opportunities and costs for odometer audits and GPS pricing.
4. Insurance industry attitudes.
5. Consumer attitudes about this price option.
6. Opportunities for government encouragement of PAYD pilot projects (funding, incentives and regulatory ability).

Examples and Case Studies

Texas Per-Mile Insurance Legislation (www.capitol.state.tx.us)

Texas House Bill 45, passed in 2001, gives insurers permission to offer cents-per-mile pricing for vehicle insurance. Companies may begin offering this price option in January, 2002. It also requires insurance companies to separately track and report the claim losses and premium revenues for mileage-based and time-based premiums. Below is a press release by the Texas National Organization for Women, which lobbied for the bill.

Statement by Deborah Bell, President, Texas National Organization for Women

September, 2001

New “cents-per-mile” car insurance law could end overcharging and redlining

Texas National Organization for Women (NOW) congratulates the Texas Legislature for passing the “cents-per-mile” car insurance bill—House Bill 45—signed into law by Governor Rick Perry. By adopting legislation NOW developed, lawmakers have taken a major step toward 1) making compulsory insurance work, 2) eliminating redlining and the stigma it creates, and 3) ending overcharging to insure cars driven less than average. The new option to buy miles of protection as needed (added to the odometer reading at a cents-per-mile rate) will enable a car owner for the first time to individually control insurance cost by the amount the car is used.

The law as passed gives insurers permission to offer the cents-per-mile option to whomever they wish. Texans should now demand that their insurers make this option available to every one of their insureds. We need the per-mile alternative to fixed dollars-per-year prices that are forcing millions of cars to go uninsured. For example, owners of cars in a certain insurance price class—based on territory, car use and type, and driver type—now paying \$500 per year in fixed installments could be offered the option of buying miles as needed at 5.0 cents per mile.

Compulsory insurance seems to work in upper-income zip codes where most people can afford to keep insurance on cars driven less than average. Because these cars cost insurers proportionately less in claims, they bring in extra profits and insurers privately call landing their business “skimming the cream.” Insurers use extra profits from “cream” customers to compete by holding car insurance prices down for their preferred customers who have many other insurance needs. Customers typically skimmed and overcharged are those who commute by carpool, bus or bicycle, and also women, older people, and households with more cars than drivers.

In low income zip codes, insurers redline many cars to higher “nonstandard” prices—not because their drivers are less careful, as insurers encourage everyone to believe—but because of the scarcity of “cream” to hold prices down. What really happens is that miles, costs, and insurance prices (per car) spiral up where high insurance cost and strong enforcement increase the incentive for ever more drivers to share fewer insured cars.

The new law directs the Insurance Commissioner to adopt by year’s end the few regulations needed (e.g., adding to the car’s ID card the odometer reading at which insurance expires unless more miles are bought). Companies may begin insuring under the option January 1, 2002. But if they then choose to withhold the option in order to protect their extra profits from insuring little-used cars, newly informed consumers can step up their demand for cents-per-mile rates and even turn to the Legislature to compel companies to offer it. That is only reasonable in view of the fact that the Legislature compels Texans to buy insurance on motor vehicles regardless of how little

they are driven, if at all.

Progressive Insurance Autograph (www.progressive.com; Carnahan, 2000)

The Progressive Insurance Company introduced its Autograph vehicle insurance coverage, a form of distance-based insurance in the state of Texas in 1999. This used Geographic Positioning System (GPS) beacons to track vehicle location and use (motorists pay more for driving under higher risk conditions). Participants paid a \$15 per month fee to cover equipment costs, although this may decline in the future as more vehicles are produced with GPS installed at the factory. This program was considered technically successful and showed strong consumer demand, although Progressive discontinued the program after two years.

Oregon HB 3871 (www.leg.state.or.us/01reg/measures/hb3800.dir/hb3871.intro.html)

Bill 3871 introduced in the 2001 Oregon legislature would provide tax credits to insurers that offer [Pay-As-You-Drive](#) pricing. It is endorsed by the National Association of Independent Insurers, regional governments, the Oregon/Idaho chapter of the American Automobile Association, the Oregon Consumer League, The Oregon Environmental Council and other environmental organizations, citizen transportation reform groups and the Interfaith Global Warming Campaign.

