



Usage-based Insurance

A Regulatory Perspective

A presentation to CAS RPM 2014

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TOWERS WATSON 

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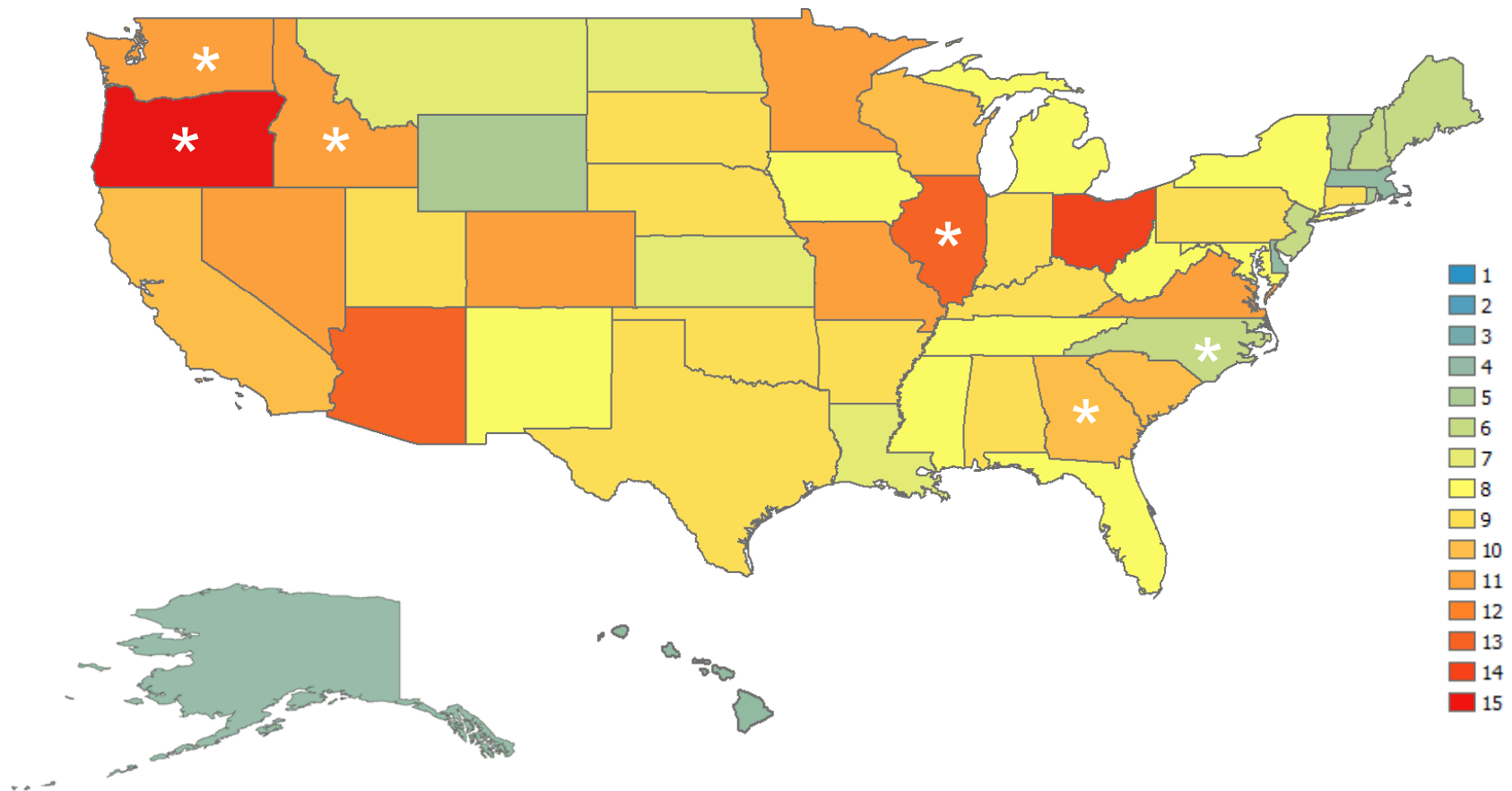
Agenda

- Regulatory market overview
 - UBI market trends
 - Department of Insurance FAQs
 - Related industry topics
- UBI in Oregon
 - Related legislation
 - Examples of rating plans
 - Participation survey
 - Regulator concerns
- Q&A

