



# Data Privacy vs. Insurance Discount: Which Will Policyholders Choose?

Casualty Actuarial Society  
Ratemaking and Product Management Seminar

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# Agenda

- Is data privacy an issue?
- What is UBI?
- What does UBI data look like?
- What do customers think about sharing their data?
- Are data privacy concerns impacting UBI implementation?

# Is data privacy an issue?

## National Security Administration and Verizon

- NSA collected phone records of millions of Verizon customers
- Data collected for three months
- Data included phone numbers of both parties, location, call duration, and time
  - Contents of conversations were not covered
- Debate over governmental authority in domestic surveillance
- Not UBI related, but an example of why data privacy is a concern

# What is UBI?

# Usage-based auto insurance

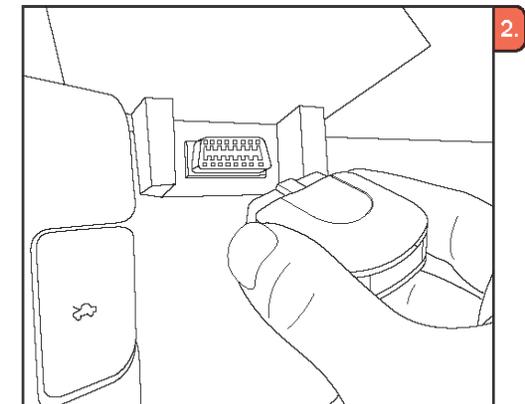
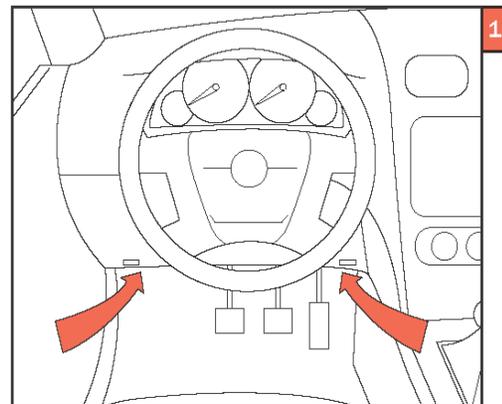
## What it is

- A device collects **real-time driving data**
  - Date and time, trip duration, speed, turning forces, and even location (optional)
  - Additional data can be merged including weather, traffic, and more
- Data is sent to the insurance company who uses it to **rate the driver on actual driving behaviors**

## What it offers insurers

- Enhanced risk **segmentation** & improved **pricing accuracy**
- Reduced loss costs & **reduction in claims**
- Increased **consumer retention** & satisfaction
- Product differentiation & brand awareness

# Customer Installation Experience



Insurers often ask customers to explicitly opt-in by signing Terms and Conditions. The voluntary act of plugging in devices is an unusual level of participation and acceptance in insurance.

# What is does UBI data look like?

# Simple example UBI data for 2½ minute trip

<b>TRIP:</b>	1												
<b>DATE:</b>	12-Jun												
<b>Time</b>	<b>MPH</b>	<b>Time</b>	<b>MPH</b>	<b>Time</b>	<b>MPH</b>	<b>Time</b>	<b>MPH</b>	<b>Time</b>	<b>MPH</b>	<b>Time</b>	<b>MPH</b>	<b>Time</b>	<b>MPH</b>
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0:00:01	2	0:00:26	11	0:00:51	12	0:01:16	0	0:01:41	0	0:02:07	32		
0:00:02	0	0:00:27	10	0:00:52	14	0:01:17	2	0:01:42	0	0:02:08	32		
0:00:03	0	0:00:28	9	0:00:53	15	0:01:18	5	0:01:43	0	0:02:09	33		
0:00:04	0	0:00:29	9	0:00:54	14	0:01:19	7	0:01:44	0	0:02:10	33		
0:00:05	2	0:00:30	9	0:00:55	12	0:01:20	9	0:01:46	0	0:02:11	34		
0:00:06	6	0:00:31	9	0:00:56	12	0:01:21	11	0:01:47	0	0:02:12	35		
0:00:07	7	0:00:32	10	0:00:57	11	0:01:22	13	0:01:48	0	0:02:13	35		
0:00:08	9	0:00:33	11	0:00:58	9	0:01:23	15	0:01:49	0	0:02:14	35		
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0:00:23	15	0:00:48	6	0:01:13	4	0:01:38	0	0:02:04	26	0:02:29	0		
0:00:24	14	0:00:49	7	0:01:14	5	0:01:39	0	0:02:05	28	0:02:30	0		

