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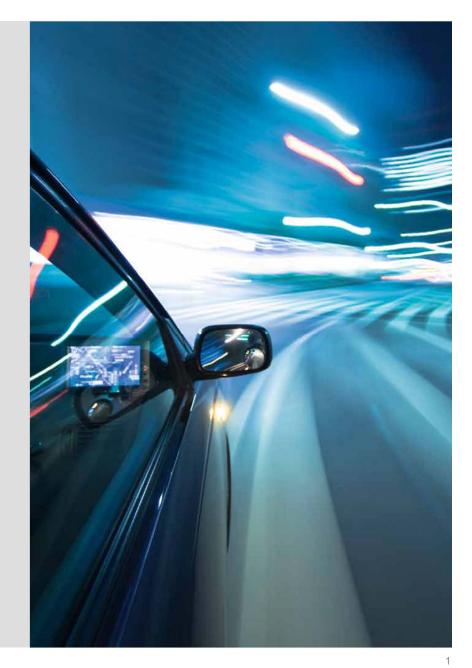
Initial value proposition

**Current UBI market** 

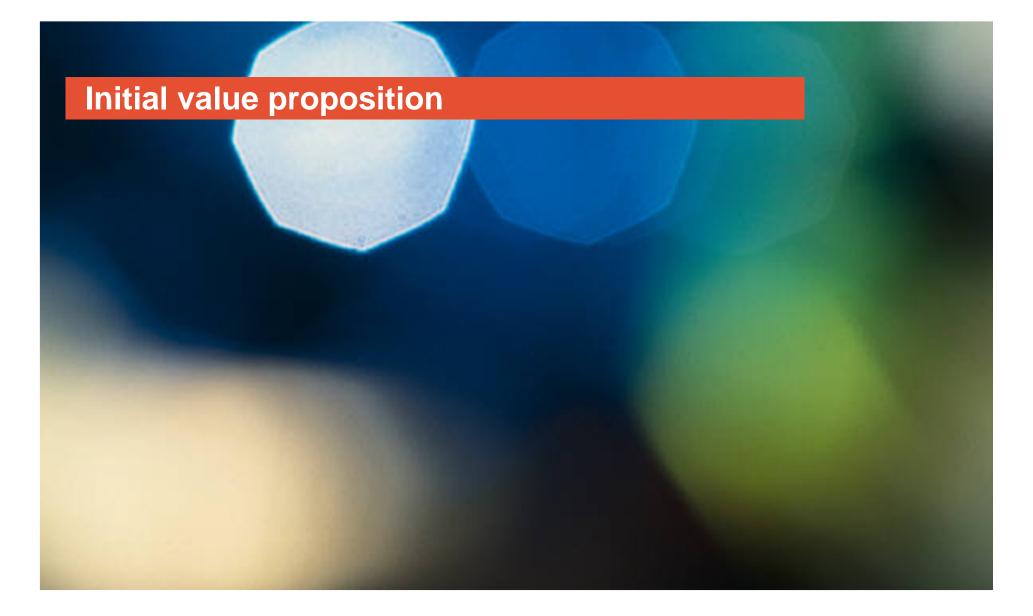
**UBI** data

**Industry Implications** 

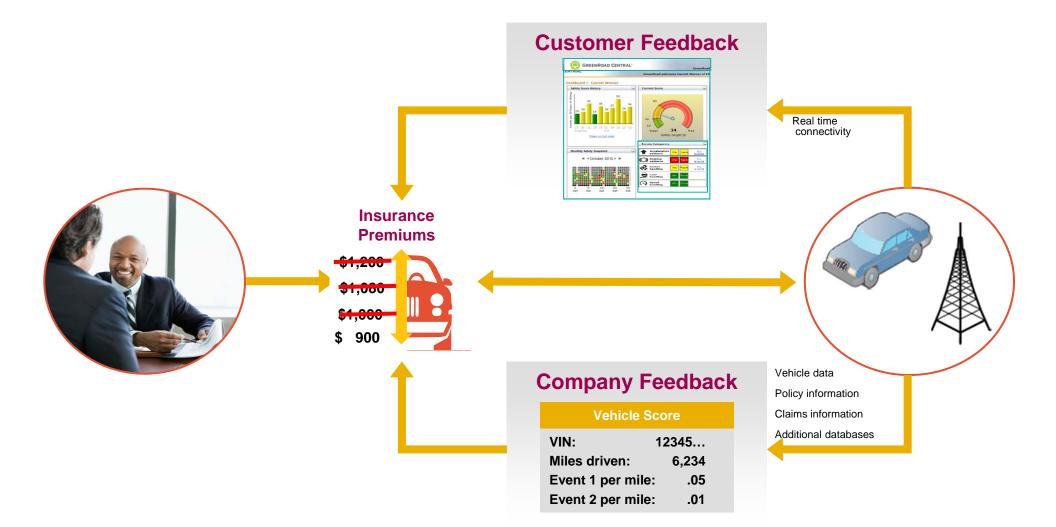
Questions



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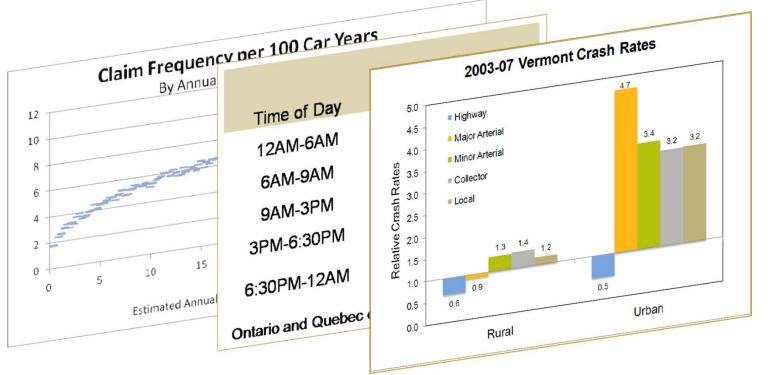
## What is usage-based insurance (UBI) today?



## **Driving data is very predictive**

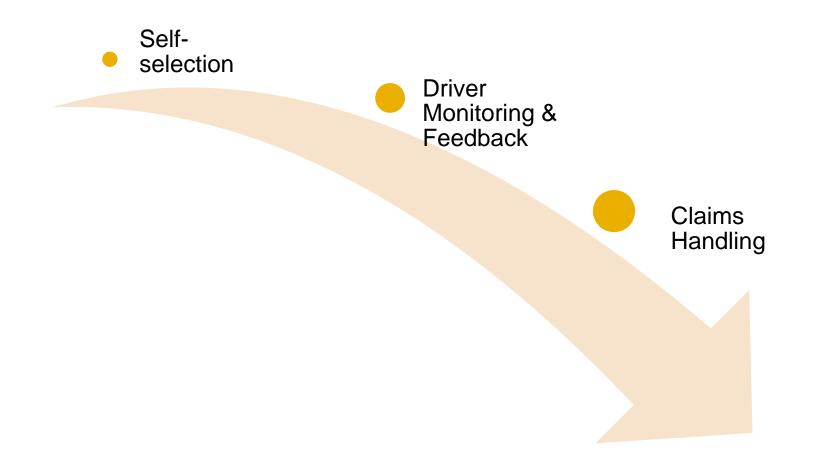
"[Telematics data] was already our most powerful variable. It is getting even more powerful. We have been mining our data, and we have identified opportunities to improve" - Tom Hollyer, Progressive National Product Development Leader

• Public studies also validate the predictive power or driving data



