Pay As You Drive Insurance

Options for the Univeristy of Oregon

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Executive Summary

American's run their vehicles over 3 trillion miles a year totaling $140 billion dollars in gasoline and increased amounts of carbon emission into our atmosphere. Reducing the amount of miles traveled is a vital component in mitigating the effects of climate change. One approach toward reducing greenhouse gases (GHGs) related to vehicle travel is pay-as you-drive insurance (PAYD). Currently, at the University of Oregon approximately fifty percent of the staff drives to and from work. Offering a pay-as-you-go insurance option would encourage the use of alternative transportation, lowering the scope 3 GHG emissions. Conducting our research and data analysis has allowed us to have a greater understanding of the benefits gained from a PAYD partnership for both the University and their employees.

Background Information

Pay-as-you-drive insurance (PAYD) is a usage-based form of insurance that calculates your monthly rates depending on the amount you drive, as opposed to standard lump-sum insurance pricing. PAYD insurance is available in some form in approximately thirty-four states, including Texas and California. As of December 2012 state regulation was approved for PAYD insurance in Oregon.

Standard insurance agencies utilize a lump-sum pricing model which has proven to be both inefficient and inequitable, placing higher cost burdens on those who drive less in order to subsidize the costs of high mileage drivers. Three main barriers have prevented the widespread adoption of PAYD pricing in the United States; 1) monitoring costs, 2) state insurance regulations and, 3) patents. The only true per-mile PAYD company in the nation is MetroMile, similar options are available through State Farm's Drive Safe and Save Program.

MetroMile is a Portland based PAYD insurance agency offering the only sole mileage based pricing model. They began operations in the winter of 2012 with the goal of incentivizing drivers with low monthly and annual mileage, as well as encouraging the use of alternative transportation. The idea behind business model is that those who drive less are less likely to be involved in accidents and/or other high risk situations. State Farm offers a comparable option, the Drive Safe and Save program which tracks your mileage, location and driving habits for a month and provides a price quote based on the collected data.

Methods and Data

Interviews with Insurance Companies

Geico and State Farm were two insurance companies that were interviewed in person. These interviews were conducted in an attempt to gain more detailed information on how each variable influences online price quotes. We also wanted additional information and thoughts from people in the insurance field about the pay as you drive insurance concept.

Geico does not offer a pay as you drive insurance option. Due to the low amount of offices located in Oregon, they primarily operate as an online company. During the interview they described how laws need to be adjusted in states to include pay as you drive insurance and that they believed that Oregon recently allowed pay as you drive insurance to be sold in this state. Geico delivered a lot of pertinent information as to how an online quote is made. Online quotes are more heavily based on the individuals driving rather than what type of car they drive. There are forty-two different factors that go into building a quote. One of the more important factors is whether or not the driver has had or currently has car insurance and how long they have had it for.

There were also differences in how they break down age and total annual mileage. Geico, like most insurance companies, use a bracket system for some variables. For example, people who drive between three to twelve thousand miles a year will pay a similar price for insurance. According to recent data, the average Oregonian would fall under this bracket as the state average of miles traveled per year is approximately ten to twelve thousand miles.

State Farm echoed many parallel points made by Geico in regards to how an online quote is calculated. They also use a bracketed system for ages and miles travelled per year to determine what price category you fall under. Similarly, State Farm also looks closely at how long you have been driving for and whether or not you currently have auto insurance.

In the interview with State Farm he addressed how quotes differ from company to company. State Farm is a company with a strong online presence but predominantly focuses on having many offices and locations throughout Oregon, whereas Geico’s efforts are focused on online business. These contrasting forms of providing insurance generally lead to differences in general prices. Having more offices allows companies like State Farm to have more office space which in turn increases the number of employees and operational costs. On the other hand an internet based company like Geico has the ability to keep prices low by avoiding those expenses. According to State Farm, customers receive better equipped to respond to your needs and a more personalized experience when a company employee is able to assist you, rather than a separate company contracted out by an online insurer to handle in-person affairs. Overall it varies depending on what the customer truly values from their company, price or personalized one-on-one contact.