## UBI data is different...

- Consider a typical commuter
  - 20 minute commute

**1,200 records of data**

- Twice daily commute, 5 days a week, one year

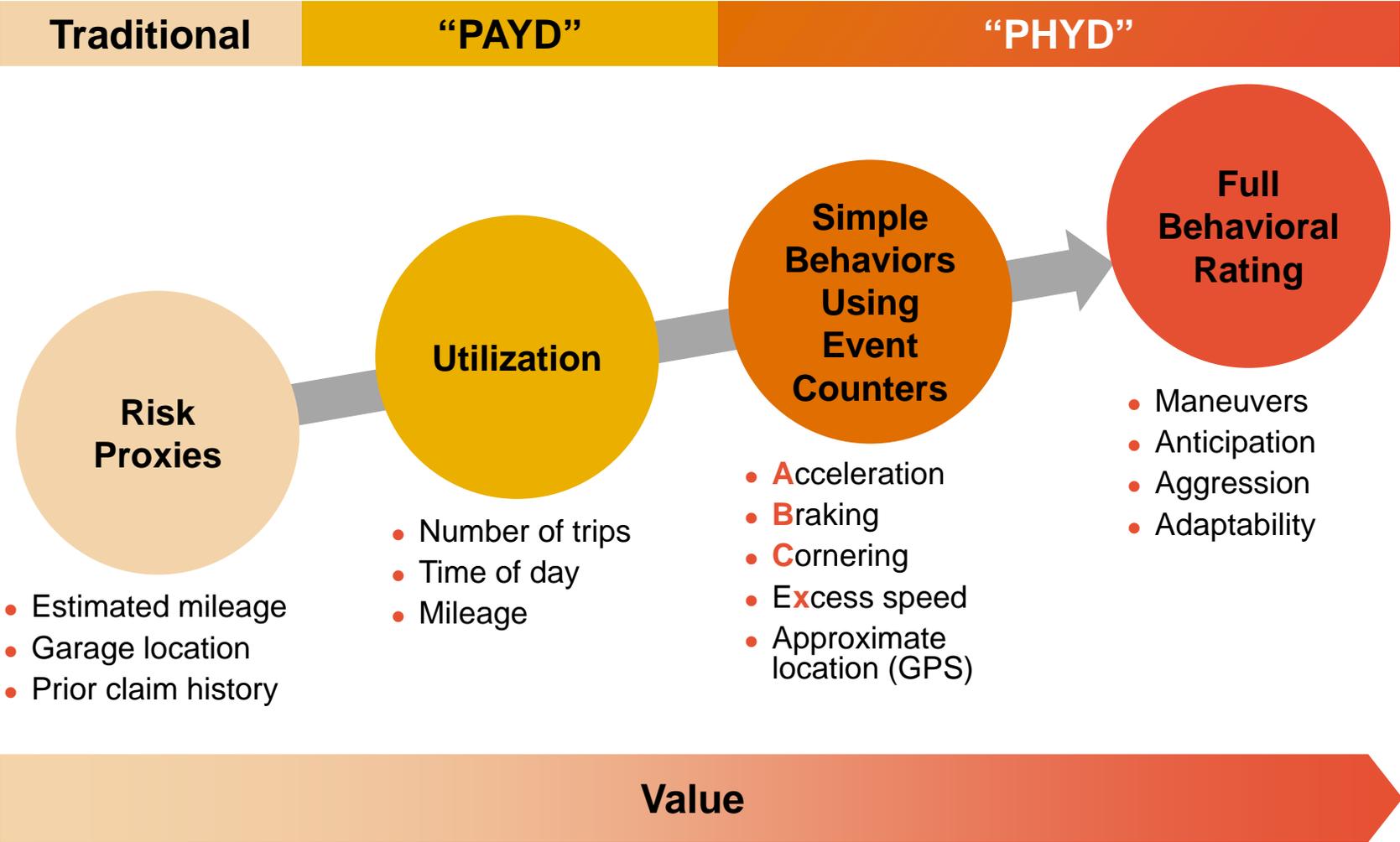
**500,000 records of data**

That's just one vehicle!

