



# Things That Make You More Likely to Be in an Accident

**Nevada Traffic Summit  
Las Vegas – May 25, 2016**

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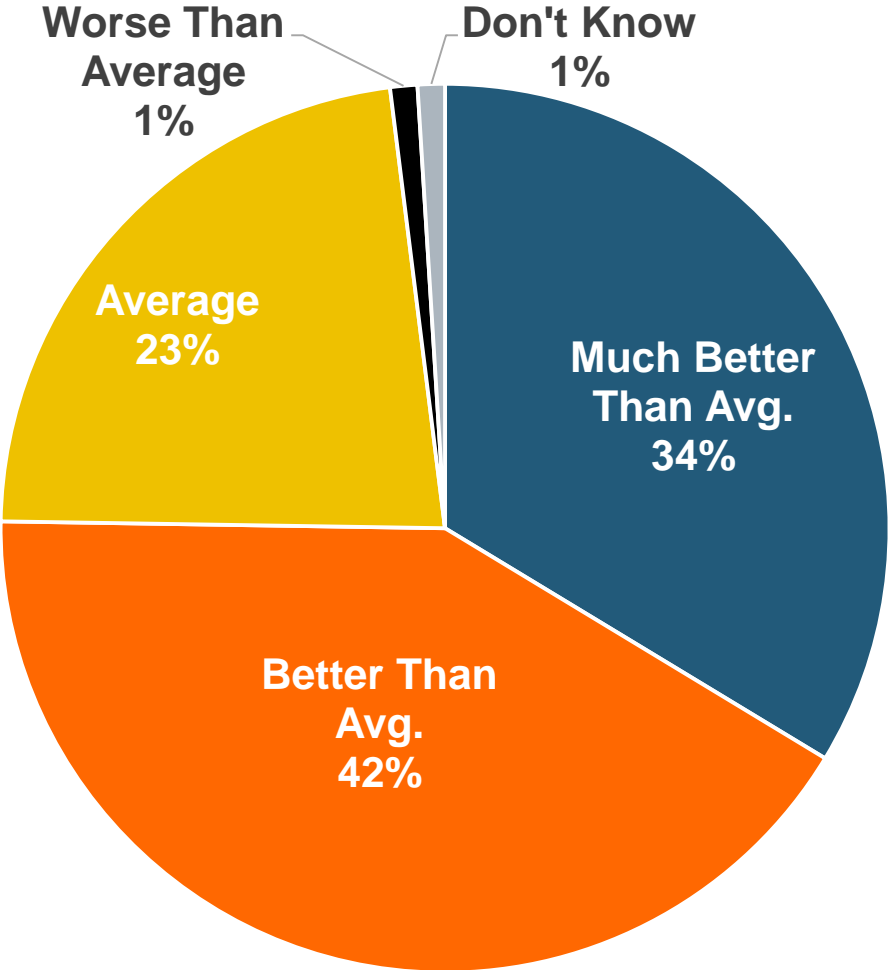


