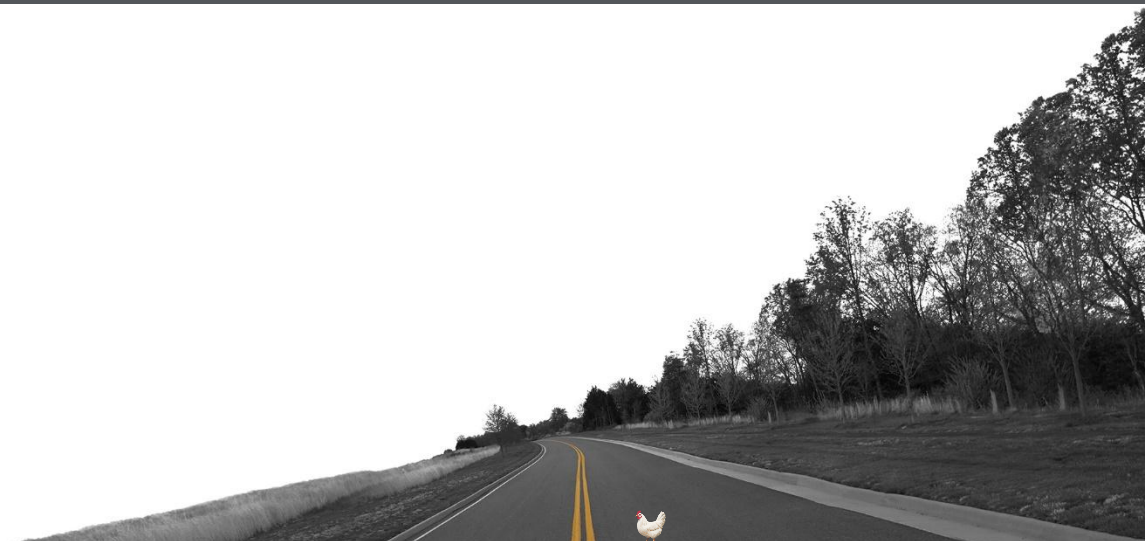
ADAS testing with motorcycles
Emerging insights and research

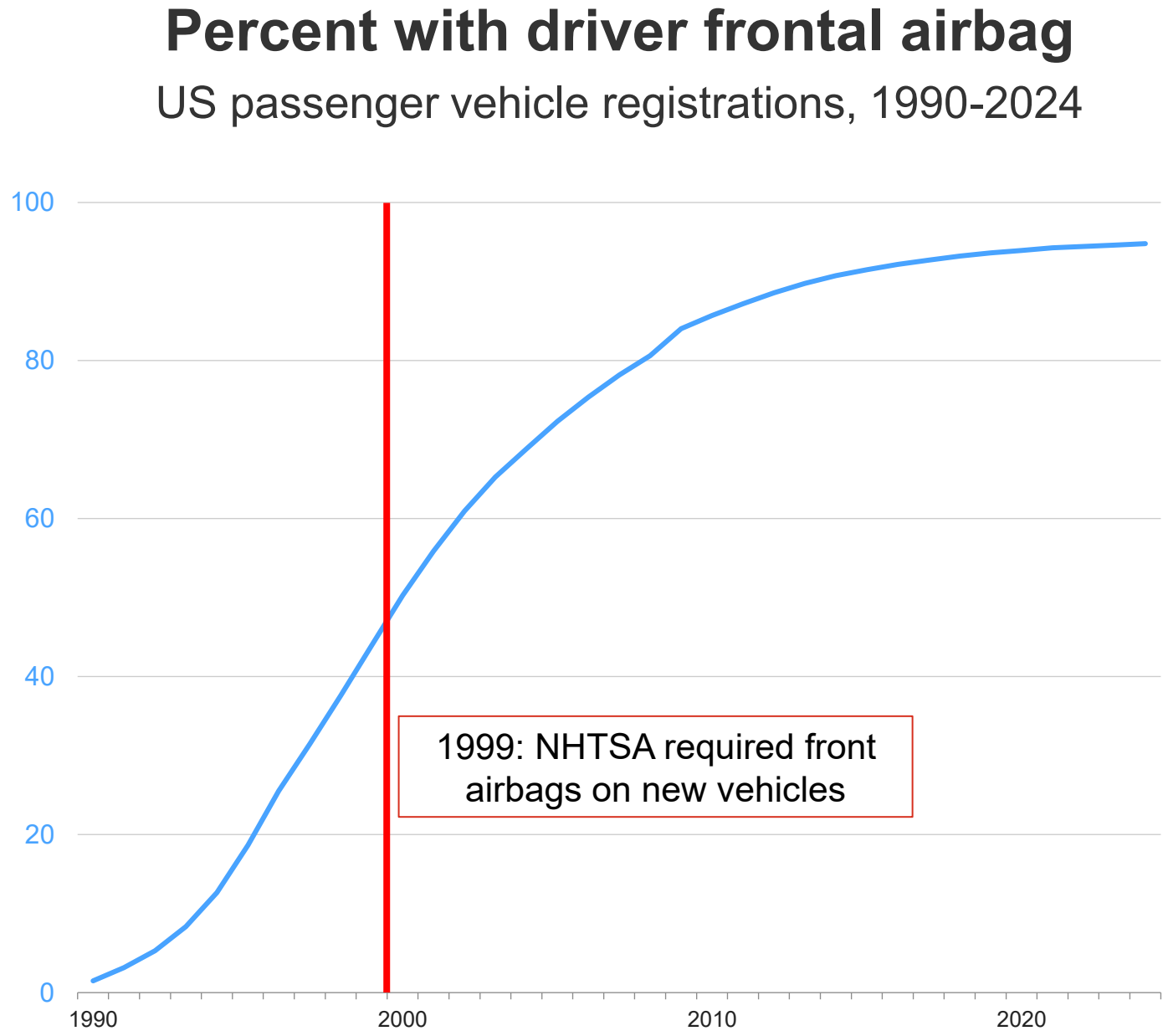
Texas Motorcycle Safety Forum
April 11, 2026

