

3M™ Linear Delineation System (LDS)

Transportation Safety Division

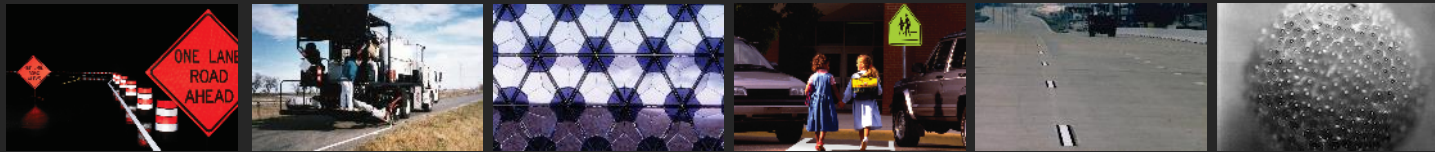


3M Transportation Safety Division History

1930

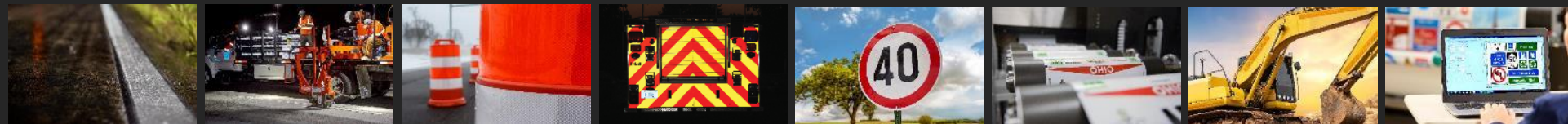


3M invents reflective sheeting and installs the first fully-reflective traffic sign in 1939; reflective technology expands to road markings and license plates.



Microreplication technology improves retro reflectivity and increases day and nighttime sign visibility. Fluorescent technology makes work zone signs and devices and pedestrian crossings more visible during dusk, dawn, and inclement weather.

2020



Wet reflective technology makes road markings visible in the rain; conspicuity markings make trucks and vehicles more visible; digital printing innovations enable enhanced graphics and more efficient traffic sign and license plate production.

3M technology improves the visibility of roadway infrastructure



Signing



Pavement Markings



Temporary Traffic Control

**There's a
need for
continuous
delineation
and long-
distance
recognition**



seeing is
believing



factors related to fatal single- vehicle run-off- road crashes¹

- Curved road segments – 90.2%
- Rural roads – 80.6%
- Roadways with fewer lanes (one or two lanes) – 67.8% (divided), 76.6% (undivided)
- Nighttime (8 p.m. – 6 a.m.) – 74.2%

¹Factors Related to Fatal Single-Vehicle Run-Off-Road Crashes , NHTSA, DOT HS 811 232, November 2009

Applications



Guardrails



Curved Roadways



Concrete Barriers (TTC)



Medians



Tunnel Approaches



Narrow Bridges

3M™ Diamond Grade™ Linear Delineation System



Products

- Fluorescent Yellow
 - 4" x 34"
 - 6" x 34"
 - 1.5" x 31" w/VHB for guardrails)
- Fluorescent Orange
 - 4" x 34" and 6" x 34"
- White – 4" x 34" and 6" x 34"
 - 4" x 34"
 - 6" x 34"
 - 1.5" x 31" w/VHB for guardrails)
- Red
 - 4" x 34"
 - 6" x 34"
- Yellow
 - 4" x 34"
 - 6" x 34"



Fastening Methods

guardrails

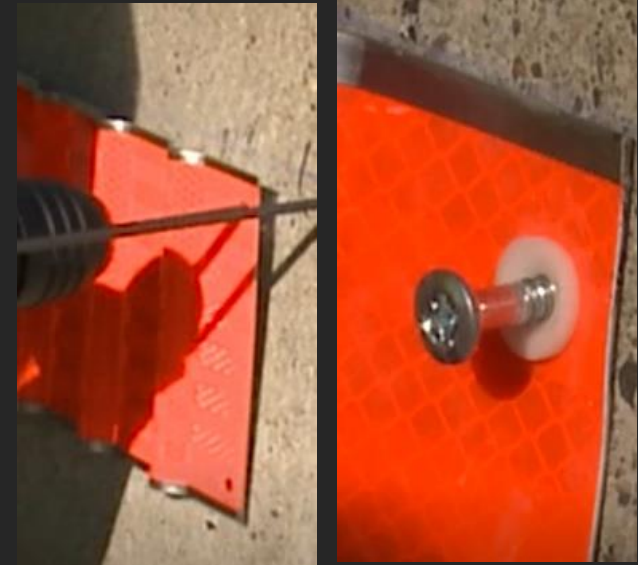


*brackets w/adhesive
or VHB*

concrete barriers



VHB



removable anchors with drill or VHB



powder-actuated fasteners

Questions?

Thank you!