

# The Effectiveness of Electronic Stability Control: US Experience

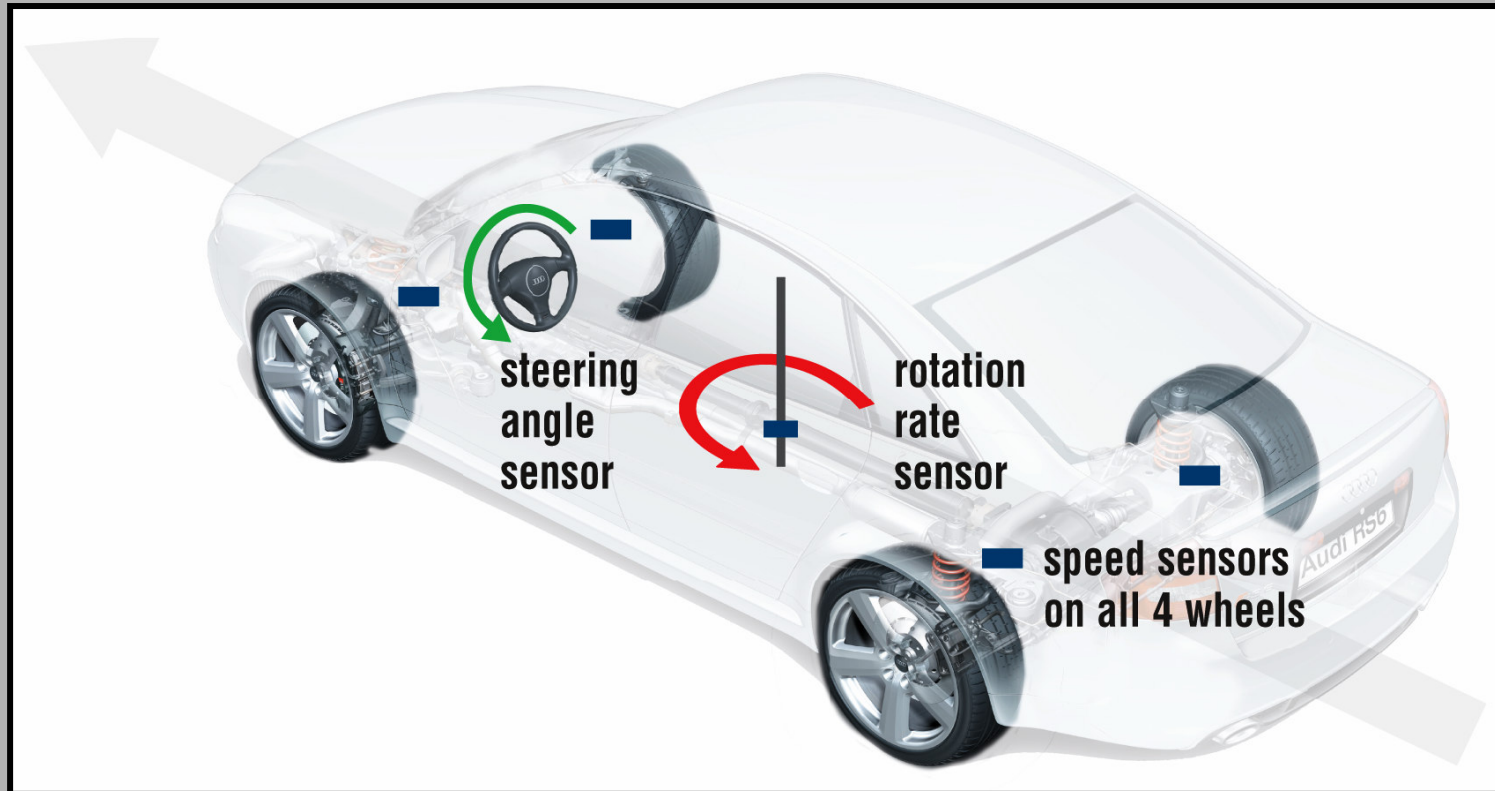
Launch of eSafetyAware! 'Choose ESC!' Campaign  
Rome, Italy ◆ May 8, 2007

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# What is Electronic Stability Control (ESC)?



