



**INSURANCE
INFORMATION**
INSTITUTE

Rising Auto Costs

CAS Ratemaking, Product and Modeling Seminar

Boston, Massachusetts

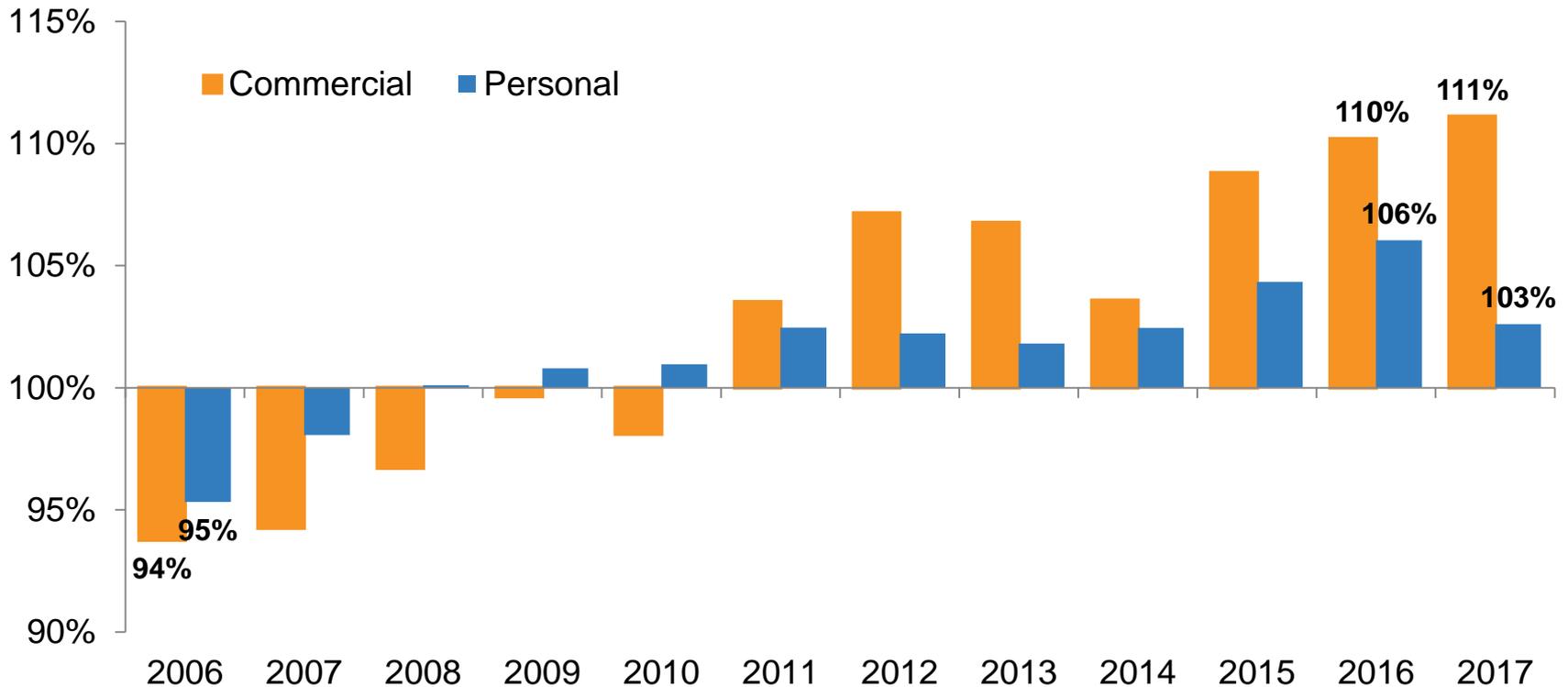
March 27, 2019

James Lynch, FCAS MAAA, Chief Actuary

Insurance Information Institute ♦ 110 William Street ♦ New York, NY 10038

Tel: 212.346.5533 ♦ jamesl@iii.org ♦ www.iii.org

Auto Net Combined Ratio



Rate Actions Helped Personal Auto Results. Not So for Commercial Auto.



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

Results by Line

Incurred Loss Ratios

| LOB | 2018 | 2017 | Change From Year Earlier |
|---------------------|-----------|-----------|--------------------------|
| Personal Auto Liab | 66 | 70 | -4.7 |
| Homeowners | 63 | 70 | -7.1 |
| PhysDam (PA, CA) | 60 | 67 | -7.0 |
| GL (incl Products) | 57 | 55 | 2.6 |
| WC | 48 | 54 | -6.0 |
| Fire & Allied Lines | 66 | 118 | -51.9 |
| CMP | 58 | 63 | -5.3 |
| Comm Auto Liab | 70 | 69 | 0.9 |
| Other | 44 | 50 | -6.8 |
| Total | 59 | 67 | -7.6 |

Positive Number =
Bad News



Through Q3. Differences may not add up due to rounding.
Sources: NAIC data from S&P Global Intelligence, Insurance Information Institute.