Comparison Charts

In order to compare rates between different companies data had to be gathered and compiled from a number of insurance companies with varying factors. The insurance companies which we collected data from were State Farm, Geico, Progressive, MetroMile, and State Farm's pay as you drive insurance (*without access to a current customer's policy an specific quote could not be obtained*). Using three distinct scenarios we entered designated variables into the company's websites to obtain price estimates. In order to ensure optimum accuracy across the board constant variables were necessary.

Assumptions

Each of the scenarios was based off of two different amounts of total annual mileage. The first was calculated using eight thousand miles and the second five thousand miles. Within the three scenarios, each driver held an insurance policy for five or more years, owned their vehicle, had a college degree, good credit rating and were used for personal use or commuting purposes. Each of the scenario's price quotes were based on five different 2006 car models, the total annual mileage and included liability coverage's of $50,000 bodily injury limit per person and $100,000 bodily injury limit per accident. The cars used are as follows: Ford 150 - Cylinder: 8, 4x4, Extended Cab, Nissan Pathfinder - Cylinder: 6, 4x4, Four door, Honda Accord - Cylinder: 4, Four door, Minivan Honda Odyssey - Cylinder: 6, 2x4, 2 Door Toyota Camry - Cylinder: 4, Two door. The comparison charts that integrate all of these variables can be found in (*refer to figures 1-6*)

Online Calculations

Each table was created using the same variable as laid out in the section above. All of the insurance company's websites asked similar questions but no uniform format exists. Emphasis was placed on aligning as much of the information as possible in order to generate an even platform for comparison. We experienced significant obstacles when creating tables as some companies automatically applied discounts to their price quotes while others did not. There were also differences in the number of extra coverage services and perks provided by some companies. These additional services can end up costing the consumer more while discounts applied by some companies may skew the numbers in their favor. Overall, these factors are not believed to dramatically alter the results of this report, but remain an important factor to keep in mind.

Scenario I

- Single male
- Thirty-five years old
- One speeding ticket within the past two years
- Minor at fault accident with minimal damage and no bodily injuries
- One owned vehicle
- Home owner with mortgage
- Address of residents 2421 Friendly St. Eugene Oregon 97405
- All residents with valid driver's license are insured

Scenario II

- Single female
- Thirty-five years old
- One speeding ticket within the past two years
- One owned vehicle
- Home owner with mortgage
- Address of residents 2421 Friendly St. Eugene Oregon 97405
- All residents with valid driver's license are insured

Scenario III

- Married male

Vehicle Type	State Farm	Geico	Progressive	MetroMile
Ford F-150	$100.58	$93.58	$145	$71.39
Nissan Pathfinder	$104.78	$101.11	$151	$73.29
Honda Accord	$102.16	$87.80	$134	$73.60
Honda Odyssey	$92.21	$81.29	$117	$61.40
Toyota Camry	$97.98	$92.70	$132	$78.13

Key Findings

Insurance Rates Comparison Charts

Vehicle Type	State Farm	Geico	Progressive	MetroMile
Ford F-150	$100.58	$81.12	$109	$78.13
Nissan Pathfinder	$104.45	$86.16	$111	$80.04
Honda Accord	$102.16	$82.59	$119	$81.39
Honda Odyssey	$95.13	$73.55	$99	$66.86
Toyota Camry	$101.10	$82.59	$115	$85.54

Scenario II – 8,000 Annual Miles

Standard Insurance Rates/Month				PAYD Rates/ Month
Vehicle Type	State Farm	Geico	Progressive	MetroMile
Ford F-150	$101.55	$59.58	$97	$63.97
Nissan Pathfinder	$99.06	$63.63	$105	$64.90
Honda Accord	$105.94	$62.40	$105	$66.86
Honda Odyssey	$96.12	$59.84	$89	$54.92
Toyota Camry	$102.21	$67.72	$103	$69.74

Figure 1

Figure 2

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Vehicle Type	State Farm	Geico	Progressive	MetroMile
Ford F-150	$84.16	$92.61	$128.00	$69.76
Nissan Pathfinder	$87.64	$100.12	$137.00	$65.50
Honda Accord	$85.44	$86.88	$127.00	$67.99
Honda Odyssey	$77.19	$80.40	$107.00	$55.97
Toyota Camry	$81.93	$91.66	$125.00	$72.14