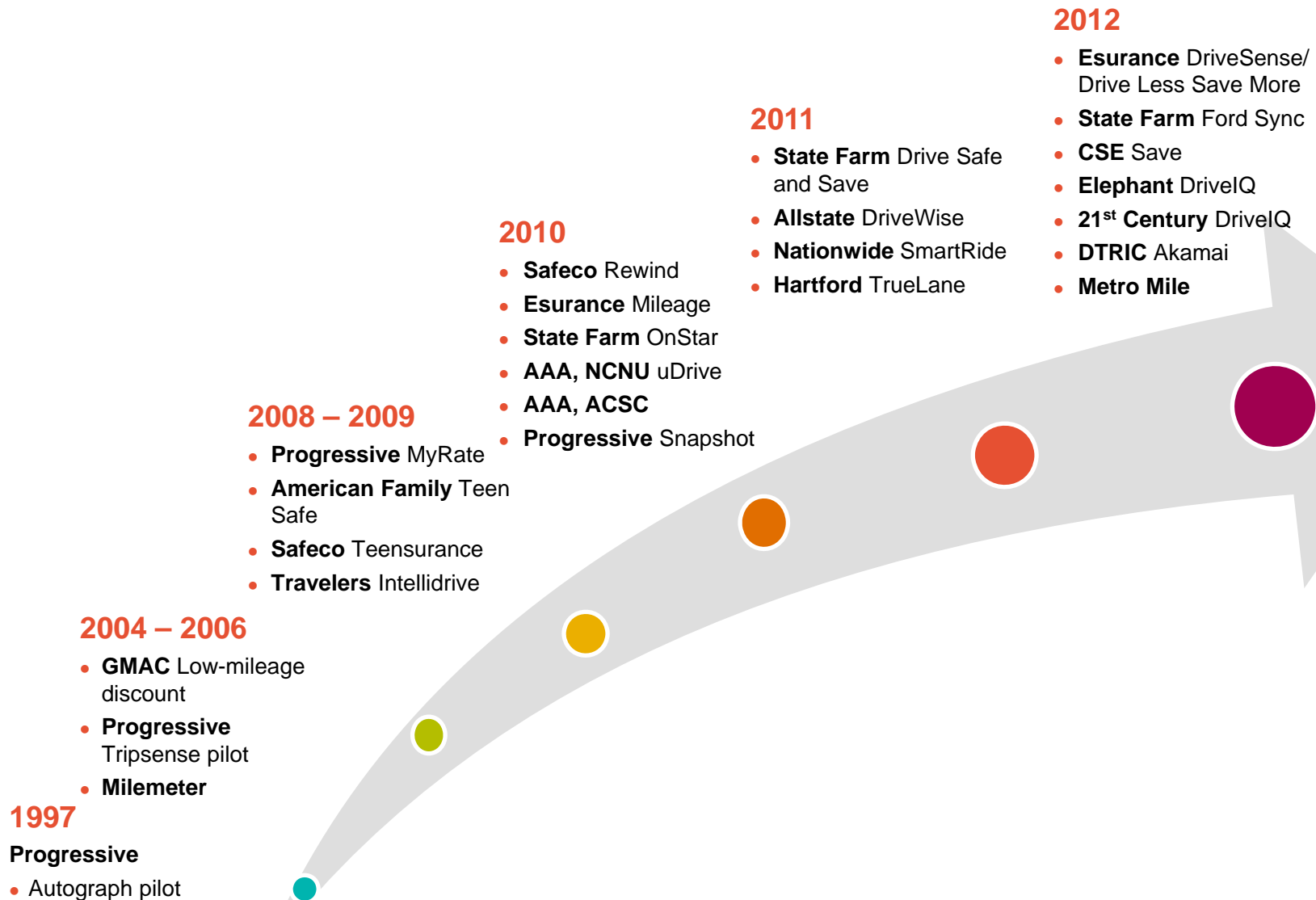
Market trends

Widespread presence of personal lines programs in US

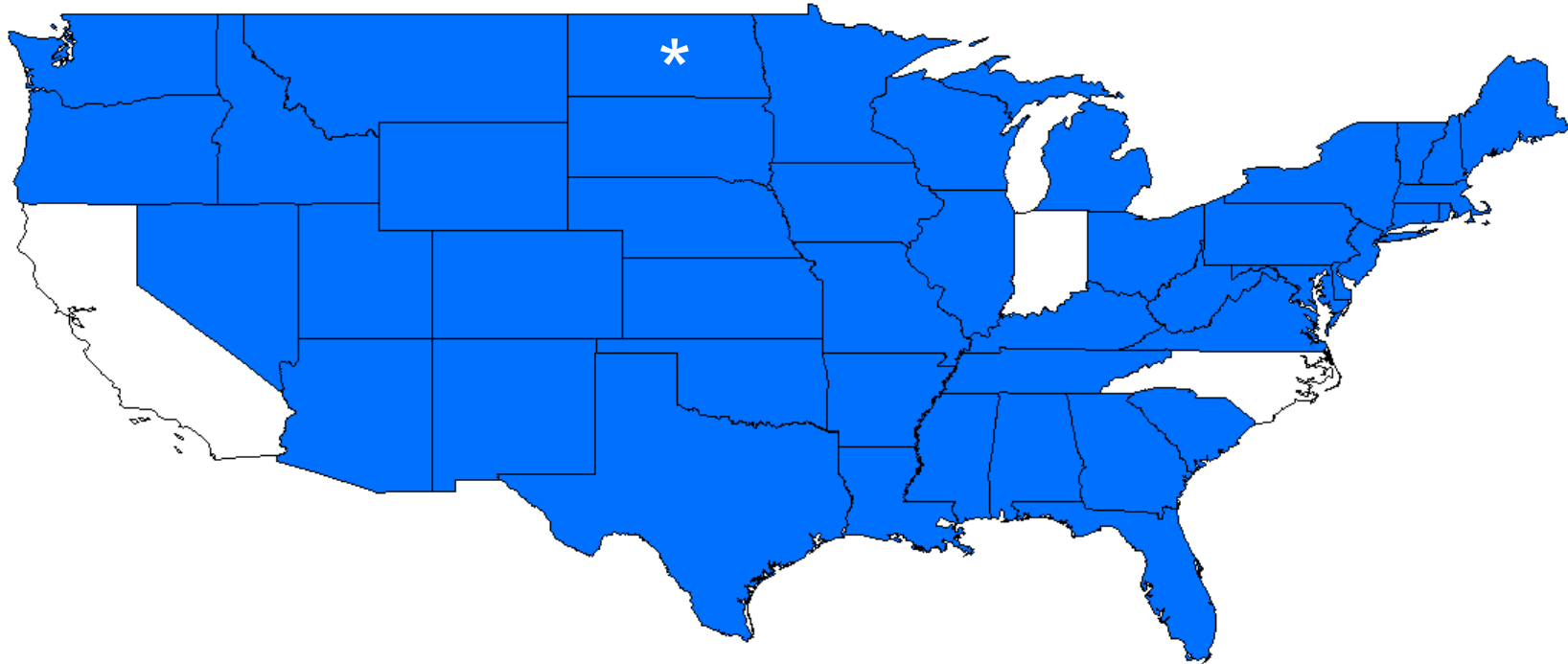
- Countrywide competitive marketplace for personal auto UBI programs



Proliferation of personal UBI programs over the years



Progressive Snapshot DiscountSM – 45 States + DC



"More than 1.4 million drivers have participated in Progressive's UBI program countrywide, which saves the drivers who earn discounts an average of \$150 per year."

— Progressive Press Release

Program changes

Sensors

Installation

Simplify

DOI FAQs

General Product

- How long does the device need to be in the car?
- Must all vehicles in the household use the device?
- What technology is being used?
- Can all vehicles use the technology or is it limited to certain makes/models?
- Who are the third party vendors? What is their function?
- How long is the data stored, for how long, who has access, how else is it being used?

Pricing

- If a GLM is used, provide necessary support: assumptions, statistical validation, testing technique, actuarial soundness, etc.
- How are discounts applied/determined by coverage?
- Is rate static between terms, revised at renewal or updated continuously?

Customer

- How is the program communicated to the insured: about the program, terms & conditions, the UBI device, data captured, discount determination, program requirements?
- What information is made available to the insured? (via portal or report)
- How do you handle disputes about discount or data accuracy?
- How transparent are vehicle operation characteristics which impact price?
- Do customers have an opportunity to improve their driving and reduce their price?

