



The Future in Transportation: Autonomous Vehicles *They'll Change Insurance - Slowly*

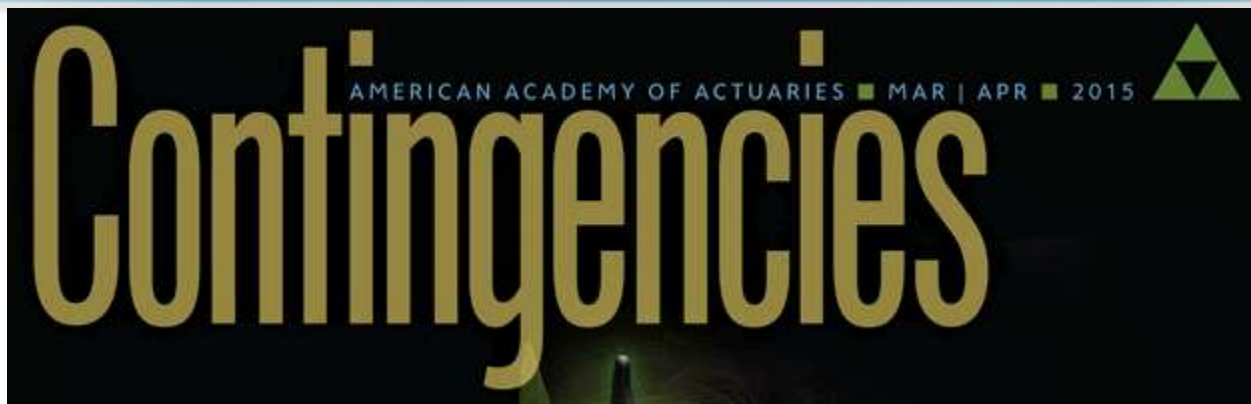
Nevada Driving Summit
May 25, 2016

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When Computers Take the Wheel . . .



NOT SO FAST Autonomous vehicles will challenge auto insurers, but they won't obliterate them

By James Lynch



Step 1: Co-pilot

In Theory

Crashes Avoided Per Year	All	Injury	Fatal
Forward Collision Warning	1,165,000	66,000	879
Lane Departure Warning	179,000	37,000	7,529
Side Assist View (Blind Spots)	395,000	20,000	393
Adaptive Headlights	142,000	29,000	2,484
Total Unique Crashes	1,866,000	149,000	10,238

In Practice

- Forward Collision Warning Working
- Adaptive Headlights Working
- Others: Benefits 'Less Clear'

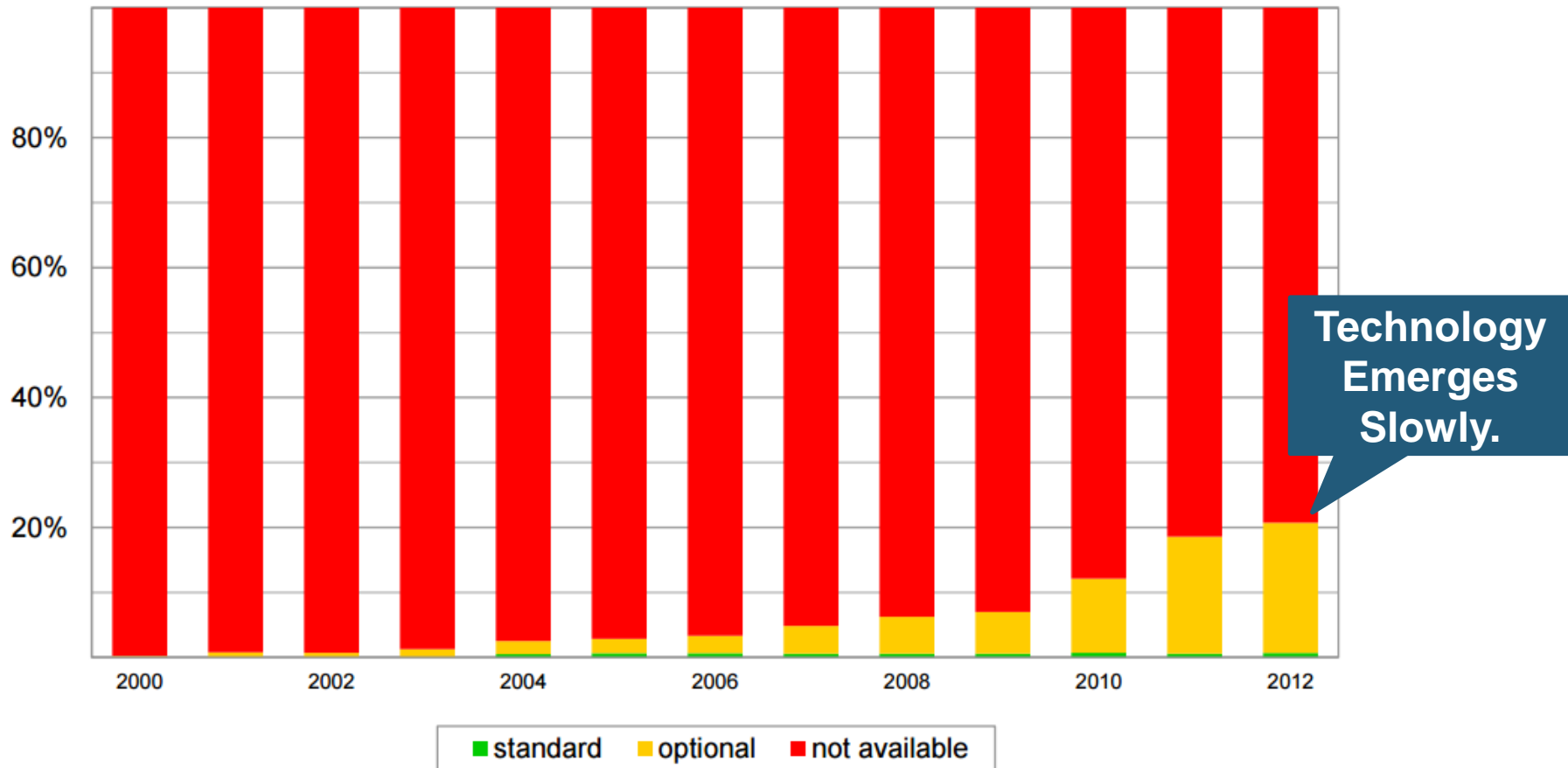
6% of
Injuries

30% of
Fatalities

Some of These Features Are Already on Vehicles. Others Are On Their Way Soon.