Rising Accident Costs

All Coverages Affected

Increase in Loss Costs, 2016:Q3–2018:Q3



Bodily Injury

6.7%



Property
Damage

3.8%



Personal Injury
Protection

4.8%



Collision

3.5%



Comprehensive

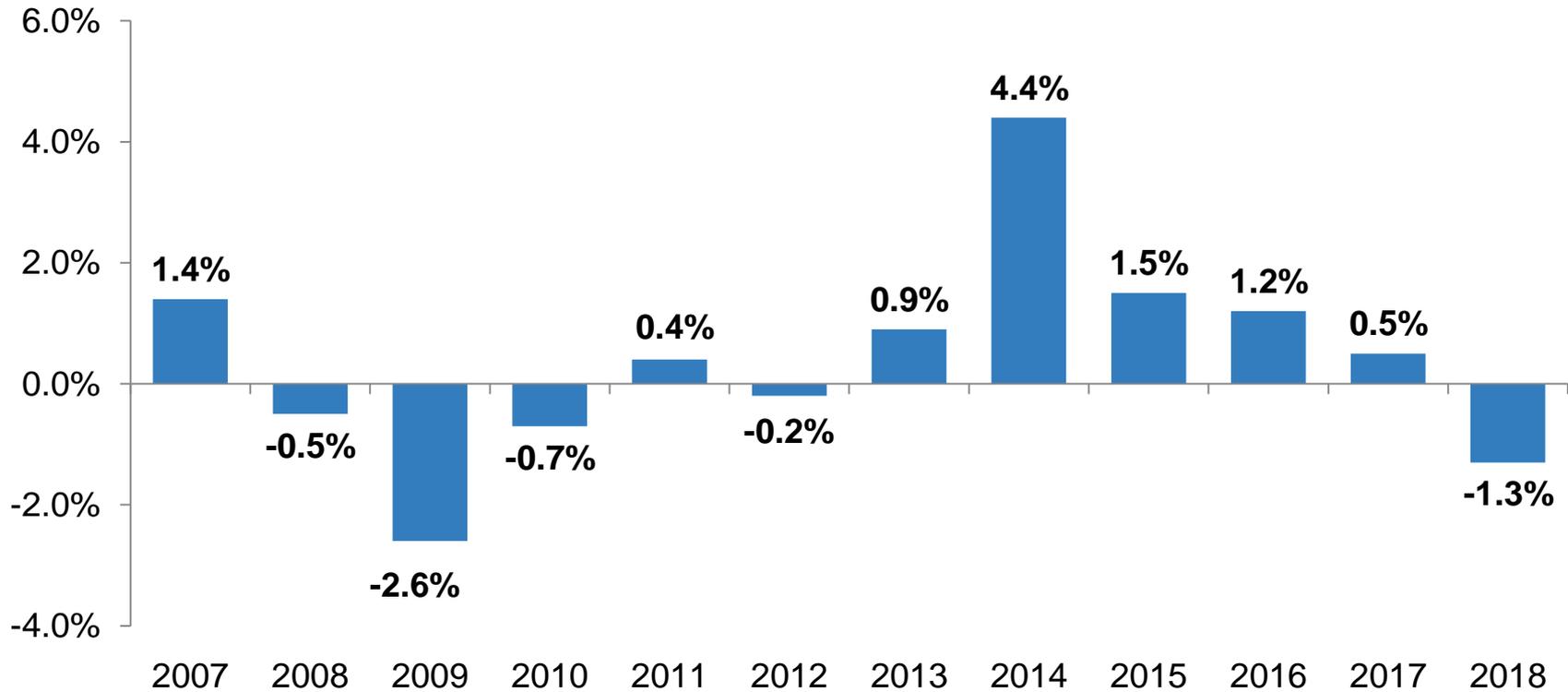
-4.0%

