## PRELIMINARY REPORT

## HIGHWAY

## HWY15MH009

The information in this report is preliminary and will be supplemented or corrected during the course of the investigation.

About 7:10 p.m. E.D.T. on Thursday, June 25, 2015, a 2007 Peterbilt tractor in combination with a 2005 Great Dane refrigerated semitrailer, occupied by a 39 -year-old driver and a 38-year-old passenger, was traveling northbound on Interstate 75 (I-75) in the center lane of the three lane roadway within a highway work zone. The weather was clear, and the roadway was dry. Various warning signs were placed in advance of the work zone to alert motorists of the on-going construction, and the posted speed limit within the work zone was 60 mph . As the combination vehicle approached milepost 11.7, traffic was stopped in the left lane and moving slowly in the center and right lanes due to the construction and associated lane closure ahead at milepost 12. The combination vehicle struck the rear of a 2010 Toyota Prius passenger car located at the end of the traffic queue and continued moving forward while colliding with seven other vehicles. These other vehicles were identified as 1) a 2010 Scion, 2) a 2003 Mazda, 3) a 2005 GMC van, 4) a 2001 Ford pickup, 5) a 2007 Chevy minivan, 6) a 2014 Cadillac, and 7) a 2015 Toyota pickup. The Scion was occupied by a driver and three passengers; as a result of the crash, the driver was ejected, and a postcrash fire consumed the vehicle. The Mazda was occupied solely by the driver; it became lodged on the front of the combination vehicle and was involved in subsequent impacts. The combination vehicle traveled 453 feet from the initial area of impact to its final rest position. Figure 1 shows the approach to the crash scene and the tire marks from various impact events.


Figure 1. Tire marks following initial impact event and leading to subsequent impacts (Source - Chattanooga DOT).

As a result of the crash and postcrash fire, the driver of the Toyota Prius, the four occupants in the Scion, and the driver of the Mazda were fatally injured. four other vehicle occupants sustained injuries, and eight occupants were uninjured. Figure 2 shows the combination vehicle after it was removed from the crash scene.


Figure 2. Postcrash damage to the 2007 Peterbilt truck-tractor.
The driver of the combination vehicle began his trip on Monday, June 22, reporting for duty in London, Kentucky. From there, he planned to pick up a load in Kentucky and transport it to a location in Florida. During this time, the driver experienced two mechanical breakdowns and was involved in a crash with another commercial vehicle. The initial mechanical issue occurred when he picked up the load in Kentucky and found that his vehicle's air compressor was unable to generate sufficient air supply to properly operate the brake system. The compressor was temporarily fixed to allow the driver to return to London, where the vehicle was taken to a repair facility and the problem with the air compressor was corrected and other maintenance items were also taken care of. Shortly after his departure from the repair facility, the driver returned to the shop when the vehicle's performance was found to be abnormal. Personnel at the shop diagnosed the problem, repaired the engine's fuel delivery system, and returned the truck to the driver. The driver did not experience any additional mechanical issues while en-route to Florida. After being on-duty for about 45 hours., he was involved in a crash where he side-swiped another commercial motor vehicle in Wildwood, Florida, and was subsequently cited for the traffic violation causing the crash. No injuries were reported from this crash, but the resulting damage to the combination vehicle caused the driver to be delayed for an additional 3 to 4 hours until the vehicle could be sufficiently repaired to continue on the trip. The driver arrived at his final destination in Florida on Wednesday, June 24, and-after being on duty for about 50 consecutive hours - he logged himself as off-duty at 4:30 p.m.

The driver began his return trip to London, Kentucky, on Thursday, June 25, about 4:30 a.m., and at 7:10 p.m., he was involved in the crash that ultimately killed six. At this point in the investigation, it has been determined that the driver had exceeded the Federal Motor Carrier Safety Regulations hours-of-service when the crash occurred.

Other aspects of the investigation are ongoing, including a review of various vehicle electronic control modules and security video that was obtained from local businesses near the
crash location. Additionally, investigators continue to interview pertinent witnesses and gather other factual information concerning cell phone records, motor carrier operations, and toxicology testing.

