

AUTO GLASS WEEK™



**AUTO GLASS
SAFETY COUNCIL™**

IGA
International Glass Association




Making Connections that Drive Profit

CHANGING TRENDS IN AUTO INSURANCE

James Lynch, Chief Actuary
Insurance Information Institute

WHO IS THE I.I.I.?



Improving public understanding
of insurance...

...what it does and how it works

INSURANCE: BY THE NUMBERS



2.8 million

People in the U.S. employed, in a wide variety of careers, from IT experts, to human resource administrators to public relations managers to financial analysts (and agents and claims adjusters)



\$5.8 trillion

Assets under management at year-end 2016, including \$1.5 trillion for the property/casualty sector and \$3.7 trillion for the life sector



\$508 billion

Contributed to the U.S. gross domestic product in 2016, roughly 2.7% of the whole

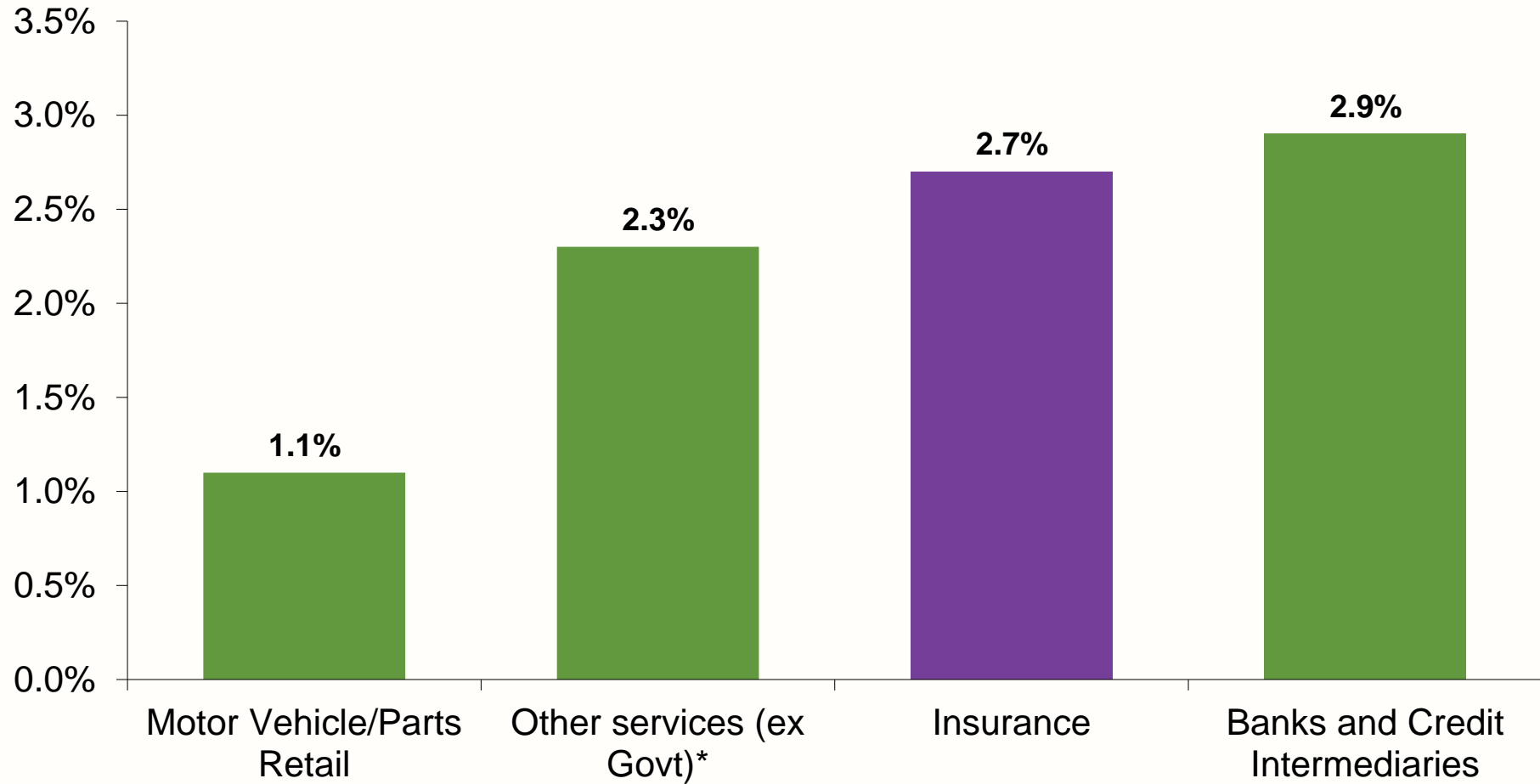


\$40.0 billion

Federal and foreign income taxes paid in 2016, plus U.S. premium taxes paid

INSURANCE: BY THE NUMBERS

(Value Added As % of GDP)



- * Includes Automotive Repair and Maintenance.
- Sources: US Bureau of Economic Analysis; Insurance Information Institute.

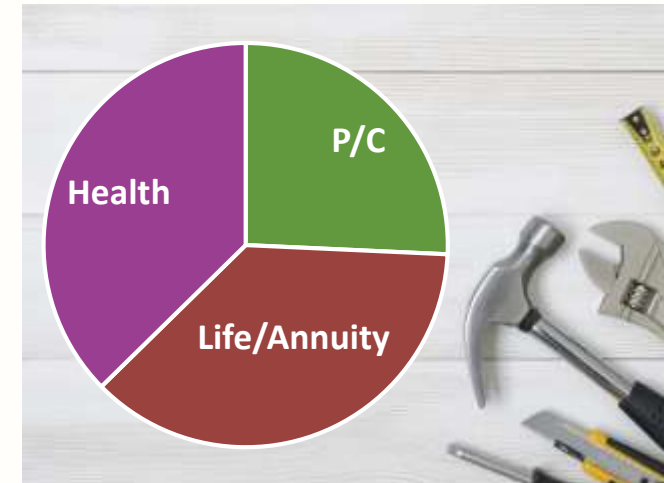
FINANCIAL FIRST RESPONDERS

Insurers annually pay over a trillion dollars in claims to rebuild lives, property and businesses.