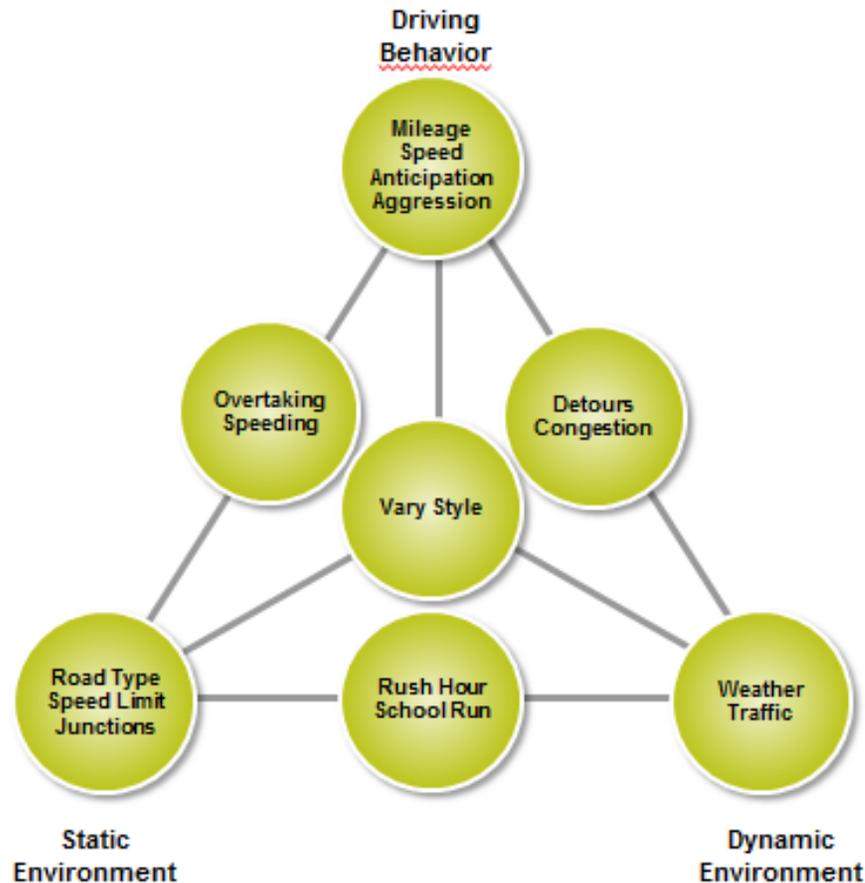
## ... and exceptionally challenging

	<b>Without UBI</b>	<b>With UBI</b>
<b>Update frequency</b>	Semi-annual	Real time, trip, daily
<b>Data quality</b>	Renewal UW	Daily scrubbing
<b>Variables</b>	Dozens	Hundreds
<b>Records per policy</b>	Dozens	Millions
<b>File size</b>	Gigabytes	Terabytes [Petabytes?]

# Data granularity, the consumer proposition and data privacy



# External data allows behaviors to be put into context



- Behaviors that are “safe” in good conditions aren’t necessarily “safe” in bad conditions
  - 60MPH on a highway is not the same as 60MPH in a neighborhood
  - 75MPH on a rainy or icy day is not the same as doing so on a nice day
- Good drivers are drivers who adjust to their environment
- Granular telematics and external data are required to do this

# What do customers think about sharing their data?

## UBI in the social world

- Sharing is becoming the norm
  - Facebook has over 1 billion monthly active users
    - Nearly 700 million of them are mobile users
  - Twitter has over 200 million active users
- USAA poll – Members/users are "somewhat" or "very concerned" about their privacy
  - Nearly 7 out of 10 Facebook members
  - 52% of Google users
- We already use devices that track our data
  - Cars
    - Services – OnStar and Sync
    - Safety – “Black Boxes”
  - Cell phones