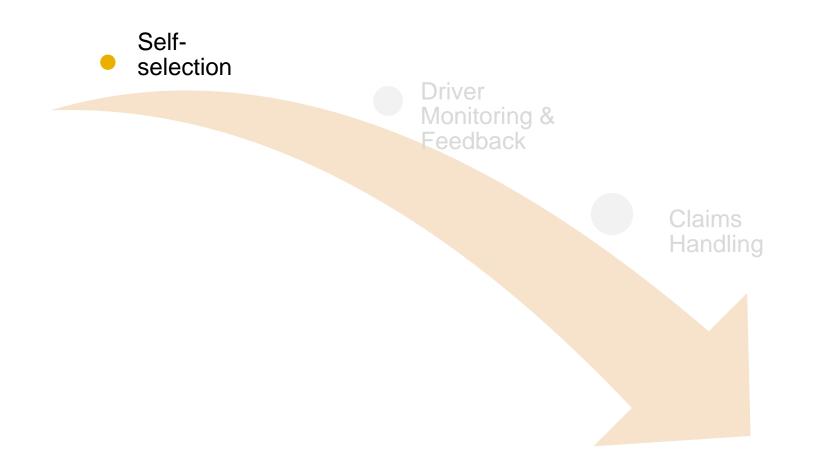
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### **UBI programs have lower losses...**



## ...which should result in lower premium

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## ...which should result in lower premium

## Is there a self-selection effect?

The current programs are voluntary, and those who perceive their vehicle(s) are operated "better than average" opt in to the program

- Safe drivers
- Low annual mileage vehicles
- Highly engaged parents

Significant for early programs, but will become diluted over time as more insured opt in

#### What is the impact of this self-selection?

- No loss reduction, just more knowledge
- No industry premium reduction, just a different distribution of premium