In 2016 alone, the industry paid

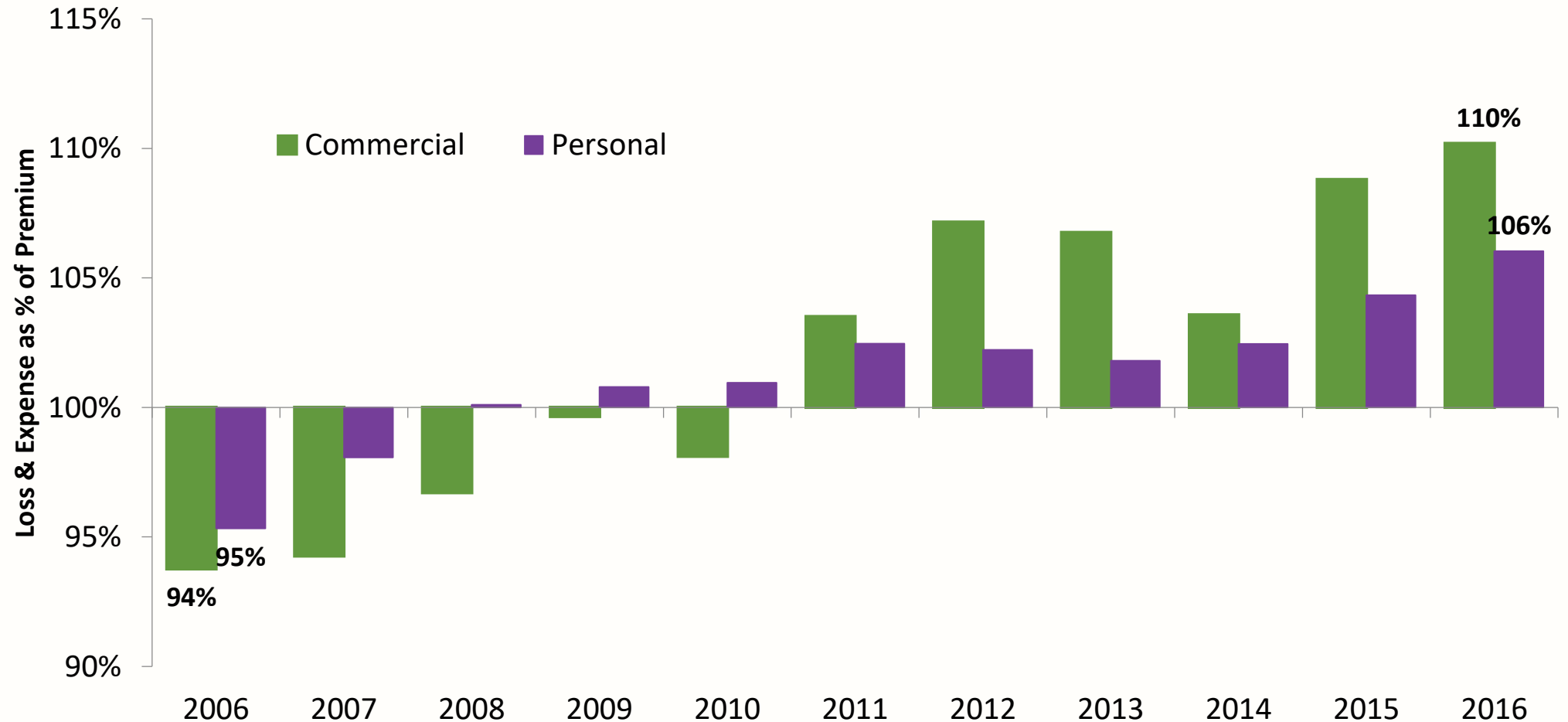
\$ 386.4 billion	P/C incurred claims (L + LAE)
554.7	Life/Annuity benefits
560.9	Health Insurance benefits

= \$1.502 trillion



- This is equivalent to \$125 billion per month.

TOUGH TIMES IN AUTO



- Source: National Association of Insurance Commissioners data, sourced from S&P Global Market Intelligence; Insurance Information Institute.