Eric Teoh
Director of Statistical Services



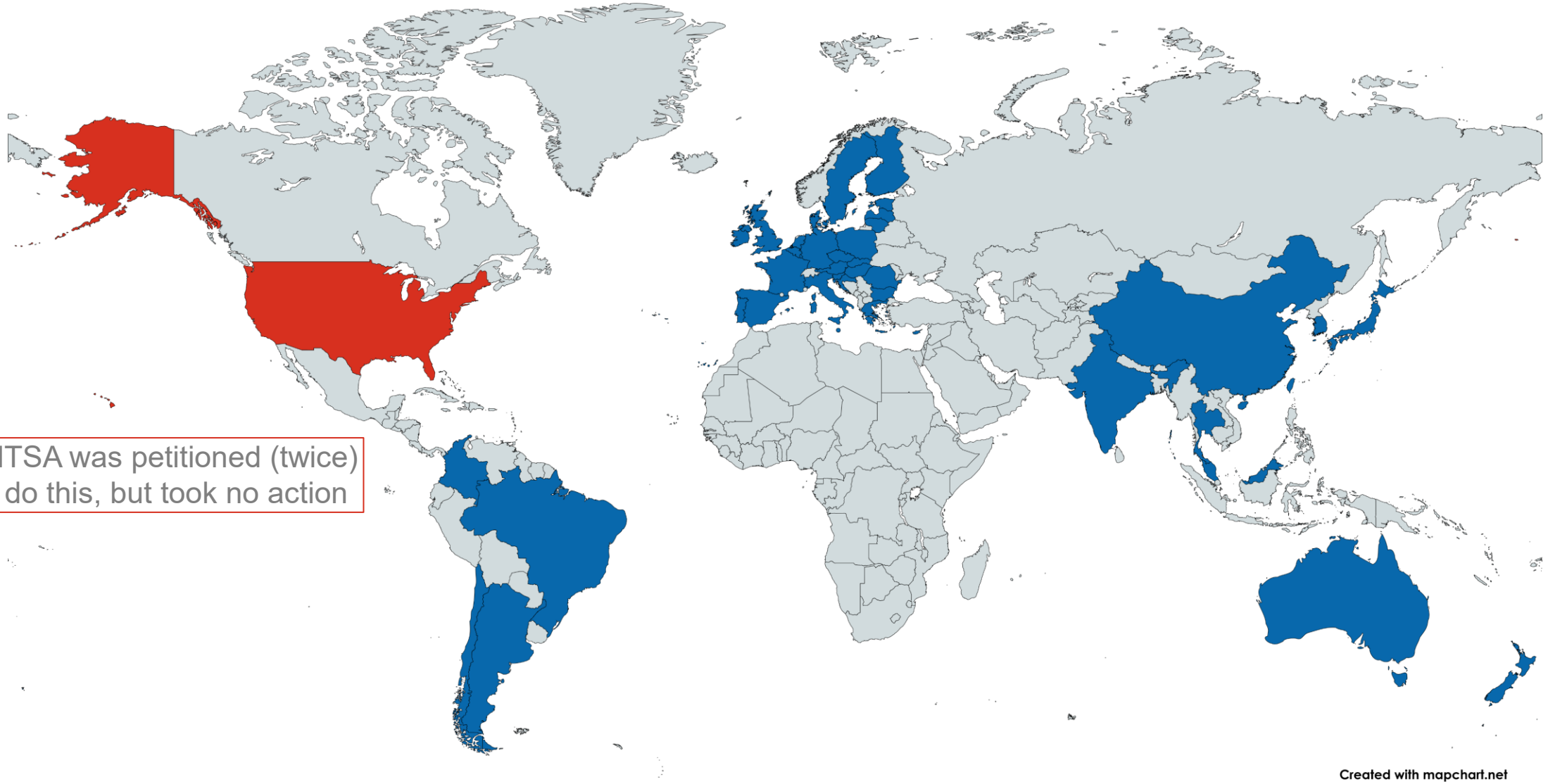
Motorcycle ABS demo test
on IIHS test track