**ESC is an extension of ABS, which has speed sensors and independent braking for each wheel. Additional sensors monitor whether the driver is asking the vehicle to turn and if it is turning.**

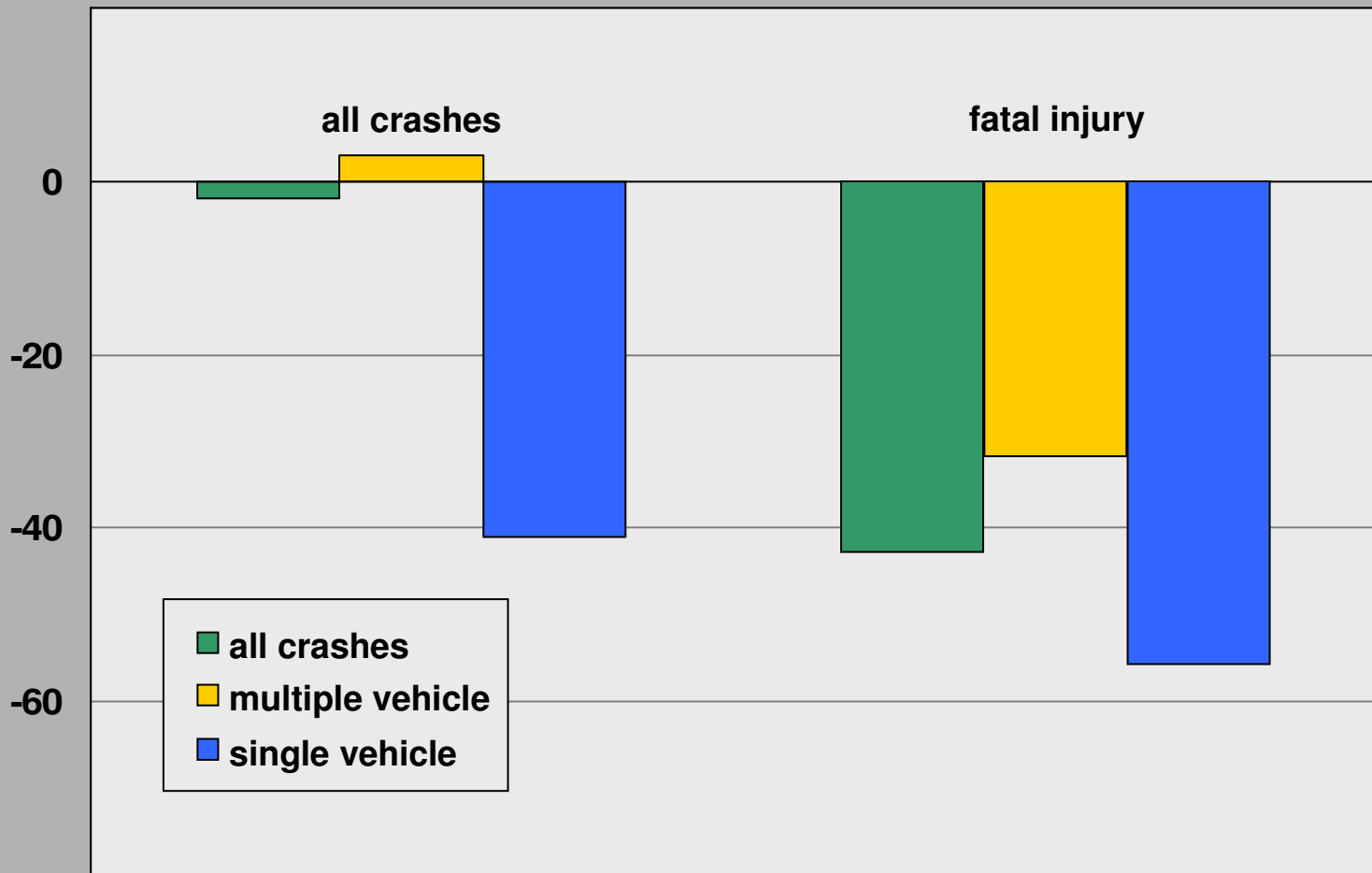
# Effectiveness of Electronic Stability Control (ESC)

## Methods

- ◆ Comparison of crash rates per registered vehicle year for cars and sport utility vehicles (SUVs) with standard ESC vs. same make/series vehicles with optional or no ESC
- ◆ 1998-2003 model vehicles from Acura, Audi, BMW, Cadillac, Chevrolet, Lexus, Mercedes, Mitsubishi, Saab, Toyota, and Volkswagen

