DID YOU KNOW???

CRASH CAUSATION SURVEY BY NHTSA REVEALS DRIVER FAULTS

In a February, 2015 bulletin by the National Highway Traffic Safety Administration (NHTSA), the critical reasons for crashes investigated in the National Motor Vehicle Crash Causation Survey (NMVCCS) conducted from 2005 to 2007 was a real eye opener. The survey was aimed at collecting on-scene information about the events and associated factors leading up to crashes involving light vehicles. Several facets of crash occurrence were investigated during data collection, namely the pre-crash movement, critical pre-crash event, critical reason, and the associated factors.

The **critical reason** is the immediate reason for the critical pre-crash event and is often the last failure in the causal chain of events leading up to the crash. **The critical reason was assigned to the driver in 94 percent (±2.2%) of the crashes.** This figure is in line with other surveys which report driver error in most of vehicle crashes and is why those in traffic safety positions are looking toward autonomous vehicles – to remove driver error from causing crashes.

Of the over two million drivers who were assigned critical reasons, recognition errors were the most (41% ±2.2%) frequently assigned critical reason. Recognition error included driver's inattention, internal and external distractions, and inadequate surveillance. Decision error such as driving too fast for conditions, too fast for the curve, false assumption of others' actions, illegal maneuver and misjudgment of gap or others' speed accounted for about 33 percent (±3.7%) of the crashes.

In about 11 percent (±2.7%) of the crashes, the critical reason was performance error such as overcompensation, poor directional control, etc. Sleep was the most common critical reason among non-performance errors that accounted for 7 percent (±1.0%) of the crashes. Other driver errors were recorded as critical reasons for about 8 percent (±1.9%) of the drivers.

In about 2 percent (±0.7%) of the crashes, the critical reason was assigned to a vehicle component's failure or degradation, though none of these reasons implied a vehicle causing the crash. There were no detailed inspections of vehicles during the NMVCCS on-scene crash investigation; the vehicle-related critical reasons were mainly inferred through external visual inspection of the vehicle components. This resulted in only mostly external, easily visible factors (tires, brakes, steering column, etc.) that were cited as the few vehicle-related critical reasons.

In 2 percent (±1.3%) the critical reason was attributed to the environment (slick roads, weather, etc.), and the last 2 percent was for unknown reasons.

So what can we take away from these findings? The data very realistically points out that crashes are really not "accidents", as an accident implies that it couldn't have been prevented – it really wasn't anyone's fault but just happened. In reality, the study finds that in 94 percent of vehicle crashes, a critical part of the causation was assigned to a driver. To me it shows that drivers take the task of driving too much for granted – they feel they can multi-task, drive too fast, and that crashes won't happen to them. It's the other driver they must worry about. But, that other driver is worrying about you. Don't give him or her cause for worry by driving safely and courteously. Is that too much to expect?