

Navigating the Regulatory Environment Around Usage-Based Insurance

CAS 2017 RPM Seminar, March 29, 2017



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UBI-quitous

- UBI now available in all 50 states*
- An estimated 5 million UBI policies in U.S. (IHS, 2015)

*California only allows UBI based on mileage

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UBI Proliferation in Personal Auto

Year	Programs
1999	Progressive Autograph
2004-2004	GMAC Low-mileage discount, Progressive TipSense
2007-2009	National General OnStar PAYG, Progressive MyRate, Nationwide SmartRide, Safeco Telematics, State Farm Drive Safe and Save, Travelers IntelliDrive
2010-2011	CSAA UDrive, Safeco Rowind, Unigard IntelliTax, Allstate DriveWise, Progressive Snapshot, Hartford TrueLane, MetroMile MetroMile
2012-2014	Esurance DriveSense, Liberty Mutual RightTrack, MetLife My Journey, American Family MySafetyViolet, Maple DriveAdvisor, Bankers Ins. DriveSure
2015	Plymouth Rock Group Drive, Pennsylvania National PennID, Iowa Farm Bureau Driveology, Motorists Mutual Group MyTrip, GuideOne UBI discount
2016	Club Insurance Company ROOT, Donagel Insurance Group DriveSense, AAA AAAADrive
2017	American Family KnowYourDrive

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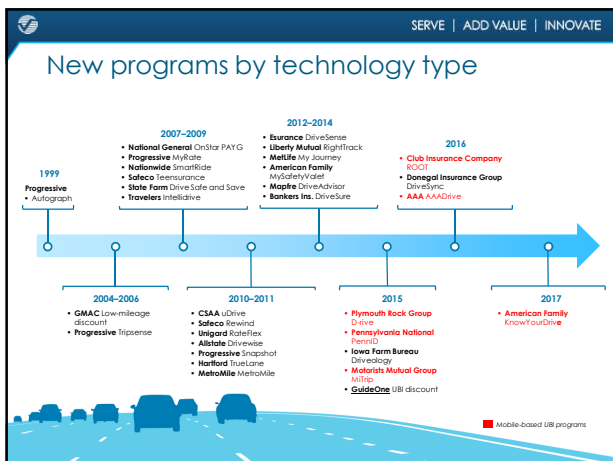
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Model variables used by top-10 insurers

Eight of the top ten personal auto writers have active UBI programs. Here's what data elements their models use for scoring:

Variable	Count
Mileage	7
Braking	6
Time of Day	6
Speed	4
Acceleration	4
Cornering	1

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Public statements

"We encourage all New York auto insurers to submit plans to our Department making use of this innovative technology."
(May 2014 Bulletin)
New York Department of Financial Services

"...it is beneficial to encourage the expansion of these programs in the state in that they offer more options to consumers."
(Pay-As-You-Drive Insurance in Maryland, 2016 Annual Report)
Maryland Insurance Administration


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Key Issues




Data ownership

- Data privacy
- Data use (e.g., claims management, selling to third parties)



Adverse actions

- Drivers who choose not to opt in
- Drivers who opt out prematurely




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Who owns the data?

"No conclusive determination"¹

Closest parallel: event data recorder laws

- Driver Privacy Act of 2015 (Federal)
 - Vehicle owner or lessee owns the data
 - EDR data can't be shared with other parties without owner's consent, except in certain situations
- Sixteen states have also enacted laws with more or less the same effect



¹ Flomenatz, Fedelick J. and Allen, Aaron J. "Auto Insurance Telematics Data Privacy And Ownership", Mealey's Data Privacy Law Report, Vol. 1, May 2015

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Adverse actions?

Virginia § 38.2-2213.1:
No surcharges or unfavorable rating tiers solely because a vehicle owner refuses to allow access to recorded data

Delaware Insurance Code §3918:
No telematics device installation without policyholder consent

In AR, MT, ND, OR, VA:
No requiring EDR data access as a condition of an insurance agreement and/or as a condition for settlement of a claim



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Sources

- Dimitris Karapiperis, et al. *Usage-Based Insurance and Vehicle Telematics: Insurance Market and Regulatory Implications*. CIPR Study, March 2015.
- Pomerantz, Frederick J. and Aisen, Aaron J. "Auto Insurance Telematics Data Privacy And Ownership." *Mealey's Data Privacy Law Report*, Vol. 1, May 2015
- "Privacy of Data From Event Data Recorders: State Statutes," National Conference of State Legislatures

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VESM Rule Filing ...Our Experience at ISO



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Transparency vs. confidentiality

On one hand...

Public filings:

Sufficient information to understand

- data
- variables
- model characterization
- results



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Transparency vs. confidentiality

On the other hand...

Private information:

Protection




- innovation
- trade secrets

Confidentiality in some jurisdictions

- more details about model
- continue confidential treatment during correspondence

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State-by-state strategies

-  **Regulation varies**
 - be aware
 - balance disclosure and transparency
-  **Teleconferences and presentations**
 - reviewer comfort
 - audience dictates the content
 - communication helps
-  **Advance preparation**
 - filing differences
 - expected questions

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Regulatory "comfort zones"

- Generalized linear models (GLMs)
 - common and well-understood
 - readily accepted by many regulators
- Machine learning algorithms
 - VESM uses a random forest technique
 - relatively new to U.S. property/casualty industry
 - less familiarity




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Regulatory "comfort zones"

- Standard GLM questions/answers not appropriate
 - obstacle to understanding and interpretation
 - sometimes analogous information exists, but sometimes it doesn't!
- Teleconferences helped
 - clarify methodology and testing
 - explain certain concepts
 - answer regulators' questions

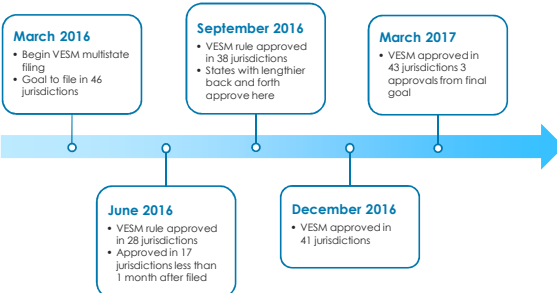
As a result, we were successful in obtaining regulatory approval/acknowledgement



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VESM filing timeline



- March 2016**
 - Begin VESM multistate filing
 - Goal to file in 46 jurisdictions
- June 2016**
 - VESM rule approved in 28 jurisdictions
 - Approved in 17 jurisdictions less than 1 month after filed
- September 2016**
 - VESM rule approved in 38 jurisdictions
 - States with lengthier back and forth approve here
- December 2016**
 - VESM approved in 41 jurisdictions
- March 2017**
 - VESM approved in 43 jurisdictions 3 approvals from final goal

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Regulatory landscape

Increased scrutiny vs. other filed rules

- more jurisdictions
- more questions
- more detailed questions

We expect even more awareness and scrutiny

- UBI more ubiquitous
- technology and regulation continue to intersect


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Fast facts

3 Number of UBI rules filed by ISO	9 Words used most in regulator correspondence rate risk data telematics VESM model score variable
4 Number of states that outsourced VESM rule filing to consultant agencies	25 Number of jurisdictions that sent RCT objections to filed VESM rule
5 Number of tele-conferences ISO had with various state regulators to discuss VESM rule	38 Most questions ISO received from one state on the VESM rule

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Thank you.
Questions?



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