INCREASING COSTS

Auto Insurance

Increase in Claim Costs, 2015:Q1–2017:Q1



Bodily Injury

15.3%



Property
Damage

15.0%



Personal Injury
Protection

14.1%



Collision

13.2%



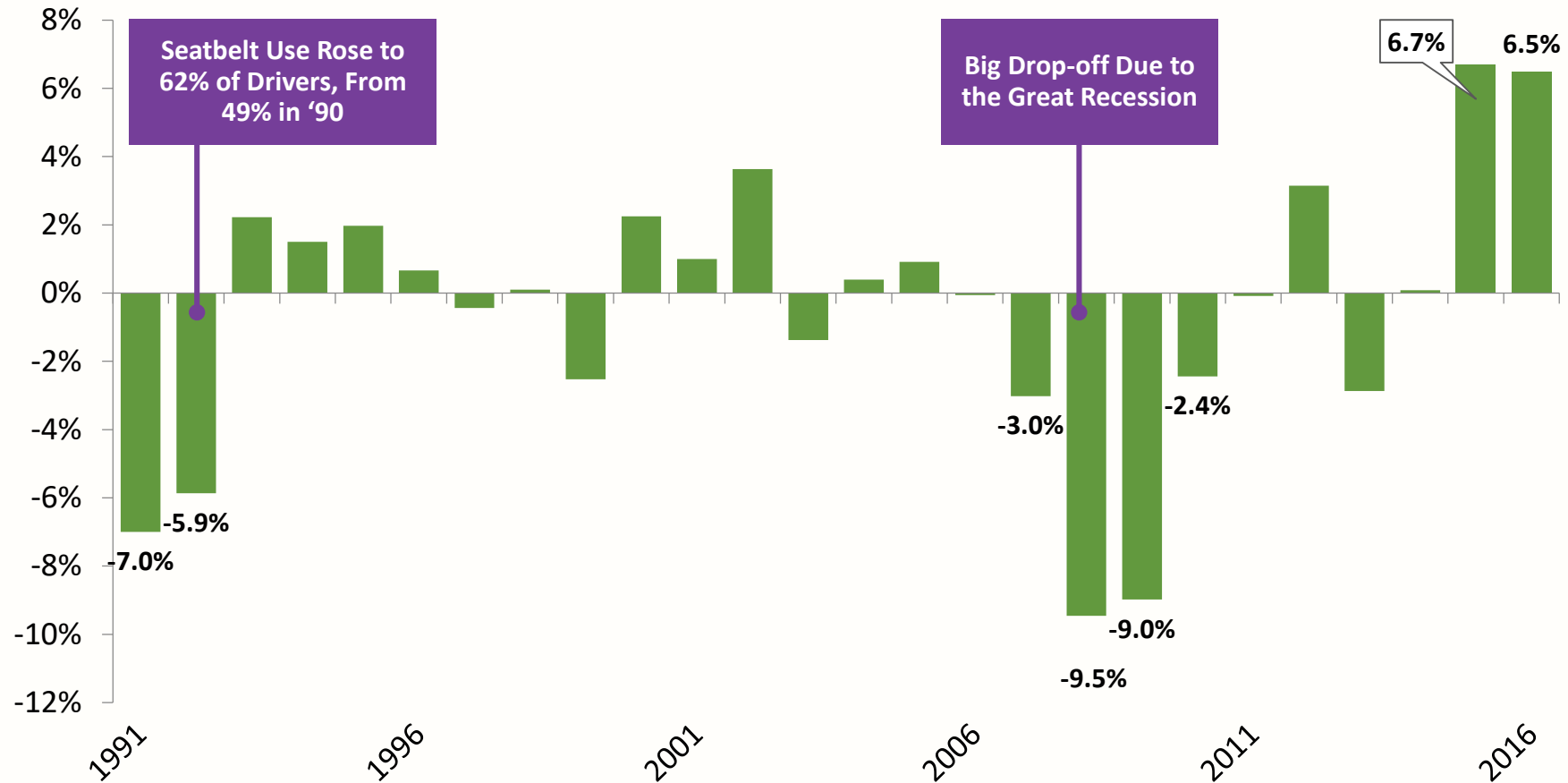
Comprehensive

22.5%

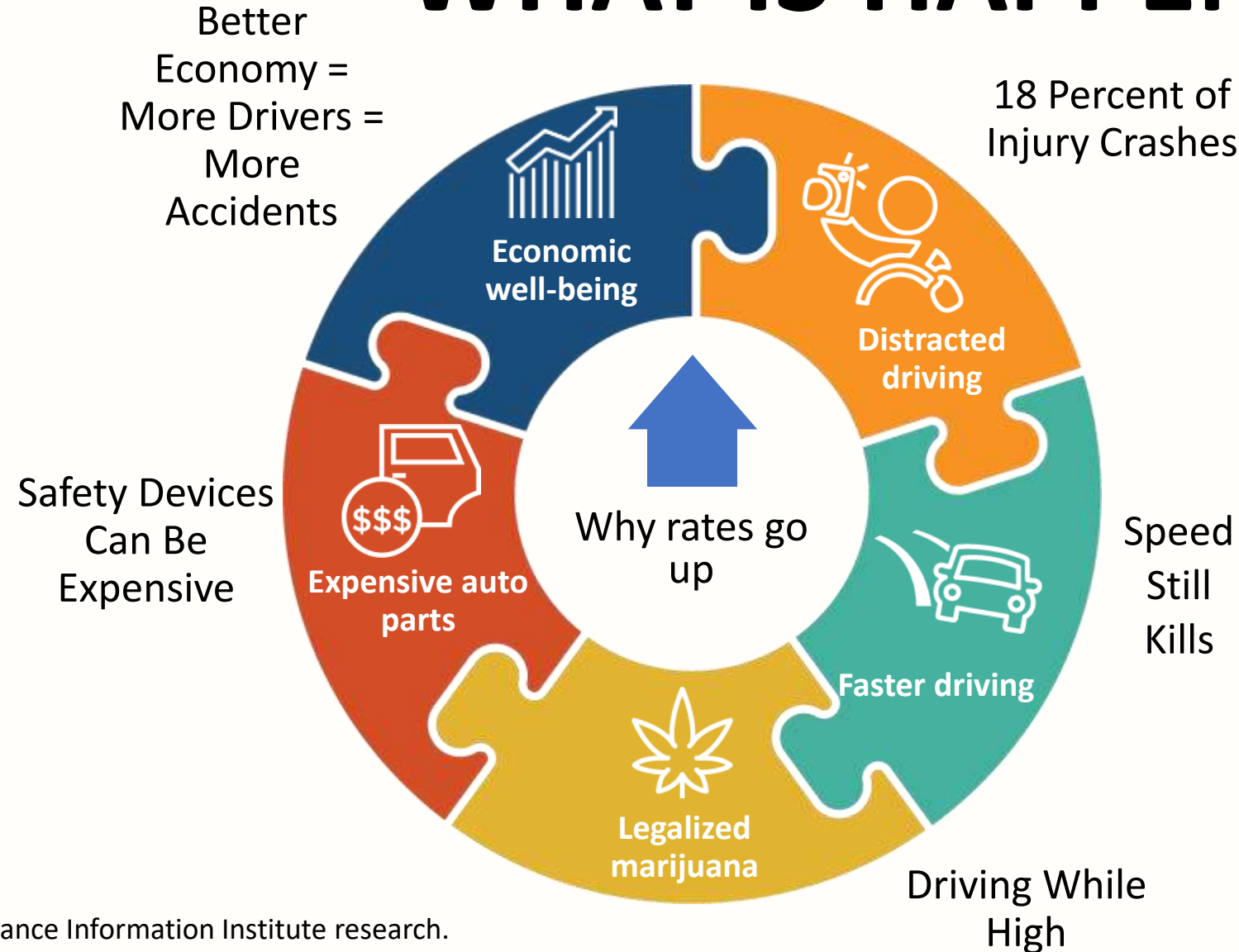
By contrast, consumer prices overall
rose 3.3 percent during the same period.