Yes, there is a self-selection effect, especially in the early stages



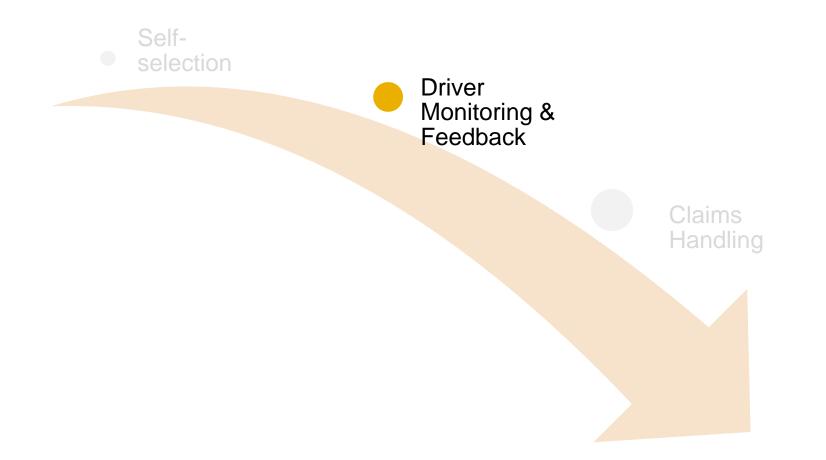
## What about for an individual company?

"The key to success in UBI insurance will be to move early. Insurers feel an overpowering need to deploy systems absolutely as quickly as they can because the likelihood is that the first module a customer installs will be his or her last. Once the insurer learns that customer's driving behavior and can accurately and affordably underwrite their risk, the customer is unlikely to switch insurers. The competing insurer will always be at a disadvantage, not knowing the customer's driving behavior." (Source: StrategyAnalytics.com)

- This is different than insurance credit scores!
  - Credit scores were controversial, so many companies didn't implement until they began to be adversely selected against. Using publicly available scores, they "caught up"
  - Driving behavior is not currently available from a third-party source, so late comers will not be able to recover

#### Early adopters will have an advantage, late comers will have trouble recovering

### **UBI programs have lower losses...**



## ...which should result in lower premium

## **Monitoring/Feedback improves driving**

Iron Mountain: 93% reduction in fleet crash rate

Iceland postal service reduced crash rate by 56%

Pepsi (Iceland) reduced fleet crash rates by over 80%

GreenRoad: 54% improvement in fleet crash rate

DriveCam: 50% average reduction in crash rates

Insure The Box (UK): 35-40% reduction in youthful crash rates

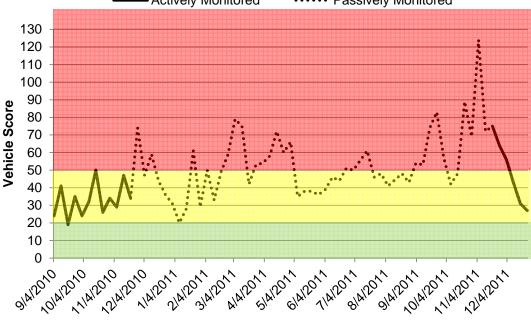


#### Safer drivers decrease fuel consumption roughly 10%

#### And a close to home example... Example: 16-17 year old driver

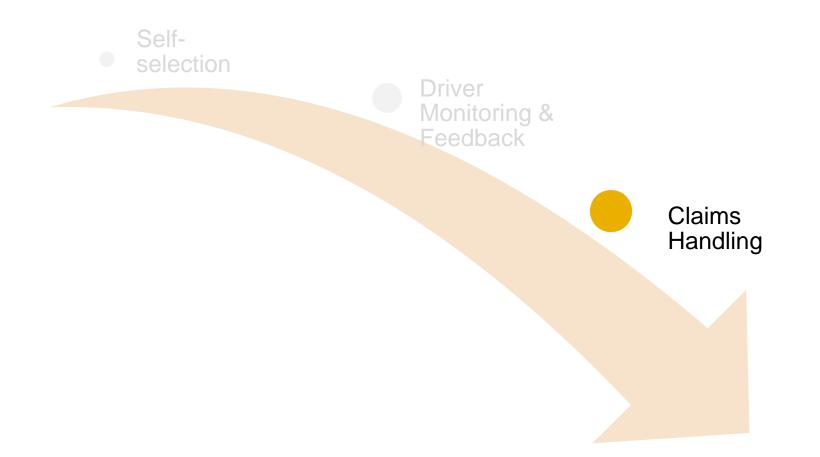
- Sep-Nov 10 (16 yrs old)
  - Constant monitoring, weekly emails, coaching, and competition
  - "Yellow" driver (good for a youthful)
- Dec 10-Nov 11 (17 yrs old)
  - Vehicle passively monitored, no emails or coaching
  - Safety scores worsened significantly over time to "red"
- Dec 11 (17 yrs old)
  - Began coaching again
  - Score returns to lowest levels over 4 week span

# Vehicle Score Over Time Actively Monitored ••••• Passively Monitored



#### Even for personal lines, active monitoring results in demonstrable improvement

## **UBI programs have lower losses...**



## ...which should result in lower premium

## **Claims handling**

#### The information can be helpful with respect to claims handling

- Some technology solutions offer emergency response
- Faster accident response has saved lives
- Information can provide valuable insights as to the exact circumstances of the claim
- Devices equipped with GPS can provide vehicle recovery information

#### The use of this information for claims differs significantly

- South Africa used to solve huge theft issue. Brazil will be a fast follower
- Italian market has embraced UBI to address fraudulent claims

#### If used for claims, this technology could drive down insurance losses further

## Why is UBI game-changing?

Significantly increases pricing accuracy

**UBI programs have lower losses:** 

Attracts lower risk insures via self-selection

Allows customers to understand and eliminate risky behaviors, actually reducing accident frequency

Improves claims handling

Differentiates product offering by offering additional services

Appeals to consumers as it is intuitive, controllable, and minimizes reliance on controversial proxies

All of these advantages lead to increased profits and improved retention.