# Towers Watson UBI Consumer Survey



# The marketplace is ready for widespread adoption of UBI

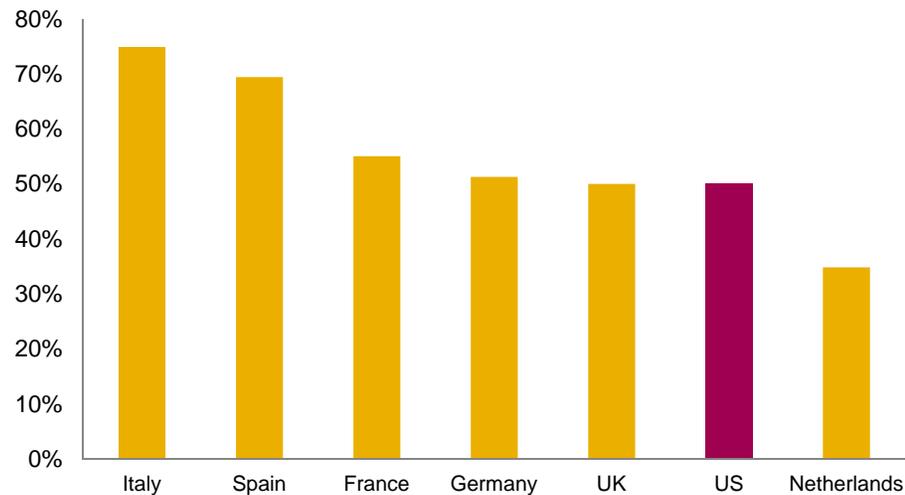
**50%**

Definitely or probably interested in U.S.

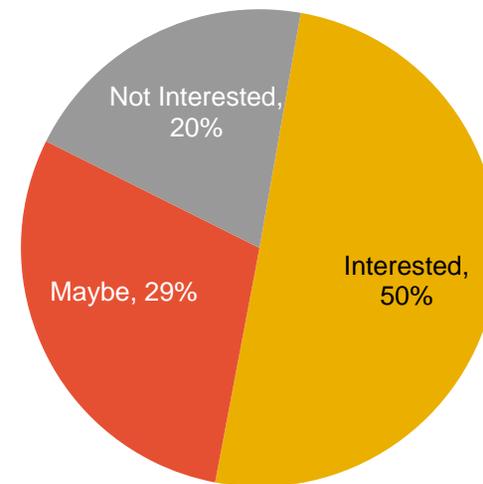
**79%**

Would be open to UBI in the U.S.