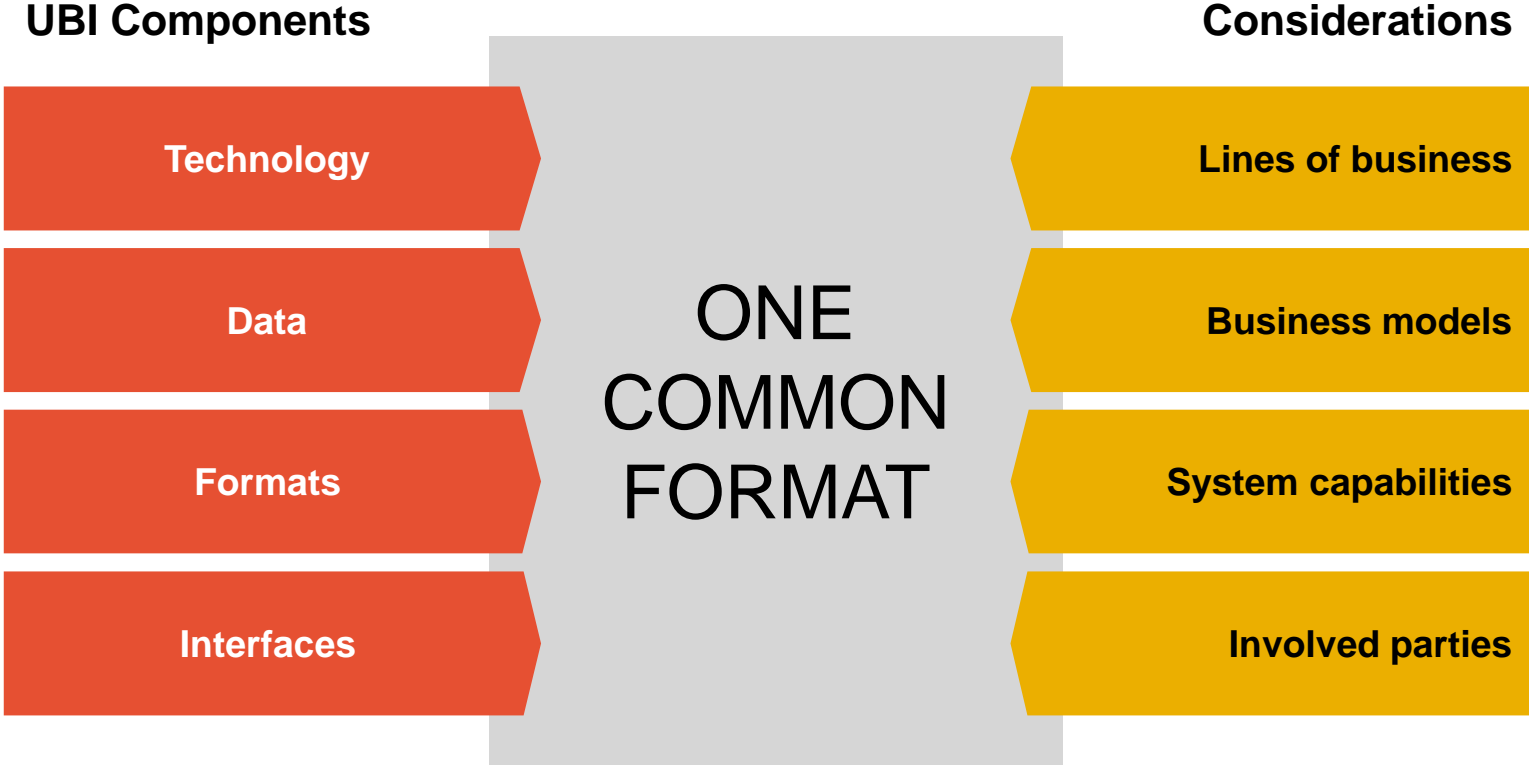
Related topics

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- Federal and state driving-based initiatives