# Effects on crash risk

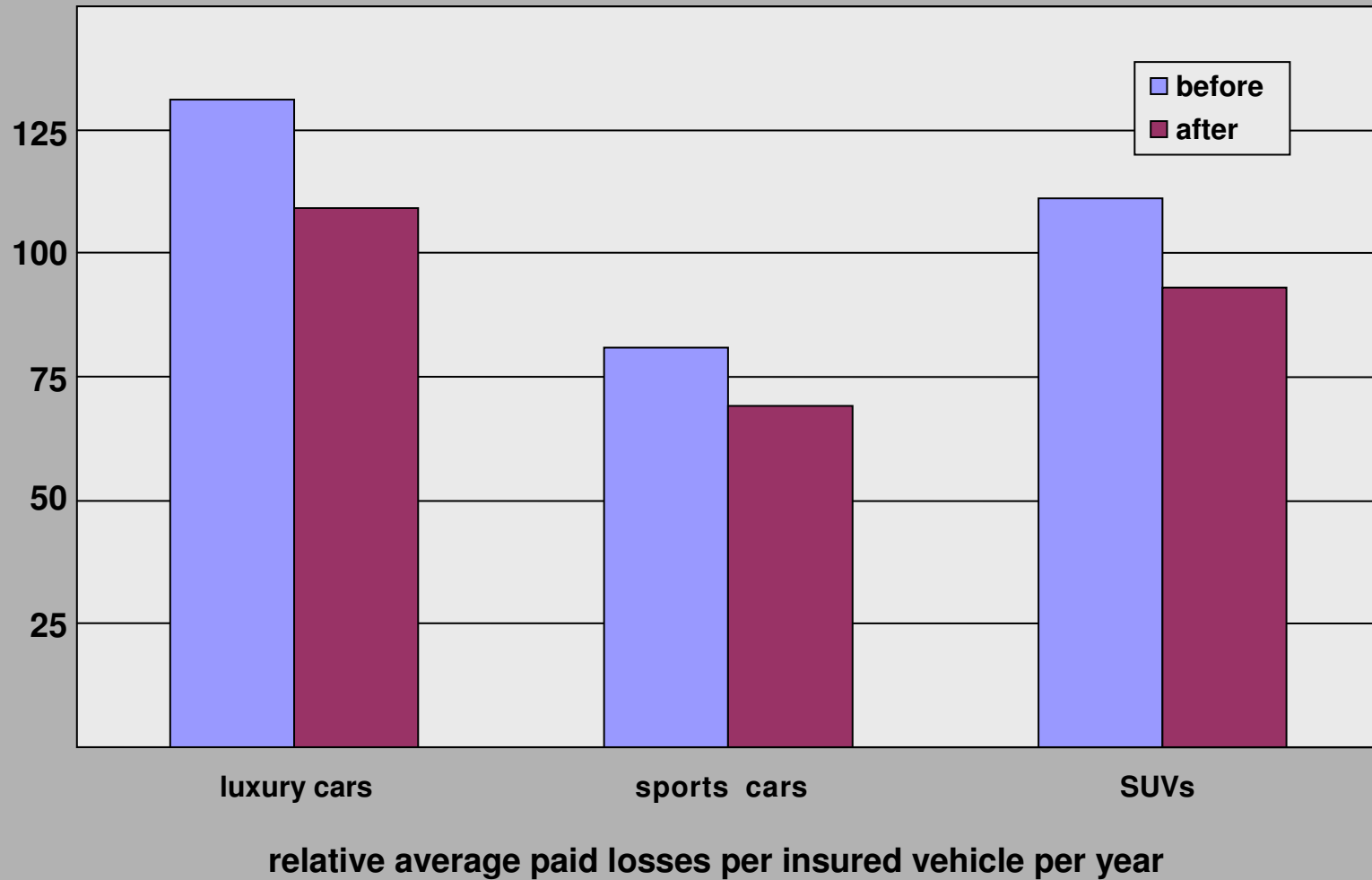
Percent change in crash rates for vehicles with standard ESC vs. optional or no ESC