From 2016 to 2018, the cost of accidents has risen dramatically. By contrast, consumer prices overall rose 6.6 percent from 2016 to 2018.



Collision Claims Frequency

Annual % Change



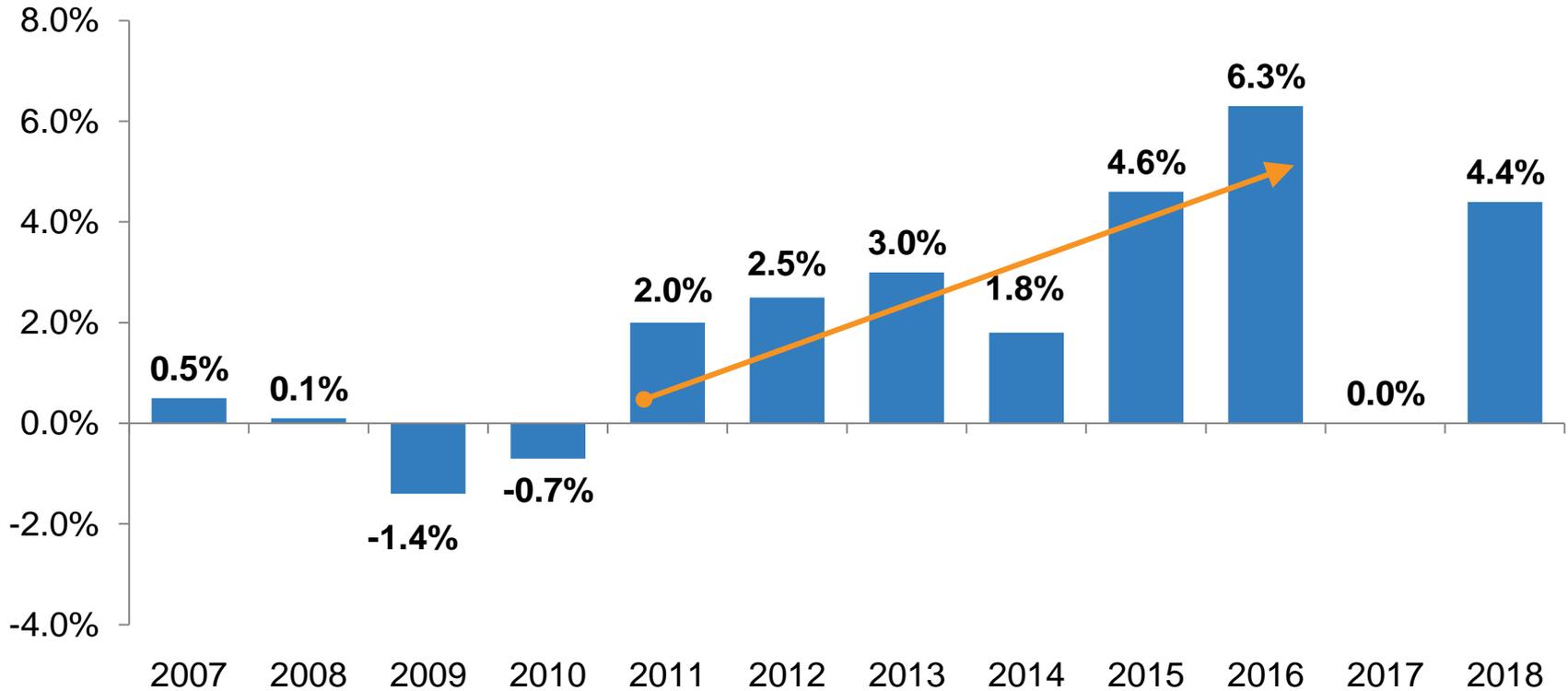
Claim Frequency Has Been Flat Since 2014.



