The effect of lead-vehicle size on driver following behavior was examined. The data were obtained from a random sample of licensed drivers who drove an instrumented passenger car, unaccompanied, as their personal vehicle for two to five weeks.

The results show that passenger car drivers followed light trucks at shorter distances than they followed passenger cars by an average of 5.6 m (18.6 ft), but at the same velocities and range-rates. This result is discussed in the context of a passenger car driver’s ability to see beyond the lead vehicle to assess the status of traffic downstream.

While it is necessary that following drivers be able to see the stop lamps on lead vehicles, this is not by itself sufficient for safety. The results of this study suggest that knowing the state of traffic beyond the lead vehicle, even by only one additional vehicle, affects gap length. Specifically, it appears that when dimensions of lead vehicles permit following drivers to see through, over, or around them, drivers maintain significantly longer (i.e., safer) distances.