# Single-vehicle fatal crashes were reduced under various conditions

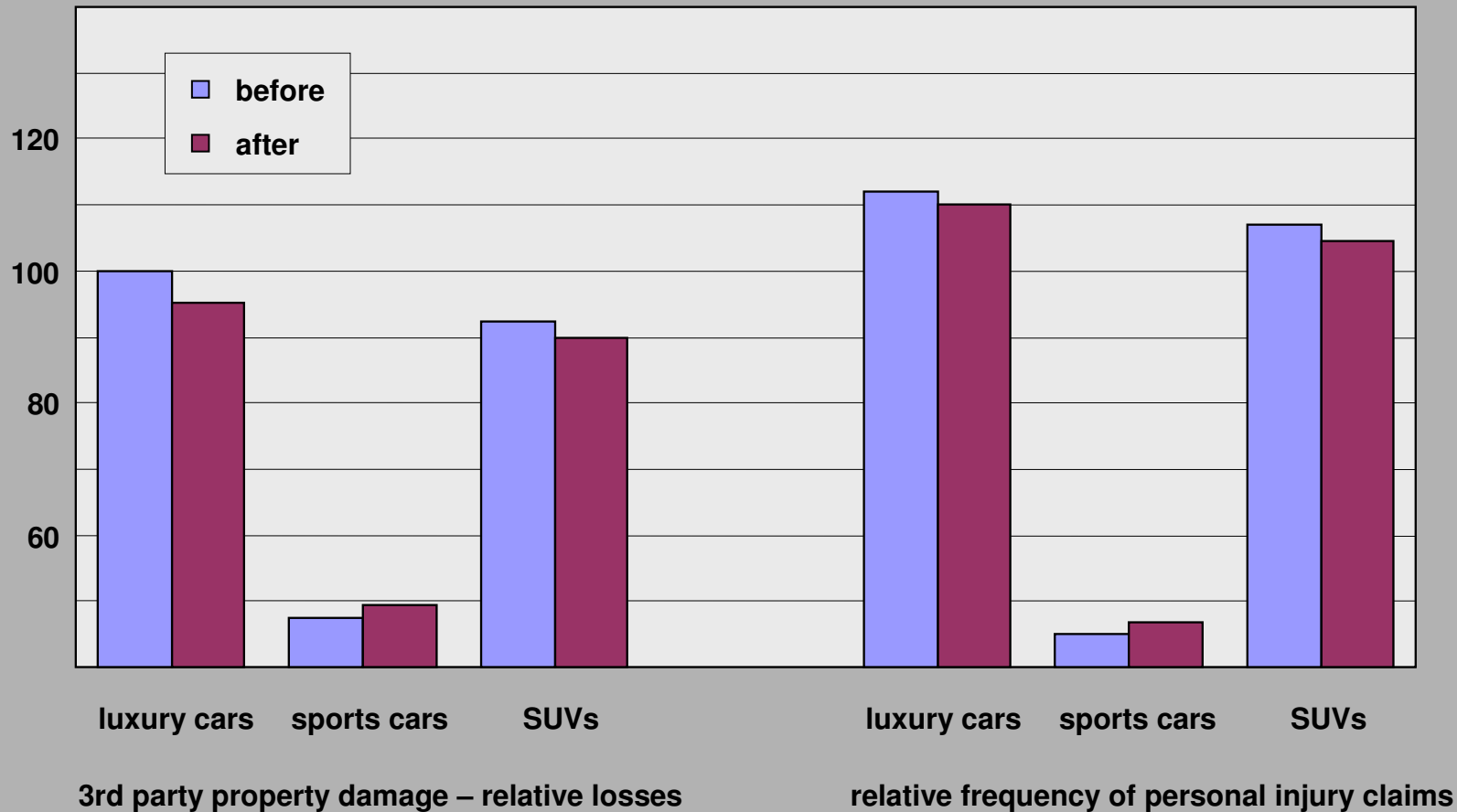
- ◆ Cars and sport utility vehicles
- ◆ Straight roads and curves
- ◆ Adverse weather and dry roads
- ◆ High speed limits and low

