

Usage-Based Insurance: Are You Ready

Governmental Perspective

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What is PAYDAYS Pricing and its Relationship to UBI?

- Pay-as-you-drive-and-you-save (PAYDAYS) pricing converts hidden and lump-sum costs of auto ownership and usage to transparent, variable costs.
- Such costs may relate to insurance, but also to parking, vehicle taxes and fees, or to the car itself through car sharing.

Why PAYDAYS Pricing?

- Most of the costs of owning and operating a vehicle are fixed.
- The financial incentive not to use personal vehicles heavily is relatively small.
- Many households, especially low-income ones, would prefer variable costs to fixed ones.
- Various studies project substantial driving reductions, public policy benefits, and consumer savings resulting from PAYDAYS pricing.

UBI Is Not a New Concept (But Tools to Offer It Are New)

- As early as 1929, virtues of charging for car insurance by the mile were recognized.
- Concept promoted by Nobel economist William Vickery in his 1968 work: “Automobile Accidents, Tort Law, Externalities and Insurance.”

Results of UBI

- Cuts vehicle miles traveled
- Curtails crash claims in excess of driving reductions
- Relieves congestion at a rate greatly exceeding driving reductions
- Diminishes air pollution and carbon emissions
- Lowers infrastructure costs
- Strengthens cities and lessens urban sprawl
- Provides substantial consumer savings
- Increases insurance company profits

Features of UBI To Maximize Driving Reductions (An Objective of Some Federal Grant Funding)

- Direct and transparent per-mile or per-minute-of-driving pricing—avoid rebates
- In-vehicle graphic displays of “insurance pricing meter” with e-mail and Web summaries
- Frequent billing without automatic bill payment
- Transit pass discounts (instead of bundling with a few free miles of insurance)
- Individualized assistance to identify alternatives
- “Regret lotteries” and peer comparisons to encourage continuous mileage reductions

Research Provides Actuarial Justification for UBI Pricing

- New research from Massachusetts that combines vehicle mileage and loss cost data shows a compelling relationship.
- Host of mostly small instrumented vehicle studies consistently shows a strong linkage between certain driving habits and crashes.
- Actions of insurance companies also suggest actuarial underpinnings for UBI.

Instrumented Vehicle Studies Support UBI Pricing

- “100-Car Naturalistic Study” in No. VA found that the 12.5% most dangerous drivers had over 100X the crash risk of the 12.5% safest drivers.
- An Israeli 103-vehicle monitoring study found that aggressive drivers were responsible for 16.6X the crash costs of the safest drivers.
- A 95-driver test of incentives to reduce speeding in Sweden led to a decline in speeding frequency from 15% to 8% of driving time.

Typical Approach to Introduce UBI Pricing— Premium Discounts for Data

- Willing participants are likely lower risk.
- Gets you the data you need to compete.
- Pricing power comes with data control.

No Long-term Solution

- Customers will ultimately gain control of their data and use it to get competitive price quotes, as they do today for non-UBI policies.
- Why? Because customers have smart phones and their vehicles have OEM-installed telematics, the data will be theirs to share.
- A “green brand” comes from an external credible source (e.g., environmental consortium demands transparency; State Climate Action Plan UBI goals tied to driving reductions).

Evolutionary UBI Products Fail with Revolutionary Demographic Changes

- Changes noted in Zogby's "The Way We'll Be," CCC Info Services "Crash Course 2012," etc.:
 - Young people delay licensure, own fewer cars, live in cities, and take transit
 - "Automobility" increasingly met through car sharing and "dynamic ridesharing"
- Auto companies respond with car sharing partnerships; insurance companies are unresponsive.

Insurance Industry Failings

- Instead of looking at peer-to-peer carsharing as a business opportunity, insurance companies threaten or hide (NYT, 3/17/12)
- Consumer Federation of America Report—Low-income households forced to pay high insurance rates.

How Insurance Companies Should Respond

- Be a leader and problem solver, not the problem.
- Don't over-price new risks; find constructive approaches to reduce exposure and price.
- Adopt to new markets—car owners want to rent their cars to their neighbors and some renters will become owners; build business relations now.
- Take heed of behavioral economics and Federal pilots.

Implementation Status of Federally-funded Pilots

- MileMeter (TX—winding down; pulled out of Federal pilot)
- Ameriprise with Towers Watson (taking over from MileMeter)
- Unigard Insurance (pulled out of Federal pilot in Washington State; substitute should soon be named)
- Plymouth Rock with Conservation Law Foundation Ventures (MA—just awarded)

Comparing Federally-funded Pilots with Other PAYDAYS Insurance Products

- Only Federal pilots include control conditions to enable before-after comparisons
- Smaller companies won funding for their pilots in part by demonstrating greater flexibility than larger companies, but launches sometimes failed
- Federal pilots have required premiums to vary a minimum of 70% based on mileage, which is larger than for other products in the marketplace

Comparing Federally-funded Pilots with Other PAYDAYS Insurance Products (cont.)

- Federal pilots require the mileage and pricing relationship to be transparent to the customer, which is not consistently so with other products
- Federal pilots generally test more than one pricing protocol, while other products do not
- Federal pilots are unique in also testing add-on incentives (e.g., transit passes in Washington State and NuRide incentives in Texas)

Other Federal Government Activities to Watch

- UBI research competitive procurement noted in 2012 “procurement forecast.”
- Federal transportation legislation reauthorization—just-passed Senate bill provides \$90M over 2 years for roadway financing pilots.
- 2,500-vehicle Naturalistic Driving Study is underway.

Thank you!

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