*Four Quarters Ending in September.
Source: Fast Track Monitoring System.

Collision Claims: Severity Trending Higher

Annual % Change

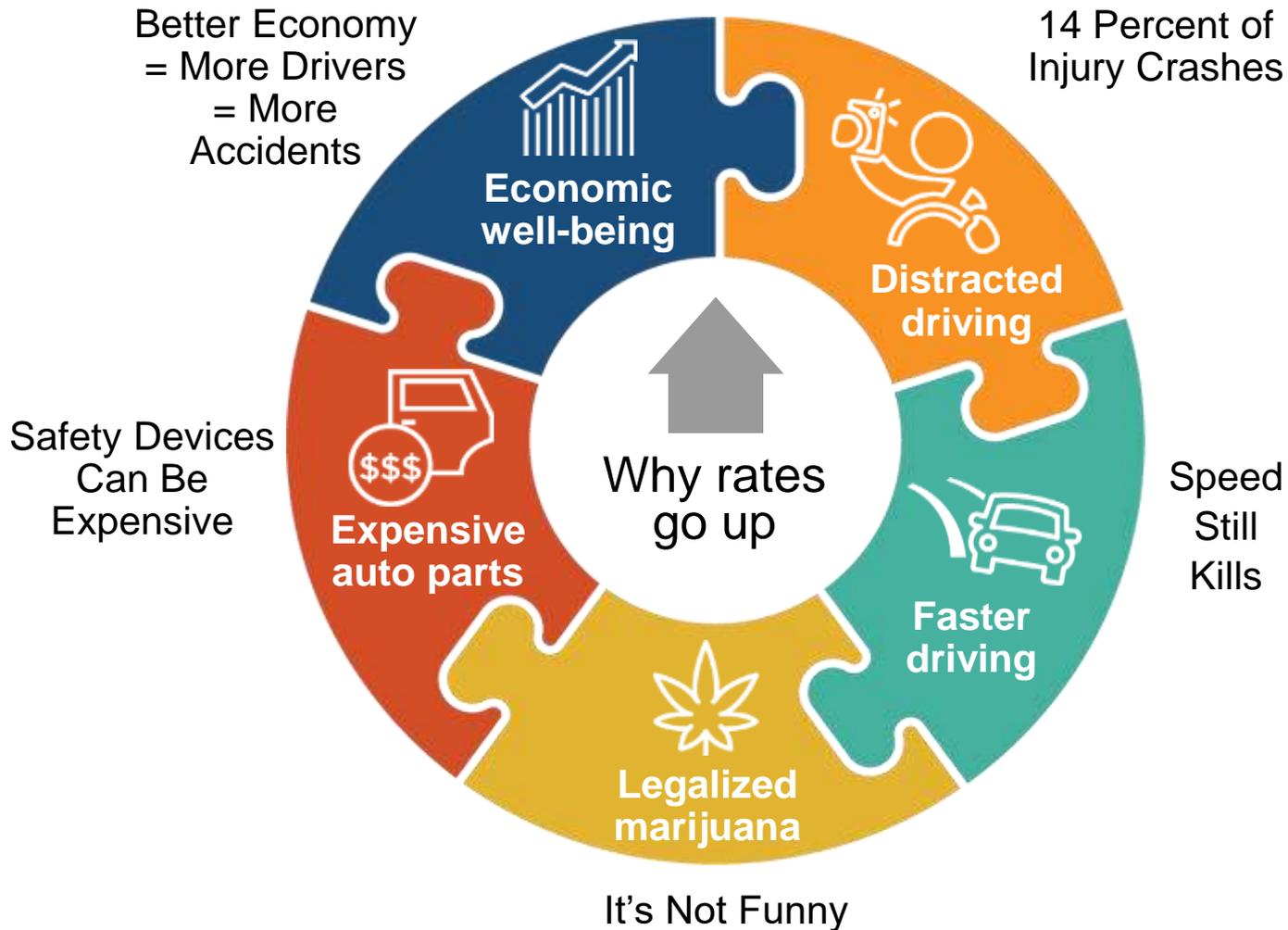


The Great Recession and High Fuel Prices Helped to Temper Claim Severity, But These Forces Have Clearly Reversed, Consistent with Experience from Past Recoveries.