Figure 4

Scenario II – 5,000 Miles

Standard Insurance Rates/Month				PAYD Rates/ Month
Vehicle Type	State Farm	Geico	Progressive	MetroMile
Ford F-150	$84.16	[illegible]	$108	$75.98
Nissan Pathfinder	$87.36	$85.20	$108	$73.18
Honda Accord	$85.44	$81.69	$119	$75.67
Honda Odyssey	$79.59	$72.78	$99	$61.35
Toyota Camry	$84.23	$81.61	$115	$79.09

Figure 5

Scenario III – 5,000 Miles

Standard Insurance Rates/Month				PAYD Rates/ Month
Vehicle Type	State Farm	Geico	Progressive	MetroMile
Ford F-150	$82.89	$59.06	$114	$56.90
Nissan Pathfinder	$80.80	$62.91	$128	$55.44
Honda Accord	$86.39	$61.70	$115	$55.86
Honda Odyssey	$78.46	$59.17	$98	$47.25
Toyota Camry	$83.10	$66.91	$110	$59.28

Figure 6

MetroMile is currently seeking two companies and/or Universities to participate in a two month pilot program. There are no financial obligations and no enrollment requirements post-pilot. Participating entities would select 50-100 employees to volunteer; each participant would receive a Metronome device for the duration of the program to track their mileage as well as online access to personalized dashboard metrics. The online dashboard allows individuals to compare their monthly mileage to the mileage of the ten lowest drivers and the top ten drivers reducing the most mileage.

MetroMile's per-mile pricing model aligns customer costs with consumption patterns, this approach incorporates interactive billing and allows consumers control over what they pay. Partnering with MetroMile creates an environment where community activity and social networks are strengthened and encourages the community to use alternative forms of transportation.

State Farm Drive Safe and Save Program

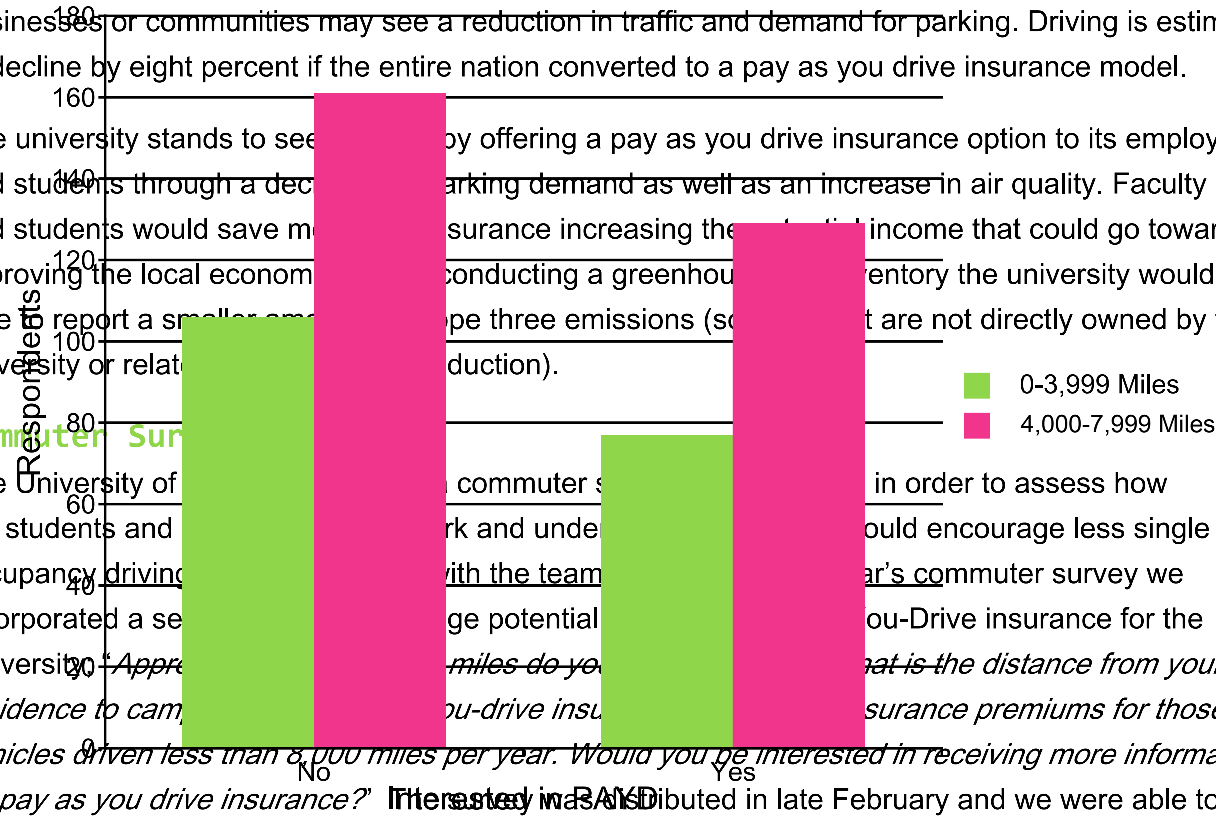
State Farm offers a version of pay as you drive insurance called Drive Safe and Save. This program offers drivers the opportunity to save up to fifty percent on their premiums. Most customers do experience a reduction in premiums, but it is not guaranteed and the amount of the discount also varies. If a customer is receiving reduced premiums based on an estimated annual mileage of less than 7500 and they drive over that amount, their premiums will be increased accordingly.

