



# Real-world benefits of car safety technology

Automakers are accelerating the rollout of technology designed to avoid crashes and improve road safety. Here's a look at selected crash avoidance features, their prevalence and real-world safety effects, according to analyses by the Insurance Institute for Highway Safety and Highway Loss Data Institute.

PUBLISHED JULY 26, 2019

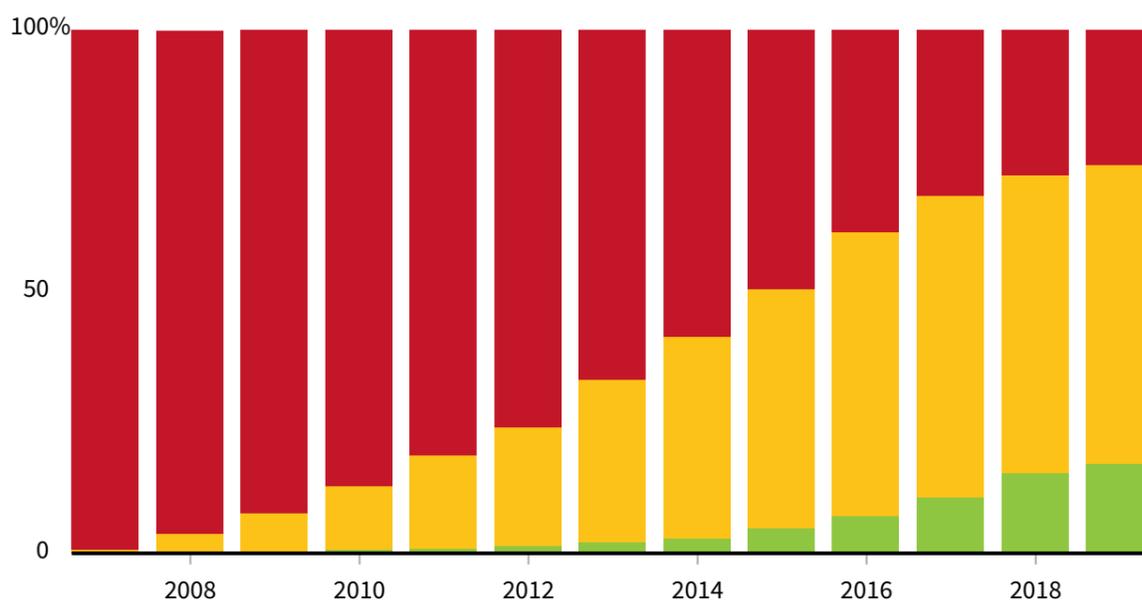


## Blind spot warning

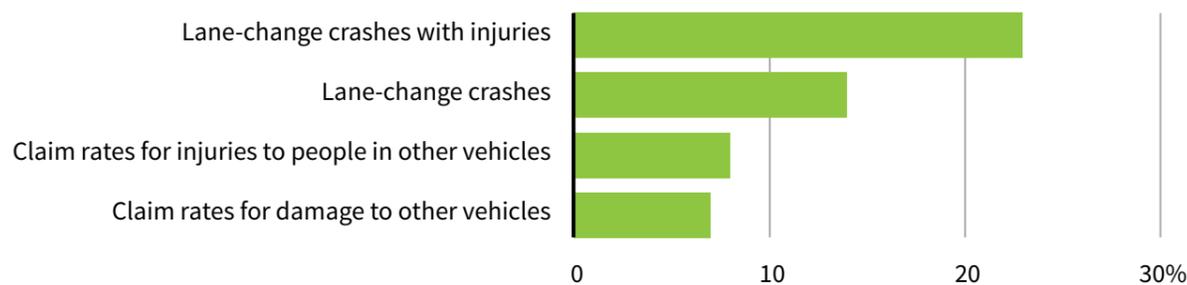
Blind spot technology detects and warns of vehicles drivers are unable to see alongside their car. Depending on the manufacturer, the system provides visual, audible or tactile alerts, such as steering wheel or seat vibration, to alert drivers that it is unsafe to change or merge lanes.

