School Bus Stop Ahead Signs

Section 7B.10 of the MUTCD describes the use of School Bus Stop Ahead signs and recommends that these signs be used only in advance of locations where a school bus stops to pick up or discharge passengers and is not visible for a distance of 500 feet by approaching traffic from either direction. The MUTCD also implies that these signs should only be installed where terrain and roadway features limit sight distance for approaching vehicles and the bus stop cannot be relocated to a more visible location. The warning sign used for this purpose is the 30-inch by 30-inch School Bus Stop Ahead (S3-1). Larger signs may be used in special situations where more emphasis is needed. Some agencies have modified this sign to indicate the distance to the actual stop, such as "500 Feet" in lieu of "Ahead."



S3-1



Permissible

Suggested Response to Installation Requests

1. Confirm with the school district the need for the signs and the use of the location as a school bus stop. The highway authority may want to set up a complaint process, utilizing school transportation and administrative employees as a first point of contact for complaints and requests for signing.

- 2. Review the location carefully to ascertain that minimum conditions are met. If the conditions are met, install the sign per *MUTCD* guidelines.
- 3. In lieu of accepting the *MUTCD* minimum 500-feet visibility requirement, in some instances it may be advisable to further study the location to determine and compare available sight distance with stopping sight distance. If stopping sight distance exceeds available sight distance, warning signs may be justified.

Available Sight Distance (ASD) can be determined with an assumed driver's eye height of 3.50 feet and a target height of 4.0 feet. The target represents approximately one-half the height of a school bus, including flashing lights. By positioning the target at the point of bus stop, the available sight distance can be determined.

Stopping Sight Distance (SSD) can be determined using the data and procedures in the latest edition of AASHTO's *Policy on Geometric Design of Highways and Streets*.

For traffic approaching the front of the bus stop, 10 feet should be anticipated for a pedestrian crosswalk plus 25 additional feet for clear zone.

For traffic approaching the rear of the bus stop, 35 feet should be anticipated for the length of the bus plus 25 additional feet for clear zone.

Suggested Warning Sign Applications

When approaching from the front, if ASD plus 10 feet plus 25 feet equals or is less than SSD, a sign is warranted.

When approaching from the rear, if ASD plus 35 feet plus 25 feet equals or is less than SSD, a sign is warranted.

If the need for a School Bus Stop Ahead sign is concluded, it is recommended that installation be made approximately 500 feet in advance of the point where one half of the stopped bus is visible.

As with all warning signs, School Bus Stop Ahead signs should only be placed when warranted by previously described conditions. Overuse of these signs or installation in unnecessary locations will reduce the overall effectiveness of the warning and result in the tendency for drivers to ignore the message.

Sign Maintenance

Discuss sign maintenance needs with the school district. A formal or informal agreement ad-

dressing school bus stop signing may be established with the school district. It may be worthwhile to assign responsibility to the school for monitoring the continuing need for signing by students and advising road authorities when such warning is no longer needed. The determination of continual need for signing may require annual communication from the highway authority to the school superintendent or transportation director. Unnecessary signs should be removed promptly.

The appendix contains a sample letter and policy for local agency use in negotiating agreements with school districts for installation of these signs.