Value Pricing Program PAYD Pilot Projects (www.fhwa.dot.gov/policy/13-hmpq.htm)

The Federal Highway Administration's Value Pricing Pilot Program is now providing funding for before/after PAYD insurance simulation pilots in Georgia and Massachusetts. The Georgia pilot will, after gathering baseline data, provide payments to participating households that reduce VMT and thus their crash exposure. In a second phase, payments will be provided to households that reduce all crash exposure factors (VMT, risky driving behavior, and driving in dangerous corridors and at risky times). A similar pilot simulation is being conducted in Massachusetts. In addition to gathering before and after data, this simulation is designed to provide the Massachusetts Division of Insurance with the data it needs to allow PAYD insurance to be offered on a permanent basis.

Norwich Union Testing GPS-Based PAYD (www.norwich-union.co.uk)

Motorists who use their car infrequently, or only make 'safe' journeys, may soon be able to get cheaper car insurance under new system being considered by one UK insurer.

New technology is being piloted which allows the insurance company to keep track of a driver's car use, including the distance travelled, and the weather conditions. Premiums would then be altered to reflect people's driving habits. Customers would have a 'black box' device fitted in their car, which would transmit their journey details back to the insurance company.

The black box will record the mileage and time of each journey, and which road the driver has travelled on. The information will then be used to calculate a monthly bill for the driver. Norwich Union says the customer is likely to get a bill more similar to those seen for gas, electric or phone usage.

The system is being piloted among 5,000 drivers by the insurance firm Norwich Union, which has dubbed the scheme 'Pay As You Drive'. Users will pay a monthly premium to cover basics like fire and theft, and then get an itemised usage bill on top. "It's a much fairer system of working out car insurance," said Liz Kennett of Norwich Union.

Implementing Pay-As-You-Drive Vehicle Insurance

The company says it is not sure what the overall impact of the system will be on premiums, but that 'safer' drivers should benefit. "It will be particularly beneficial to those who do short journeys or for those who don't use their car that often," said Ms Kennett.

If the trials are a success, Norwich Union hopes to roll out the scheme by 2004.

National Organization for Women Insurance Reform Program (www.now.org)

The National Organization for Women has lobbied for per-mile insurance pricing to create more equitable insurance and avoid current discrimination based on gender. Female drivers tend to drive their vehicles about 40% less than male drivers, and have about 40% fewer crashes and claims, yet insurance companies offer much smaller discounts for women. NOW argues that insurance pricing should be based on mileage, rather than using gender as a surrogate for mileage, and that this would provide significant savings to most women drivers. NOW has successfully lobbied to have per-mile insurance legislation introduced in Pennsylvania and Texas, and it has been proposed at the U.S. federal level (Auto Choice Reform Act of 1997; NOW, 1998).

Responses to Concerns About Per-Mile Insurance

This section discusses concerns that have been raised about distance-based pricing by the insurance industry.

Insurance pricing already incorporates mileage.

Although some insurance companies incorporate mileage-related rate factors such as commute distance or estimated annual mileage, none begins to approach actuarially accurate, marginal pricing, and so fail to give motorists accurate price signals.

Mileage is less important in predicting crashes than other rating factors.

Whether mileage is more or less important than other risk factors is irrelevant for distance-based pricing options that incorporate existing rating factors (all except PATP). Until recently insurance companies had no reliable source of mileage data and so could not accurately determine the relationship between mileage and claims. Data based on independent odometer readings shows a strong relationship between mileage and claims within existing price categories.

Travel foregone could be lower risk than average, resulting in little crash reduction, and less insurance cost savings than reduced premium revenue.

This concern is technically valid, although there is no evidence that it is true. Available evidence indicates that broad vehicle travel reductions result in proportionally greater crash reductions and insurance savings. Additional research and pilot projects that test the effects of distance-based pricing could address this concern.