# Some Facts About Non-Driving Factors

*Why Insurers Don't Rely Solely on Driving Record*

# Most People Don't Know Their Risk Profile

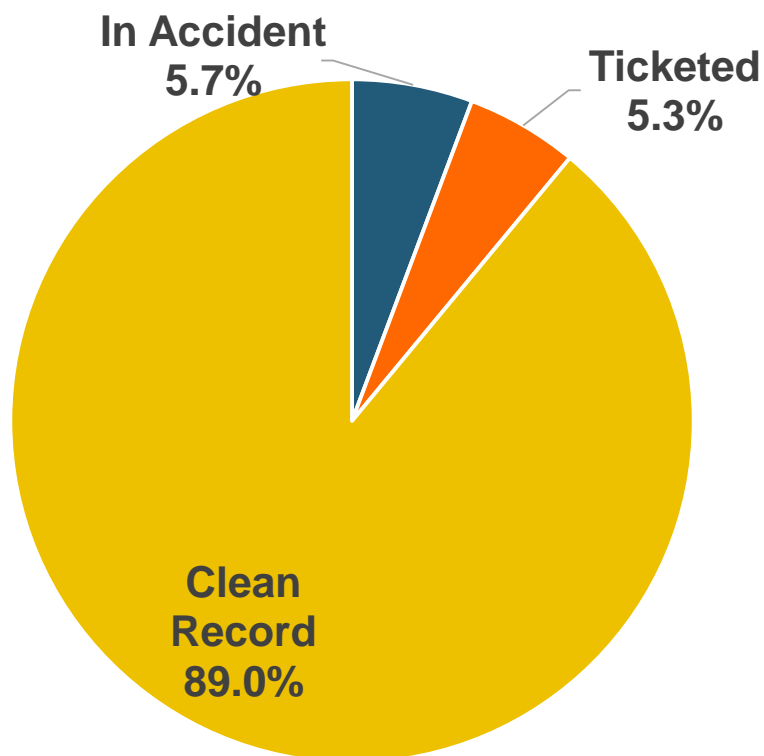
## Do You Consider Yourself a Better-Than-Average Driver?



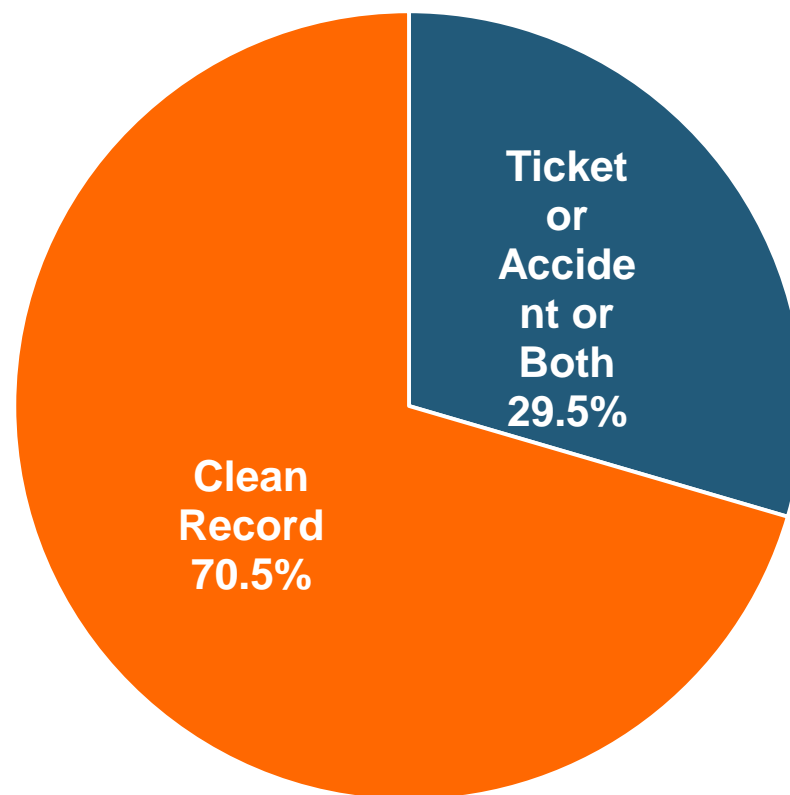
SOURCE: "Auto Insurance Telematics: Consumer Expectations and Opinions," Insurance Research Council, 2015.