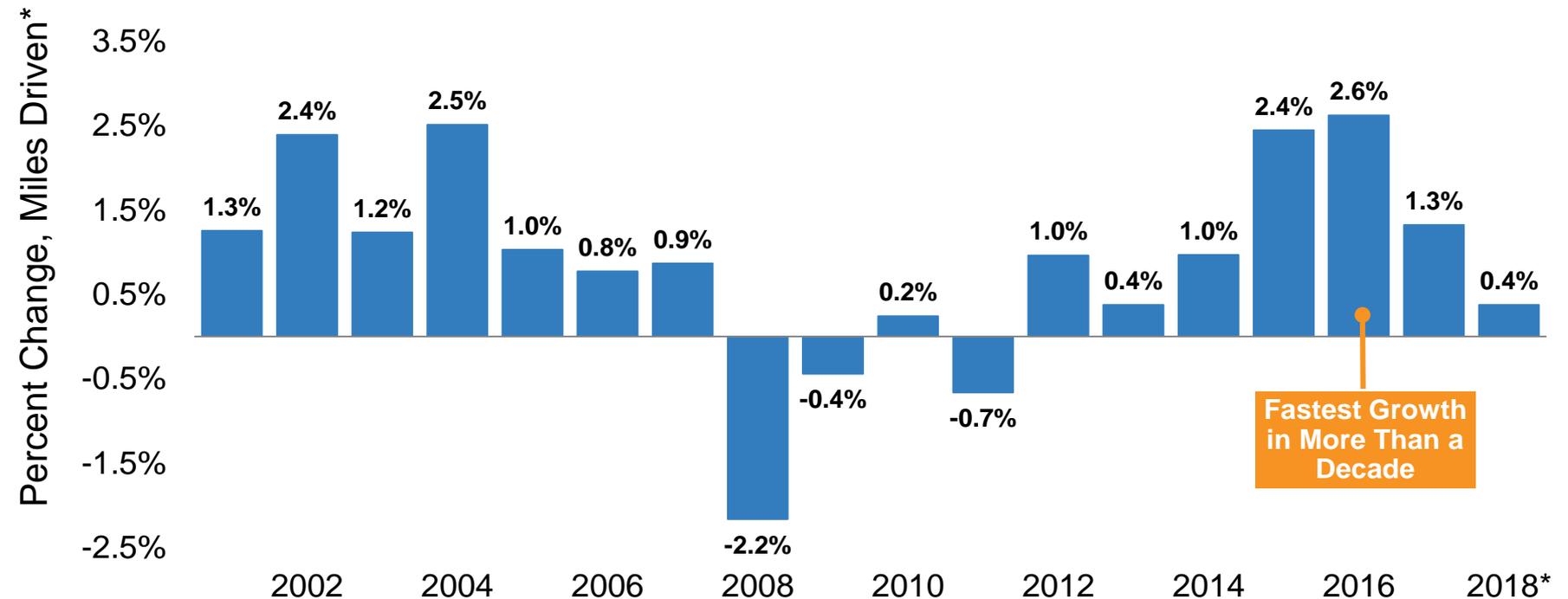


*Four Quarters Ending in September.
Source: Fast Track Monitoring System

Road Safety



America is Driving More Again

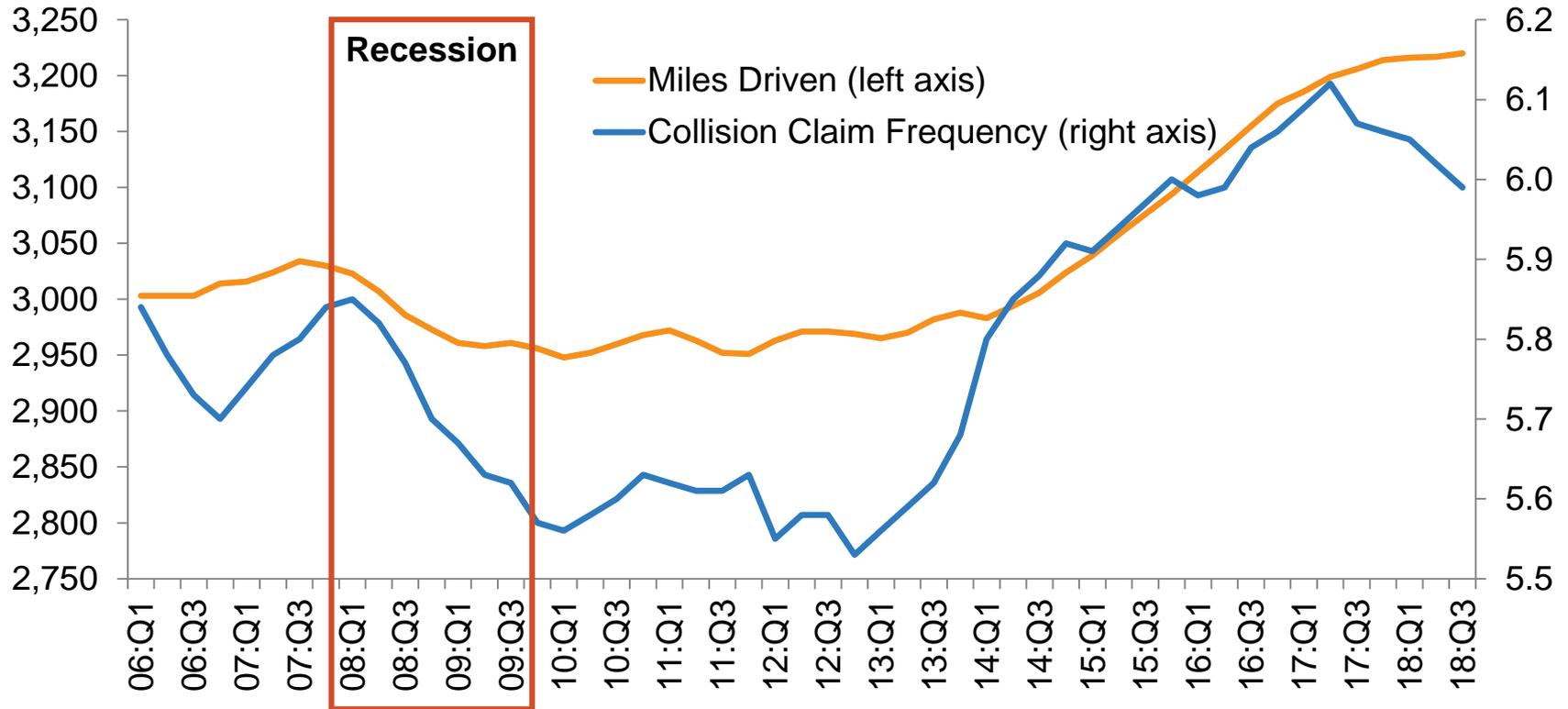


Tremendous Growth In Miles Driven. The More People Drive, The More Frequently They Get Into Accidents.

More Miles Driven => More Collisions

Billions of Miles Driven in Prior Year

Overall Collision Claims Per 100 Insured Vehicles



The More Miles People Drive, the More Likely They are to Get in an Accident, Helping Drive Claim Frequency Higher.

