



NTSB National Transportation Safety Board

Office of Highway Safety

Simulations

Purpose of Simulations

Evaluation of

- Vehicle speeds
- Drivers' statements
- Pickup truck sensing diagnostic module (SDM)

Strategy to Simulate Collisions

Calculating vehicle speeds

–EDSMAC4

- Based on SMAC
- Used to simulate collision

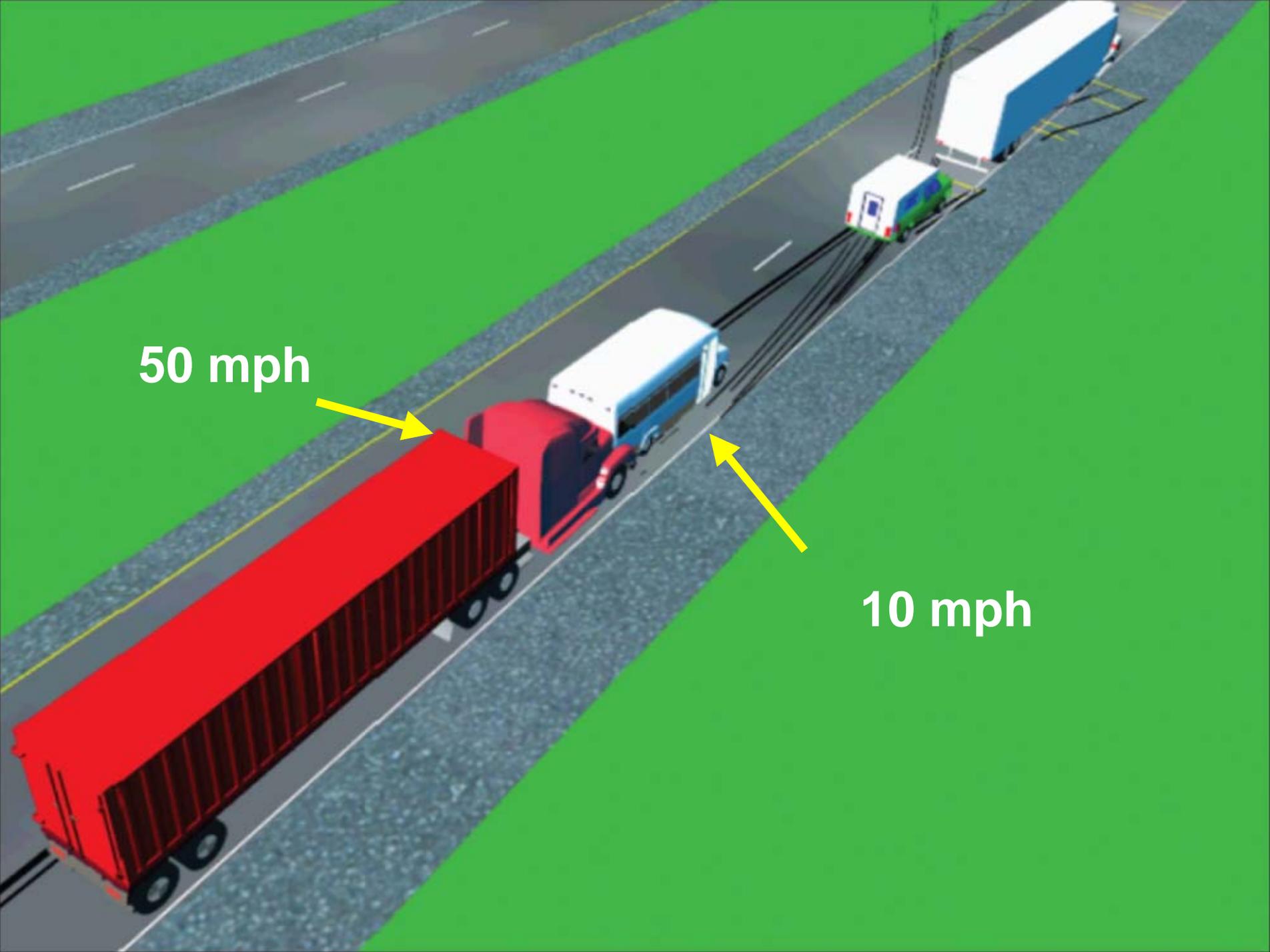
SDM Data from Pickup Truck

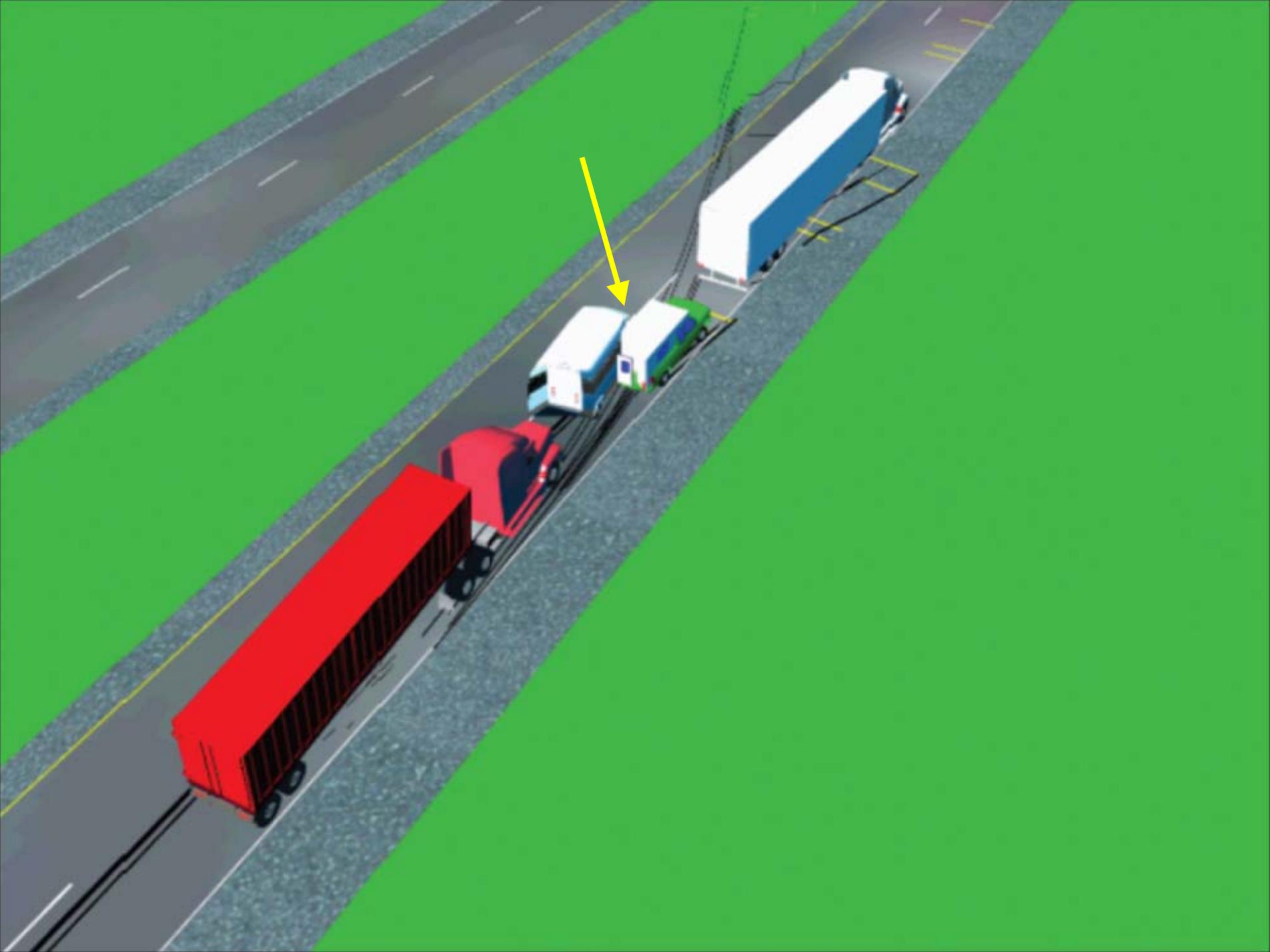
- SDM data (pickup truck)
 - Traveled at 3 mph for at least 3 seconds
 - Rearward change in velocity > 13.77 mph