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#### Selection of insurance providers that have launched telematics Widespread development underway on a global basis

#### Canada

**Industrial Alliance** 

#### U.S.

Allstate Nationwide **Plymouth Rock** American Family Progressive NoCal AAA The Hartford Elephant Travelers Esurance State Farm 21<sup>st</sup> Century SoCal AAA GMAC Sequoia Liberty Mutual

#### Allianz Aviva Coverbox CIS Direct Line Ingenie Insure the Box Polis Direct Mapfre

#### WGV Uniqua Reale Mutua RSA The AA Markerstudy Equity Sabre

Young Marmalade

Europe

#### **South Africa**

Discovery Hollard MiWay

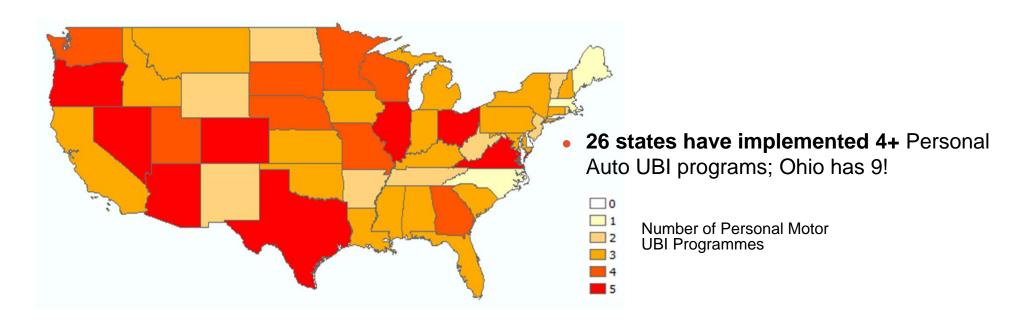
#### Japan AIOI

Australia Real

Insurance/Hollard

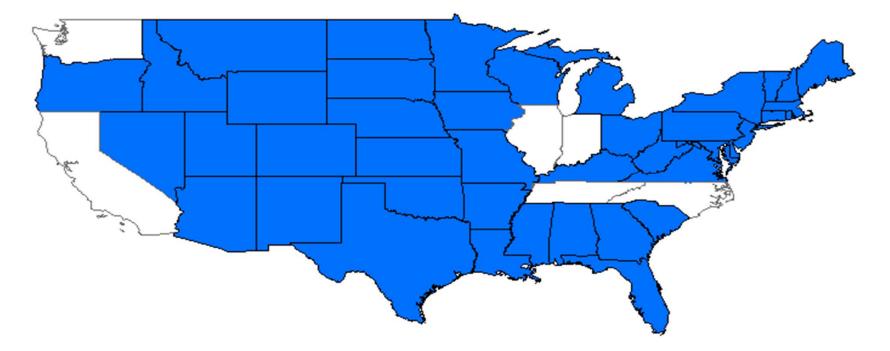
## **Today in the US market**

- Eight of the top 10 personal motor insurers have implemented programs
- U.S. companies representing over 75% of the market already have programs or are actively pursuing them
- "UBI device sales rocketing from \$50 million in 2011 to approximately \$2.6 billion by 2015." (FC Business Intelligence)





### **Progressive Snapshot Discount**<sub>m</sub> - 42 States + DC

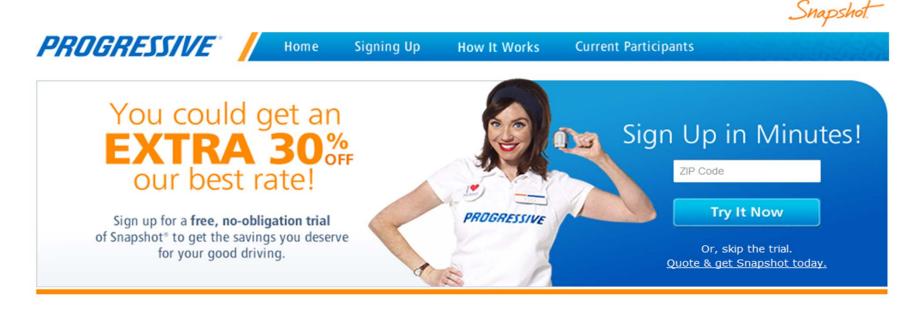


#### More than \$1 billion of Snapshot premium in the past 12 months alone

"The name of the game is the quantity of data and the quality of analysis and insight. We've got a 15-year, five billion mile head start on other insurers, and we'll only extend our lead as more drivers try Snapshot" - Richard Hutchinson, Snapshot General Manager



#### **Consumer Proposition**



#### Here's how you try Snapshot before you decide to buy a Progressive policy!



Plug in the snapshot device.