# Most Drivers Have Clean Driving Records

## In One Year. . .

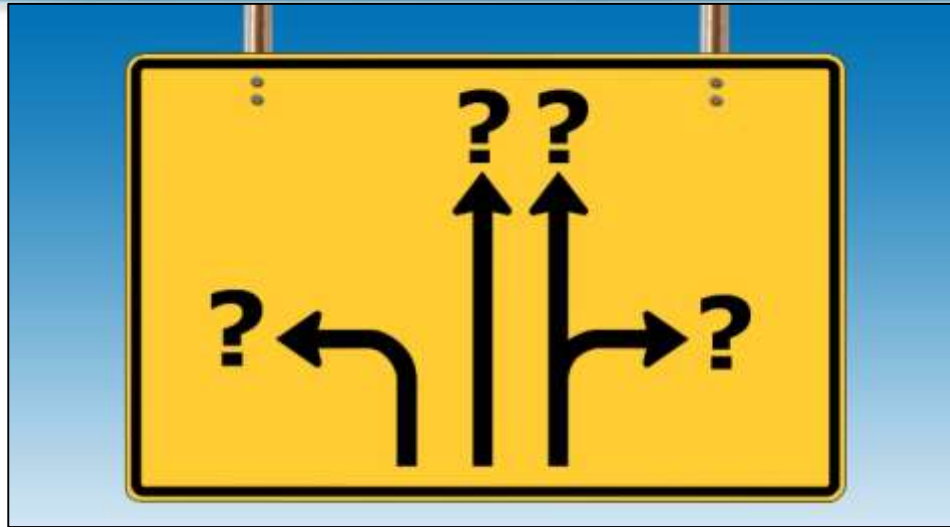


## In Three Years. . .



Three-year calculation makes conservative assumption that no ticketed driver in a year is in an accident that year.  
SOURCES: Insurance Information Institute calculation using data for 2012 from ISO, a Verisk Analytics company, and Langton and Durose, *Police Behavior During Traffic and Street Stops*, 2011, Department of Justice, p. 7.

# How to Differentiate Among Drivers?



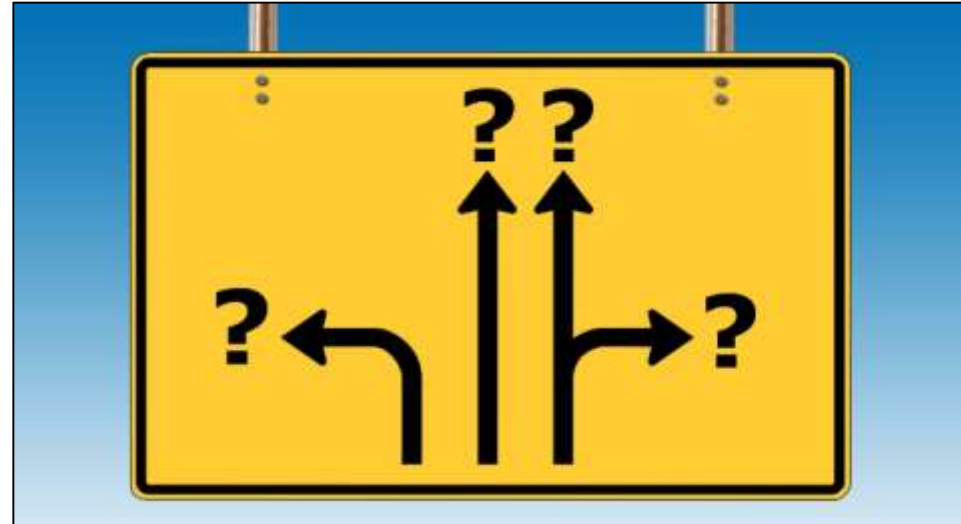
## ■ Underwriting: 'Gut' vs. Data

- ◆ Underwriters Got a Sense for Which Risks Were Better
- ◆ Imperfect System
  - Subjective
  - Potential for Bias
  - Adverse Selection (I Know Something You Don't)

# How to Differentiate Among Drivers?

## ■ Actuarial Risk Classification

- ◆ Uses Rating Variables to Create Risk Profile
  - Verifiable
  - Predictive
  - Age vs. Miles Driven



