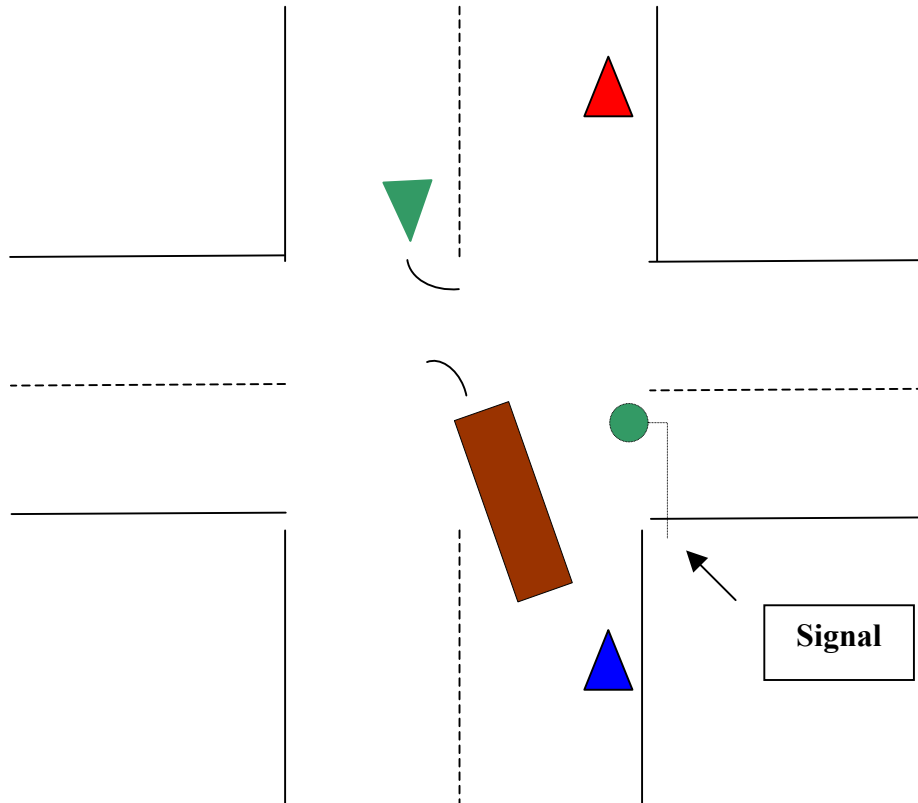


TRUCK LEFT TURN (SLOW DOWN) – NV:2B

In this scenario, an attempt was made to determine if a driver would predict that a car in the opposing lane which is hidden from view by a truck to the left of the driver could potentially turn into the path of the driver as this driver passed by the truck (Figure 1). The scenario developed here is based on a scenario that was previously used in the research done for the AAA Foundation for Traffic Safety (Fisher et al., in press). It is included here in a slightly modified form. Clear differences were found in the behavior of experienced and novice drivers in this scenario and it serves as a check on the adequacy of the scenarios that will be built for this experiment. Specifically, the same differences should be seen in the behavior of younger and older drivers in this scenario as were seen in the previous experiment.

Briefly, in the truck left turn scenario, the driver and a truck are on a four-lane state route, two lanes in each direction. The truck (brown) is slightly ahead of the driver's vehicle (blue) and getting ready to make a left turn at a signalized intersection. The signal is green. The driver is not able to see the car (green) in the opposing lane ahead of the truck that is turning left at any distance from the intersection. The lead vehicle (red), which is ahead of the driver's vehicle, proceeds through the intersection without slowing down.

Figure 1: NV:2B



Material Risks. When the risk materializes, the vehicle in the opposing lane should turn left in front of the driver. When the risk does not materialize, the vehicle in the opposing lane should simply continue through the intersection.

Dependent Variables. The dependent vehicle variables include the number of drivers braking before they proceed through the intersection and the decrease in the velocity of the driver's vehicle when that driver passes alongside the truck. The dependent eye tracker variables include the point at which a driver first fixates the area at the front right of the truck and how frequently a driver refixates this area.