In order for the program to work State Farm uses one of three companies to collect data from a customer's vehicle: OnStar, Sync, or In-Drive. Each of these companies requires that users have an active subscription in order to utilize their services. Vehicles 1996 and newer should have In-Drive capability, vehicles from 2004 and on are typically equipped with OnStar, and Certain Ford, Lincoln, or Mercury vehicles from 2008 on may be able to use sync. These programs collect data such as vehicle miles traveled as well as, in most cases, driving behavior such as sudden stops or quick accelerations.

Like all insurance companies, State Farm does not have access to information such as how their customers drive. They rely on generalities like male or female, age, education level, etc. Using generalities means that insurance companies have to charge premiums based on perceived customer driving behaviors. By collecting data directly from customer's vehicles on their personal driving habits, State Farm can better tailor their prices to fit an individual which in most cases saves the customer money. According to the article *How a Creepy Car Insurance Idea Could Save Thousands of Lives (and the Planet),* the fewer miles you drive the less likely it is that you will be in an accident or need to make a claim to your insurance company, thus allowing an individual's price to decrease.

Many parties experience benefits when drivers have a monetary push to switch to pay as you drive insurance. Two out of three households would save money on their premiums ("*Drive less, pay less for insurance*"). National benefits resulting from the estimated 2% decrease in carbon dioxide emissions, as well as oil consumption reductions of approximately 4 percent ("*Drive less, pay less for insurance*") . Additionally, decreases in traffic volume can greatly improve air quality, reduce congestion and businesses or communities may see a reduction in traffic and demand for parking. Driving is estimated to decline by eight percent if the entire nation converted to a pay as you drive insurance model.