DRIVING FATALITIES ARE RISING

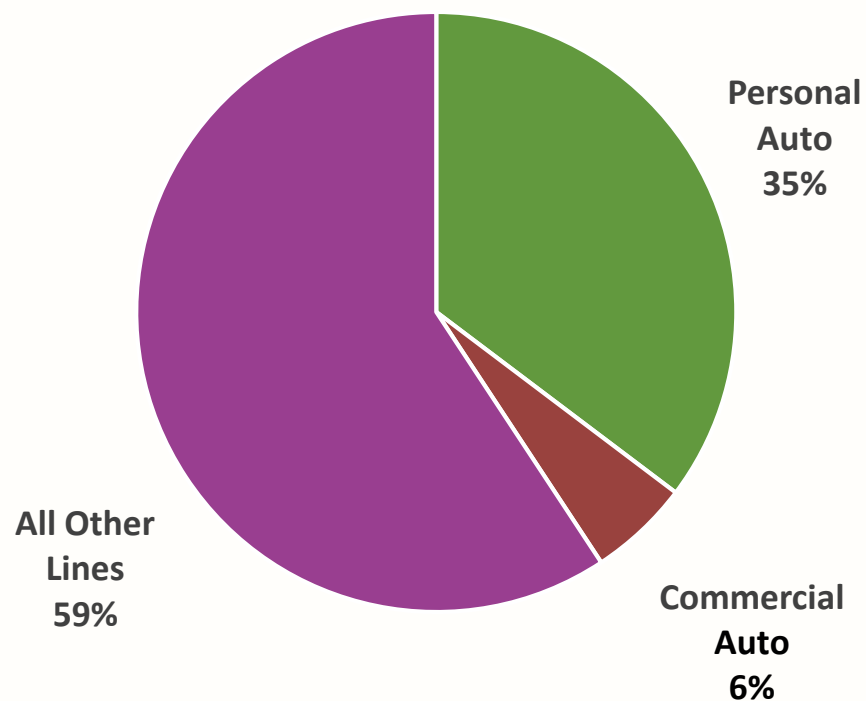
Annual Change in Motor Vehicle Deaths



WHAT IS HAPPENING?



THE DRIVER WILL GO AWAY . . .



. . . SOMEDAY

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STEP 1: SELF-DRIVING

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

STEP 2: DRIVERLESS



Delphi prototype
"Roadrunner"

SF to NYC in Nine
Days (4/2015)

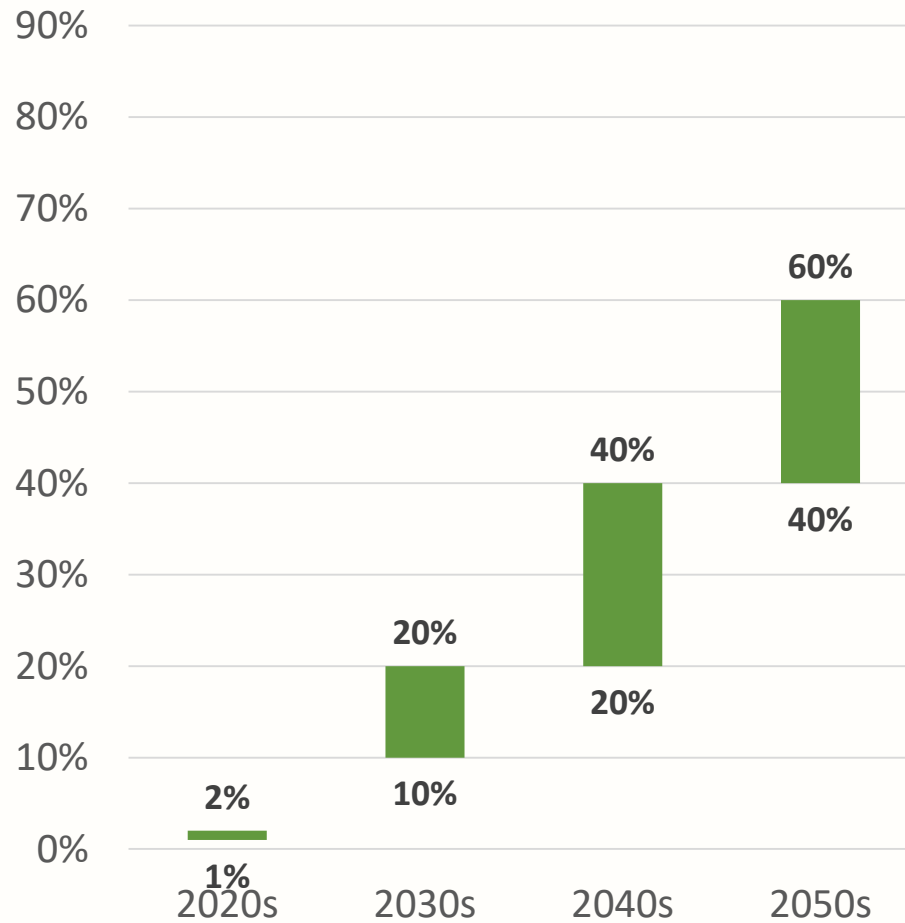
3,400 Miles – All
but 50
Autonomous

Issues: 'Unmarked
Lanes, Heavy
Roadworks,' When
Sun Was Low in Sky

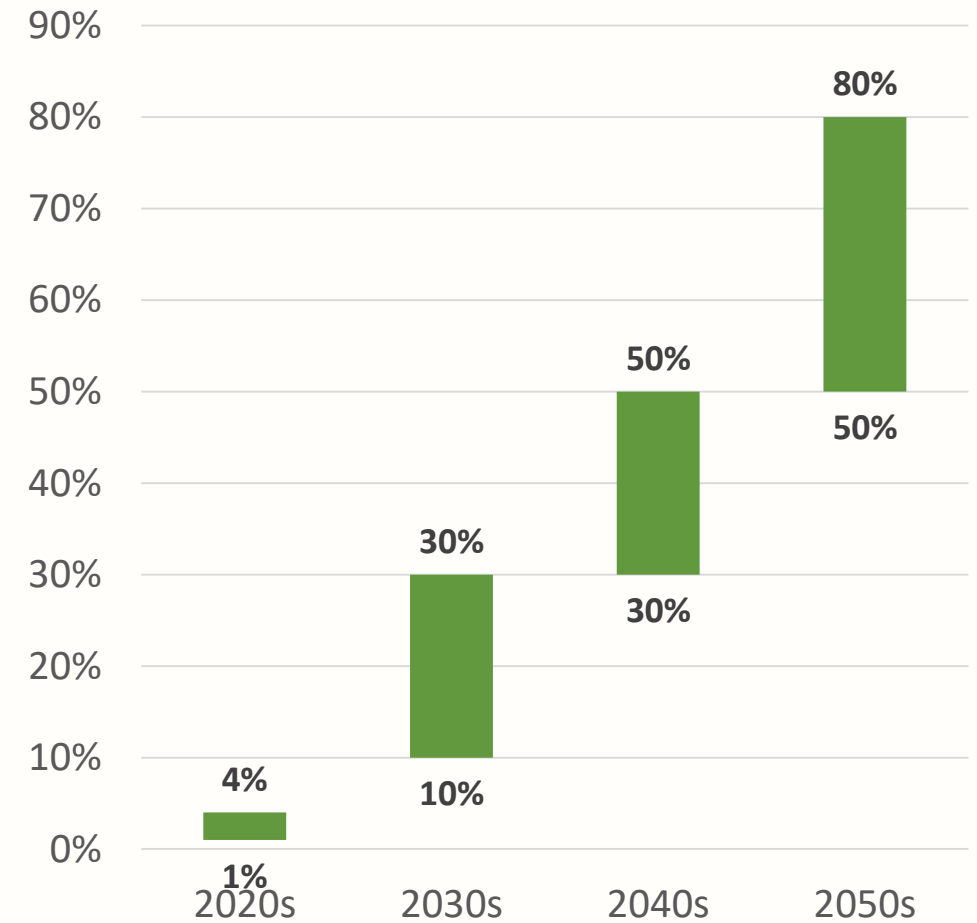
These Are on the Drawing Boards of Almost All Automakers. But the
Dream Vehicle Is a Long Way Off.