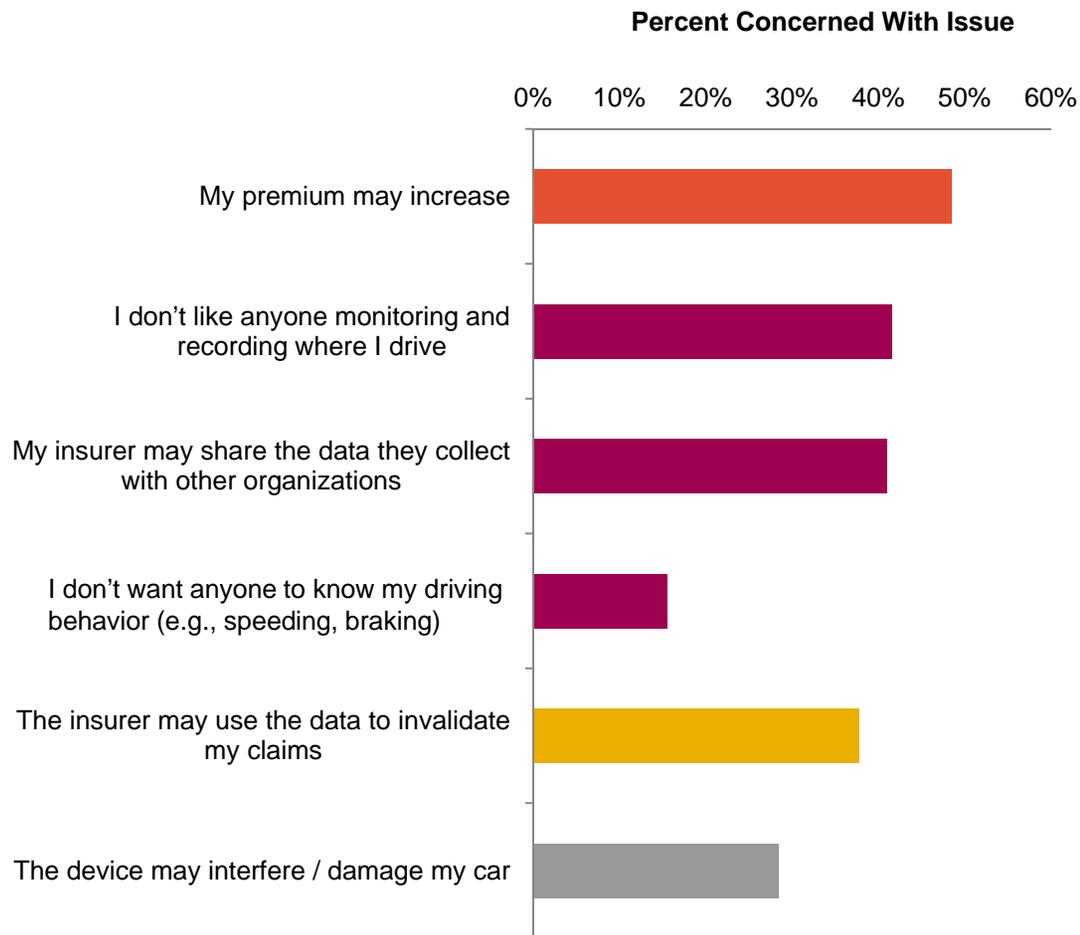
Percent interested in UBI, by Country



U.S. Interest in UBI



# What are insureds' main concerns with UBI?



## Money

49% worried that premium will increase

## Privacy

~40% worried about sharing their data

## Claims

38% worried claims will be invalidated

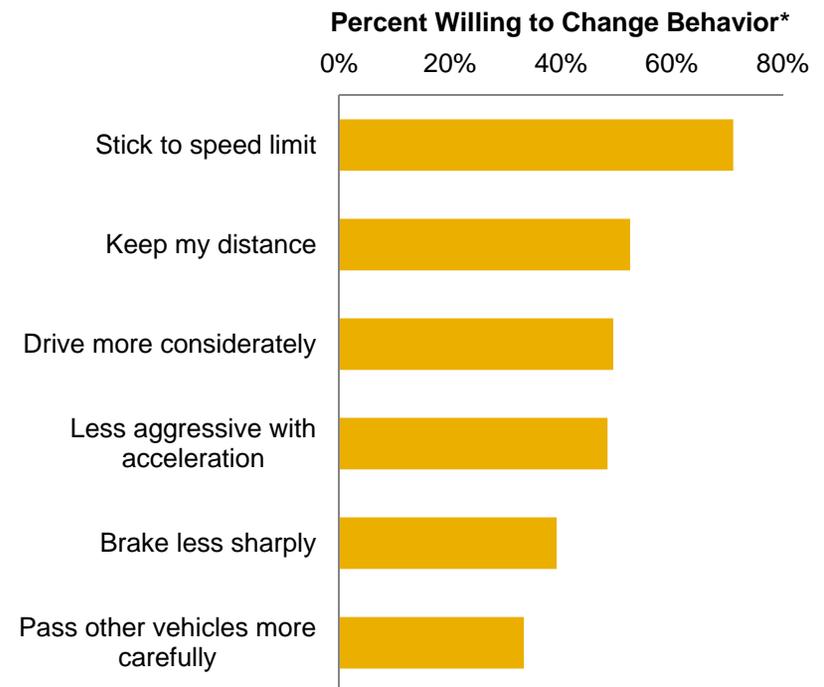
# There is a large appetite for behavioral change features

**60%**

of those interested in UBI are willing to change their driving behavior

- **Sticking to speed limit**
  - **keeping distance**
  - **driving more considerately**
- are top three behaviors people are willing to change

## Behaviors Willing to Change



\*Percentage taken of those that indicated they are willing to change behavior (i.e. ignores those that are not willing to change behavior).

## What will policyholders expect?

- Policyholders will expect:
  - Transparency in how data is used
    - Discount
    - Claims handling
    - Value-added services
    - Set expectations up front
  - Transparency in who has access to the data
    - Insurance company and Telematics Service Provider (TSP)
    - Will data be sold or used for marketing?
  - Data will be secured
    - Not limited to UBI
- Insurance company needs to keep the policyholder's trust

# Product design

- UBI programs are voluntary
  - Policyholder must choose to enroll
- Terms and conditions
  - Policyholder must plug device into vehicle (or install app)
  - Another form of product terms and conditions acceptance
- Web portal
  - Policyholder can log-in to see how they are doing and how they can improve
  - Data can be shared with the policyholder to help them understand the risk they represent to the insurer
- Benefits must out-weigh the risks
  - Customer value proposition
  - Target market