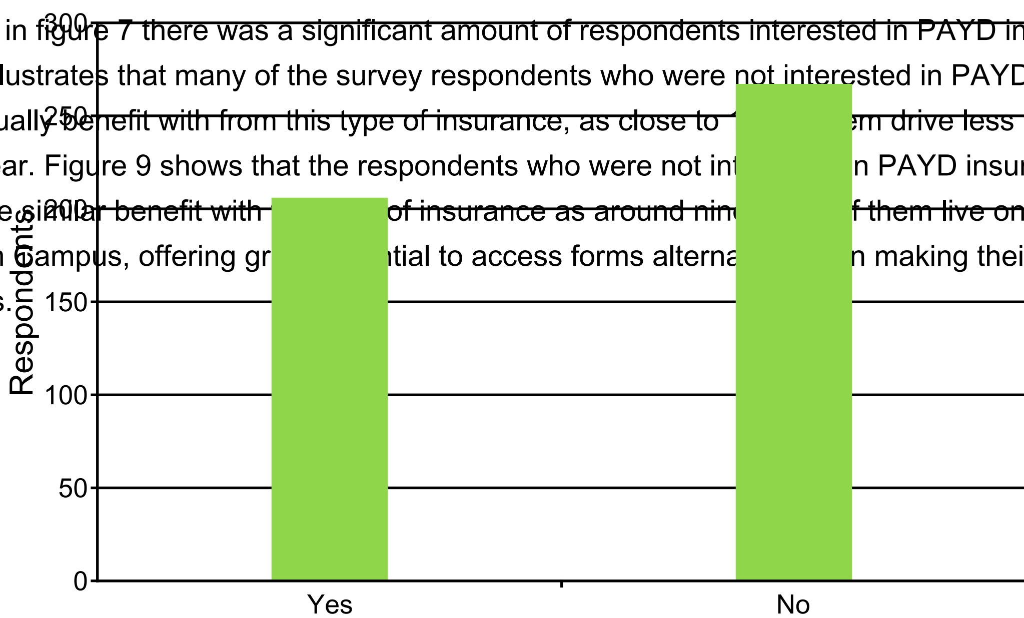
The university stands to see [illegible] by offering a pay as you drive insurance option to its employees and students through a dec[illegible]arking demand as well as an increase in air quality. Faculty and students would save m[illegible]surance increasing the [illegible] income that could go towards improving the local econom[illegible] conducting a greenhou[illegible]ventory the university would be able to report a sm[illegible]pe three emissions (so[illegible]t are not directly owned by the university or relat[illegible]duction).