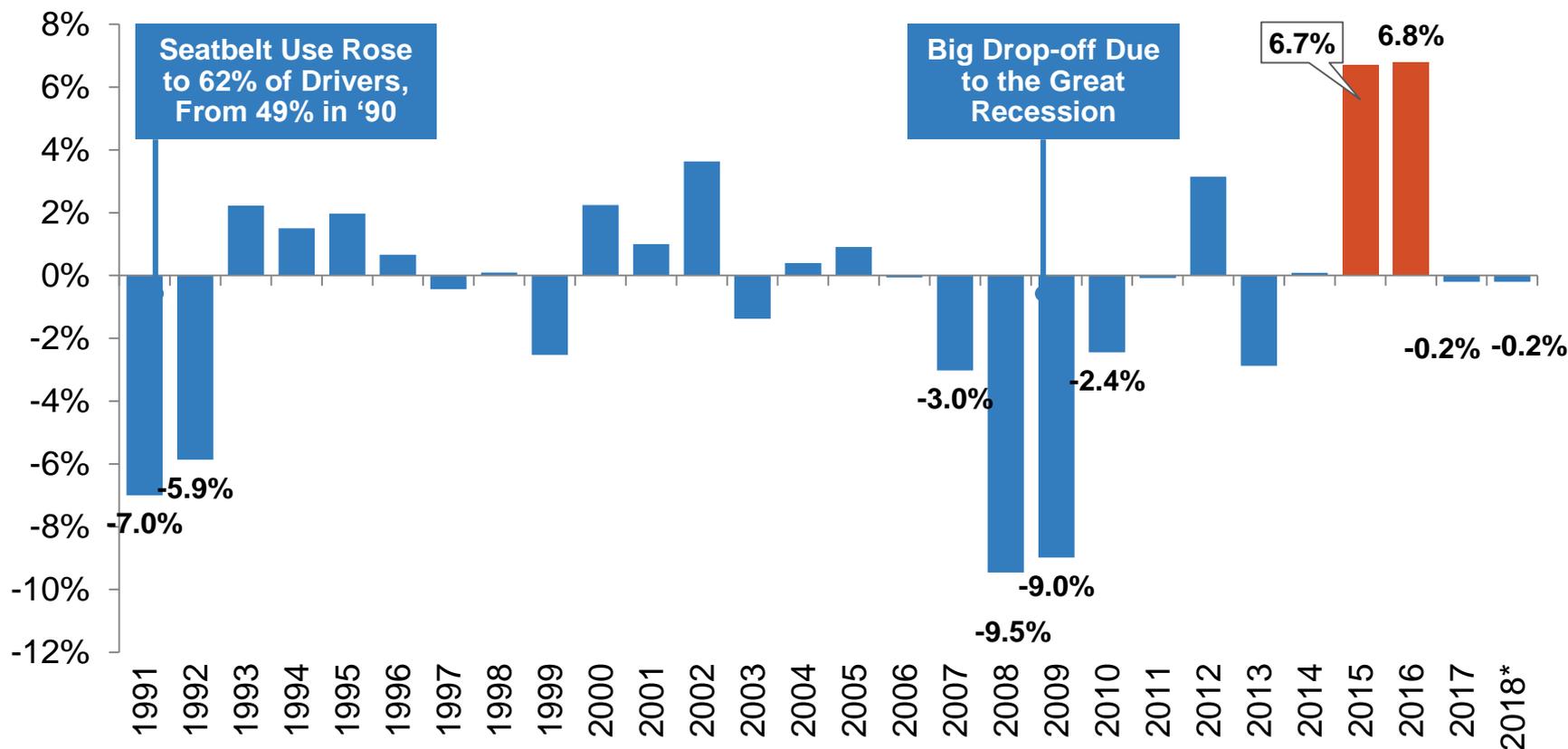


Sources: [Federal Highway Administration](#); Rolling four-quarter average frequency from Fast Track Monitoring System; Insurance Institute for Highway Safety; Insurance Information Institute.



Severity: Driving Fatalities Have Peaked

Annual Change in Motor Vehicle Deaths



Driving Has Been Getting Safer for Decades, But Recent Trend is Discouraging— over 40,000 Deaths in 2016



Sources: National Safety Council, Insurance Information Institute.
*2018 estimate of 40,000 deaths

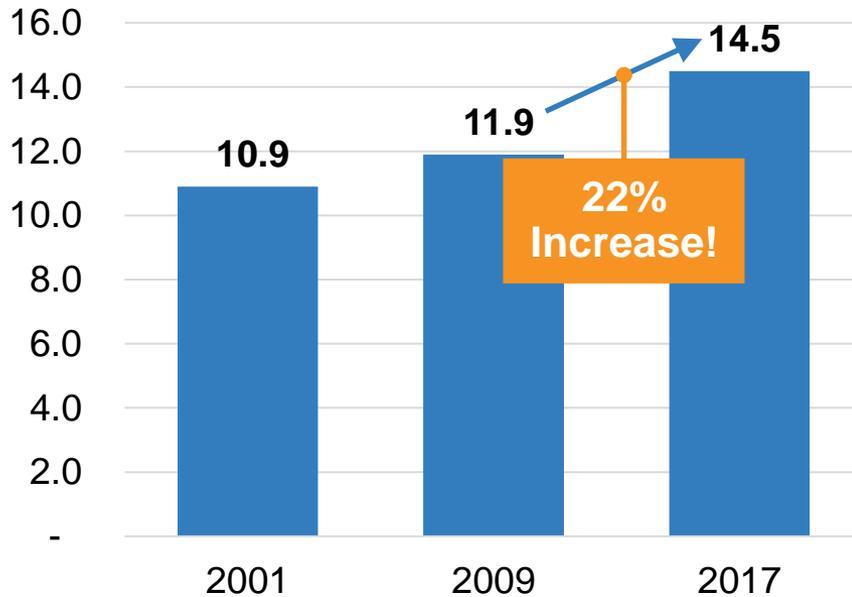


Auto Repair: Complexity Grows

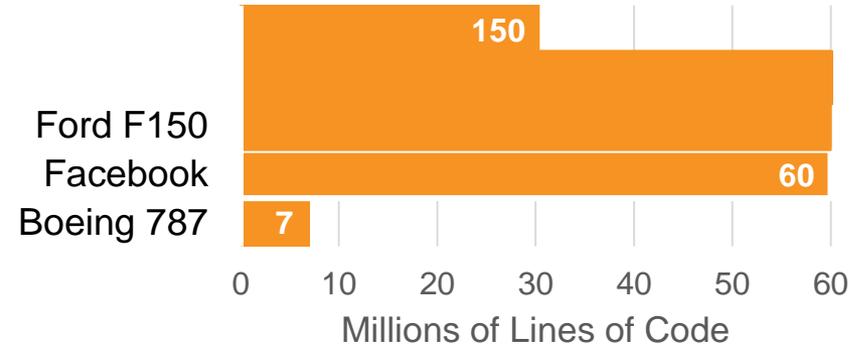
More Cool Stuff to Fix

More Parts, More Labor: Higher Costs

Parts/Collision Claim on Current Year Car



Electronics Add to Cost, Complexity



- ▶ Electronics: 40-50% of cost of vehicle
 - ◆ Pre-repair scan: \$63
 - ◆ Post-repair scan: \$93
 - ◆ Calibration labor: sublet at \$150
 - ◆ OEM: 98% of camera/sensors



* Property Damage Only.