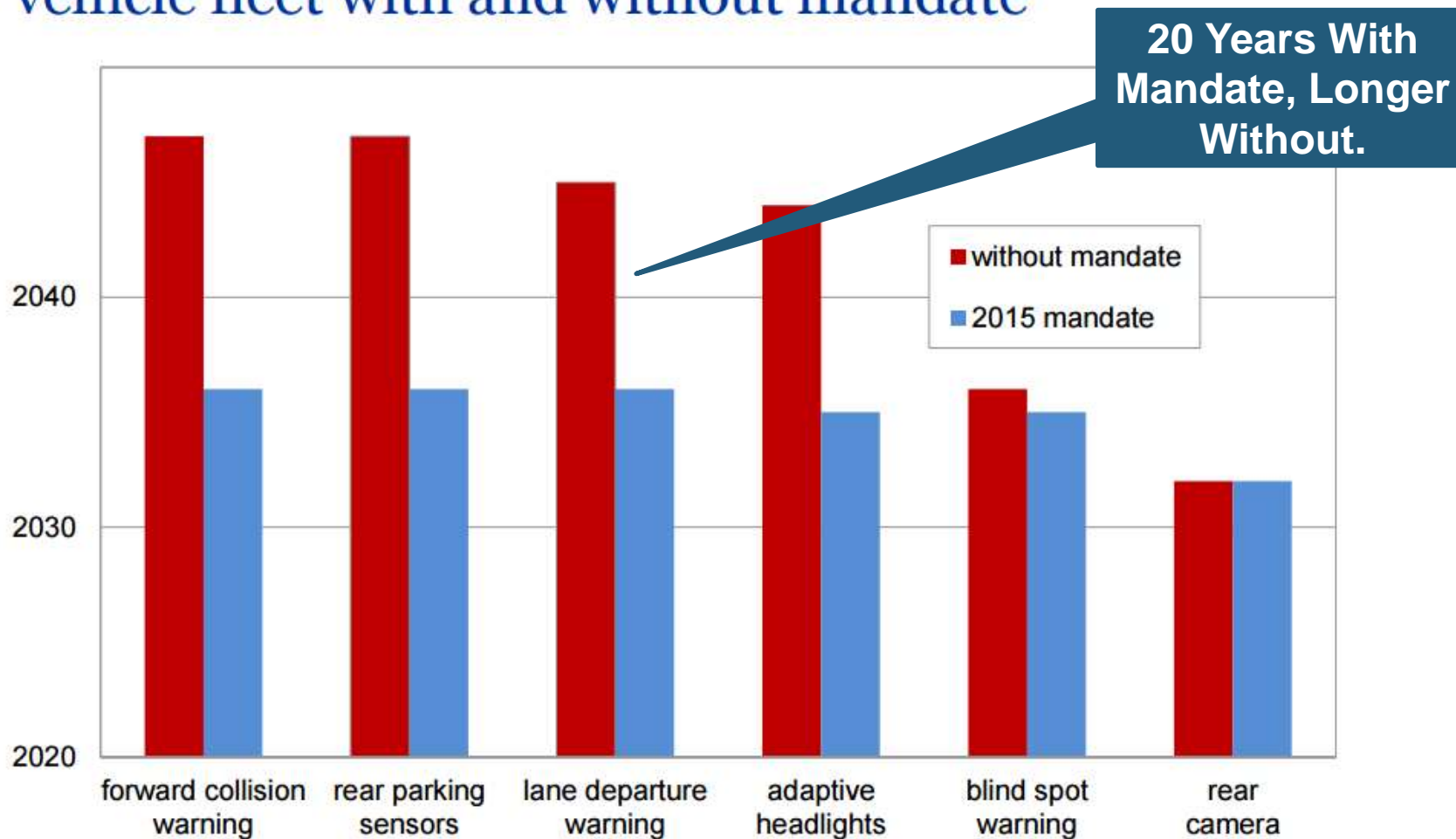
Step 1: Co-pilot

New vehicle series with forward collision warning By model year



Step 1: Co-pilot

Calendar year features reach 95% of registered vehicle fleet with and without mandate



Step 2: The ‘Dream Vehicle’