Distance-based insurance unfairly increases costs to high-mileage drivers.

Distance-based pricing would increase costs for motorists who drive significantly more than the current average within their price group. This is justified on actuarial grounds, and so increases fairness. Most motorists save money and experience net welfare gains with distance-based pricing, and very few would have their vehicle costs increase more than a few percent. Distance-based vehicle insurance benefits lower-income motorists to a significant degree overall.

Automobile insurance reform should focus on equity, affordability and safety.

Distance-based pricing helps achieve all of these goals. It increases equity by making premiums more actuarially accurate and reducing costs for lower income motorists. It allows motorists to save money and makes vehicle ownership more affordable. It significantly increases road safety.

Safety advances/congestion reduction/air pollution reduction/energy conservation can best be pursued in ways other than mileage-based insurance.

It is unnecessary to choose between distance-based pricing and other strategies. Distance-based pricing complements other strategies. Because of its multiple benefits, distance-based insurance can be one of the most cost-effective ways to achieve these objectives.

People need their cars too much to give them up. There will be no travel reduction.

Distance-based insurance is not expected to cause people to give up cars. In fact, by reducing fixed costs, vehicle ownership should increase slightly. There is extensive evidence that vehicle travel is affected by vehicle operating costs. A modest (5-15%) mileage reduction is predicted.

Consumers will not accept this change.

The Autograph pilot project, and market surveys indicate consumer demand for distance-based pricing. A broad range of interest groups support distance-based pricing. Support should increase as consumers and citizens learn more about its benefits.

Odometer fraud will be a major problem.

Although some odometer fraud may occur, it is expected to be a minor problem overall, with fraud rates comparable to other common consumer transactions, and far lower than with current insurance pricing. Odometers are increasingly tamper resistant, regular odometer auditing should discourage and identify most tampering, and the financial incentive for fraud is relatively low. Insurers financial exposure would be minimal since odometer fraud voids coverage.

It would increase administrative costs to insurers and inconvenience vehicle owners.

Odometer audits are significantly cheaper than vehicle emission inspections because they require less equipment and specialized training, can be performed in conjunction with other vehicle servicing, and can be provided by a large number of businesses in a competitive market. Total incremental costs are modest (predicted to be about \$6 per vehicle year), and far smaller than direct benefits to consumers and society.

If distance-based pricing were better, insurance companies would already use it.

Individual insurers face several barriers to implementing distance-based pricing. An individual company faces relatively high administration costs to establish an odometer auditing system. Insurance regulators are often unsupportive of pricing innovations. An individual insurance company only captures a small portion of the total benefits, since most financial savings are passed back to customers or accrue to competitors. Insurers do not profit from reductions in uncompensated crash costs, congestion, infrastructure costs, or pollution, or benefit directly from increased equity.

Insurance companies currently maximize profits by maximizing their gross revenue, because they are dependent on investment income. A pricing strategy that reduces total crashes could reduce profits if regulators or market competition required a comparable reduction in premiums. Although there are potential financial and marketing benefits, these longer-term saving which would have to offset an individual insurer's short-term revenue losses and risks. It is therefore not surprising that few insurers have implemented distance-based pricing.

This type of pricing has never been used before.

Some vehicle insurance is already distance-based: rates for fleets and commercial vehicle coverage are often based on mileage, and Progressive Insurance's Autograph coverage. There is nothing unique about pricing based on use. Prices for most goods are based on some measure of consumption, such as water and electric meters, and scales used to weigh food. Vehicle rentals and leases incorporate odometer-based price components. Vehicle insurance is unusual for having pricing that allows unlimited consumption (i.e., vehicle mileage).

Odometer auditing would be an invasion of privacy.

Odometer readings are already collected during vehicle servicing, vehicle sales and crash investigations. Odometer readings are even sold by private companies to used vehicle purchasers. Odometer auditing simply standardizes the collection of this information. Odometer auditing does not identify when or where a vehicle has been driven, or provide any other information that could be considered private. Odometer auditing would provide significant additional consumer benefits.

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