Once you get your devices in the mail, plug them into each of your cars. It's easy.



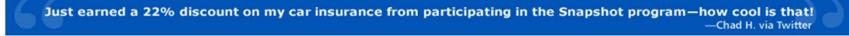
Drive like you normally do.

For the next 30 days, we'll collect information about your good driving habits.



#### Get your personalized rate.

See how much you could save off Progressive's best rate as a good driver!



Source: Progressive website

### **State Farm**



#### In-Drive<sup>®</sup> is...

In-Drive<sup>®</sup> is a part of the State Farm<sup>®</sup> Drive Safe & Save™ program that offers a new way to save on your insurance based on safe driving. In addition to savings, Drive Safe & Save with In-Drive also offers innovative safety and diagnostic services allowing you to connect with your vehicle like never before. Drive Safe & Save with In-Drive consists of two self-installed devices: In-Drive Communicator and In-Drive Visor Clip.

In-Drive Communicator

#### In-Drive Communicator

A small device that simply plugs into your vehicle's onboard diagnostics port to collect the det necessary to ear

#### Convenient Mobile Application

Access to your savings and driving

- Real-time access to vehicle location
- Detailed breakdown of miles per galloi
- and vehicle diagnostics

#### Enhanced Safety Features

Easy access to trained specialists in an emergency .

- Automatic crash notification if an accident should occur .
- Roadside assistance for vehicle related problems .

#### Package Comparison



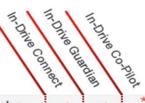




In-Drive Connect

In-Drive Guardian

In-Drive Co-Pilot



Maintenance/Service Reminder	~	~	*
Recall Information	~	~	
Eco-Drive Data	~	~	
Stolen Vehicle Location Assistance	~	~	
Risk Category Comparison	×	~	
Driver Behavior Tips	~	~	
Geobloc™ Display	~	~	
MPG Status	~	~	
Vehicle X-Ray Diagnostics	~		
Incident Alert		~	
Manual Emergency Call	_	~	
Roadside Assistance		~	
Enhanced Diagnostics		~	
Vehicle Location Monitoring	*	*	~
Location Alerts	*	*	¥
Speed Alerts	*	*	~

\* In-Drive Co-Pilot requires either In-Drive Guardian or In-Drive Connect package.

### Shift in product vs. price focus unclear



Progressive

Sign up for a FREE trial Now you can test drive

Snapshot to see how much you can save. No purchase necessary.

Learn more

- PRICE PROPOSITION
  PRICE PROPOSITION
  Will price remain king with more powerful risk segmentation?
- Price focus will require strong analytic insight with more data to create new risk factors from telematics data

- Opportunity to de-commoditize the product
- Product/service focus including driver coaching require an understanding of driving behavior and the key influencing factors



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## How do we currently price?

- Current premium is based on a combination of policy, vehicle, and operator characteristics
- Most variables are <u>correlated</u> rather than <u>causal</u>

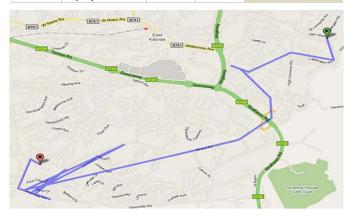
Correlated	Causal
Age, sex, marital status, etc.	Way you drive
# of prior accidents	Aggressive/unsafe driving
Garage location	Where you drive
# vehicles	How much you drive

- "How" and "where" the vehicle is being operated are <u>causal</u> variables
- Good UBI programs will identify <u>causal</u> driving behaviors that should reduce the reliance on <u>correlated</u> variables

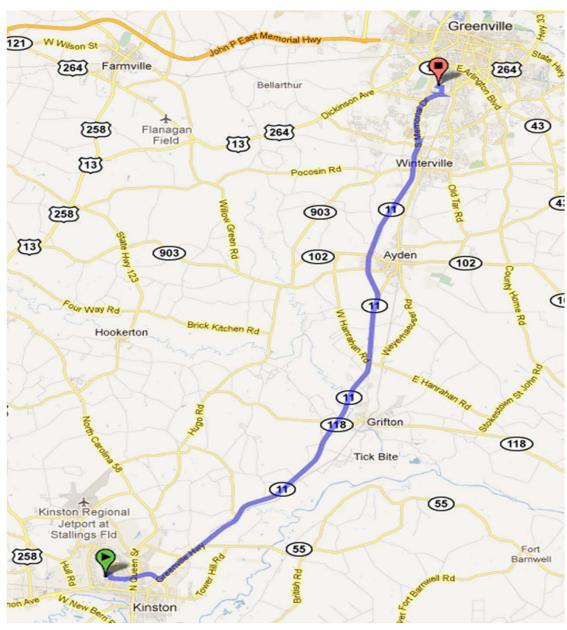
### Data brings significant and new challenges