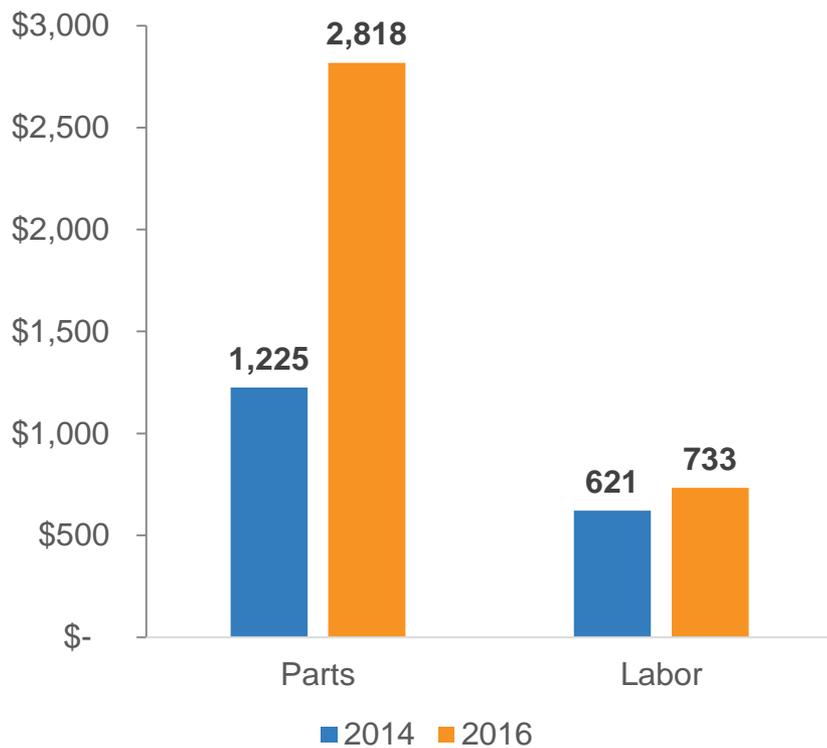
SOURCES: CCC Information Services; Ford Motor Co.;



Fixing a Bumper

... On an Entry-Level Luxury Car (~\$35K)

2014 Cost vs. 2016 Cost



What Has Changed?

| | 2014 | 2016 |
|-------------------------|------|---------|
| Grille: Distance Sensor | \$0 | \$2,818 |
| Headlamp Assembly | 394 | 918 |
| Mechanical Labor | 0 | 108 |

Fewer Accidents, Higher Costs

- ▲ Parts: 130% Higher
- ▲ Labor: 18% Higher
- ▲ Total cost: \$1,705 higher



2016 vehicle has LED headlights and adaptive cruise control.
SOURCE: Liberty Mutual Insurance.

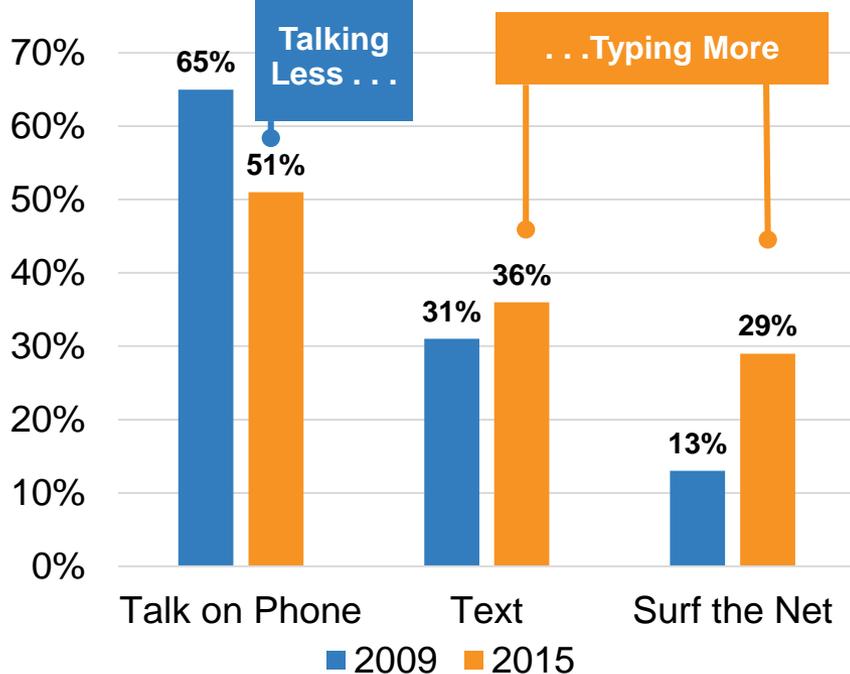


What About Distractions?

It's A Problem. Is It Growing?

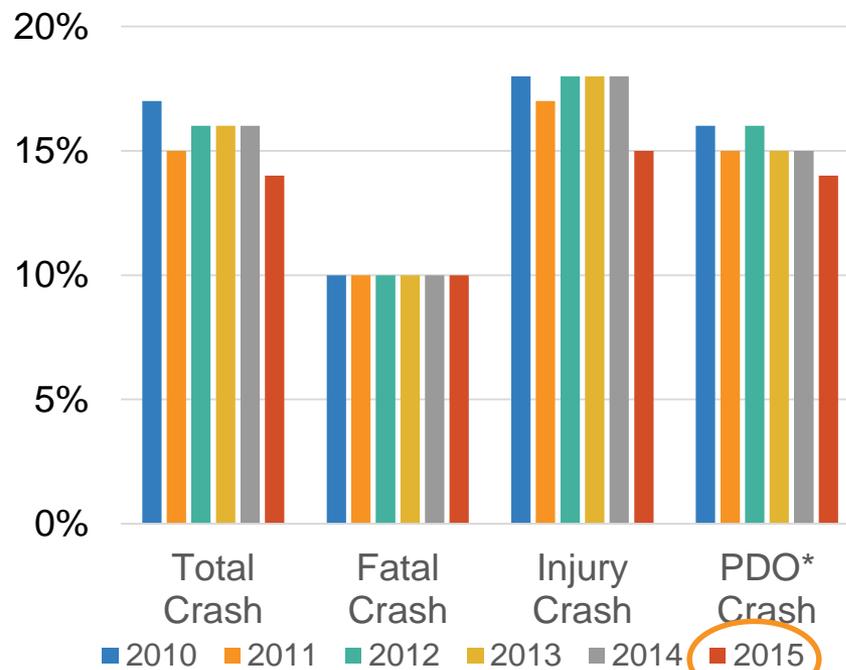
What We Do Behind The Wheel

Percentage of Drivers Who . . .