It takes decades for features on new vehicles to become ubiquitous in our fleet



Countries requiring ABS on new motorcycles

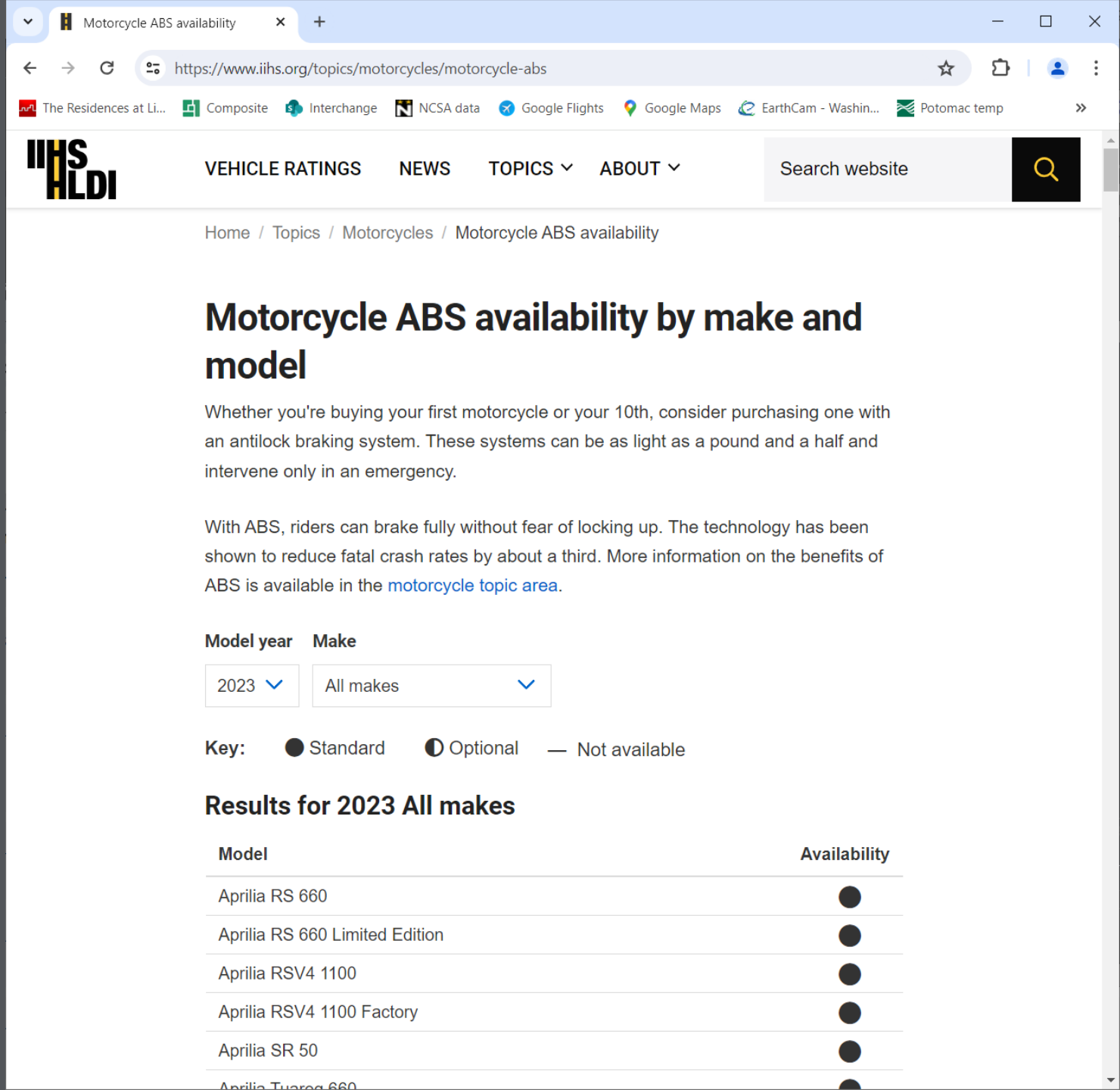
>125cc (usually), on-road