## ■ Fairer for Insurer and Policyholder

- ◆ Objective – Uses Data to Predict
- ◆ Rate Follows Risk

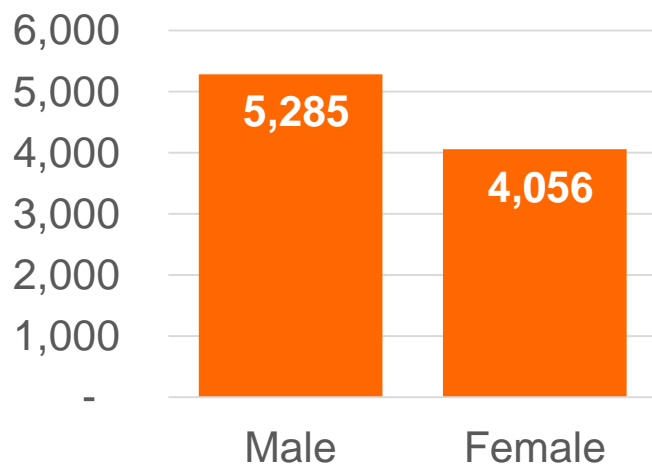
# Early Factors Were Non-Driving

■ Age

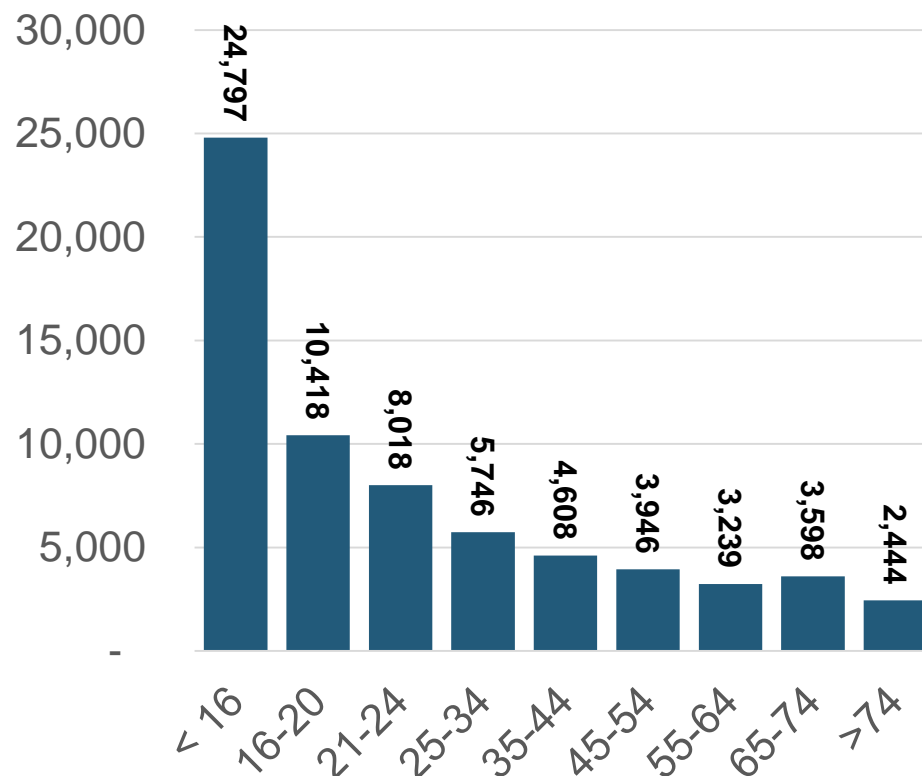
■ Gender

■ Territory/State

### Crashes per 100,000 Drivers, By Gender



### Crashes per 100,000 Drivers, By Age



SOURCES: U.S. Department of Transportation, National Highway Traffic Safety Administration, Federal Highway Administration.

# Rating Plans Have Grown Complex

Year	Estimated Number of Rating Classifications	Estimated Rating Possibilities	Licensed Motor Vehicles in the US	Ratio of Rating Possibilities to Motor Vehicles
1960	9	2,688,000	74,000,000	0.04
1990	16	3,145,728,000	189,000,000	16.6
2013	20	2,264,924,160,000	250,000,000	9059

