



**MIKE MCCUE MAKES TIME TO READ  
THE WALL STREET JOURNAL.**

**FIND OUT WHY**

**THE WALL STREET JOURNAL.**  
*Read ambitiously*

# THE WALL STREET JOURNAL.

This copy is for your personal, non-commercial use only. To order presentation-ready copies for distribution to your colleagues, clients or customers visit <http://www.djreprints.com>.

<http://www.wsj.com/articles/self-driving-cars-could-cut-down-on-accidents-study-says-1425567905>

## TECHNOLOGY

# Self-Driving Cars Could Cut Down on Accidents, Study Says

Report predicts mass adoption of auto-piloted vehicles beginning in about 15 years



Attendees sit in the self-driving Mercedes-Benz F 015 concept car at the International CES in January. Every major auto maker as well as technology companies like Google and Uber are working on autonomous vehicles. *PHOTO: ASSOCIATED PRESS*

By **MIKE RAMSEY**

Updated March 5, 2015 12:17 p.m. ET

Widespread embrace of self-driving vehicles could eliminate 90% of all auto accidents in the U.S., prevent up to \$190 billion in damages and health-costs annually and save thousands of lives, according to a new report by consulting firm McKinsey & Co.

The study, compiled after interviews with dozens of industry officials, predicts mass adoption of auto-piloted vehicles beginning in about 15 years and initial implementations early next decade.

Autonomous or semiautonomous vehicles are becoming a bigger focus at auto companies such as Daimler AG's Mercedes-Benz and technology giants, including Google Inc. and Uber Technologies Inc. Their promise has become a central theme in an industry scrambling to improve vehicle safety and revolutionize the core of an automobile.

“Autonomous vehicles and the path toward them is one of the most shaping trends in the auto industry today,” said Hans-Werner Kaas, a senior partner in McKinsey's automotive practice.

Installations of some of the most sophisticated active safety gear on passenger cars built in the U.S. are modest but rising, said automotive information website WardsAuto.com. In the 2014 model year, 1.4% of new vehicles had adaptive cruise control, up from 1.1% in 2013; 8.4% had lane-departure prevention technology, compared with 3.4%; and 10.1% had blind-spot alert, compared with 6.3% the prior model year.

---

*‘Autonomous vehicles and the path toward them is one of the most shaping trends in the auto industry today.’*

—Hans-Werner Kaas, senior partner in McKinsey's automotive practice

---

McKinsey's view that fully autonomous vehicles will begin to dominate roads by 2030 isn't a sure bet. In 2000, for instance, many auto executives and research firms predicted hydrogen fuel-cell powered vehicles would be a prevalent form of transportation by 2020, but some car companies have backed away from that technology.

Several auto executives, including Tesla Motors Inc.'s Elon Musk, have forecast that a fully autonomous car will be ready in five years.

General Motors Co. and Renault SA are working on autonomous cars and introducing

features that put more control of a vehicle in software.

But the obstacles to full implementation across the millions of miles of public roads in America or other markets are high.

Robotics professor Ryan Eustice, who is working on autonomous vehicle technology at University of Michigan, said “the idea has been a little bit oversold in terms of having the problems solved.”

Mr. Eustice said vehicles still can't be relied on to perform correctly in dynamic driving situations or in bad weather, off major routes or where maps may be out of date.

The McKinsey study predicts that insurance companies will shift their focus to technical failures and away from driver risk profiles over time.

It also suggests a massive shift in the automotive business model, resulting from pay-for-use rather than ownership of vehicles, and it also forecasts that autonomous vehicles will advance robotics development because of common components.

**Write to Mike Ramsey at [michael.ramsey@wsj.com](mailto:michael.ramsey@wsj.com)**

---

Copyright 2014 Dow Jones & Company, Inc. All Rights Reserved

This copy is for your personal, non-commercial use only. Distribution and use of this material are governed by our Subscriber Agreement and by copyright law. For non-personal use or to order multiple copies, please contact Dow Jones Reprints at 1-800-843-0008 or visit [www.djreprints.com](http://www.djreprints.com).