

D21 Automotive Defect Case Studies Exemplifying Agency Capture of the National Highway Traffic Safety Administration (NHTSA)

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Learning Overview: The goal of this investigation is to explore the poor job that automakers and the Federal government have done regarding their clear obligations in automotive safety. Case histories will provide a clear and accurate representation of the inadequacies and facts regarding several Federal Motor Vehicle Safety Standards (FMVSS), as well as how agency capture has enabled automotive defects to continue unabated for decades, despite ample proof of inexpensive alternative designs.

Impact on the Forensic Science Community: This presentation will impact the forensic science community involved in the forensic aspects of traffic accident investigation and reconstruction.

Several case studies illustrate how widespread, life-threatening vehicle safety defects have been ignored for decades by automakers and the NHTSA. This research illustrates that this is due, at least in part, to agency capture of Department of Transportation (DOT) officials. (1) Petitions to upgrade FMVSS 207 and to establish a rear impact occupant protection standard have been “under review” at NHTSA since 1974. This has occurred despite thousands of preventable deaths, countless catastrophic injuries, and research clearly proving far safer, economically feasible alternative designs. NHTSA admitted in 1996 that FMVSS 207 is “flawed and inadequate” but has yet to change the standard. (2) Roof crush resulting in failure of vehicle survival space during rollover crashes kills approximately 10,000 Americans yearly, about 30% of all light vehicle occupant fatalities. The number of occupant injuries is significantly higher. FMVSS 216, the original standard and subsequent FMVSS 216a, define vehicle roof strength requirements. The results of hundreds of rollover crash tests and accident investigations involving roof crush and the questionable effectiveness of these standards, and the decades of delay involved in upgrading the standards, will be discussed, analyzed, and summarized. (3) Flaws in FMVSS 301 for fuel system integrity has allowed extremely dangerous vehicles to be sold to the motoring public. Even after the debacles of the Ford® Pinto®, General Motors® sidesaddle gas tank pickups, and more recent Jeep® fuel-fed fires, automakers continue to build vehicles with fuel tanks placed in crush zones and to ignore readily available inexpensive technology that would significantly reduce the threat of crash-induced fuel system failures. (4) The Minicar Research Safety Vehicle (RSV) was developed in the 1970s to prove that fuel-efficient, yet extremely safe vehicles were readily producible by automakers. When NHTSA later claimed that it was impossible to have safe fuel-efficient cars, they intentionally destroyed the evidence of the remaining RSVs.

All these areas exemplify how agency capture has occurred in violation of public trust. It will be seen that automakers and the government have, and continue, to fail to provide reasonable protection to the public in the event of automotive rear impacts, rollovers, and crash-induced fires. Automakers continue to provide misleading or untrue information to NHTSA, which in turn continues to turn a blind eye to ongoing serious safety defects.

Automotive Safety Defects, Agency Capture, NHTSA