**Delphi prototype
“Roadrunner”**

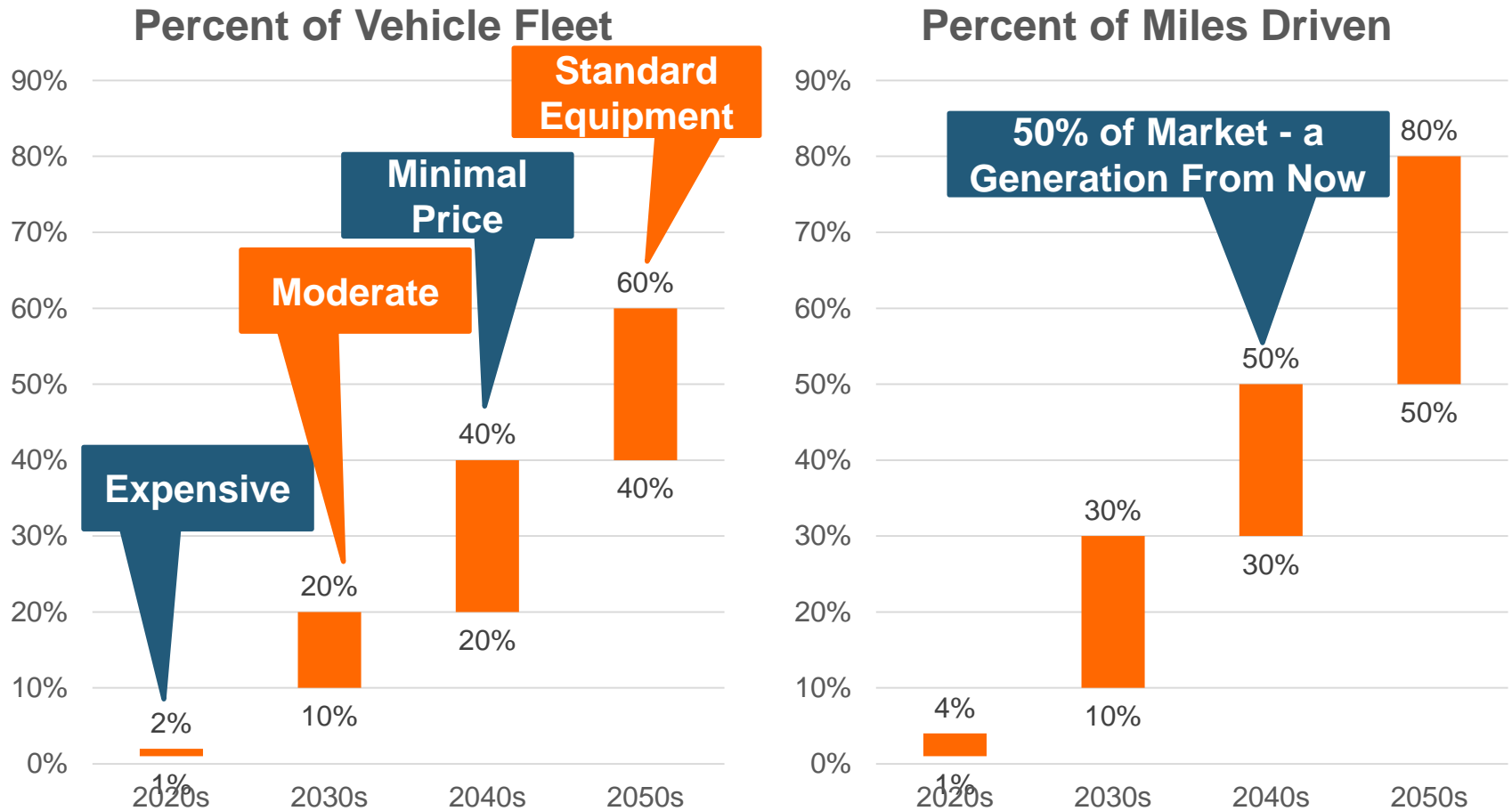
**SF to NYC in Nine
Days (4/2015)**

**3,400 Miles – All
but 50
Autonomous**

**Issues:
‘Unmarked Lanes,
Heavy
Roadworks,’
When Sun Was
Low in Sky**

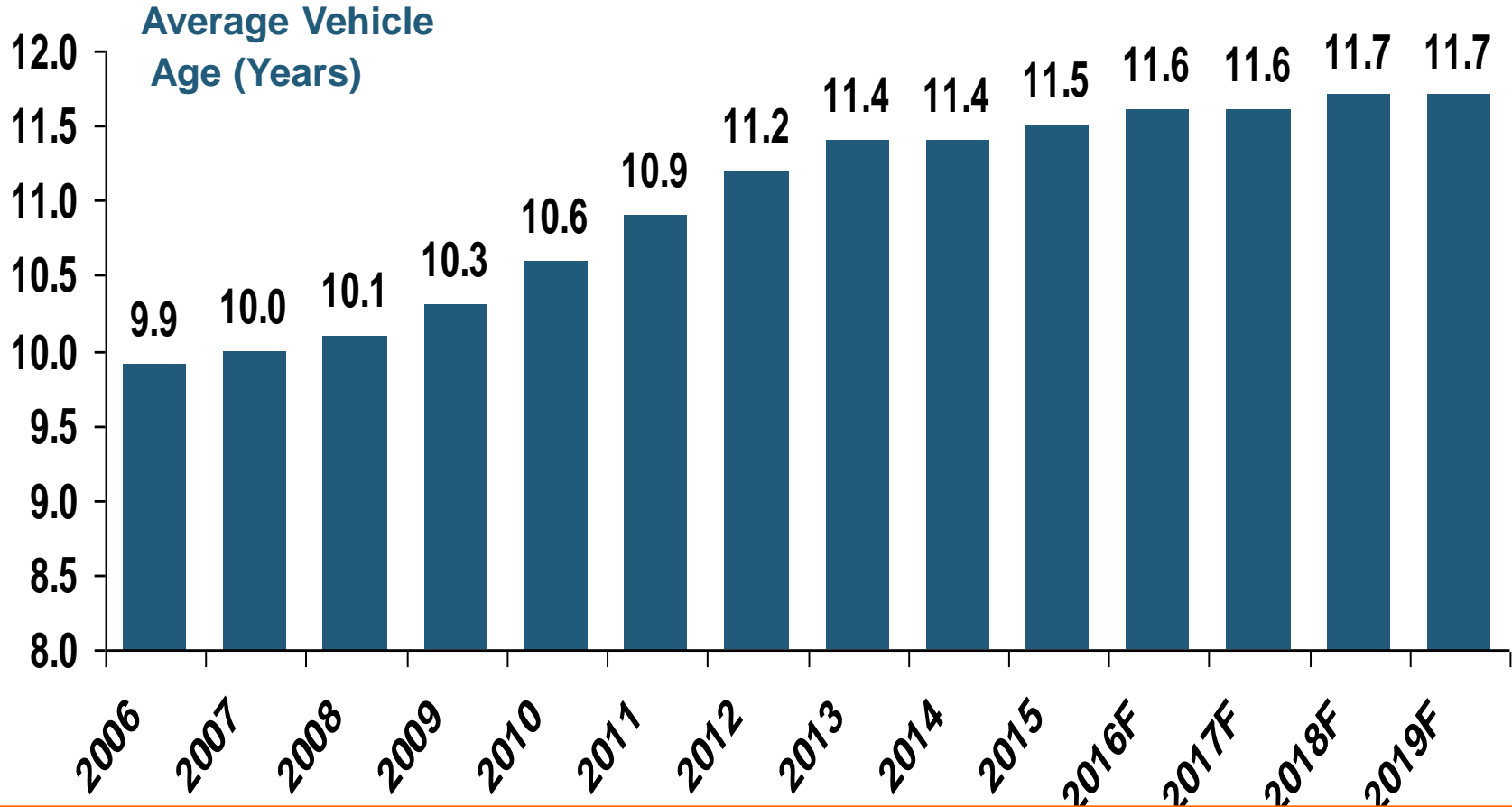
**These Are on the Drawing Boards of Almost All
Automakers. But the Dream Vehicle Is a Long Ways Away.**

When Will This Happen?



