

Driver Performance Related to Median Visibility

JASON C. YU, Virginia Polytechnic Institute

ABRIDGMENT

•**POSITIVE GUIDANCE** for traffic operation requires that the median on divided highways be highly visible at all times; it must contrast with the through traffic lanes in order to warn of its presence and alignment. However, studies of the frequency and nature of accidents and hazards involving levels of median visibility indicate that most divided highways lack adequate median visibility, particularly during nighttime hours.

The purpose of this study was to evaluate the effect of median visibility on driver performance on a selected section of divided highway. The evaluation was based on vehicle speeds and vehicle placements under before-and-after conditions of median delineation. The field study was conducted under actual traffic conditions. Vehicle speeds and lateral placements were simultaneously recorded on the same sample vehicles. Statistical analysis was employed to determine whether the differences in mean values of before-and-after conditions were significant.

The results derived from this study disclosed that median visibility had no definite effect on vehicle speeds but that vehicle placements observed under the delineated median condition were significantly different from those under the nondelineated condition, resulting in more efficient and safer traffic operation on the divided highway.