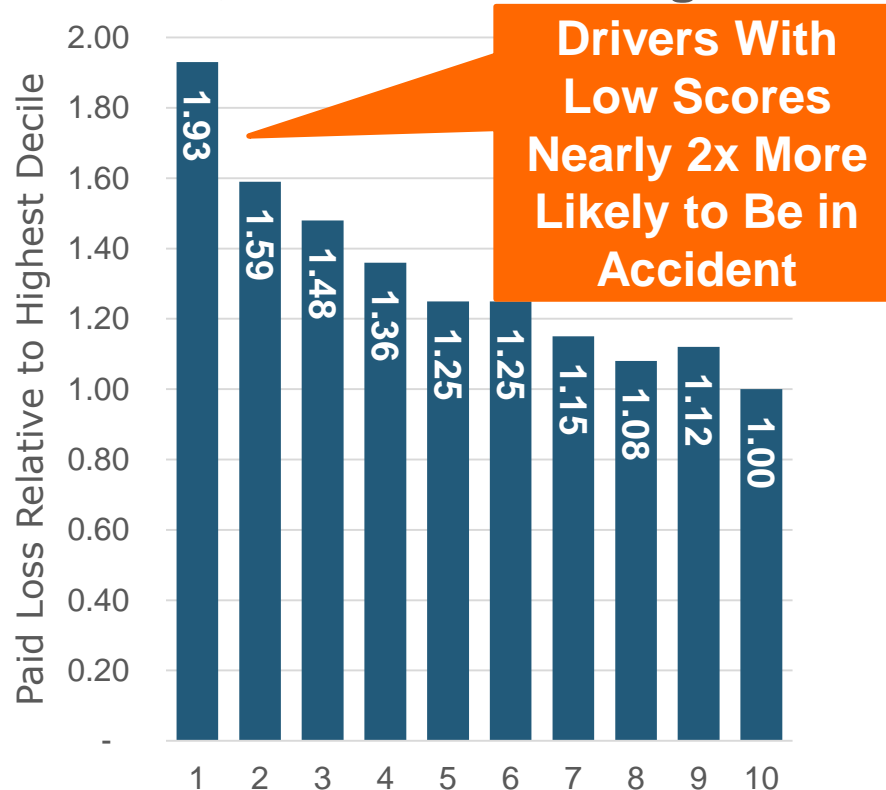
## New Variables Include

- Credit Scores
- Payment Method
- Tenure With Prior Company
- Homeowners Losses

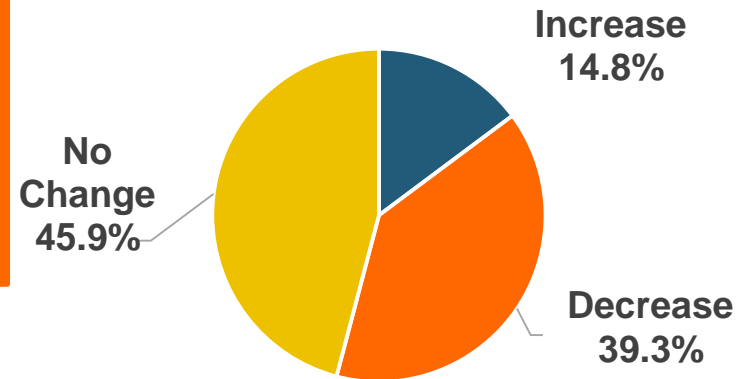
**There Are No Two  
Identical Risks.  
Everybody Pays A  
Different Premium**



## Paid Loss by Insurance Score, Collision Coverage



## Impact of Credit Scores on Consumers



SOURCE: Arkansas State Insurance Department, Use and Impact of Credit in Personal Lines Insurance Premiums Pursuant to Ark. Code Ann. § 23-67-415, 2015, p. 4.

## Common Variables

- Payment History
- Bankruptcy
- Amt of Credit Used
- Number, Type of Account
- Length of Credit History

Relativity Controlled for Ethnicity, Neighborhood Income.

SOURCE: Federal Trade Commission, Credit-Based Insurance Scores: Impacts on Consumers of Automobile Insurance, July 2007, Table 6.