# 1<sup>st</sup> party property damage insurance losses were 15-17% lower with ESC



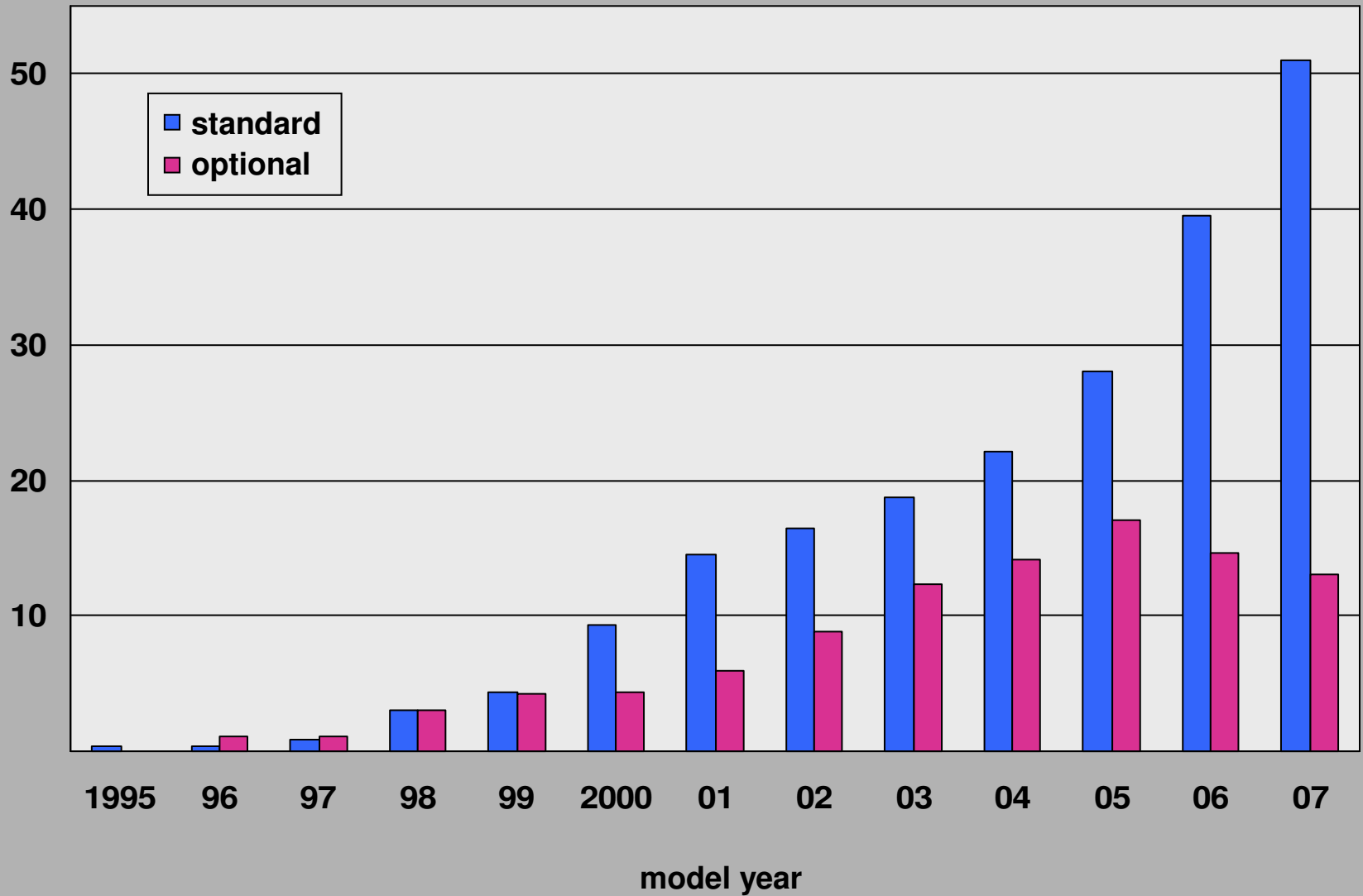
100 = average for vehicles of same type

# 3<sup>rd</sup> party property damage insurance losses and 1<sup>st</sup> party injury losses were little different with ESC



Luxury car results are relative to all other luxury cars. Sports car results are relative to all other sports cars.  
 SUV results are relative to all other midsize/large 4WD SUVs.

# Percent of vehicle models with ESC in U.S.



# Brand names for electronic stability control in the United States

- ◆ Vehicle stability assist
- ◆ Dynamic stability control
- ◆ Electronic stability program
- ◆ StabiliTrak
- ◆ AdvanceTrac
- ◆ Vehicle dynamic control
- ◆ Dynamic stability and traction control

# Percent of parents who said various safety features were necessary in teenagers' vehicles

Minnesota, North Carolina and Rhode Island; February-May 2006

driver airbag	79
passenger airbag	58
antilock brakes	41
seat belts	19
side airbags	11
bumper strength	2
electronic stability control	1
didn't consider safety	10

ESC not a popular response

**For more information:**

**[www.iihs.org](http://www.iihs.org)**

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