# UBI benefits all key stakeholders



## Consumers

- Control of premium
- Understandable rating based on how, when, where drive
- Access to useful driving feedback
- Value-added services
- Green and progressive products

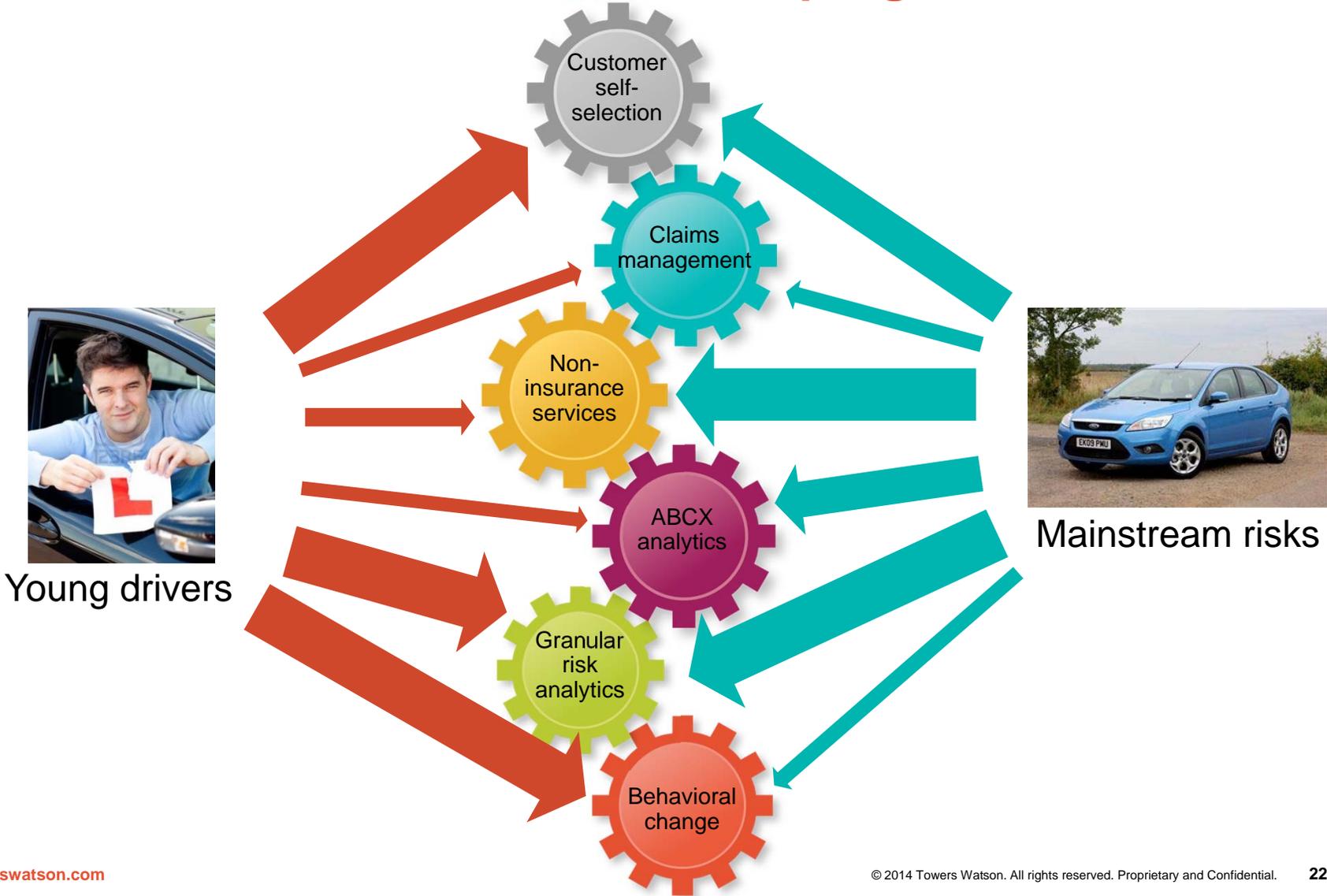
## Insurers

- Enhanced pricing
- Product differentiation and brand awareness
- Reduced loss costs
- Improved consumer satisfaction and retention