SOURCE: *Autonomous Vehicle Implementation Predictions*, Victoria Transport Policy Institute, 2015.

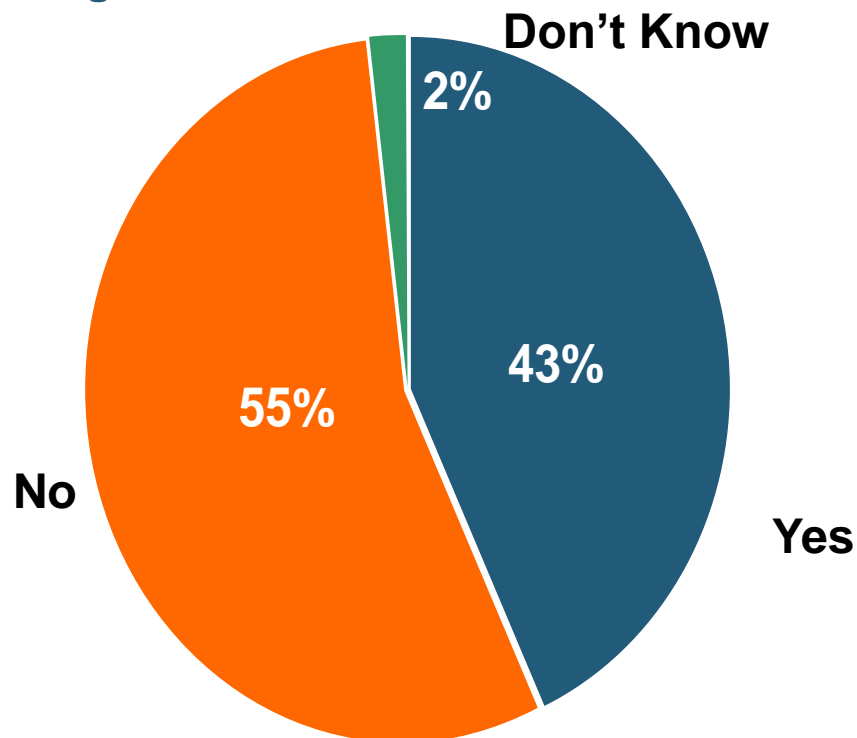
Why Will It Take So Long?



Recession Hangover – People Struggling to Afford Major Purchase; Cars Are Built Better, Last Longer.

Why Will It Take So Long?

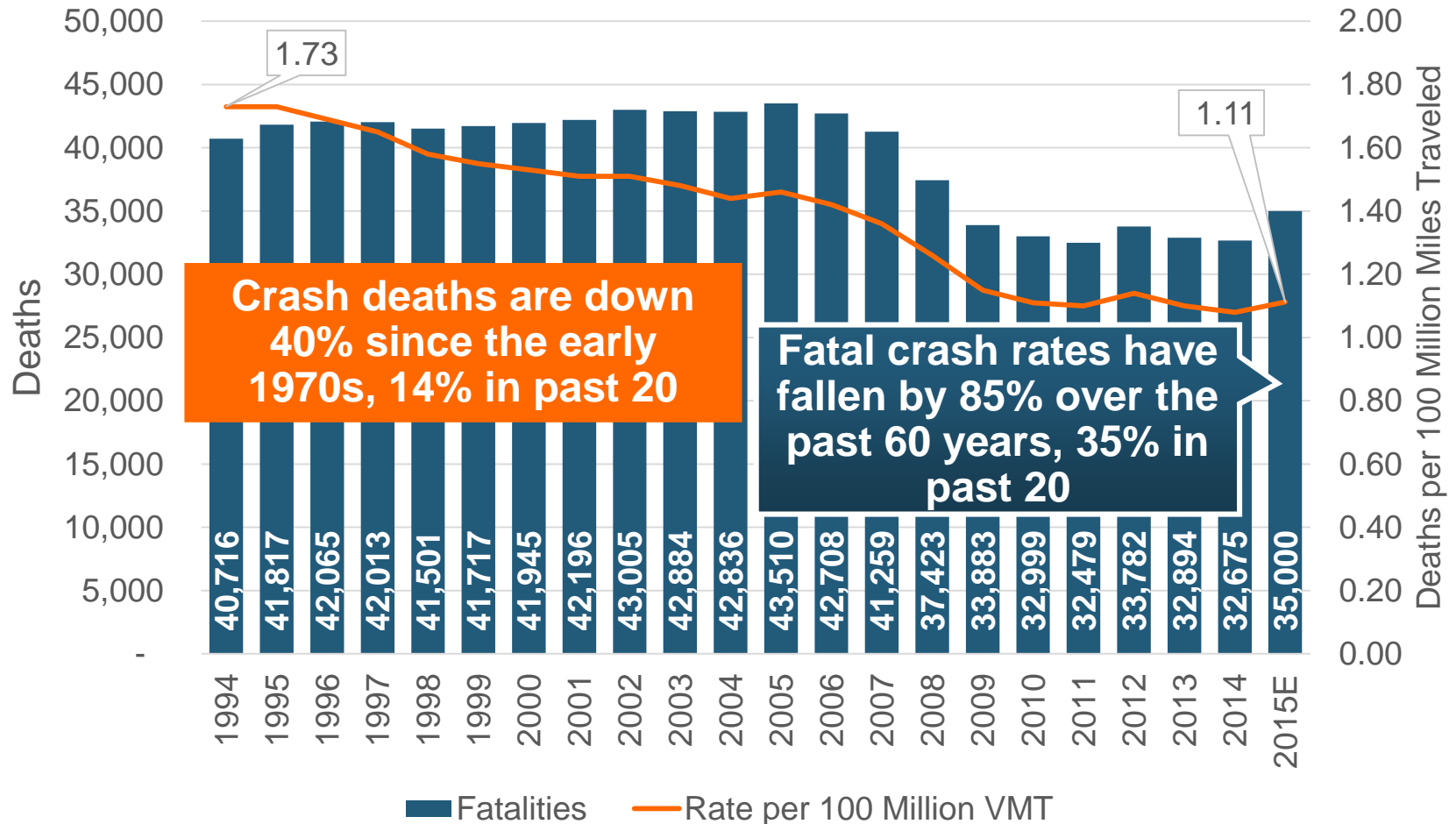
Q. Would You Be Willing to Ride in a Driverless Car?