HOW SOON?

Percent of Vehicle Fleet



Percent of Miles Driven

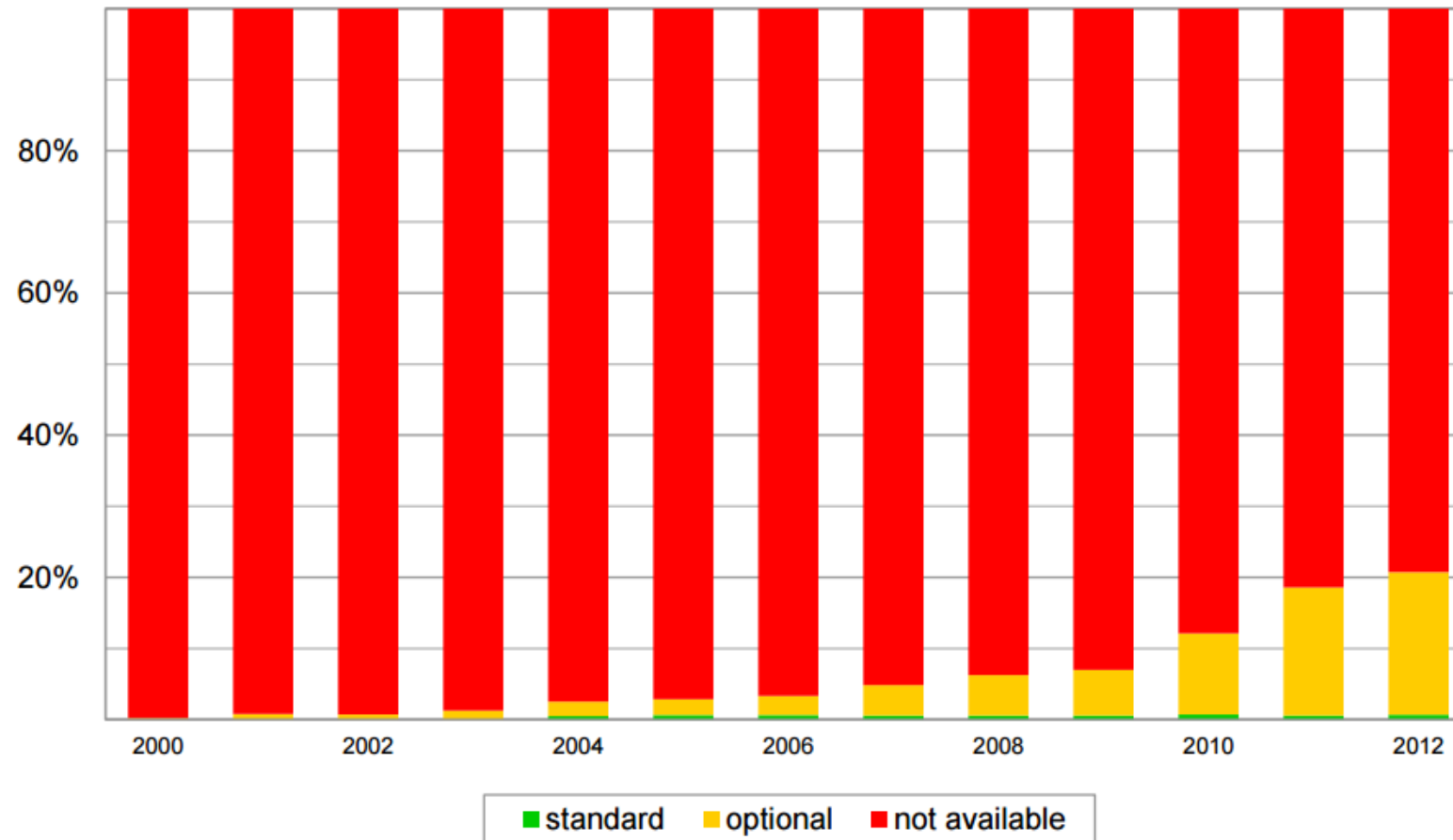


SOURCE: *Autonomous Vehicle Implementation Predictions*, Victoria Transport Policy Institute, 2015.