## Regulators

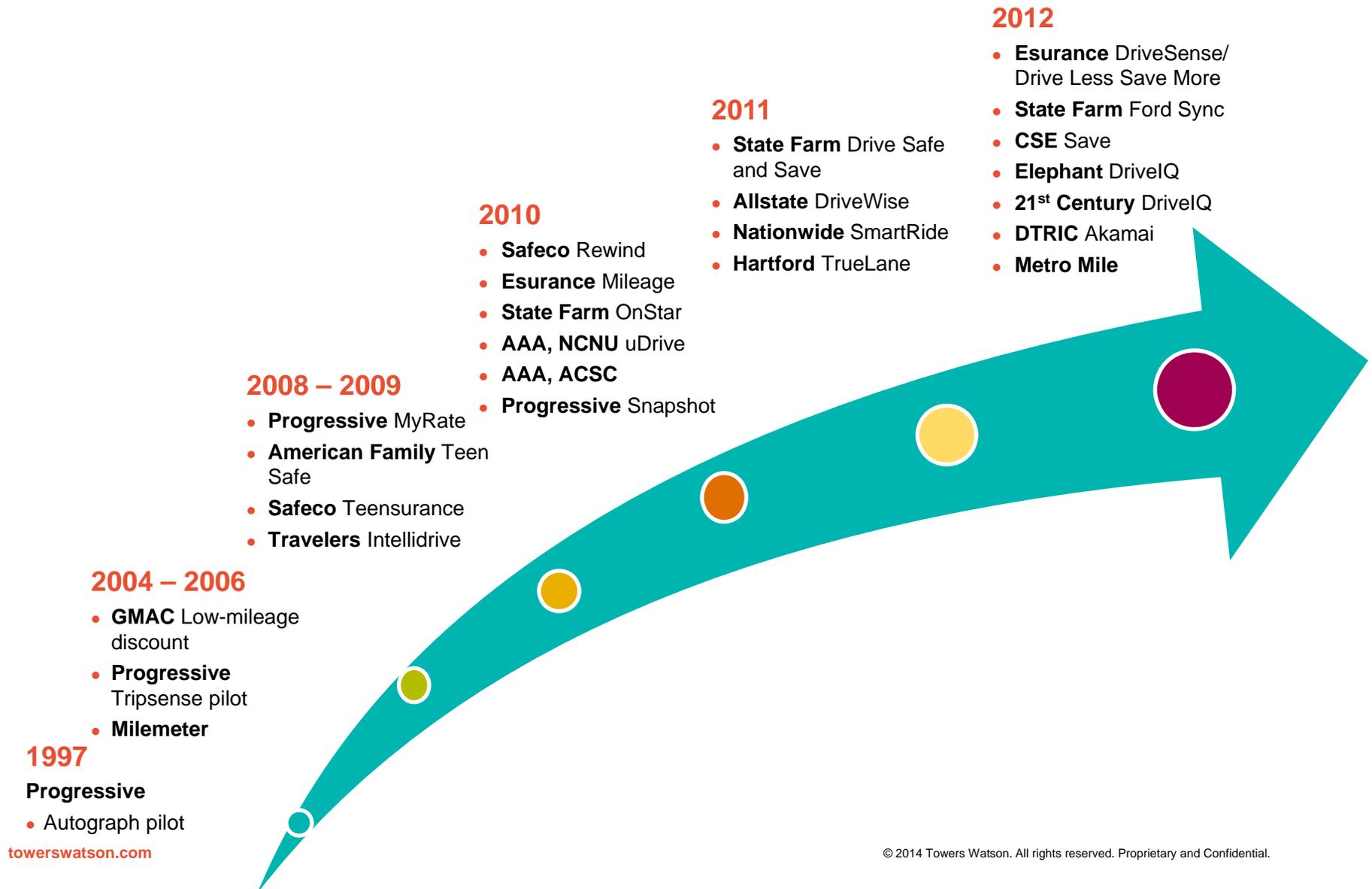
- Saves lives
- “Fairly” discriminatory variables
- Consumer acceptance and premium control
- Environmentally friendly