- Unlike typical actuarial data
  - Updated second-by-second
  - Hundreds of variables
  - Terabytes of data
- Telematics data can have errors and must be checked
- Imperative to automate as much of the validation as possible to facilitate ongoing scrubbing

feed_trip	start_time	distance_	road_type	horizontal road	spee
942	17/08/2010 01:58	0.0621	Fourth	95.69	20
936	17/08/2010 00:41	0	Fourth	80.16	20
183	07/07/2010 12:25	0.7456	Fourth	78.91	20
429	21/08/2010 16:31	1.0563	Fourth	77.05	20
399	17/08/2010 20:06	1.0563	Fourth	72.7	20
936	17/08/2010 00:38	0	Fourth	67.73	20
936	17/08/2010 00:39	0	Fourth	67.73	20
936	17/08/2010 00:37	0	Fourth	67.73	20
942	17/08/2010 01:57	0.0621	Fourth	65.24	20
957	17/08/2010 04:27	0	Fourth	116.2	30
522	26/07/2010 14:36	0.3107	Fourth	114.95	30
595	02/08/2010 13:53	0	Fourth	108.12	30
595	02/08/2010 13:52	0.0621	Fourth	108.12	30
520	26/07/2010 13:08	0.0621	Fourth	96.93	30
527	26/07/2010 15:39	0.2485	Tertiary	85.75	30
599	02/08/2010 15:11	0.0621	Fourth	83.26	30
586	01/08/2010 22:11	0.1243	Fourth	80.78	30
520	26/07/2010 13:07	0	Fourth	78.91	30