IIHS HLDI

www.iihs.org/motorcycleABS

Lookup tool for consumers



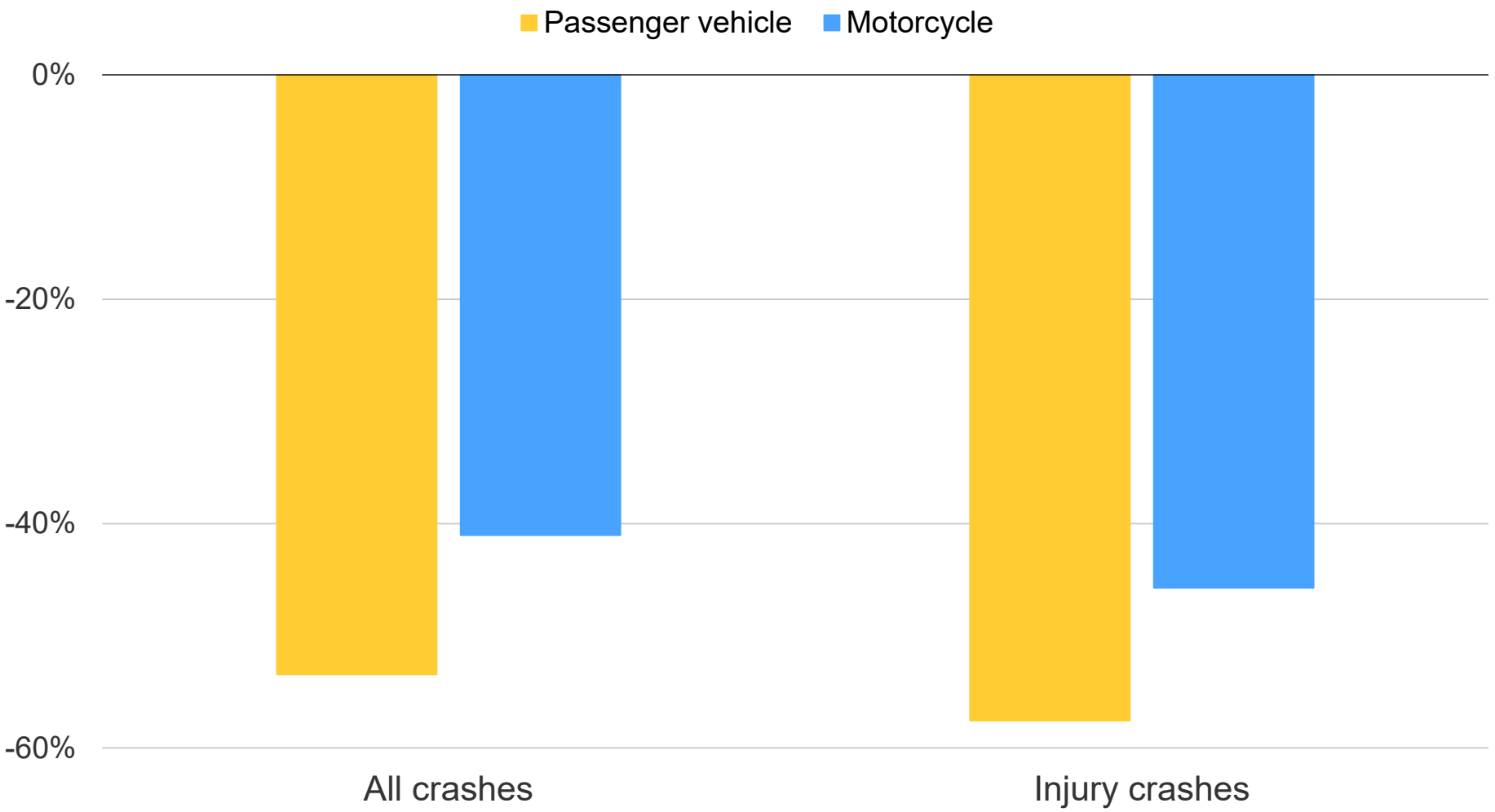
Front crash prevention technology needs to detect motorcyclists

