

Decatur, Tennessee: Collision Between Service Truck and School Bus

Service utility truck departs roadway, returns and crosses into opposite travel lane in front of school bus



WHAT HAPPENED

A service utility truck was traveling at an estimated speed of about 52 mph on a two-lane state route when its right-side wheels departed the roadway. When the driver steered the truck back onto the roadway, the truck yawed counterclockwise, crossed into the opposing travel lane, and was almost perpendicular to the roadway. At the same time, a school bus was traveling in the opposing travel lane at 46 mph. Although the bus driver braked, she did not have time to avoid the collision, and the school bus struck the right side of the truck.

WHAT WE FOUND

The truck driver said he was looking in his side rearview mirrors at a police vehicle behind him when the truck's right-side wheels left the roadway. Lane departure warning and lane-keep technologies are driver-assist systems that can help drivers maintain lane position and prevent roadway departures. In addition, the truck driver's ability to return to the roadway was affected negatively by the characteristics of the shoulder and off-roadway terrain; however, since the crash, the Tennessee Department of Transportation has made improvements to the roadway in the area of the collision that address these deficiencies. Also, inward-facing cameras on the school bus showed that several of the school bus passengers were not seated properly in their seats, which increased their risk of injury. If installed on the bus and properly worn, lap/shoulder belts would have mitigated the forward inertial movement of the unbelted passengers on the school bus, keeping them within the protecting seating compartment and reducing their risk of injury.

PROBABLE CAUSE

The probable cause of the Decatur, Tennessee, crash was the service truck driver's inattention to the forward roadway due to his looking at a sheriff's vehicle behind him, which resulted in his failure to keep the truck on the roadway. Contributing to the cause of the crash were non-recoverable and critical foreslopes and the pavement edge drop-off along the state highway, which prevented the truck driver from safely returning the truck to the roadway in a controlled manner. Contributing to the severity of the crash was the lack of passenger lap/shoulder belts on the school bus and the unsafe seating positions by some of the students.

DATE / TIME

October 27, 2020 / 3:45 p.m. ET

VEHICLES

2018 Freightliner truck configured as a service utility vehicle

2013 Thomas Built transit-style (Type D) school bus

FATALITIES / INJURIES / EJECTIONS

2 fatal

4 serious, 10 minor, 14 uninjured,

5 unknown injury level

0 ejections

You should know:

- Drivers should maintain attention to the forward roadway.
- Lane departure prevention systems are driver assistance systems that can help keep drivers within their travel lanes.
- Not sitting properly in a bus seat, particularly near an impact location, increased risk of injury of the students on the bus.
- Lap/shoulder belts would have mitigated the forward movement of passengers, thereby reducing risk of injury.
- Onboard video recorder information can be used to identify risky student behaviors, such as sitting improperly in the seats, and to proactively correct these behaviors and maximize occupant protection for compartmentalized passengers.

More information at <http://www.nts.gov/schoolbuses>