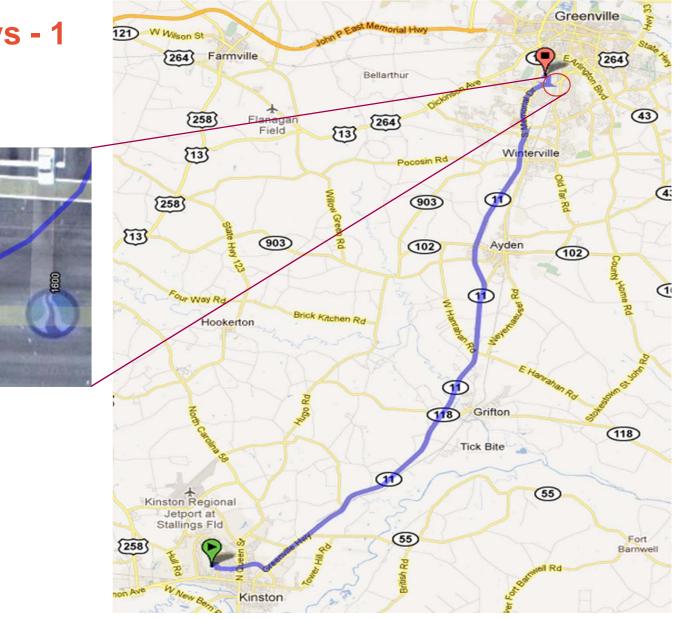


## **Example journeys - 1**



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## **Example journeys - 1**



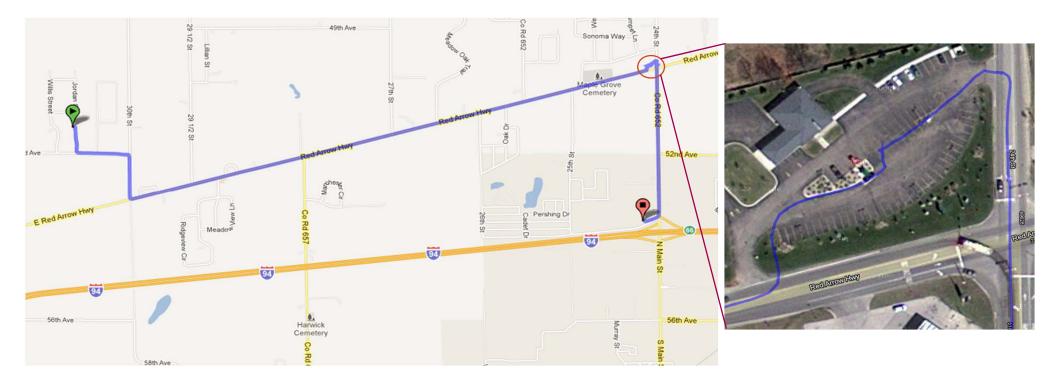
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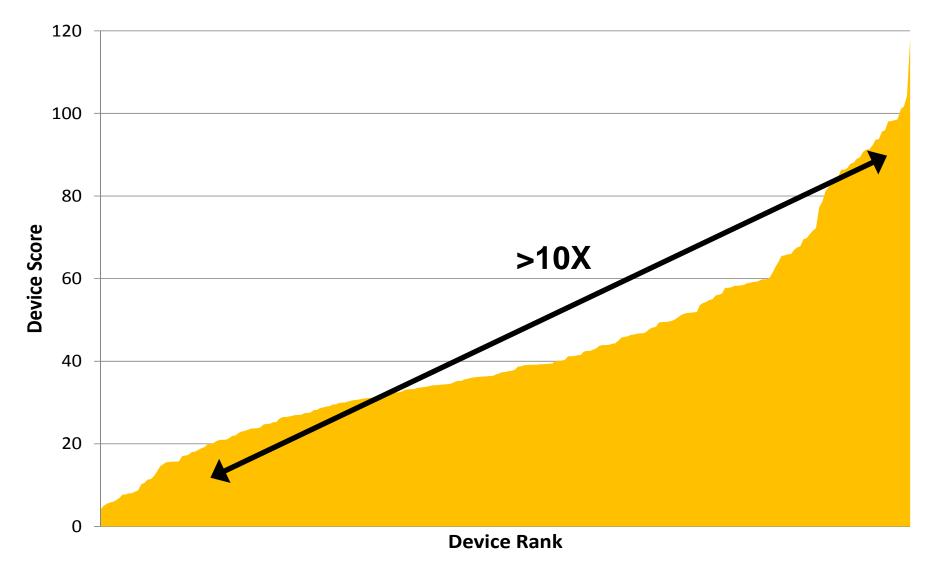
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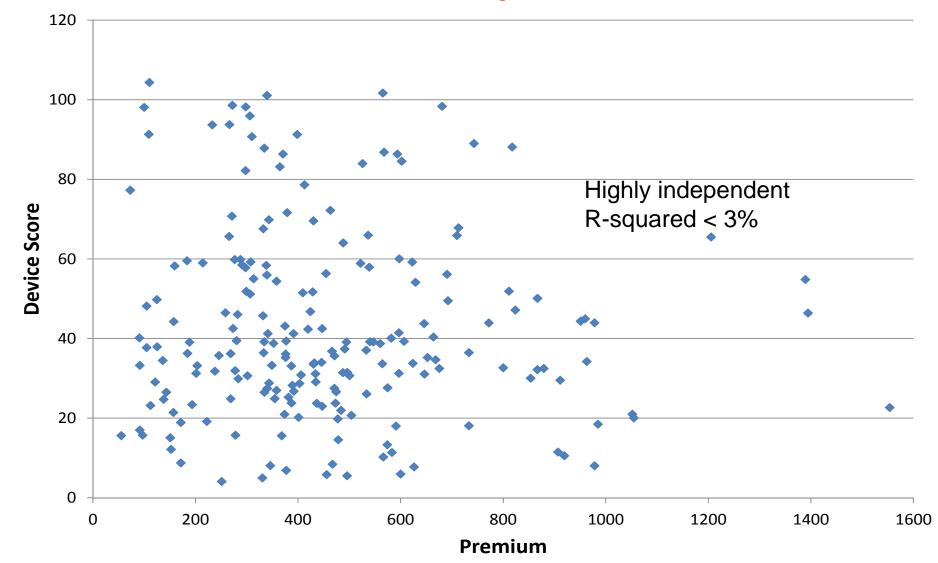
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## **Example journeys - 2**



## Driving data is very predictive....

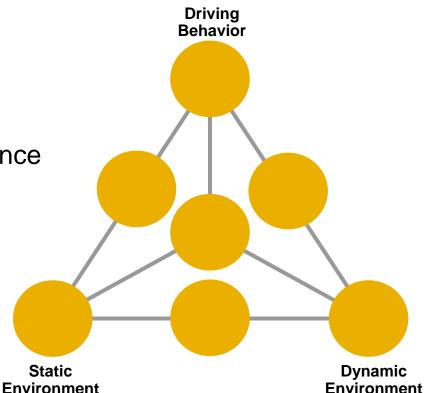




### ...and uncorrelated with current premiums

## How will pricing change?

- Data and analytics will continue to advance
  - Dataset are going to get larger and more credible
  - Scoring algorithms will get more and more predictive
  - New data sources will be incorporated



- Companies will completely re-work the rating and underwriting focusing on the how the vehicle is being operated
  - Medium-term: focus will be on minimizing controversial variables (insurance credit scores, driver assignment, infrequent accidents)
  - Long-term: even the less controversial proxy variables will be flattened or replaced completely

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### What does it mean for the company?

