Building the safer roads of tomorrow starts today.

3M™ Connected Roads

The future is closer than you think. Vehicles with assisted-driving capabilities are already on the roads and at 3M, we’re committed to helping make that future a reality. Many of the automated technologies found in cars today use the same infrastructure drivers have relied on to help them safely navigate for years. Our goal is to continue to help improve safety through enhanced infrastructure for both human drivers and automated vehicles.

Reduced crashes
Automated vehicles could reduce 80–90% of accidents caused by human error.

Geater capacity
Smaller lanes for automated vehicles means more space on the road.

Increased efficiency
Better flow through intersections could reduce delays by up to 95%.

Visit 3M.com/ConnectedRoads to see how we’re helping support the safer, more connected roads of the future.

1. Center for Transportation Research, The University of Texas at Austin.

Many challenges on roadways are unexpected and difficult to address for human drivers. But with highly-visible 3M reflective technologies like 3M™ Diamond Grade™ DG3 Sheetting, we can enable both human and machine vision. This additional layer of redundancy can help reduce or eliminate even the edge case incidents where extreme conditions prevent drivers from safely navigating on their own.

Greater Safety: The Driving Force of Automation

While connected and automated vehicles (CAVs) can help eliminate many of the common incidents caused by traffic congestion and day-to-day distractions, the value of supporting automated technologies doesn’t end there.

Sharing a Common Vision

From non-profits to private visionaries, public policy makers and more, our partnerships are critical to helping make this safer, better future a reality. We are engaging with regulatory agencies, academia, OEMs and sensing technology providers around the world to understand challenges from a global perspective and help drive the creation and adoption of comprehensive standards for CAVs and infrastructure.

3M™ Connected Roads technologies are CAV-ready.

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Imagine navigating…

...in bad weather with unclear road markings…

...on curved roads where lines disappear from sight…

...or on lighter surfaces, such as concrete, where white markings alone could blend in.

Temporary Traffic Control

Recommended technology:
3M™ Diamond Grade™ DG3 Fluorescent

Fluorescent reflective materials are highly visible around the clock including day, night, dawn, dusk and inclement weather conditions. The result is greater readability and quicker sign identification, providing automated vehicle assistance in critical areas like roadwork and congestion.

Road Markings

Recommended technology:
3M™ High Contrast Tapes

Combining a darker backing with high-brightness tapes creates visible markings that can be followed by automated vehicle cameras, supporting functions like:

- Lane departure warning
- Left turn assist
- Adaptive cruise control
- Lane keeping
- Traffic jam assist
- High speed automation
- On-highway platooning
- Autopilot

Road Signs

Recommended technology:
3M™ Diamond Grade™ DG3 Reflective Sheeting

The brightness and long-term durability of this sheeting material results in signs that are highly visible at a distance, enabling automated vehicles to capture, process and react to information in real time. This may help enable CAV functions like:

- Traffic sign recognition
- High speed automation
- On-highway platooning
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Returns 58% of light to driver

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**Improve Visibility**

In bad weather with unclear road markings...

...or on curved roads where lines disappear from sight...

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*3M™ Connected Roads technologies are CAV-ready.*
Building the safer roads of tomorrow starts today.

At the core of 3M™ Connected Roads is our mission to bring everyone home safely. Families and commuters. Pedestrians and road workers. We’re pursuing a future of zero deaths on the road. But there are a variety of other advantages to building simple, redundant infrastructure to support the vehicles of tomorrow:

**Reduced crashes**
Automated vehicles could reduce 80–90% of accidents caused by human error.

**Increased efficiency**
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**Greater capacity**
Smaller lanes for automated vehicles means more space on the road.

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