- Failure to see/perceive motorcyclist is a common factor in crashes
- Technology can help, if it works. But is it already helping?
- Incremental improvement

Jacob’s mom rear-ends him, might not have if she had FCW/AEB

AEB already benefits motorcyclists, but can improve

Effects of AEB on passenger vehicles in police-reported rear-end-striking crashes
by type of struck vehicle



Motorcycle crashes potentially preventable by three crash avoidance technologies on passenger vehicles

Eric R. Teoh

Insurance Institute for Highway Safety, Arlington, Virginia

Left-turn crashes and motorcycle safety

Eric R. Teoh

Research Department, Insurance Institute for Highway Safety, Arlington, Virginia

Accident Analysis and Prevention

How can front crash prevention systems address more police-reported crashes in the United States?

David G. Kidd, Eric R. Teoh, Jessica S. Jermakian

If all passenger vehicles had perfect ADAS systems…

(2-vehicle crashes)

- 10% fewer fatal motorcycle crashes
- 22% fewer police-reported motorcycle crashes
- Adding left turn assist functionality could further reduce motorcycle crashes

26% fatal, 13% police-reported

Where technology could improve

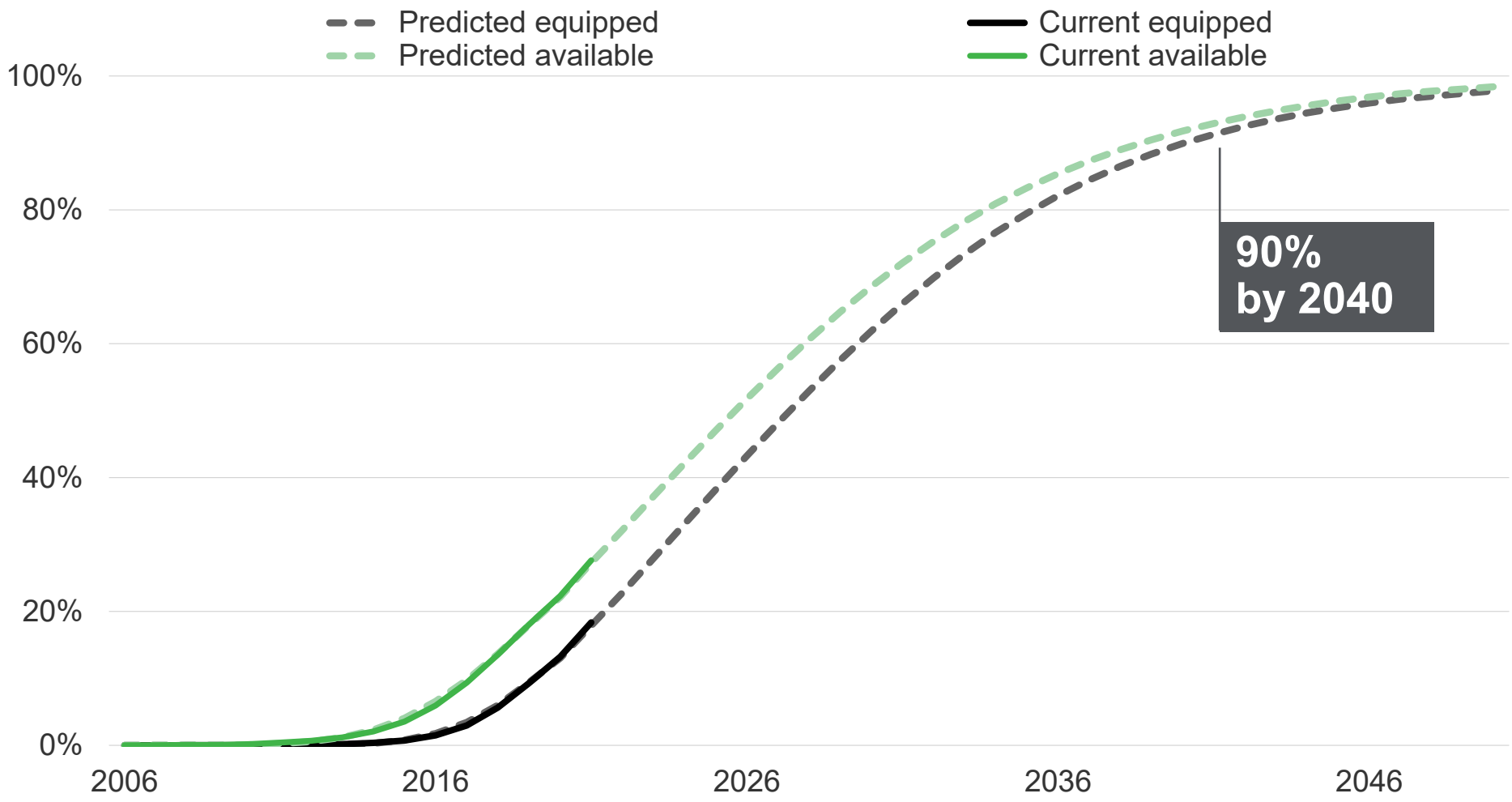
based on real-world crashes

- Higher speeds than old test (12-24 mph)
- Motorcycle and truck struck vehicle

IIHS HLDI

Predicted percentage of registered vehicles with automatic emergency braking

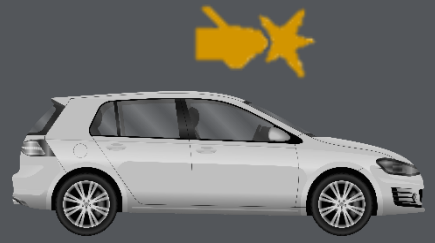
By calendar year



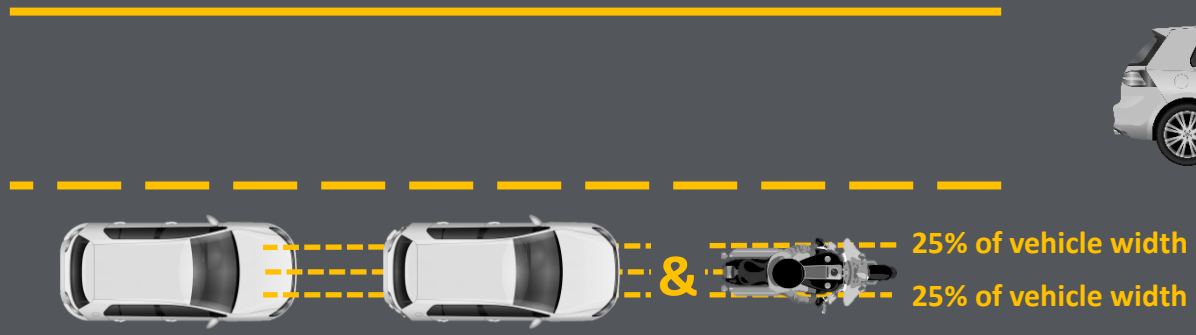
Updated front crash prevention system evaluation