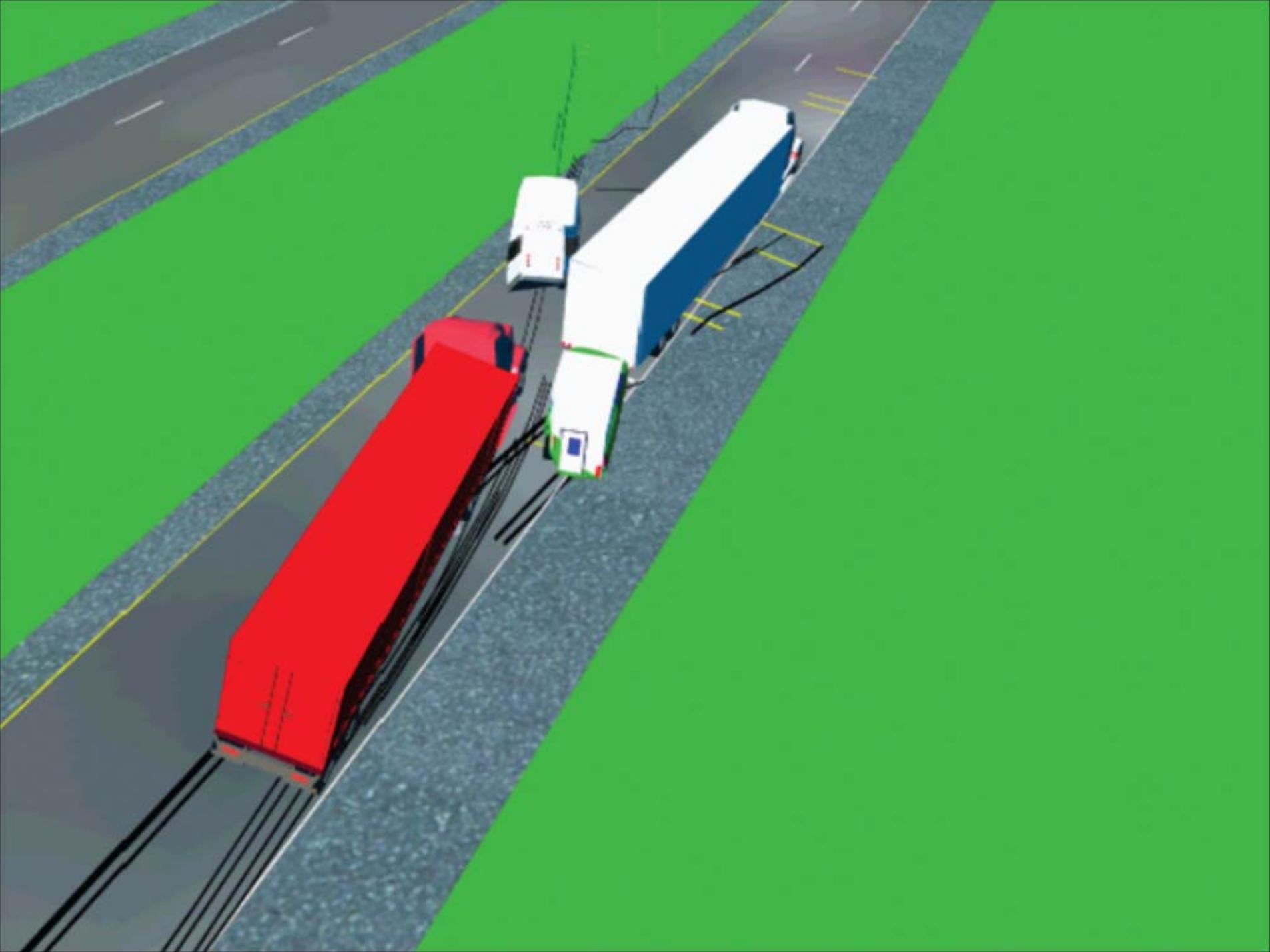
50 mph

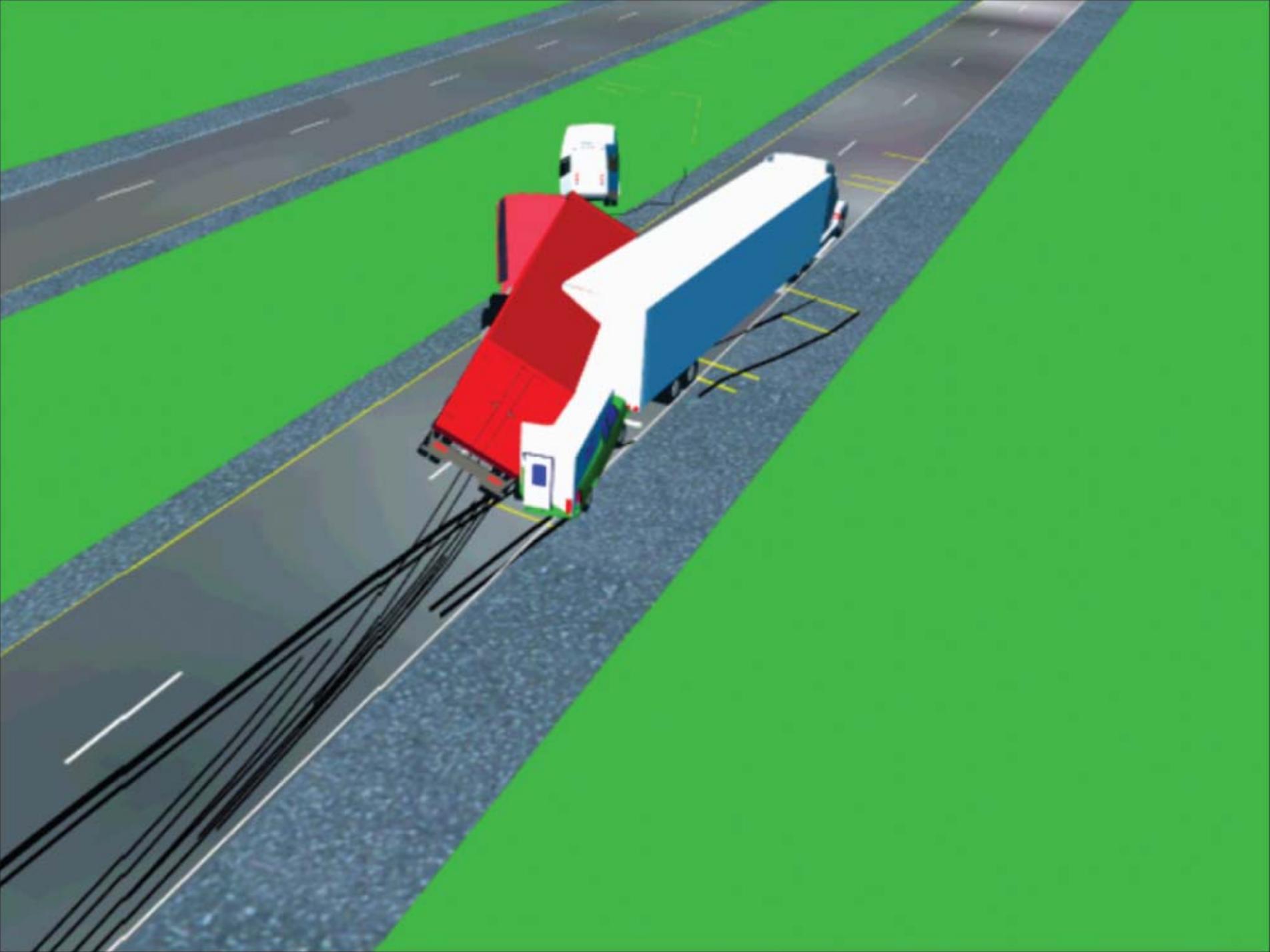


