

**BUS LEFT TURN AT TRIANGLE AND EAST PLEASANT (STOP BEFORE TURNING) – NV:3B**

In this scenario, an attempt will be made to determine whether a driver turning left at an intersection will predict that his or her view of through vehicles in the opposing lane can be blocked by larger vehicles turning in front of and at the same time as the driver. Specifically, a bus (yellow) is initially behind a lead vehicle (red) and in front of the driver (blue), all three getting ready to turn left at a four way signalized intersection (Figure 1, top). After stopping at a red light, the bus then moves into the intersection. The driver moves behind the bus and into the path of vehicles in the opposing lane (green), which are obstructed from view by the bus (Figure 1, bottom). It is hypothesized that inexperience driver will predict less well the presence of vehicles (green) in the opposing lane.

**Figure 1: NV:3B**

The bus will initiate its turn from a full stop at a red light on Triangle. When the light turns green, it starts the turn and completes most of that turn fairly quickly giving the lead and decoy vehicle plenty of time to pull into the intersection before the light changes to yellow. When the tail end of the bus starts moving out of the intersection the signal will
change from green to yellow. The bus will complete the left turn at Triangle. Note that
the green globe is visible to the driver at all points in the turn.

**Notes.** It may be difficult to stage this scenario. The participant driver needs to complete
enough of the left turn so that he or she is actually in the opposing lane (and still blocked
from the view of that lane by the bus). Drivers in a hurry will naturally do such. But,
drivers moving less quickly may not do such. This is just one more example where a lead
vehicle may prove to be especially important.

This scenario can be contrasted with the truck left turn scenario in which the driver is
traveling straight through the intersection and the bike in breakdown lane scenario, where
like this scenario the driver is turning left. However, there the vehicle obscuring through
traffic is in the opposing lane. Here, in this scenario, it is turning left along with the
driver.

**Material Risks.** When no risk materializes, no vehicle in the opposing lane will come
racing through the intersection. When a risk does materialize, a driver in the opposing
lane will come racing through the intersection.

**Dependent Variables.** The obvious dependent measure of behavior of the driver's
vehicle is the number of drivers pulling into the opposing lane in the intersection (rather
than staying in their lane until the bus pulls forward). However, this could be a
particularly difficult scenario even for an experienced driver. Thus, when the light turns
yellow, the experienced driver may turn back to the right (better to see around the tail of
the bus). The obvious summary measure of a driver's eye movements is the location of
such movements during the turn. The driver's eyes should be on the end of the bus so
that any vehicles running a yellow light in the opposing lane will be recognized as soon
as possible.