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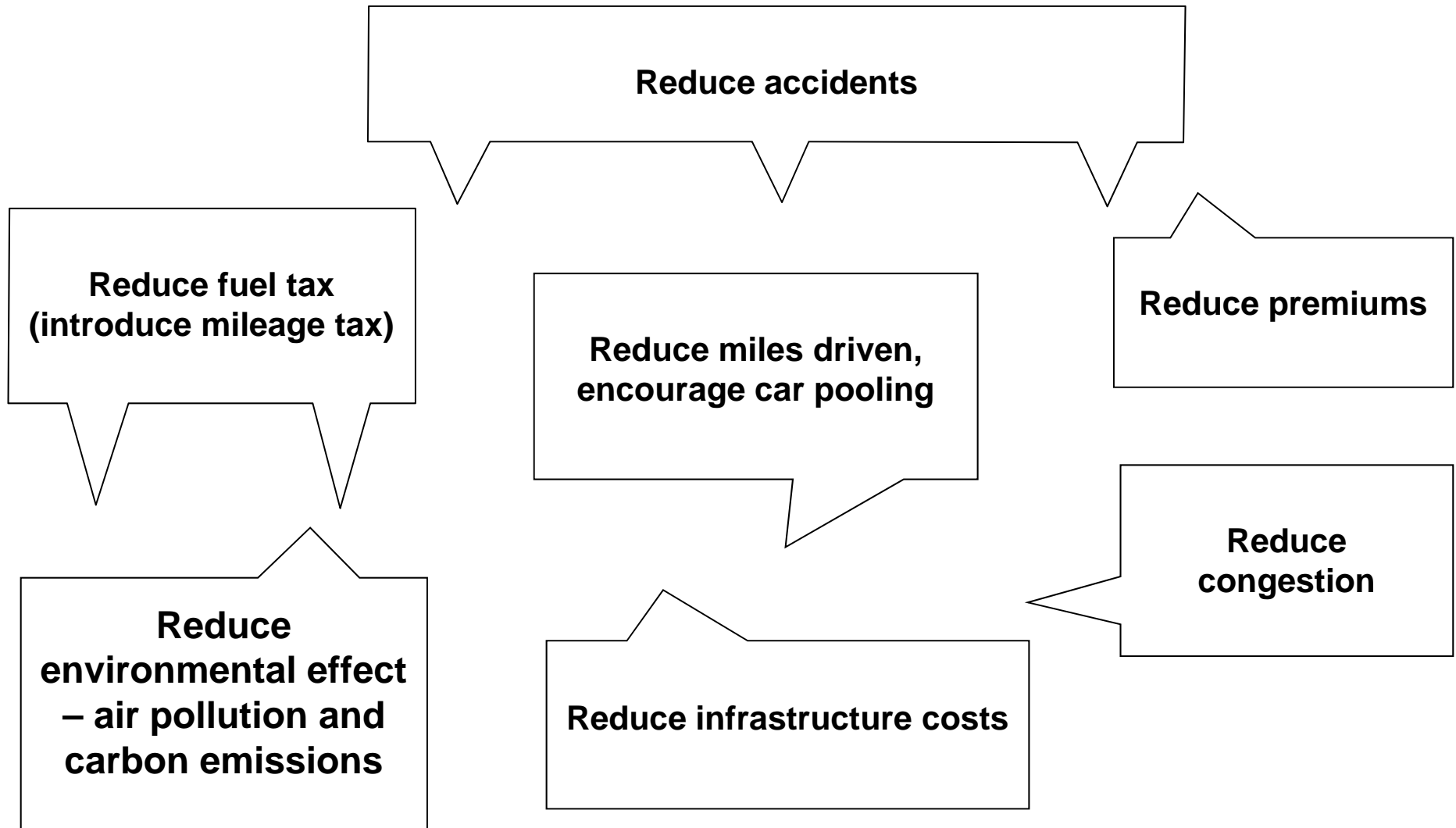
ACORD Telematics Data Standards



Related topics

- ACORD data standards
- Federal and state driving-based initiatives

Why are they interested?