ISSUE 1: TECH

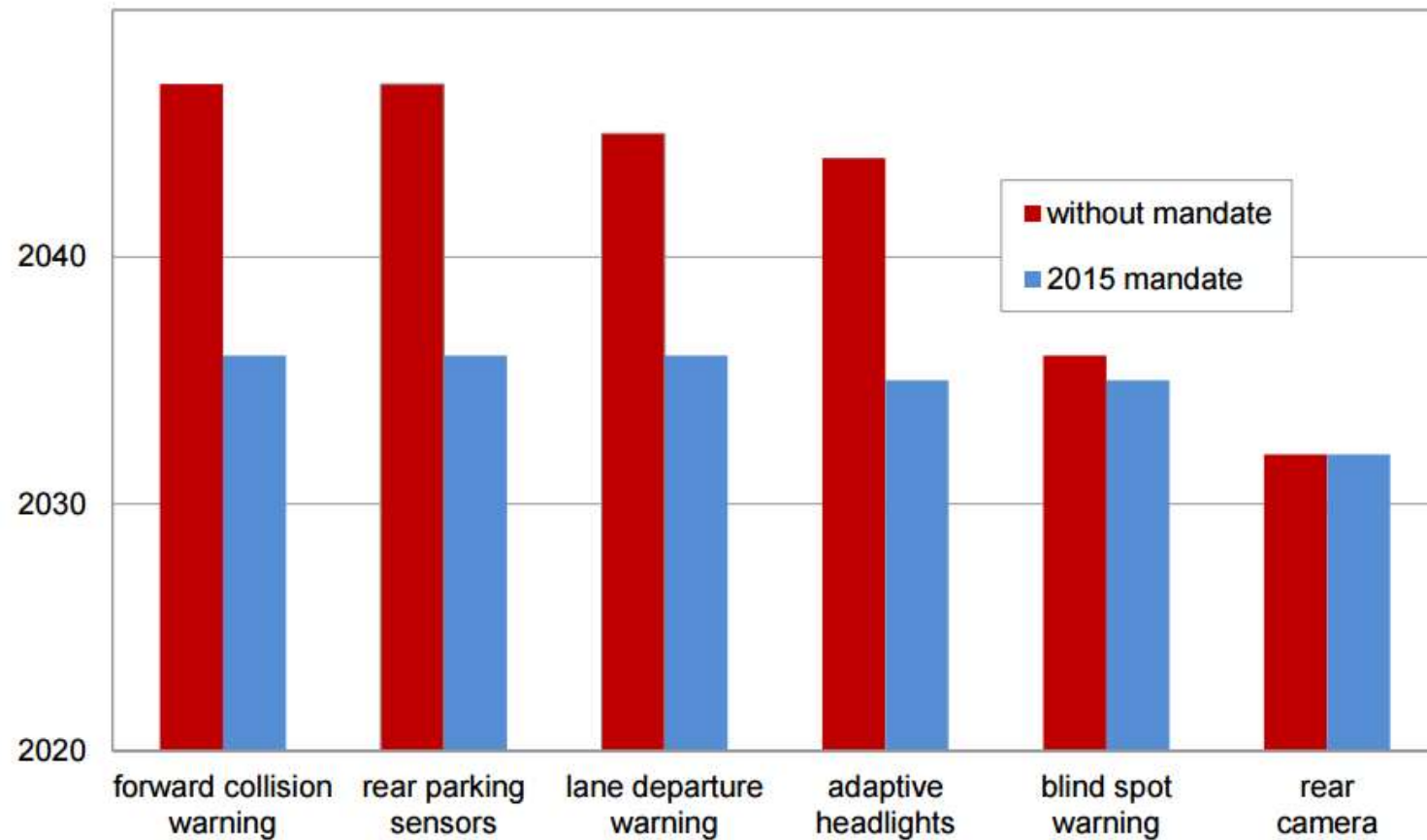
New vehicle series with forward collision warning