But Impact Is Not Clear

Percentage of Crashes Involving Distraction



Most Recent Year



* Property Damage Only.

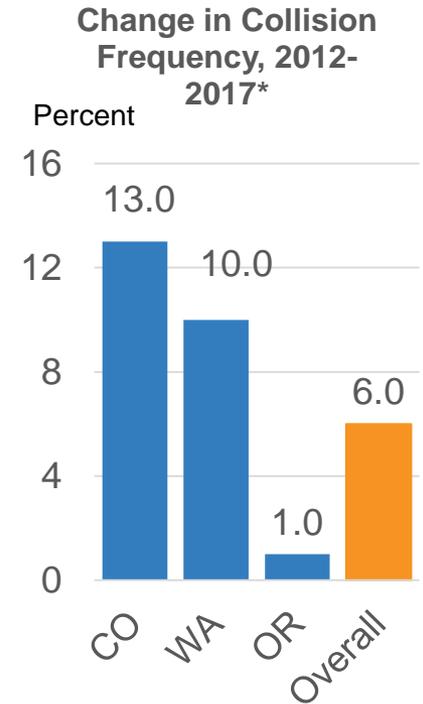
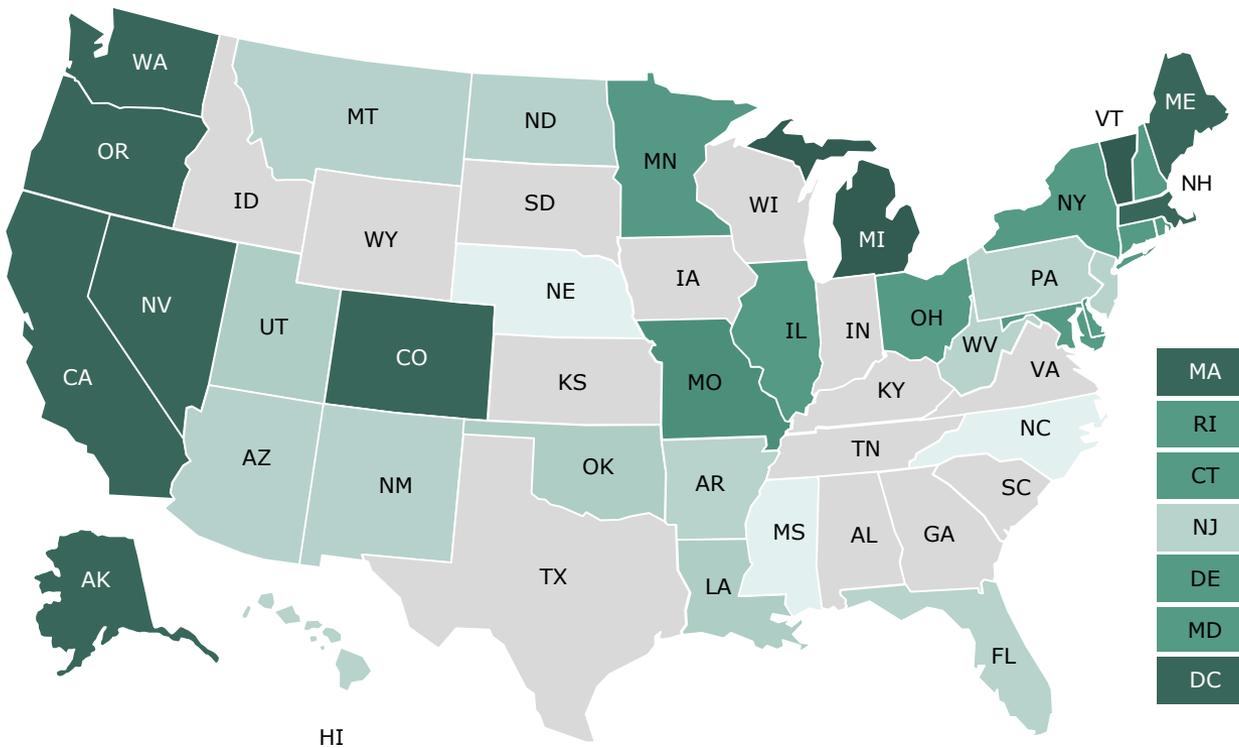
SOURCES: State Farm, National Highway Transportation Safety Administration (distraction.gov)

Weed Spreads Like Wildfire. Insurers Caught in the Middle



Current marijuana laws by state

■ Fully legal
 ■ Medical use legal and recreational use decriminalized
 ■ Medical use legal
 ■ Recreational use decriminalized
 ■ Fully illegal



* Vs. Neighboring States.

Sources: – Map - National Journal; Ballotpedia, 2019
Collision Frequency – IIHS, LEGAL POT: Crashes are up in states with retail sales, October 18, 2018





**INSURANCE
INFORMATION**
INSTITUTE

Thank you for your time
and your attention!