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STATE HIGHWAY ADMINISTRATOR

June 4, 1992

In Reply Refer To
File No. SW-92-3

Mr. J. L. Butner
State Traffic Engineer
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

Dear Mr. ~~Butner~~: *Lynwood*:

Thank you for your letter requesting information on methods used in North Carolina to treat highways subject to heavy fog.

The following treatments have been used in the past few years on North Carolina highways.

- "Fog Likely Next XX Miles" sign
- "Dense Fog Likely Next XX Miles, Adjust Speed" sign
- Continuous flashers accompanying these signs
- Raised reflective pavement markers on lane and edge lines
- Reduced spacing for raised reflective pavement markers
- Oversize silver and orange roadside delineators

In 1974 we installed a fog detection system on Interstate 40 near Canton, North Carolina. This system met with some success in fog detection, but we experienced substantial maintenance problems. Initially, the warning flashers were actuated by sensors at the onset of fog. After problems were experienced with the system, the flashers were rewired to allow manual actuation by the Highway Patrol. Currently, the flashers operate on a continuous basis. Similar systems have been installed in other states recently, and reports indicate those states have experienced some of our earlier problems.

A member of our staff observed a regulatory sign "Use Flashers Below 40 Mph" on a US highway near Altoona, Pennsylvania. Mr. Ken Smith of the Pennsylvania Department of Transportation reports these signs are used to provide motorists in fog-prone areas sufficient advance warning of slow-moving trucks at steep upgrades, possibly preventing single and multiple rear-end collisions. To date, we have not used this sign in North Carolina.

Mr. J. L. Butner

June 4, 1992

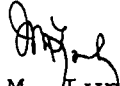
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We feel variable message matrix signs may have possible use in areas where fog is common. An advisory message applicable to current conditions could be effective in controlling vehicle speeds when visibility is reduced unexpectedly.

Attached is an article from the American Traffic Services Safety Association newsletter on accident mitigation in fog-prone areas.

If you have any further questions, please let me know.

Very truly yours,



J. M. Lynch, P.E.
State Traffic Engineer

JML/WJW:wjw

Attachment

bc: Area Traffic Engineers