By model year



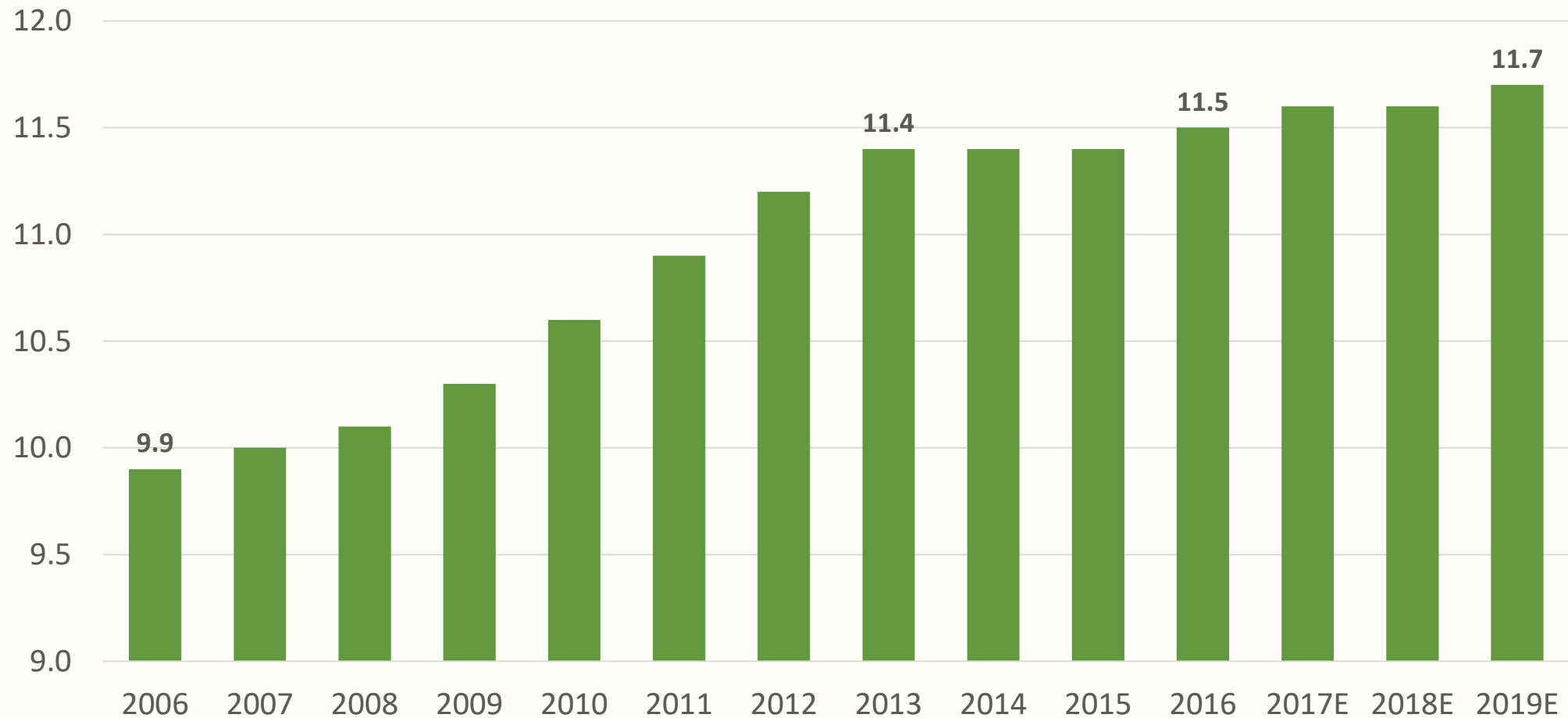
ISSUE 1: TECH

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



ISSUE 1: TECH

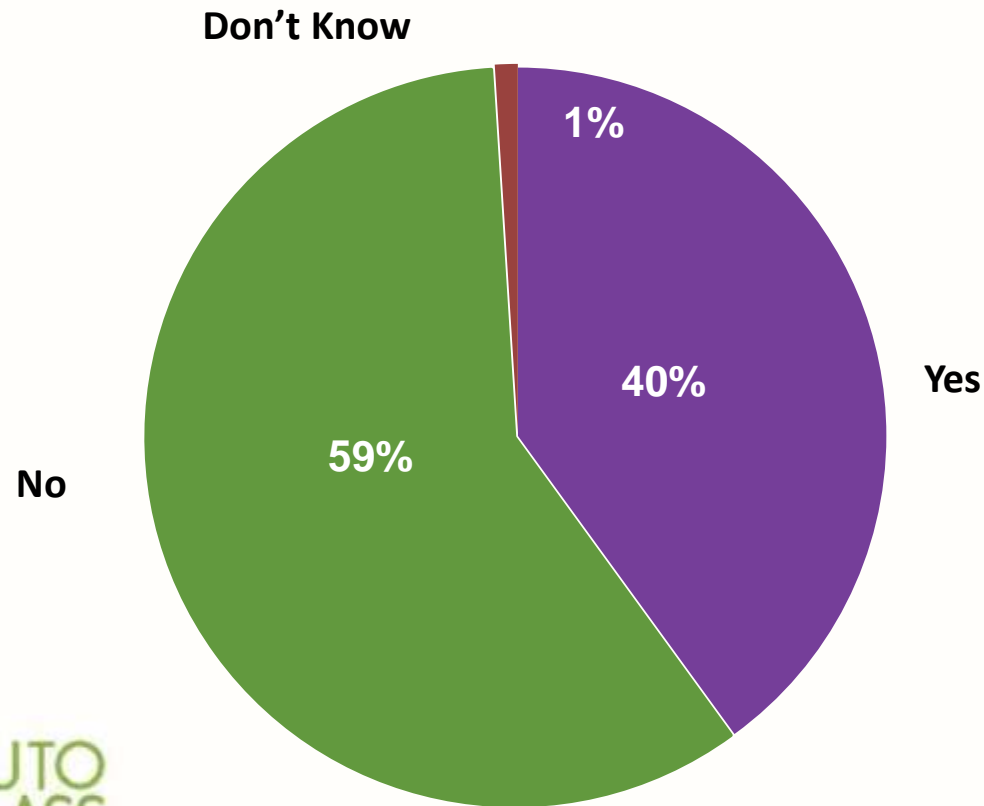
Average Vehicle Age (Years)



SOURCES: Polk, August 2013 Survey, IHS Automotive November 2016; Insurance Information Institute.

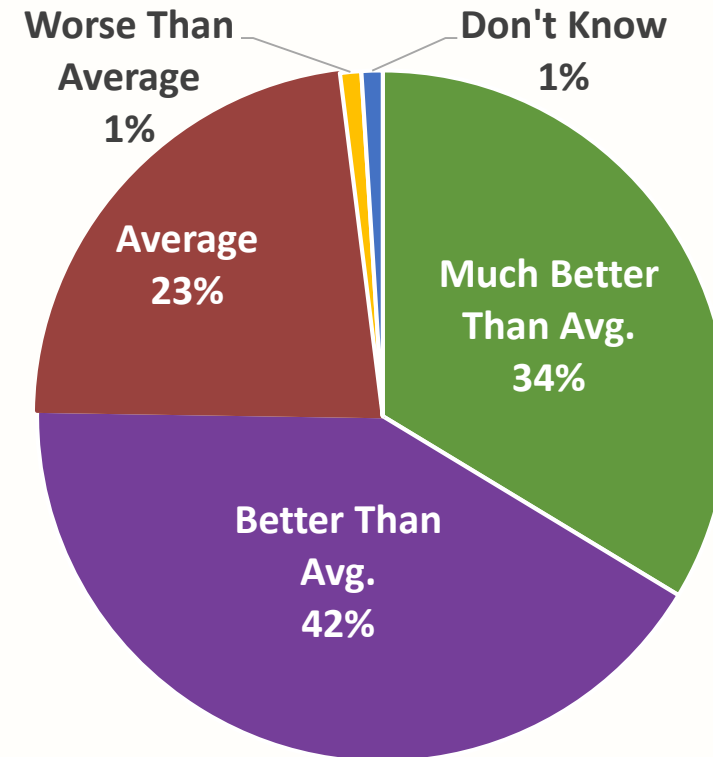
ISSUE 2: CONSUMERS

Would You Be Willing to Ride in a Driverless Car?



SOURCE: Insurance Information Institute annual *Pulse* Survey, June 2014.

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



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

ISSUE 3: HOW DO YOU GET THERE?