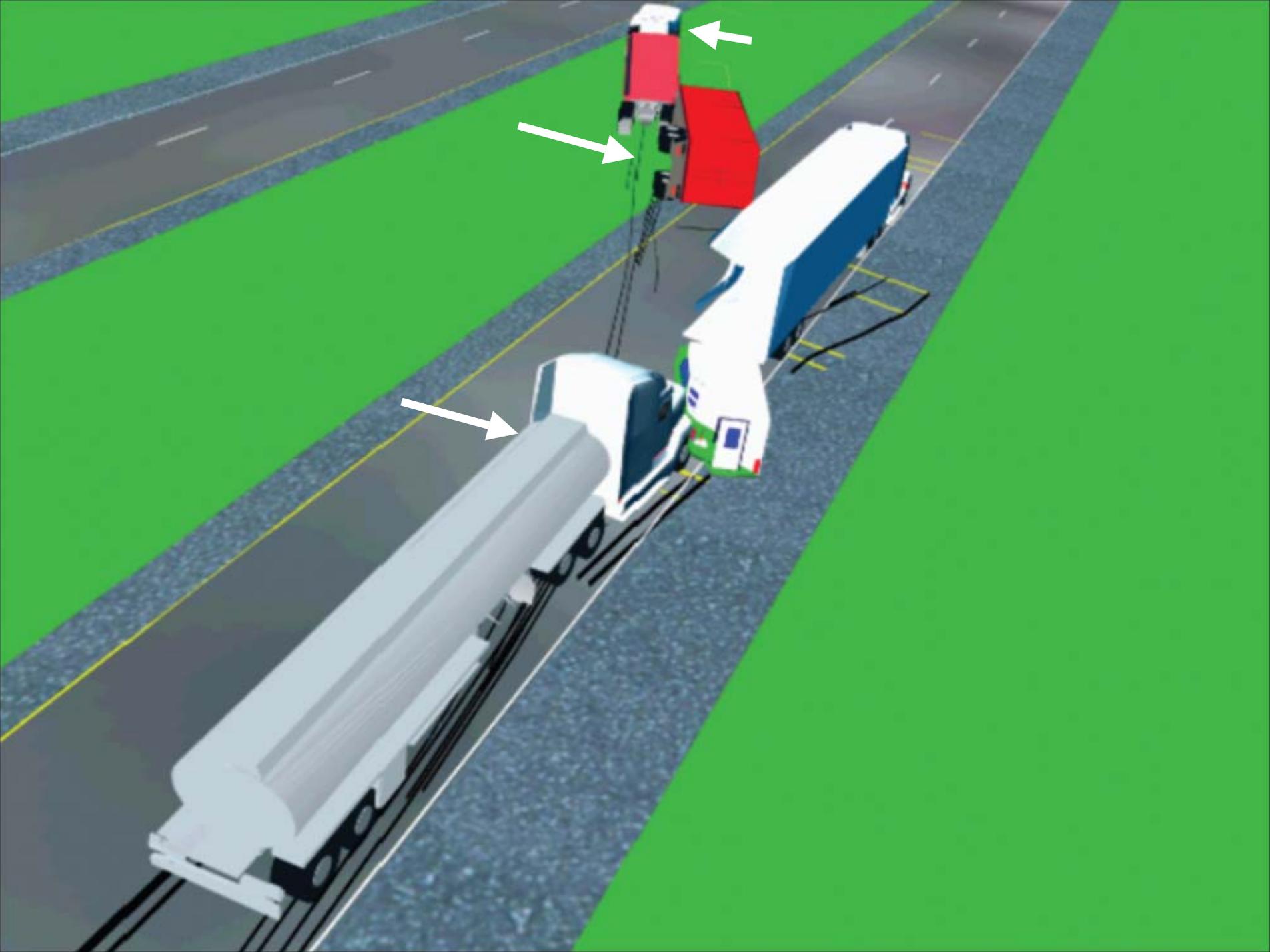
10 mph

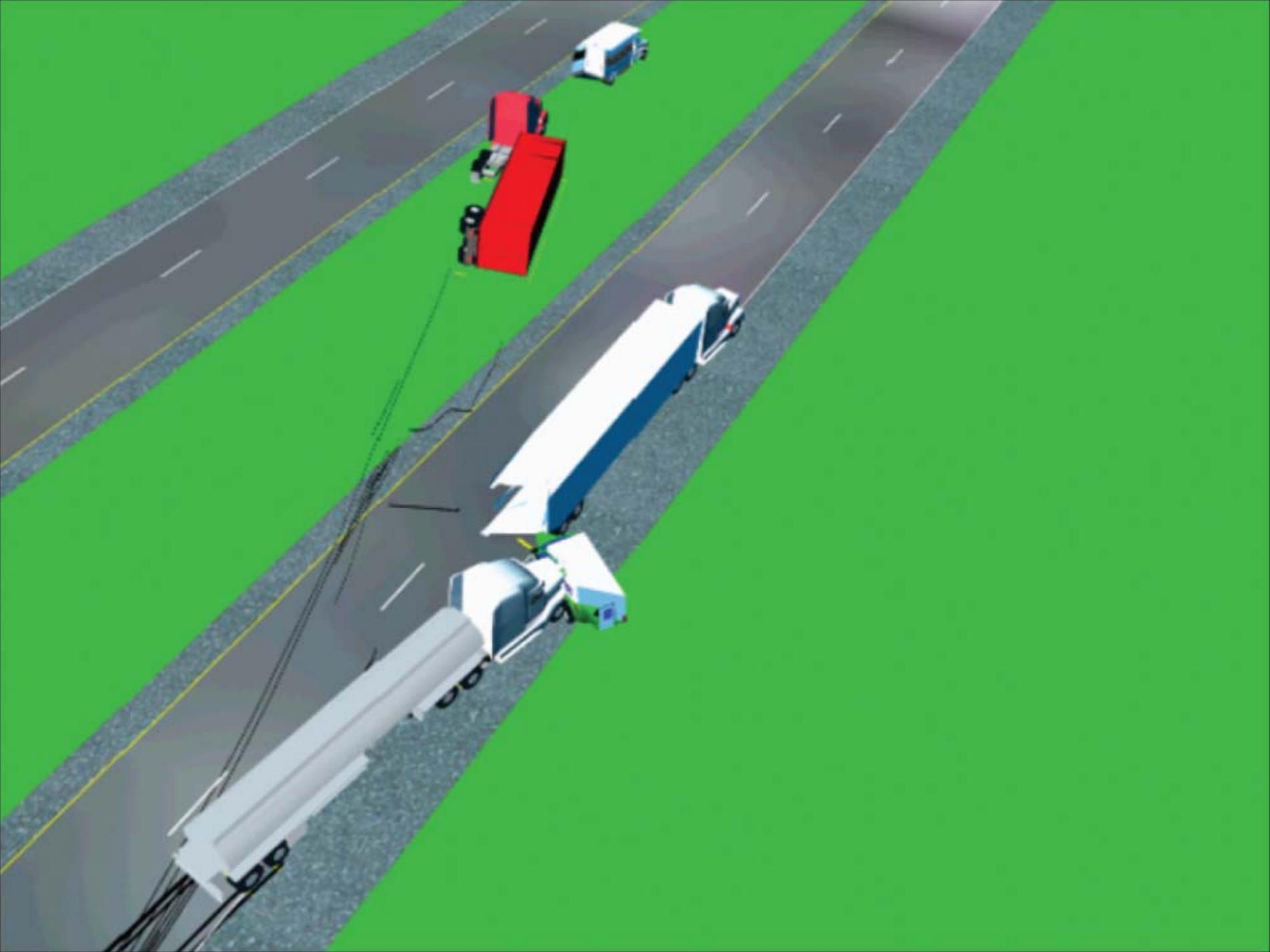