# Benefits shape the customer proposition by segment - and the data needed to support the program



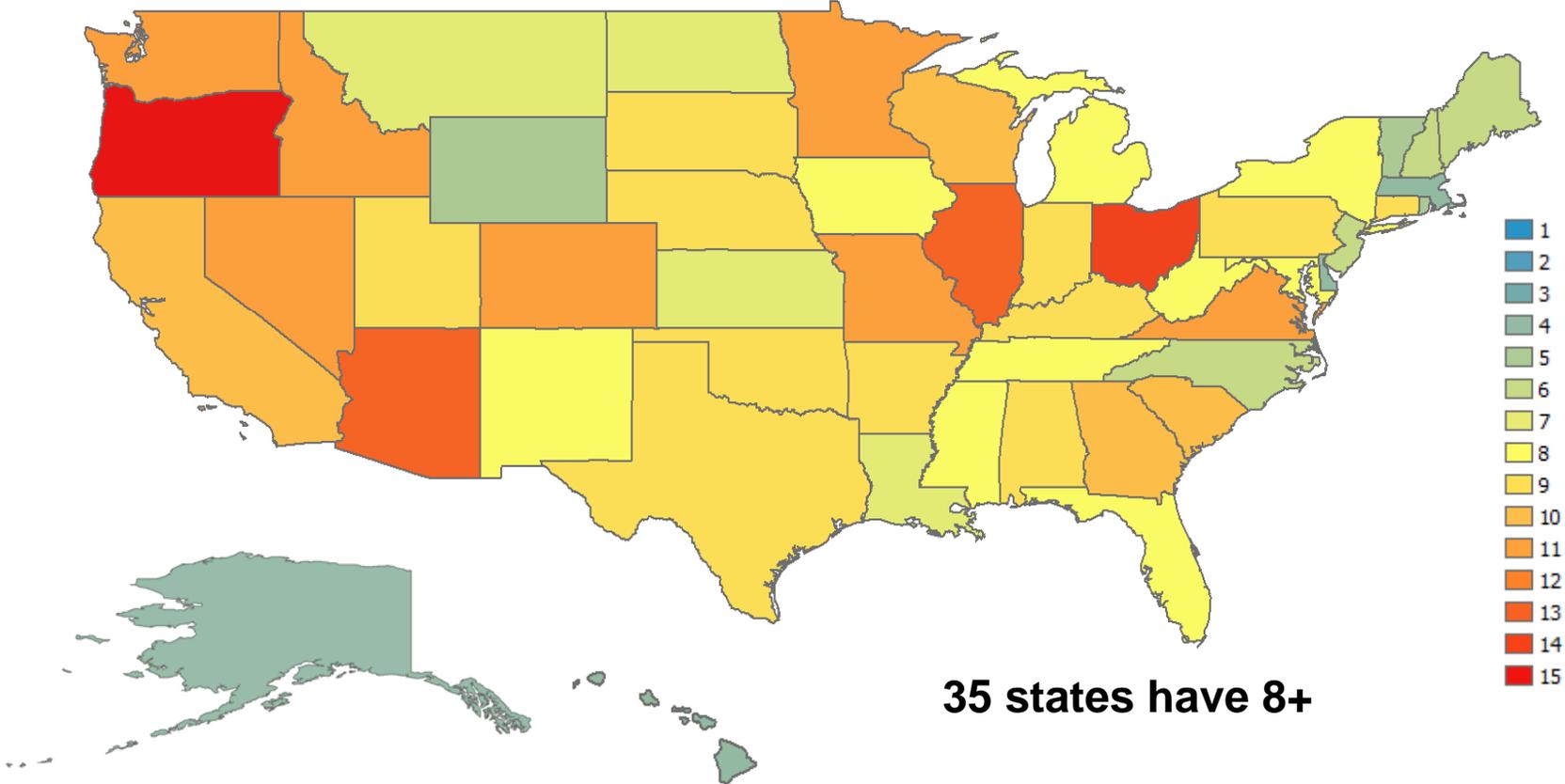
# Are data privacy concerns impacting UBI implementation?

# Proliferation of personal UBI programs over the years



# US Market Today

- 50 states and D.C. have 4+ personal auto UBI programs implemented



## U.S. UBI adoption

- Widespread regulatory acceptance with minimal exceptions
- Nine of the top 10 personal auto writers have introduced a public program
- Companies representing more than 80% of the market have a program or pilot
- Progressive Snapshot® has ~1.5 million vehicles, writing more than 50,000/month
- Along with insight to TSP volumes, we estimate ~200,000 vehicles are being written into UBI programs per month
- Allstate reports more than 1B miles collected
- Progressive reports more than 9B miles collected

## Contact information

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