ISSUE 3: FUMBLED HANDOFFS

Anatomy of an AV Claim

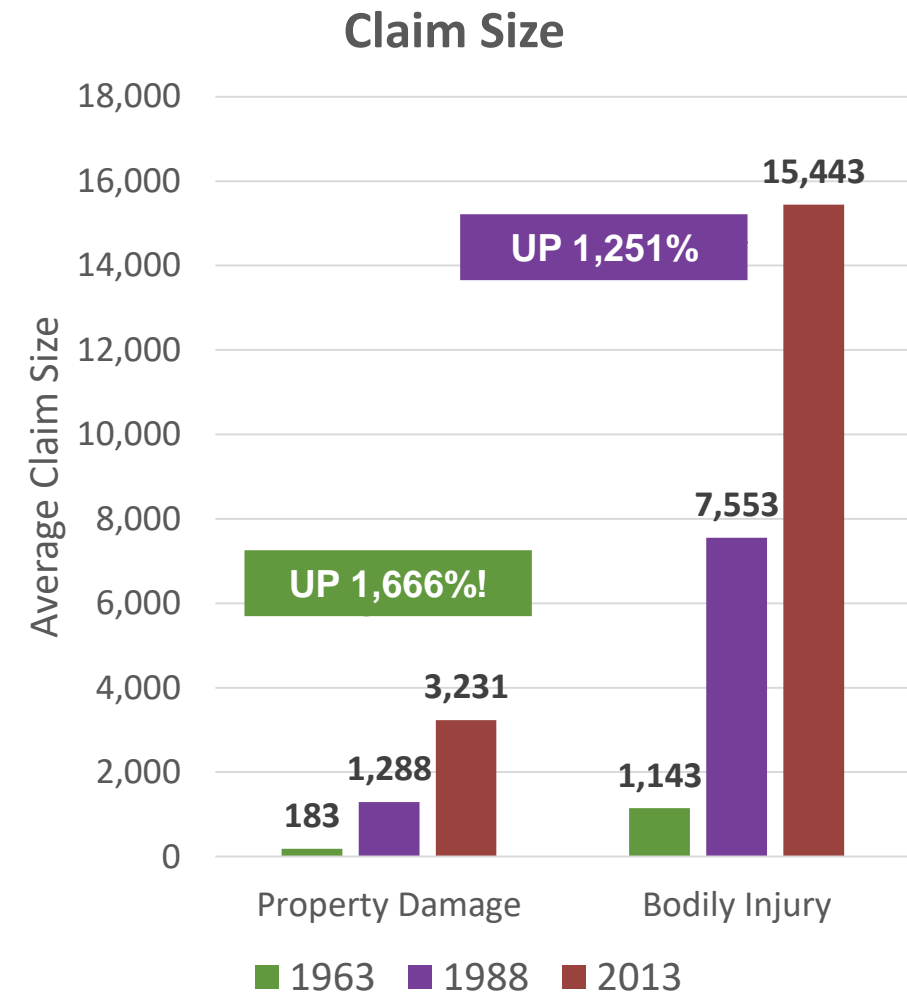
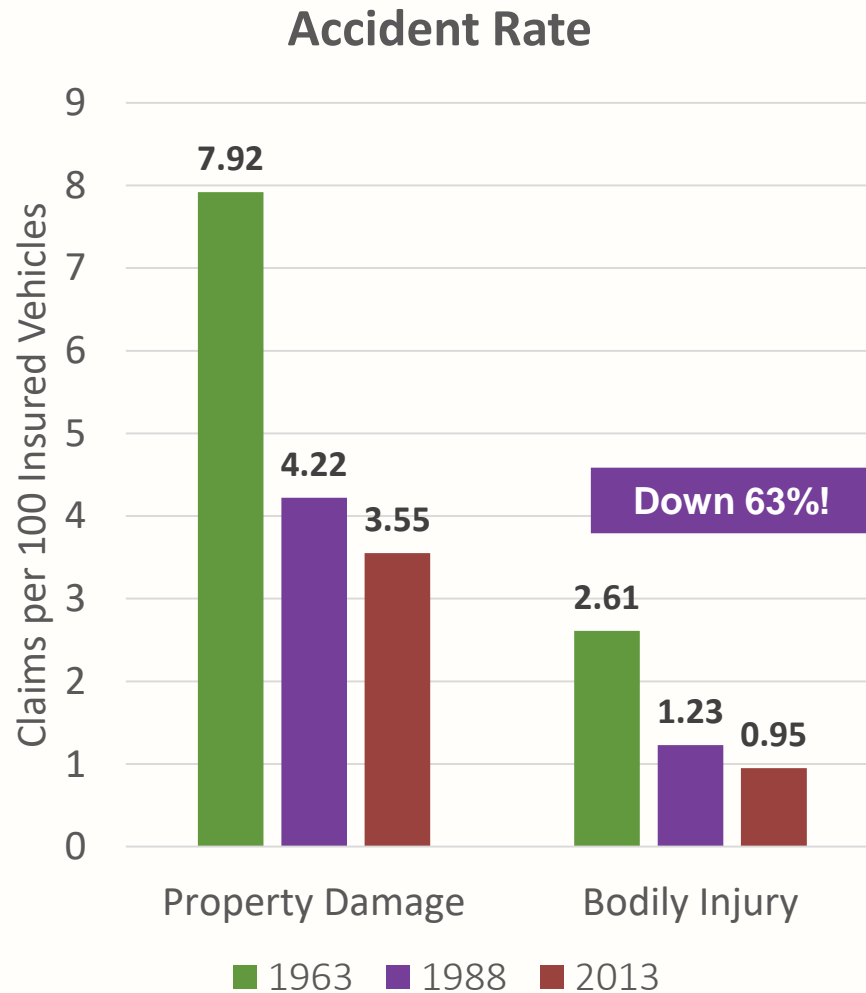
What Happened?

- May 7, 2016 – Williston, FL
- Tesla Model S
 - 74 mph In A 65 Zone
 - Engaged Technology “Autopilot”
 - Traffic-Aware Cruise Control
 - Autosteer (Lane-keeping)
 - Car Had Auto Emergency Braking
- Truck Turned in Front of Car
- Autopilot Warned Driver *7 Times*

The Accident



SAFETY: AN OLD STORY



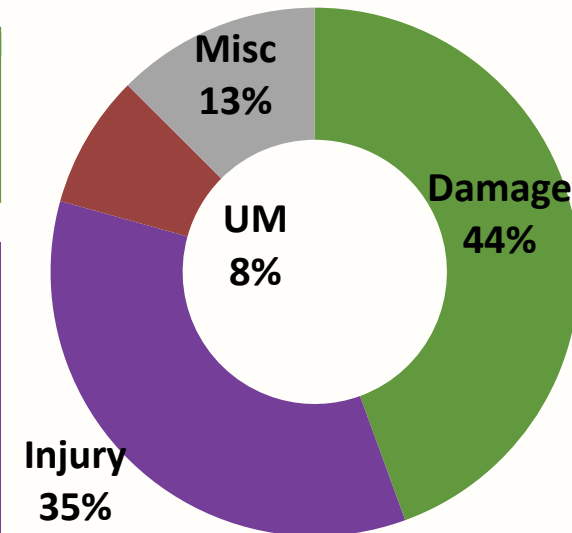
SOURCES: Insurance Institute for Highway Safety, Insurance Services Office, Insurance Information Institute.

IMPACT ON INSURANCE

Type of Coverage	Examples	Accident Rate	Claim Size
Damage	PD, Collision	Decrease	Increase
Injury	BI, PIP, MedPay	Decrease	Unclear
Uninsured	UM/UIM	None	None
Miscellaneous	Comprehensive	None	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.



TWO FINAL ISSUES

- Shift to product liability



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- Will people still own cars?



SUMMARY

- Radical Change is Coming.
- It Takes a Long Time for Technology to Penetrate the Marketplace.
- Technology Has Been Making Cars Safer for Decades.
- There Will Still Be Accidents.