# The Future: Telematics

Driver-Specific  
Information => Driver-  
Specific Premium

## ■ Monitor Drivers As They Drive

- ◆ Snapshot (\$2.6B in 2014 premium)
- ◆ Many (most?) insurers offer
- ◆ Not CA, NC

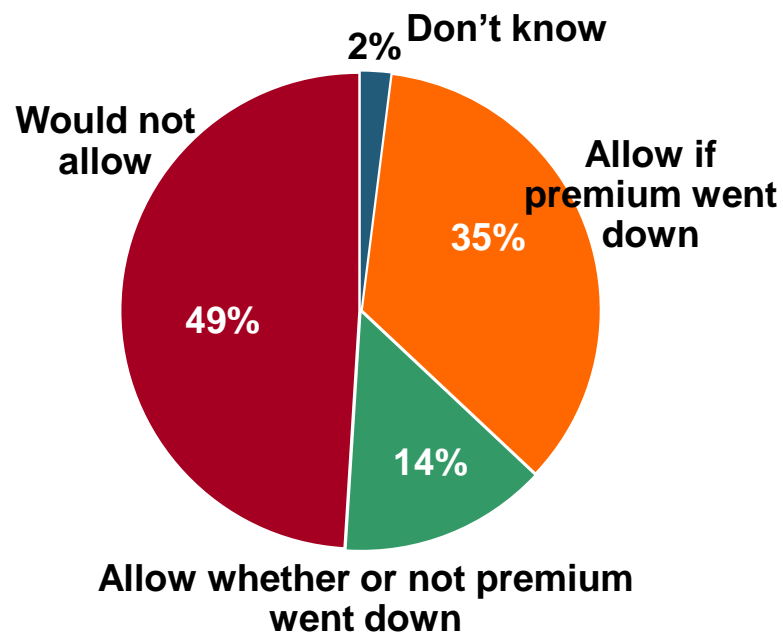
## ■ Monitoring Devices

- ◆ 'Dongle'
- ◆ Smartphone
- ◆ OnStar etc.



# Telematics: Growth Potential

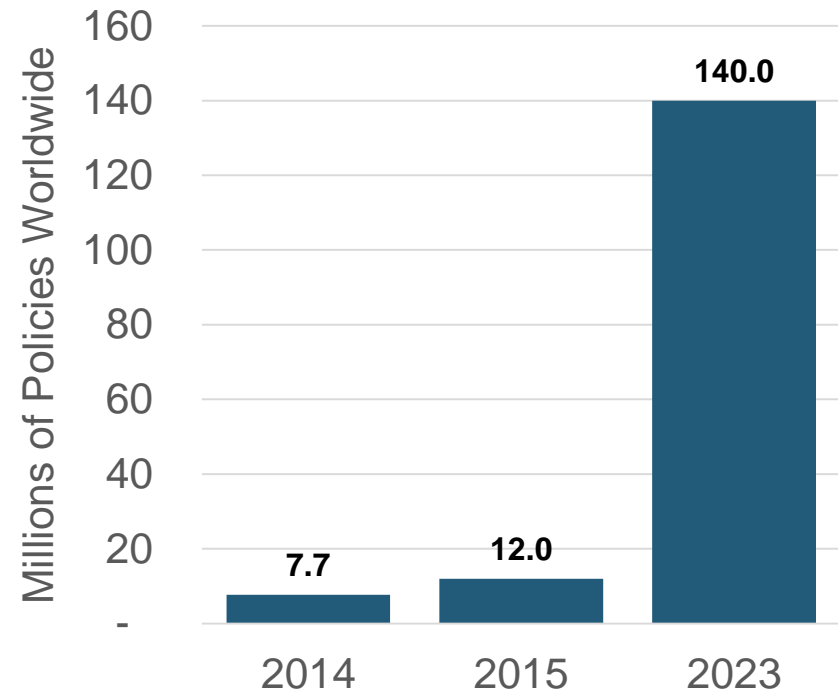
Q. Would You Allow Insurer to Collect Driving Information to Set Premium?<sup>1</sup>



<sup>1</sup>Asked of those who auto insurance.

Source: Insurance Information Institute Annual *Pulse* Survey, May 2016.

## Policy Projections



Source: IHS Automotive.

**Market is Poised to Grow, But Some Reluctance Remains.**

- Some Drivers Are Better Than Others
- Classify Drivers by Risk Profile is Important Insurance Job
- Classification is Difficult, Sometimes Controversial
- Telematics Allows Classification by Driving Skill That Has Never Been Seen Before

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and your attention!*

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