Most People Say They Would Not Ride in a Driverless Car.

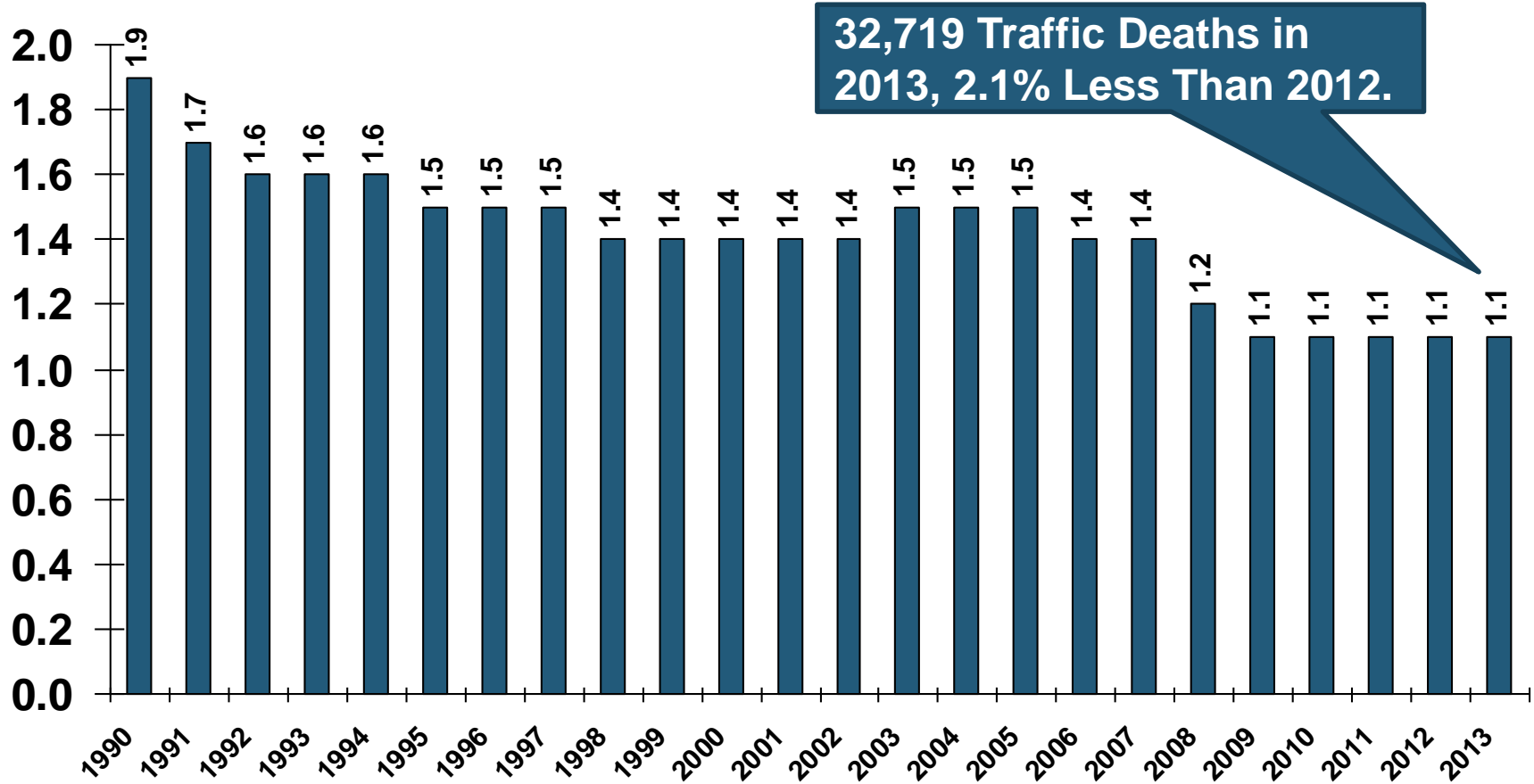
Enhanced Vehicle and Road Safety Have Made Driving Much Safer

Motor Vehicle Crash Deaths and Crash Death Rate, 1994-2015



Source: National Highway Transportation Safety Administration, Federal Highway Administration, National Safety Council; 2015 Estimates by Insurance Information Institute.