Better pricing	<ul> <li>The predictive power of the telematics data is undeniable</li> <li>Some companies are offering discounts up to 50% for low risk drivers, highlighting the additional segmentation power</li> </ul>
Product differentiation & brand awareness	<ul> <li>Some programs are very basic discount programs that will appeal to price sensitive groups. More sophisticated programs add a wide variety of value-added services that differentiate the product</li> <li>UBI programs promote the idea that the company is "modern" and "green"</li> </ul>
Reduced loss costs	<ul> <li>Consumers understand UBI, so there is a significant self-selection effect</li> <li>Behavioral modification programs have been shown to significantly reduce risky driving and, consequently, accident frequency</li> <li>Potential for further reduction by using data in claims handling</li> </ul>
Consumer satisfaction and retention	<ul> <li>Consumers want to pay less for their insurance, and this gives discounts that only their current carrier can offer (as others don't know their driving behavior)</li> <li>Ancillary services (e.g., teen tracking) greatly appeal to certain consumers and make the insurance product more valuable to them</li> <li>Retaining existing customers is significantly cheaper than adding new ones</li> </ul>
	UBI programs lead to better retention and greater profits

#### What is the perspective of the consumer?

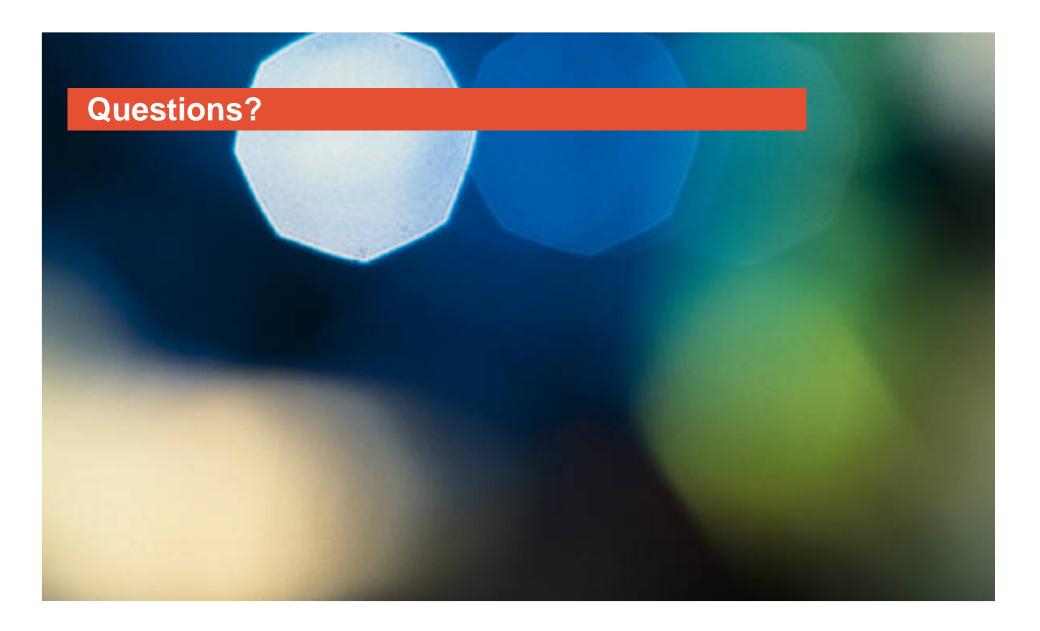
Understand it and like to control their premium	<ul> <li>Consumers don't like the use of credit scores because it doesn't make sense.</li> <li>Generally speaking, "good" drivers opt in, get participation discounts, and have the opportunity for even greater discounts</li> </ul>
Want access to useful driving feedback	<ul> <li>Accidents are the leading killer of teens. UBI programs give parents a variety of tools to help monitor and counsel their teen drivers.</li> <li>Many adults are faced with elderly parents whose driving is deteriorating. UBI can help evaluate skill deterioration and provide helpful safety tips</li> </ul>
Like options for value-added services	<ul> <li>Consumers generally like options</li> <li>Programs vary from basic to deluxe in their service offerings. Some consumers really like the added services</li> </ul>
Value companies that are socially responsible	<ul> <li>Society is becoming increasingly environmentally conscious, and consumers value companies that are "green"</li> <li>Younger consumers like new and different products even when the product may not appeal to them</li> </ul>

Most consumers view UBI favorably and participants are very satisfied

#### What is the perspective of regulators and society in general?

Want variables that are "fair"	<ul> <li>Most states require that rates are adequate and not excessive or unfairly discriminatory</li> <li>UBI varies rates based on driving behavior, which has been proven to be predictive and is clearly "fair"</li> </ul>
Like that UBI makes sense and is controllable	<ul> <li>Regulators are concerned with factors like credit that don't "make sense" to consumers. UBI makes sense</li> <li>Regulators prefer variables that give the consumer "control" to reduce costs without reducing coverage</li> </ul>
Support "green" initiatives	<ul> <li>Safer driving and fewer miles significantly reduces emissions</li> <li>14 states have pay as you drive specifically listed in their climate plans</li> </ul>
Endorse efforts to save lives	<ul> <li>Highway accidents result in approximately 3M injuries and 35K fatalities each year, and the government seeks to reduce that through various programs</li> <li>Driver feedback significantly reduces risky driving</li> </ul>

#### For these reasons, regulators are anxious to approve UBI programs



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## **Contact information**

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