TRAFFIC AND SAFETY INFORMATIONAL SERIES FREQUENTLY ASKED QUESTION #5

Why Aren't There Better and Longer Lasting Stripes on the Road?

To some motorists, it may seem like pavement markings—for example, the stripes on the road that divide traffic lanes—are reapplied frequently. Highway agency personnel can also become frustrated with having to apply and reapply those markings.

No single material or application technique is best for providing long lasting pavement markings. Instead, many factors impact the design of pavement markings and the decisions regarding the materials and application methods used at each location.

Durability and cost of materials

When deciding what material to use for pavement markings, durability and cost are evaluated on a caseby-case basis. Pavement marking materials are generally either paint based or non-paint based. Paintbased markings are nondurable, lasting from six months to two years, and are relatively inexpensive. Non-paint-based markings are durable, generally lasting longer than paint-based markings, but are more expensive than paint-based markings. An example of a non-paint-based marking material used in Iowa is epoxy.

Pavement type and condition

The type of pavement surface must also be considered when choosing pavement markings. For example, asphalt concrete surfaces require either hot-applied thermoplastics or heavy applications of paint-based markings for the markings to be visible. For streets in good condition, more durable pavement markings are generally used. However, for streets in poor condition that may be resurfaced soon, a less expensive paint-based material is usually used.

Weather and season

Marking materials applied during the summer generally last longer than those applied during cold weather. Moreover, some non-paint-based markings are not widely used in Iowa because snowplows have a tendency to remove them.

Amount and composition of traffic

The more traffic on a street, the more quickly the pavement markings deteriorate, with trucks and other heavy vehicles typically wearing pavement markings more quickly than passenger cars. However, over time even common use leads to wear, and even the most durable pavement markings will likely need to be repaired or reapplied at some point.

For more information

For more information, please contact ______.