Chesterfield, New Jersey: School Bus and Truck Collision at Intersection

**WHAT HAPPENED:** A bus was traveling north on Burlington County Road (BCR) 660 while a Herman's Trucking Inc. roll-off truck with a fully loaded dump container was traveling east on BCR 528, approaching the intersection. The bus driver had stopped at the flashing red traffic beacon and STOP sign. As the bus pulled away from the white stop line and entered the intersection, it failed to yield to the truck and was struck behind the left rear axle. The bus rotated nearly 180 degrees and subsequently struck a traffic beacon support pole.

**MAIN FINDINGS:** The school bus driver did not effectively scan the intersection for oncoming traffic and failed to observe the approaching truck. He was fatigued due to acute sleep loss, chronic sleep debt, and poor sleep quality associated with his medical conditions and alcohol use; the sedative side effects from prescription medications; and the synergistic effect of these factors. This fatigue contributed to his reduced vigilance and detection of the approaching truck. It is likely that he would not have been medically certified to drive a school bus if he had fully disclosed his medical history, or if the medical examiner had more thoroughly examined him when he completed his commercial driver's license medical certification examination form. Additionally, some students on the school bus wore their lap belts improperly or not at all. The combination of the truck's defective brakes and overweight condition reduced its overall braking efficiency, thereby contributing to the severity of the crash.

**PROBABLE CAUSE:** The National Transportation Safety Board determines that the probable cause of the Chesterfield, New Jersey, crash was the school bus driver's failure to observe the Mack roll-off truck, which was approaching the intersection within a hazardous proximity. Contributing to the school bus driver's reduced vigilance were cognitive decrements due to fatigue as a result of acute sleep loss, chronic sleep debt, and poor sleep quality, in combination with, and exacerbated by, sedative side effects from his use of prescription medications. Contributing to the severity of the crash was the truck driver’s operation of his vehicle in excess of the posted speed limit, in addition to his failure to ensure that the weight of the vehicle was within allowable operating restrictions. Further contributing to the severity of the crash were the defective brakes on the truck and its overweight condition due to poor vehicle oversight by Herman's Trucking, along with improper installation of the lift axle brake system by the final stage manufacturer—all of which degraded the truck's braking performance. Contributing to the severity of passenger injuries were the nonuse or misuse of school bus passenger lap belts; the lack of passenger protection from interior sidewalls, sidewall components, and seat frames; and the high lateral and rotational forces in the back portion of the bus.

**LOCATION**
Chesterfield, New Jersey

**DATE, TIME**
February 16, 2012 / 8:15 a.m.

**VEHICLE(s)**
Garden State Transport Corporation 2012 IC Bus, LLC, school bus
2004 Mack roll-off truck

**FATALITIES / INJURIES / EJECTIONS**
1 Fatal
5 Serious, 11 Minor, 10 Uninjured
0 Ejections

You should know:
Bus drivers must be medically qualified
Students and parents must be taught the importance of proper seat belt use

The full report can be found at: http://www.ntsb.gov/schoolbuses