





# Durable high performance solutions from the

leader

in traffic safety innovation

Safety
Mobility
Visibility
Trust

Pavement markings are essential for traffic safety, mobility and guidance. They can help reduce crashes and fatalities,<sup>1</sup> decrease travel times, alleviate congestion and even boost roadway capacity.<sup>2</sup> They're an efficient and effective method of conveying roadway information to drivers, who can read and react to pavement markings without taking their eyes off the road.

3M has been a trusted manufacturer and innovator of pavement markings for nearly 40 years. We've helped make retroreflective technology a standard safety practice on not just pavement markings but traffic signs and work zone devices, as well. While our technologies have raised the bar on retroreflective performance, our industry expertise has helped agencies all over the world make the right choices for meeting their roadway safety and mobility objectives.

- 3M scientists pioneered and advanced the science of retroreflectivity, and our enhanced visibility technologies are incorporated into thousands of products, both consumer and industrial.
- 3M is a global leader in adhesives, coatings, ceramics and polymer technologies, a key to the
  exceptional longevity of our traffic safety products.
- 3M's customized training and technical assistance is unequaled in the industry, helping to lower life-cycle costs and streamline maintenance.
- Because we're a global company with local resources, 3M sales representatives and distribution centers are never far away.

<sup>&</sup>lt;sup>1</sup> Carlson, Park, Andersen (2009). The Benefits of Pavement Markings: A Renewed Perspective Based on Recent and Ongoing Research. *TRB Annual Meeting*.

<sup>&</sup>lt;sup>2</sup> Miller, T.R. Benefit-Cost Analysis of Lane Marking. *Transportation Research Record*, 1334.

## Everything you need to mark the way

From two-lane rural roads and urban highways to high-speed, multi-lane freeways.

Whether you're striping hundreds of miles of long lines or marking a busy urban intersection, the qualities you look for in pavement markings don't change. You need markings that maintain their reflectivity under constant abuse from both vehicles and the elements. You need markings that will stand up through multiple seasons to help you control costs and reduce maintenance. You need markings that are easy to apply, environmentally sustainable and backed by a company you can trust.



3M<sup>™</sup> Stamark<sup>™</sup> Pavement Marking Tapes set the bar for durability, lasting retroreflectivity and long-term value.
 They're available in both permanent and removable versions, standard white, yellow and black colors, pre-cut symbols and legends, and contrast markings for improved daytime visibility.



 3M<sup>™</sup> Liquid Markings—which include high-build paint, polyurea and thermoplastic—take performance to the next level by combining reliable liquid binders with all weather optics.



 3M<sup>™</sup> Raised Pavement Markers are designed for boosting safety on all types of roadways in both snowplow and non-snowplow areas.

All 3M pavement markings have favorable environmental profiles, free of lead chromates and heavy metals, and are manufactured with non-polluting solvents. 3M™ Stamark™ Tapes, All Weather Liquids and Raised Pavement Markers are as easy to apply as they are long lasting, with extended season capabilities that maximize application flexibility.

### See the difference with 3M safety technologies

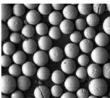


### More durable

A good indicator of pavement marking durability is how well the retroreflective beads withstand harsh roadway conditions. As these photos show, 3M's unique microcrystalline ceramic beads resist chipping and scarring significantly better than conventional glass beads. The result: Your lane and edge markings stay brighter longer, giving drivers the visible delineation cues they need to navigate safely.



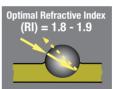
Conventional glass beads after sandblasting.



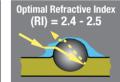
3M microcrystalline ceramic beads after sandblasting.

### More visible

3M blends two different kinds of retroreflective beads together to provide visibility in all weather conditions. 3M's 1.9 index beads (left) deliver optimal dry reflectivity, while 3M's 2.4 index beads (right) provide true reflectivity in the rain.



Beads with Optimal Refractive Index (RI) of 1.9 are ideal for retroreflectivity under dry conditions.



Beads with Optimal Refractive Index (RI) of 2.4 are ideal for retroreflectivity under wet conditions.

### Putting roadway safety on the line

Whether it's high performance reflective sheeting for signs or vehicles, tapes or liquid pavement markings, roadway maintenance services or advanced sign management, 3M has the technologies and expertise to help you improve roadway visibility and safety, reduce long-term costs and conform to the highest government standards in the world.

For more information about 3M Pavement Marking technologies, go to 3Mlines.com. To discuss your specific pavement marking objectives with a 3M representative, call 1-800-553-1380.