Fatalities per Hundred Million Miles Driven

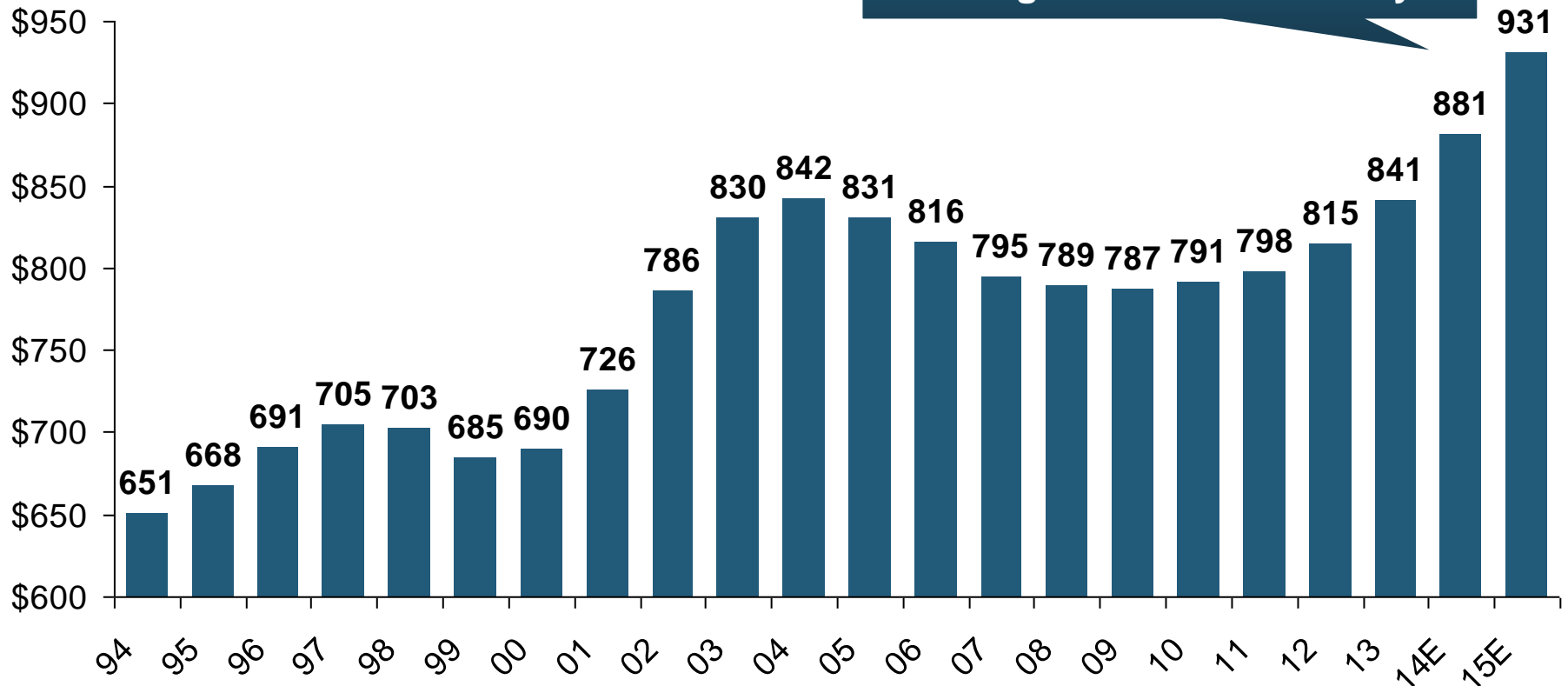


Auto Fatality/Injury Rates Have Been Falling for Decades.

Sources: National Highway Traffic Safety Administration.

But Auto Insurance Expenditures Rise

For Past 20 Years, Expenditures
Rising About 1.5% Annually



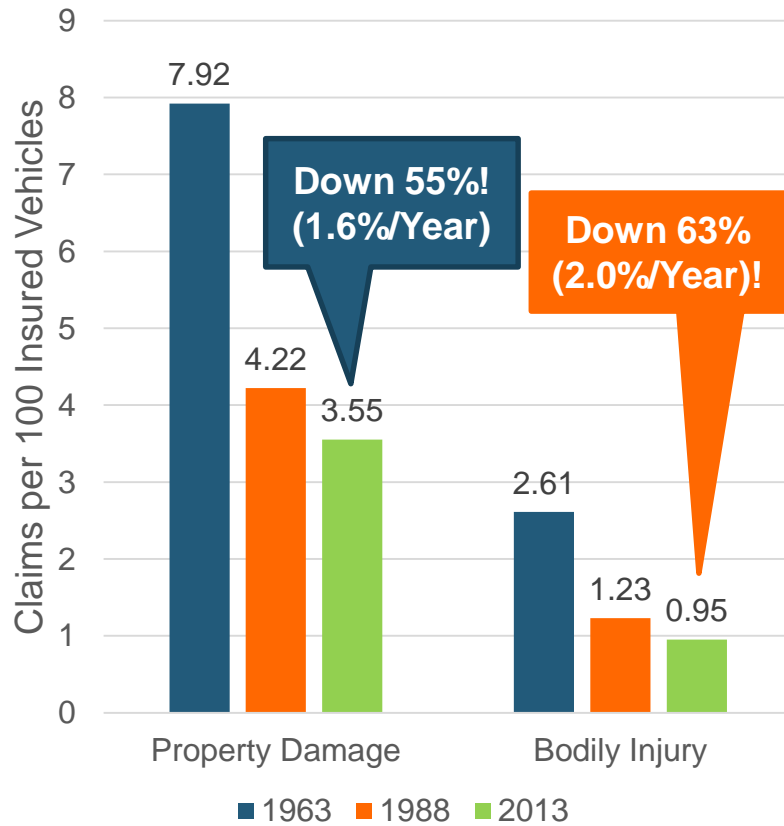
If Cars Are Safer, Why Are Insurance Costs Rising?