### Proportion of vehicle models

Standard    Optional    Not available



### Reduction in the rate of accidents



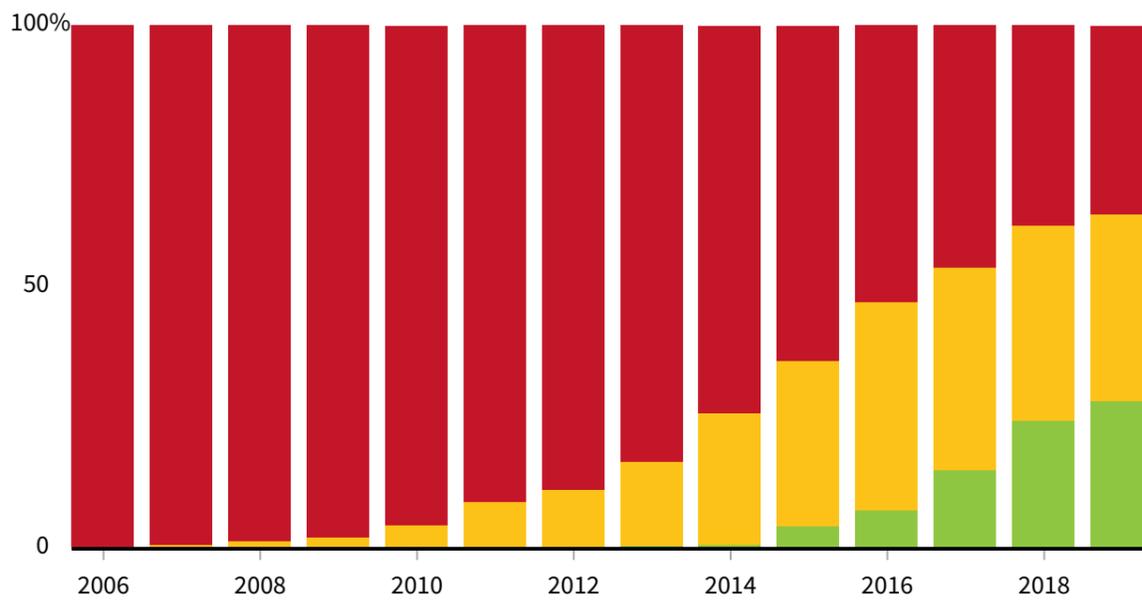
## Forward collision warning

## with auto-emergency braking

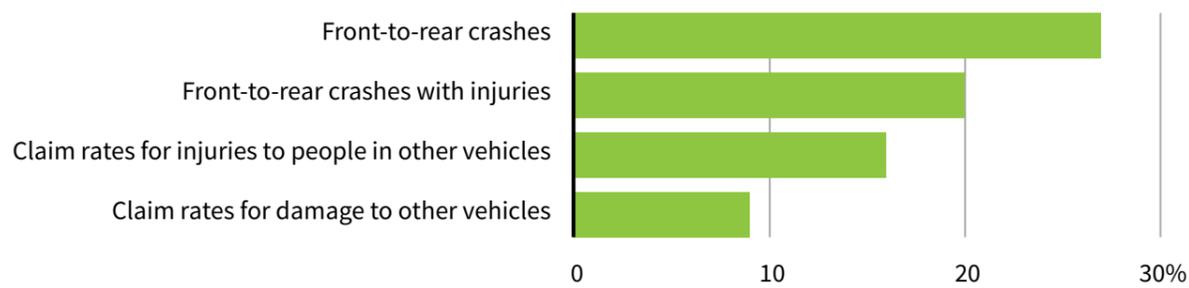
Using cameras and other sensors, including radars or laser, forward collision warning systems alert drivers with an audible, visual or haptic cue if they are closing in too quickly on a car or object ahead. Advanced systems featuring automatic emergency braking can stop a car to avoid a collision at slower speeds, or reduce the collision force at higher speeds.