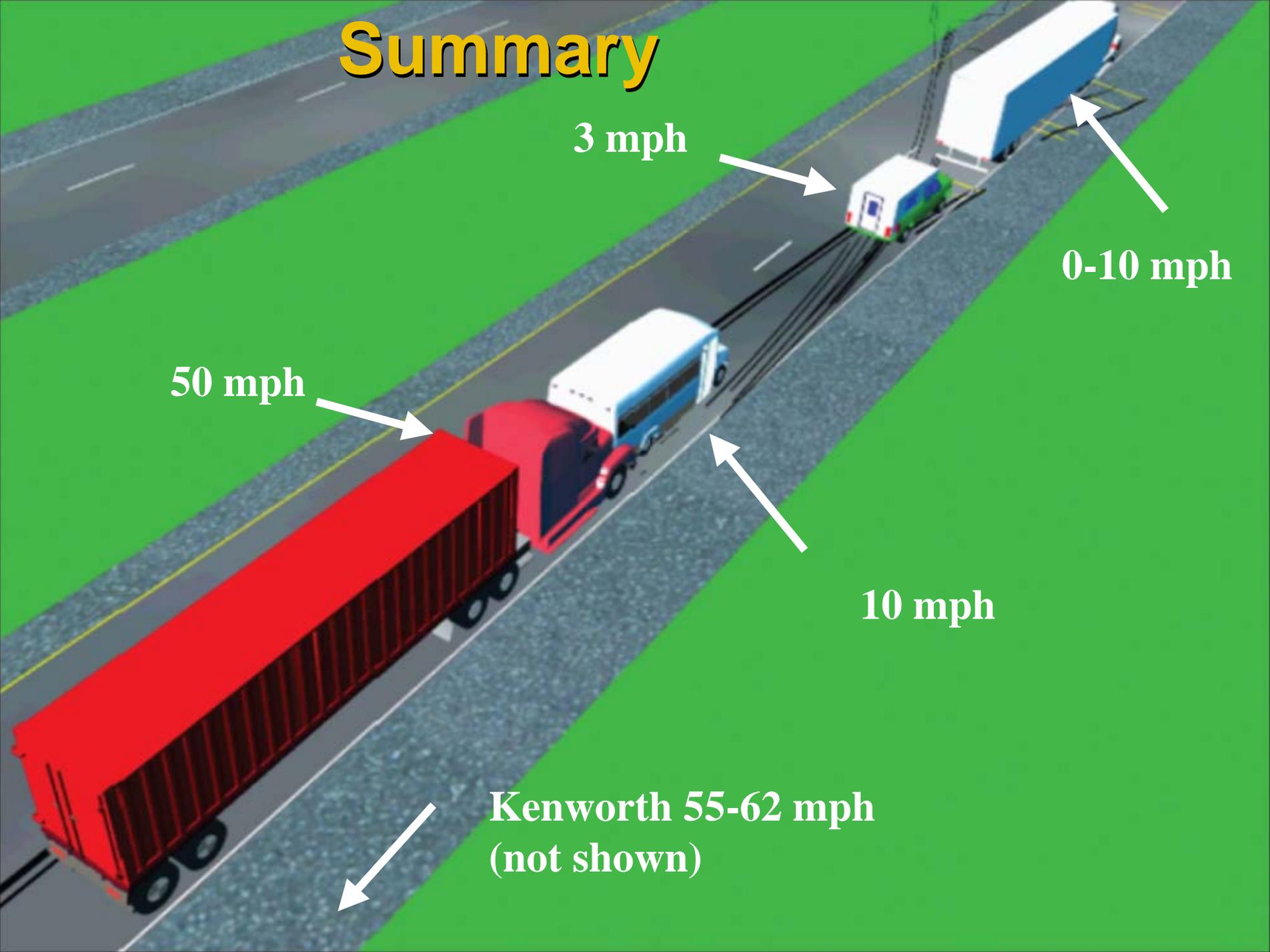


Simulations

- Depicts best fit to physical evidence
- Shown at real time
- Weather and surrounding traffic not represented

Simulations

Summary



3 mph

0-10 mph

50 mph

10 mph

Kenworth 55-62 mph
(not shown)



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