Insurance Information Institute Estimates/Forecasts

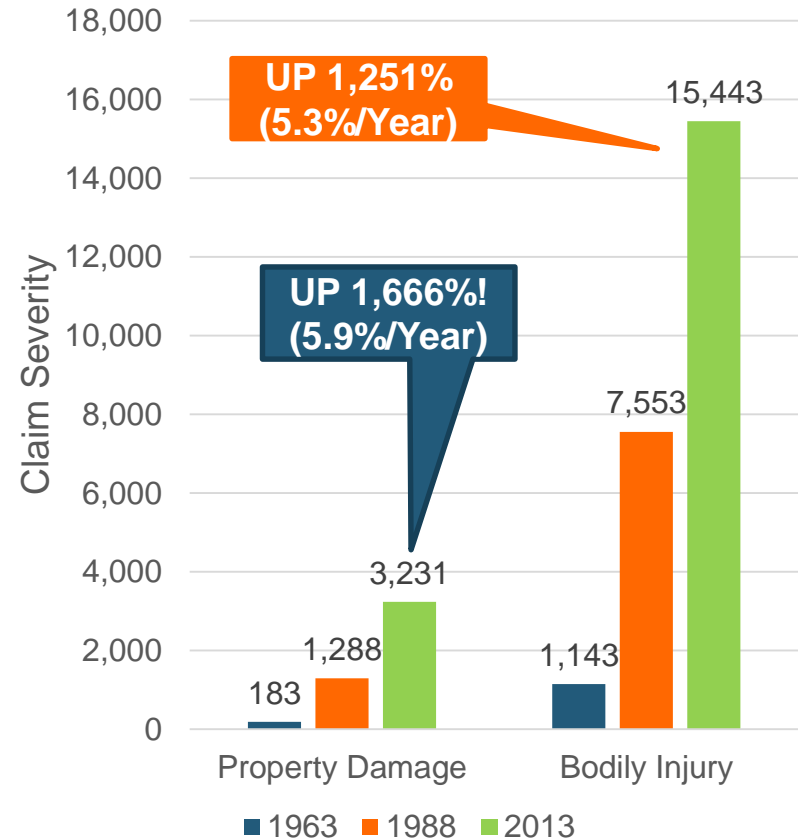
Source: NAIC, Insurance Information Institute estimate for 2014-2015 based on Motor Insurance CPI.

Auto Insurance: Frequency vs. Severity

Frequency: How Often Is There An Accident?



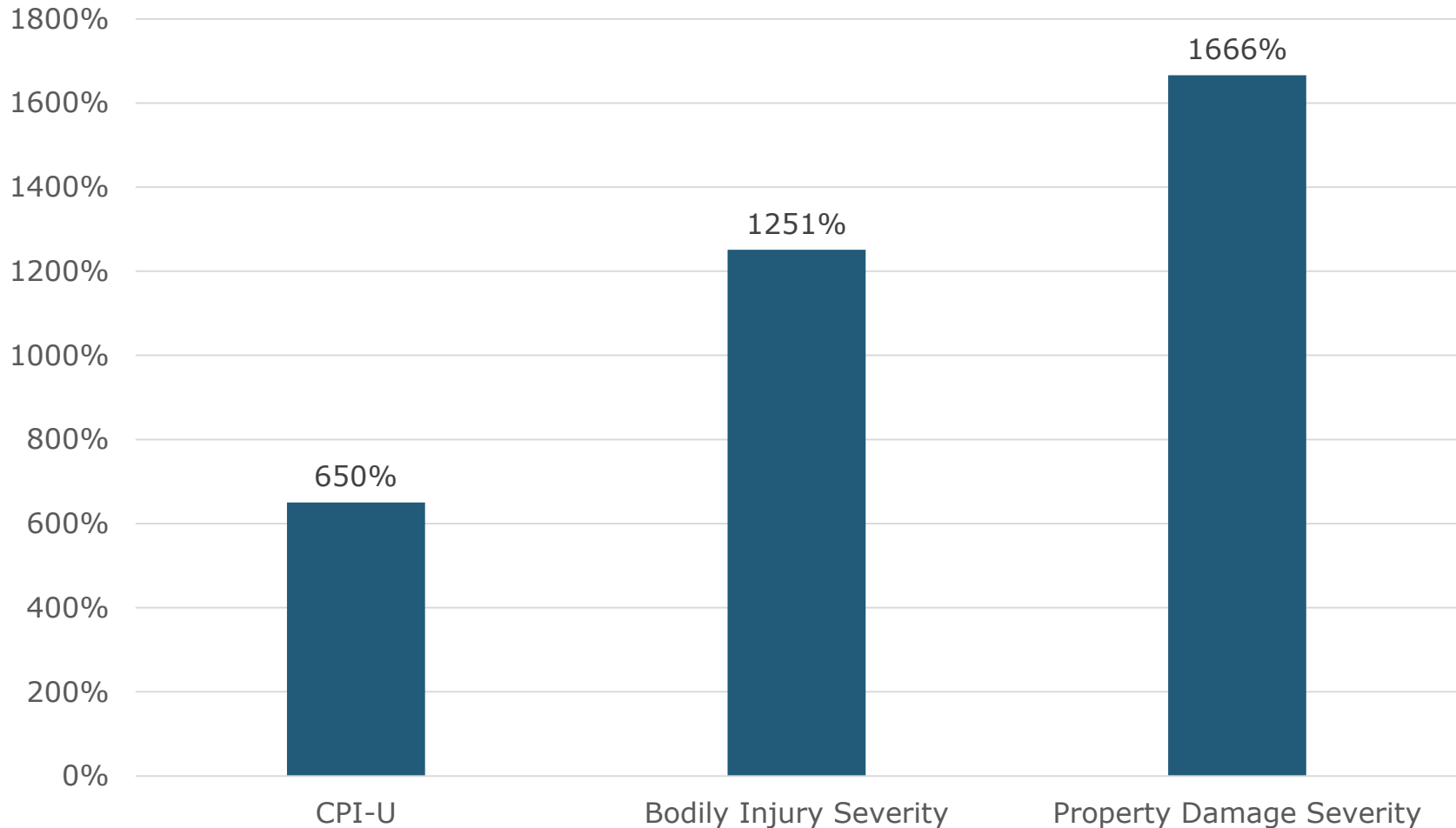
Severity: How Big Is the Claim?



Sources: Insurance Institute for Highway Safety, Insurance Services Office, Insurance Information Institute.