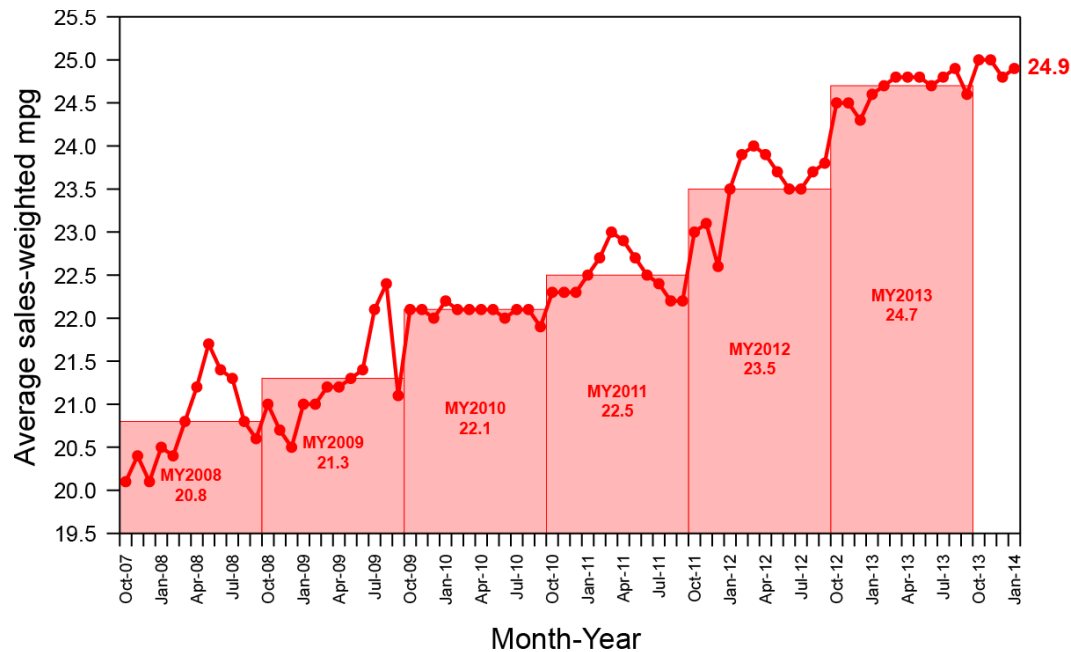


Transportation Research Board's Strategic Highway Research Program

- Largest naturalistic driving study to date
- \$67M budget
- More than 2,300 vehicles and 33M miles traveled across six regions
- Monitored for over three years
- Understand driving behavior and road conditions
- Complete in early 2014

The problem with the gas tax

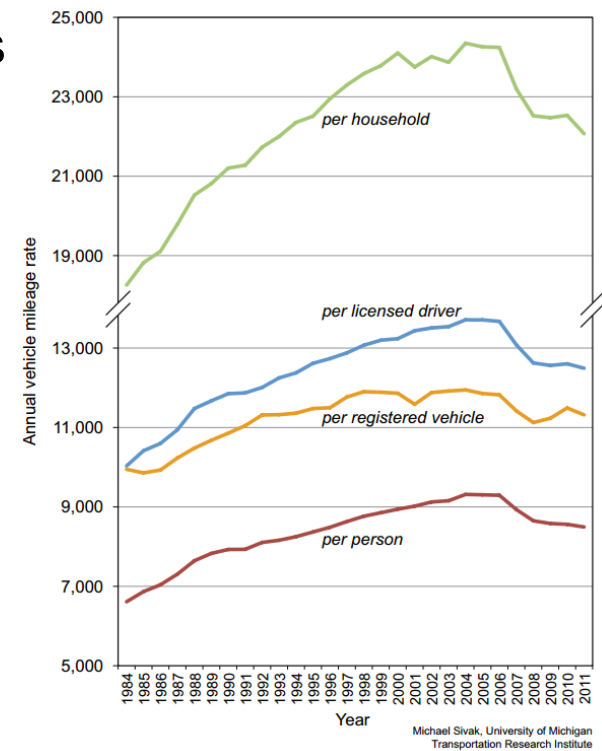
- Fuel efficiency is increasing
 - Great disparity between vehicle types (electric cars do not pay at all)



Michael Sivak and Brandon Schoettle
University of Michigan Transportation Research Institute

The problem with the gas tax

- Fuel efficiency is increasing
 - Great disparity between vehicle types (electric cars do not pay at all)
- Miles traveled is decreasing
- Federal gas tax has not increased in 20 years



The vehicle-miles-traveled pilots

- Studies previously performed in California, Iowa, Massachusetts, Minnesota, Nevada, North Carolina, Oregon, Washington
- 5,000 vehicles in Oregon beginning July 1, 2015
- Voluntary Illinois truck pilot

USAGE BASED INSURANCE IN OREGON

David Dahl, FCAS, MAAA

Casualty Actuary

Oregon Insurance Division

2014 CAS Ratemaking and Product Management
Seminar April 1, 2014

Usage Based Insurance - Overview

- A usage based insurance (UBI) rating plan incorporates the driving behavior and the mileage of an insured's vehicle
- Most use a telematics device to model driver behavior and monitor vehicle mileage
- Most programs provide only credits
- The models are often considered confidential

Oregon UBI related legislation

Insurer premium tax credit, ORS 317.122 –

- Tax credit for qualified motor vehicle insurance policies for the premium tax ORS 731.820(F) and retaliatory tax amounts due.
- A qualified policy has a rating plan that is at least 70% based mile based or timed based.
- Credit is \$100 per vehicle subject to a limit of \$300 per policy.