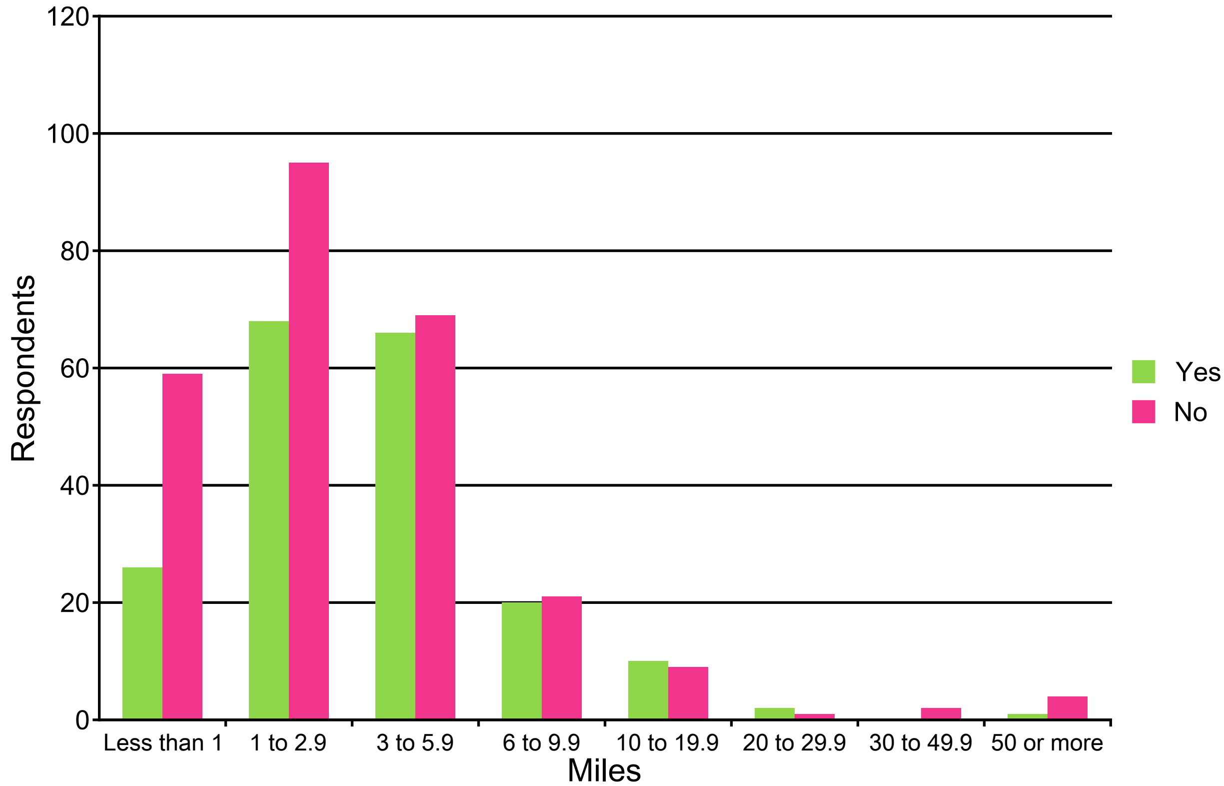


Commuter Sur[illegible]

The University of [illegible] commuter s[illegible] in order to assess how the students and [illegible]rk and unde[illegible]ould encourage less single occupancy driving[illegible]ith the team[illegible]ar's commuter survey we incorporated a se[illegible]ge potential [illegible]ou-Drive insurance for the University: "*Appr[illegible] miles do yo[illegible]at is the distance from your residence to cam[illegible]u-drive insu[illegible]surance premiums for those vehicles driven less than 8,000 miles per year. Would you be interested in receiving more information on pay as you drive insurance?*" The survey was distributed in late February and we were able to retrieve our results by the beginning of March. In these results we found that sixty-three percent of faculty and staff drive to and from campus alone. A PAYD program would encourage employees to drive less while simultaneously providing them the benefit of saving money on their auto insurance. PAYD has proven to encourage individuals to choose alternative modes of transportation to the UO campus and in turn reduce carbon emissions. Close to half of the survey participants were interested in learning more about Pay-as you drive insurance.

As shown in figure 7 there was a significant amount of respondents interested in PAYD insurance. Figure 8 illustrates that many of the survey respondents who were not interested in PAYD insurance would actually benefit with from this type of insurance, as close to [illegible]em drive less than 4,000 miles a year. Figure 9 shows that the respondents who were not int[illegible]n PAYD insurance could experience similar benefit with [illegible] of insurance as around nin[illegible]f them live only 1 to 2.9 miles from campus, offering gr[illegible]tial to access forms alterna[illegible]n making their to commutes to campus.





Recommendations

Based on the key findings there are three recommendations that can be made to the University of Oregon:

MetroMile is currently in the process of selecting a few companies and/or Universities to partner in a pilot program. This two month pilot would be free of charge and obligations to participants and will be conducted in hopes of reducing insurance costs, encouraging alternative forms of transportation and creating a positive relationship between the community, employees and MetroMile. The University could offer survey participants who responded positively to consider switching to a pay as you drive insurance model the opportunity join MetroMile's pilot and provide feedback to the University.

The University should facilitate an educational/information seminar about MetroMile and State Farm's PAYD programs for faculty and staff to increase employee awareness on the opportunities these programs offer. The booths can generate excitement and encourage people change insurance carriers. An educated representative could ease worries employees may have regarding this relatively new form of insurance. Through an informational seminar possible participants would have the opportunity to ask questions and interact one-on-one with PAYD

Figure 9

Many companies are beginning to implement some form of pay as you drive insurance. At this time the best option may be to wait and let the market develop further. Currently, MetroMile is only one solely pay as you drive insurance provider in the United States. Standard insurance companies are beginning to develop their own variations, in the future additional programs will be offered.

Conclusions

Great potential for the adoption of broad-scale participation in a PAYD program for the University of Oregon's staff and students exists. With a majority of employees residing a short distance from campus, and fifty percent of surveyors willing to switch to PAYD the capacity for an established partnership is high. More companies are beginning to incorporate some sort of PAYD plan into their insurance options. Increased insurance options mean there will be expanded opportunities for consumers to receive a specialized insurance plan. This interest toward PAYD insurance could help the University increase their renowned reputation as a sustainably conscious school.

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