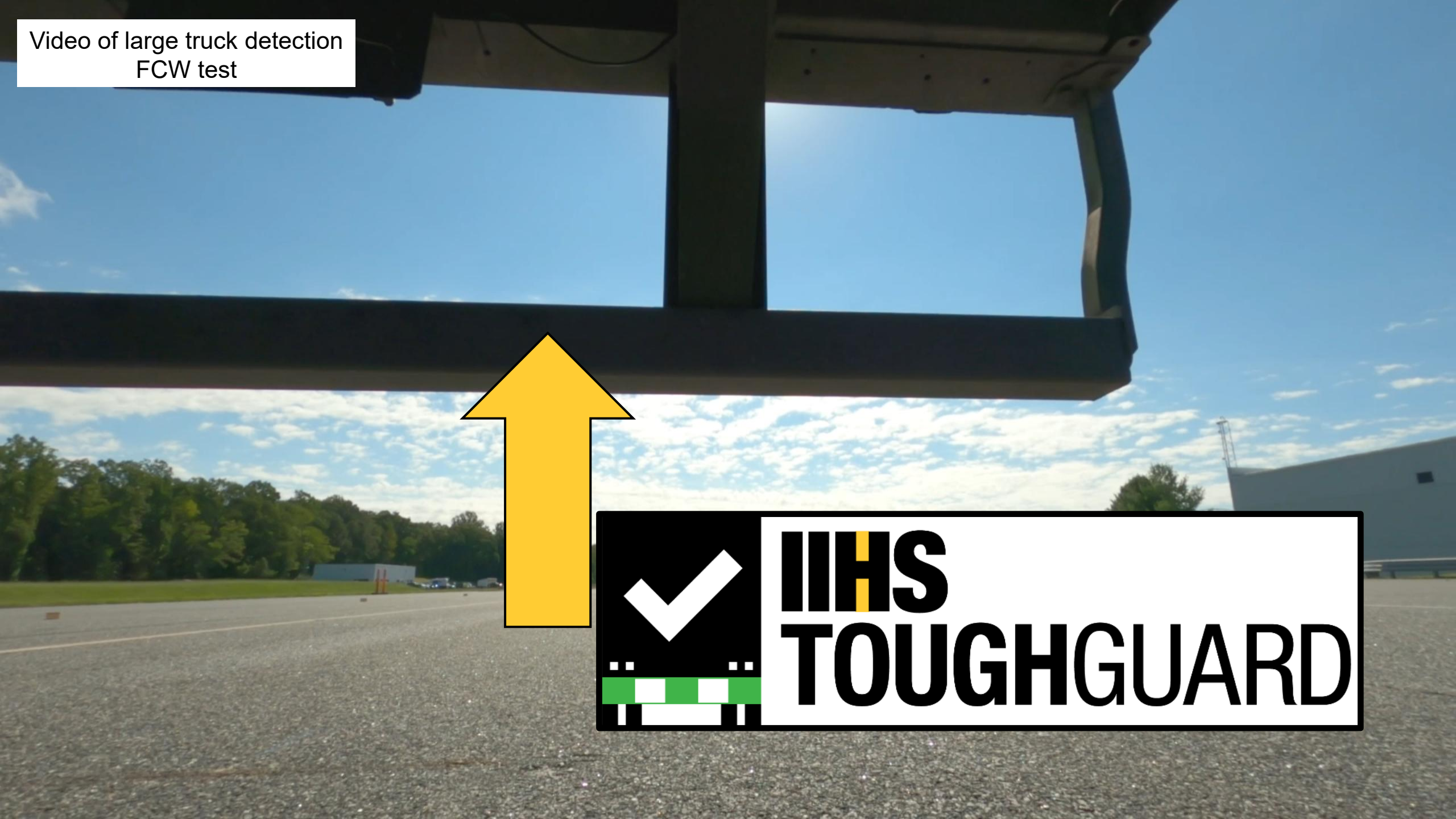
50 km/h

60 km/h



70 km/h




Video of large truck detection
FCW test
IIHS
TOUGHGUARD


Dynamic Research, Inc.
VIRGINIA
IIHS-VRC
Soft Car 3000


VIRGINIA
IIHS-VRC

Video of motorcycle detection
FCW/AEB test

Video of motorcycle detection
FCW/AEB test

Ratings for small SUVs

P Chevrolet Equinox

M Ford Escape

A Honda CR-V

M Hyundai Tucson

M Jeep Compass

G Good A Acceptable M Marginal P Poor

P Mazda CX-5

P Mitsubishi Outlander

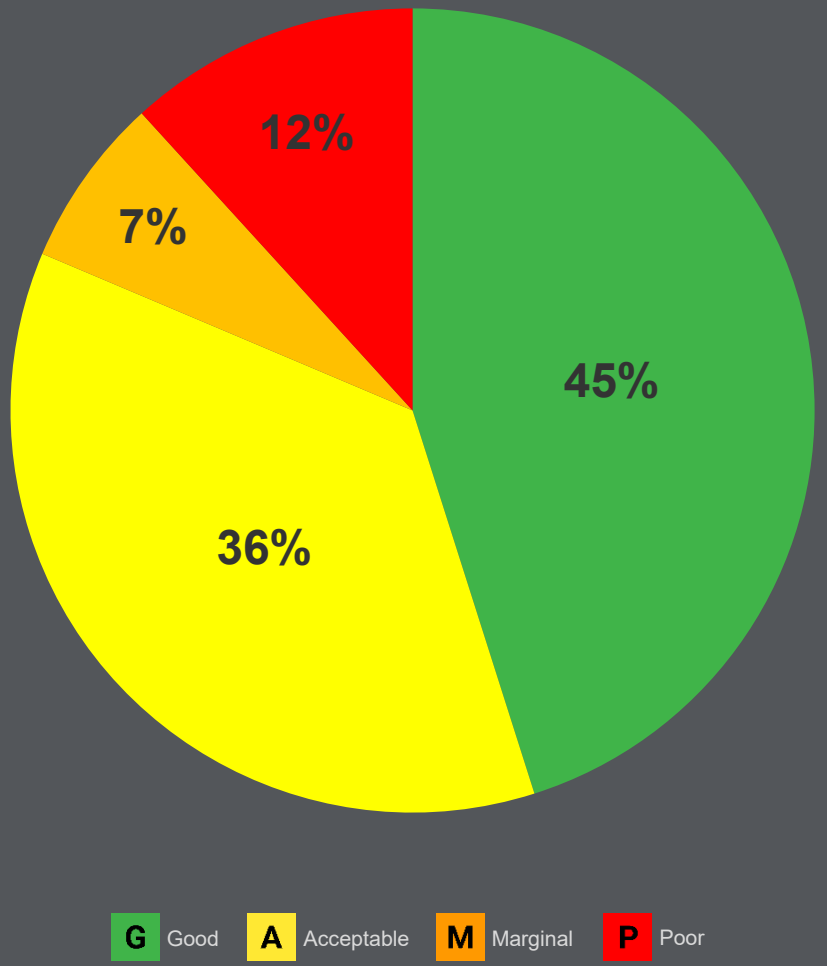
G Subaru Forester

A Toyota RAV4