Oregon UBI related legislation

Insurer premium tax credit, ORS 317.122 (cont'd) –

- Department of Revenue determines whether a motor vehicle policy qualifies for the tax credit .
- Tax credit was extended in 2009 legislative session. Tax credit expires on January 1, 2018.

Oregon UBI related legislation

Motor vehicle mileage based tax, ORS 319.383 to 319.945

- Creates a pilot program where vehicles are taxed on a per mile basis at rate of 1.5 cents per mile instead of a fuel tax
- Private road mileage is eligible for a tax credit
- A voluntary program limited to 5000 vehicles with gross vehicle rating of 10,000 pounds or less

Oregon UBI related legislation

Motor vehicle mileage based tax (continued)

- no more than 1500 vehicles can have a rating of less than 17 mpg,
- no more than 1500 vehicles can have a rating between 17 and 22 mpg
- A participant can leave the program midterm

Oregon UBI related legislation

Motor vehicle mileage based tax (continued)

- Oregon Department of Transportation will write rules to determine:
 - how mileage is monitored,
 - how the mileage tax is paid,
 - how to apply for a refund for private roadway mileage and,
 - how to obtain credit for a fuel tax surcharge

Examples of UBI rating Plans

ISO filed Risk Analyzer Modules

- ISO has filed risk analyzer modules that incorporate usage based rating factors
- The environmental module, effective July 1 2010, incorporates factors such as weather patterns and traffic density to determine rate relativities.
- The score factor and its offset factor is applied to territory factor to determine the location rating type factor. The module can be thought of as a refinement to the territory rating factors.
- Module does not use a telematic device

Examples of UBI rating Plans

ISO filed Risk Analyzer Modules

- The GeoMetric model, effective March 23 2013, uses a telematics device to determine the driving location of vehicle throughout the day.
- The average factor based on driving location is compared to the garaging location factor in the environmental module to determine a possible credit ranging from 5 to 25%.

Examples of UBI rating Plans

ISO filed Risk Analyzer Modules

- ISO filed safety scoring rule, effective 2/20/2014, generates a score based on the occurrence of specific driving events and the time of day the event occurred. A credit is applied to the environmental module rating factor.
- All Risk Analyzer rating plan modules are optional and need to be filed by an insurer before use.

Examples of UBI rating Plans

Metromile program –

- Metromile is closer to a pay as you drive type rating plan
- The rate is divided into two components: a fixed charge that does not vary and a mileage based charge paid each billing period.
- The fixed rate is 40% of the base premium rated at 10,000 annual miles.

Examples of UBI rating Plans

- Metromile program –
- Rating plan uses credit, education, continuous insurance, and not at fault accidents/comprehensive claims as well as traditional rating variables
- Program is currently underwritten through Integon Indemnity Insurance Company beginning November 1, 2013
- Program was originally underwritten through Dallas National effective December 5, 2012

UBI Usage in Oregon

UBI Participation Survey

- In early 2012 the Insurance Division conducted a participation survey of UBI market penetration
- Participation was low at the time, about 4% of premium for established programs
- Participation rates may have increased since several insurers have filed new programs
- Programs that rate on fixed time interval (e.g. 30 days) may have increased participation rates over time

Usage Based Insurance

Regulator concerns –

- UBI Models can be filed confidentially; however, the model, including parameter formulas, needs to be filed.
- UBI Models need to be supported though not necessarily with historical data.
- Other data sources are National Transportation Safety data (e.g. time of day rating) and pilot program data.

Usage Based Insurance

Regulator concerns (continued) –

- Use of information in claim investigation
- Appropriate level of disclosure of telematic information to policyholders for education and risk reduction.

Q&A

Questions for David

- What participation, renewal and maximum discounts are you seeing in the marketplace?
- UBI programs are still fairly immature. What type of support are you seeing for rates and discounts given the lack of credible historical data?
- How much information on the UBI algorithm is required to be publicly disclosed in Oregon?
- Which data sensor sources have been approved in Oregon (OBDII, smartphones, OEM, self-report)? Do you have concerns or considerations for any of these?
- Many companies are concerned that their competitors will begin offering discounts if the insured proves their score or discount in their own UBI program. What are your thoughts on this practice?
- Do you have concerns or restrictions on the pricing impact of non-UBI participants?

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