Auto Claims Have Grown Faster Than Inflation for 50 Years

Percentage Change, 1963-2013

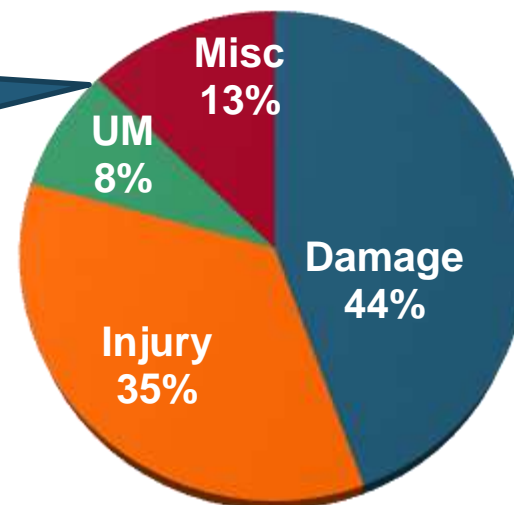


Impact by Coverage

Type of Coverage	Examples	Frequency	Severity
Damage	PD, Collision	Decrease	Increase
Injury	BI, PIP, MedPay	Decrease	Unclear
Uninsured	UM/UIM	<u>None</u>	None
Miscellaneous	Comprehensive	<u>None</u>	Increase

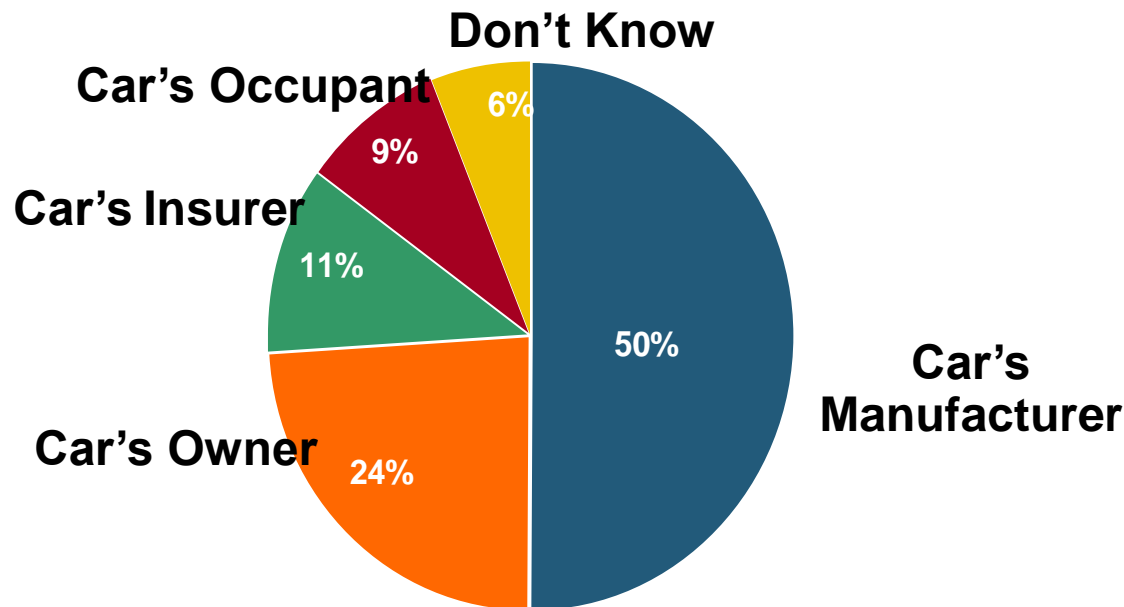
Coverages on 21% of Premium Will Be Unaffected for Decades

Autonomous Vehicles Will Have Different Impacts on Different Coverages and Will Not All Happen At Once.



I.I.I. Poll: Who Is Responsible?

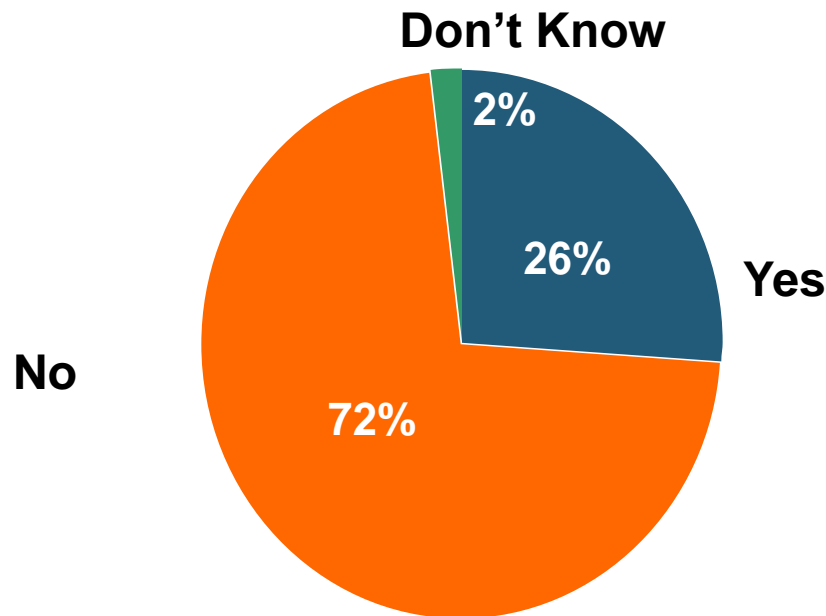
Q. Who should be responsible if an accident occurred involving a driverless car?



Half of Respondents Think a Driverless Car's Manufacturer Should Bear Responsibility in Case of an Accident.

I.I.I. Poll: Who Is Responsible?

Q. Would you be willing to pay more for your car to cover the manufacturer's liability in case of an accident?



Only a Quarter of Americans Would Be Willing to Pay More for a Driverless Car to Cover the Manufacturer's Liability in Case of an Accident.

- Technology Has Been Making Cars Safer for Decades.
- It Takes a Long Time for Technology to Penetrate the Marketplace.
- The Size of Claims Has Grown Faster Than the Frequency of Claims Has Shrunk.
- Auto Insurers Should Be Up to the Challenge.

Insurance Information Institute Online:

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*Thank you for your time
and your attention!*

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