Volkswagen Taos P

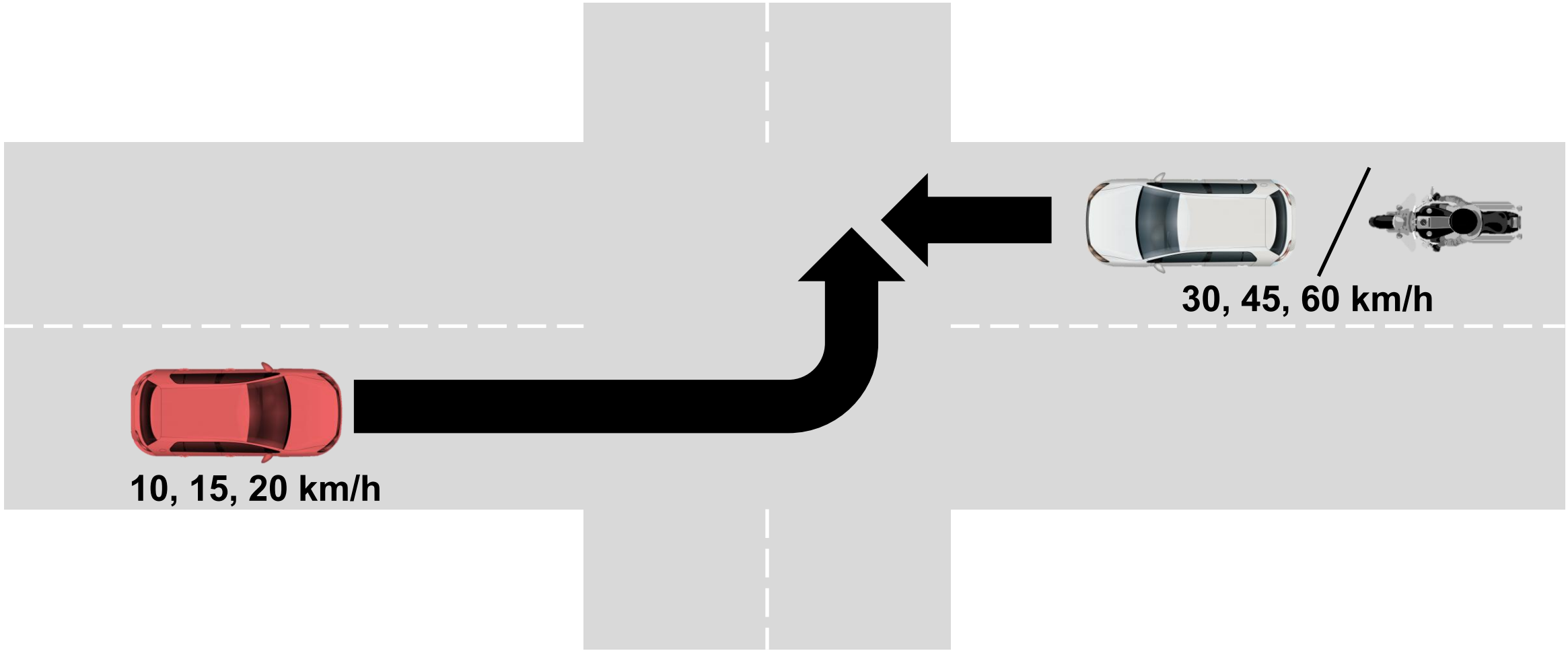
Front Crash Prevention 2.0 Ratings

2026 Model Year (102 vehicles)



Left turn assist is hugely promising

Euro NCAP, ASEAN NCAP, C-NCAP, C-IASI, ANCAP testing
IIHS is considering




Video of left turn assist test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Insurance Institute for Highway Safety
Highway Loss Data Institute

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THANK YOU

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30x30
Reduce roadway fatalities 30% by 2030