### Proportion of vehicle models

Standard    Optional    Not available



### Reduction in the rate of accidents

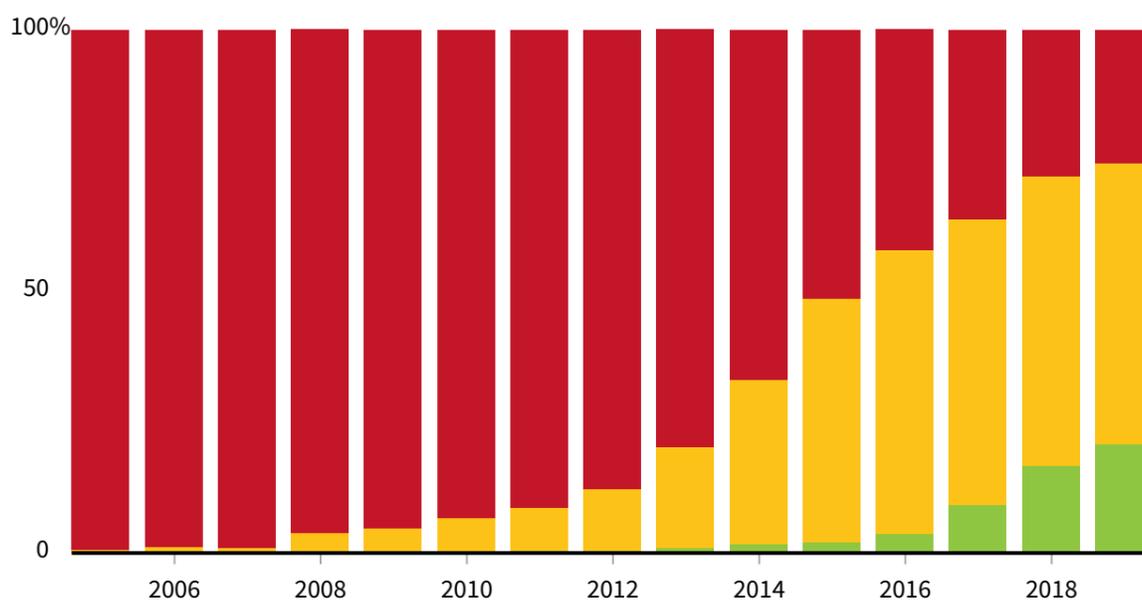


## Lane departure warning

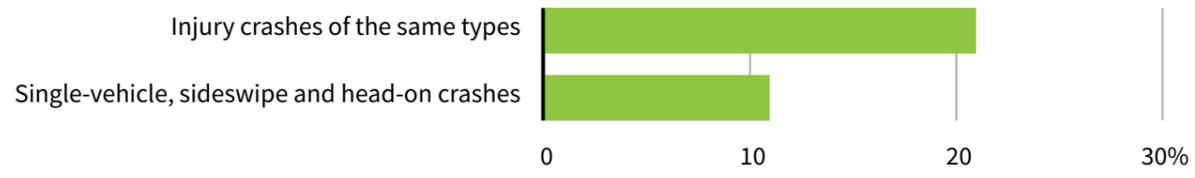
On roads with clear markings, lane departure warning systems can alert drivers if their car begins to drift out of a lane to avoid crashes. Using cameras to monitor striped and solid lane markings, the feature alerts drivers with visual, audible or haptic cues. Use of the turn signal overrides lane departure warnings.

### Proportion of vehicle models

Standard    Optional    Not available



### Reduction in the rate of accidents



Note: Accident reduction rates are analyzed by comparing rates of police-reported crashes and insurance claims for vehicles with and without the technologies as of June 2019.

Sources: Insurance Institute for Highway Safety; Highway Loss Data Institute

By Sirui Zhu; Illustration by Wen Foo

REUTERS GRAPHICS