Preparing for a revolution

Our roadways are the site of a revolution. Long-dreamed-of self-driving vehicles are becoming a reality. Already, most newer cars use machine vision to support advanced driver assistance systems like lane keeping and lane departure warning. But for this driving revolution to continue to evolve, our infrastructure must evolve as well. Roadway and vehicle materials are being designed for human eyes as well as for the cameras, radar and lasers of Connected and Automated Vehicles (CAVs) so they can interpret the surrounding environment and quickly respond.

Smarter vehicles rely on smarter infrastructure.

Advanced Road Markings
Durable, high-contrast pavement markings like 3M™ Connected Roads Contrast Tape Series 380ADAS help to deliver more consistent detection by human and machine vision than non-contrast products.

Brighter, Smarter Signs
Bright, retroreflective traffic signs help provide better readability, which results in more accurate navigation and faster decision-making for drivers.

A different kind of bright: Fluorescent
How signage made from 3M™ Diamond Grade™ DG³ Reflective Sheeting can help improve safety

3M™ Diamond Grade™ DG³ Reflective Sheeting can make a difference by making signage brighter and more visible in all lighting conditions. Innovative full-cube prismatic technology returns more light to drivers at greater distances.

25-46% crash reduction over a three-to-six-year period, where brighter signs, like 3M™ Diamond Grade™ DG³ Reflective Sheeting, were installed.

Drivers detect fluorescent signs an average of 53 m sooner than their non-fluorescent counterparts during the day.

This significant difference was even larger within the 55-75 age group.

There are places where the number of crashes are higher than average. Common hidden hazards are:
- Sharp corners
- Hills
- Winding roads
- Hidden intersections
- Poor or concealed warning signs

Fluorescent yellow sheeting appears most effective where the roadway geometry or obstructions hide the hazard for which the sign is providing the only warning.