

## **Clarence Ditlow's Involvement in Advancing Federal Motor Vehicle Safety Standards**

As Director of the Center for Auto Safety from 1976 through 2016, Clarence Ditlow and his staff played a major role in advancing Federal motor vehicle safety standards through petitions, comments and even lawsuits to advance action by the National Highway Traffic Safety Administration. His work has helped to save tens of thousands of fatalities and serious injuries in crashes on American roads.

Based in part on NHTSA's estimates of life savings from the various FMVSS and our own analyses, we have made a rough estimate of how many lives were saved in cases where Mr. Ditlow played a significant role. While he was not solely responsible for these life savings, he was responsible in many cases for initiating action, advancing the effective dates, and ensuring more stringent requirements in the standards. Among his accomplishments are:

### ***Occupant Crash Protection in Frontal Crashes***

- **Safety Belts.** A full complement of safety belts, including lap/shoulder belts in front outboard positions, has been required since 1968. Upgrades were made in 1972 through 1974 to make belts more comfortable and convenient. However, the major increase in life savings from safety belts came after the Supreme Court decision in *State Farm v. DOT* after which virtually all states passed safety belt use laws. That increased belt usage to a large majority of motorists. Mr. Ditlow, through the Center's actions in this critical period, assisted in the saving of at least 200,000 lives.
- **Air Bags.** The *State Farm* decision and further pressure from the Center also brought air bags as standard equipment on most new cars and light trucks in the 1990s. NHTSA estimated the savings from air bags to be more than 50,000 lives.

### ***Occupant Protection in Side Crashes***

- The side impact standard, which was upgraded to a dynamic crash test in the mid-1990s after the Center put major pressure on NHTSA for the upgrade, has saved more than 35,000 lives.

### ***Occupant Protection in Rollovers***

- Rollovers were costing the lives of more than 10,000 motorists annually until a few years ago. The Center sponsored and publicized the results of dynamic roof crush tests on the JRS that finally resulted in an upgrade of the roof crush requirements. Combined with a requirement for Electronic Stability Control, improved interior padding in the roof area, and ejection

protection using improved side glazing and window curtain air bags – all of which came after extensive pressure from Mr. Ditlow – the number of rollover fatalities has been cut by approximately 75 percent in vehicles meeting all of these standards. The result will be the saving of at least 7,000 lives per year when the standards apply to most vehicles on the road. Based on this improvement in rollover performance we estimate that 20,000 lives have been saved, through 2015, by these standards.

As an added comment, the auto industry forced a retreat from NHTSA's original roof crush proposal in 1970, a requirement that would have been virtually identical to the recent upgrade of the roof crush standard. Since that time, the industry put forth phony research and testing that they claimed showed that roof crush was not related to occupant injury in rollovers. Even today, with proof that the stronger roof crush standard is saving lives, the industry has not apologized or even admitted that they were wrong and that strong roofs are saving lives in rollovers.

### ***Child Safety***

- The standard on child restraints was substantially upgraded at his urging during Mr. Ditlow's tenure as was a requirement for standard anchorage or latch systems for child safety systems in the rear seats of passenger vehicles. Mr. Ditlow also played a role in the recall of numerous defective child restraints. NHTSA estimates the savings from these upgrades has been more than 10,000 child fatalities.
- The Center has advocated for and backed a petition for rulemaking on seatback strength to prevent fatalities and serious injuries to children in back seats. The failed seatback and their front seat occupants can strike and seriously injure properly restrained children in rear seats in a rear-end collision. The Center documented many cases of death and serious injury in such cases but NHTSA has failed to initiate rulemaking to upgrade the seatback strength requirements.

### ***Fire***

- NHTSA estimates that only about 25 lives have been saved from fires after upgrades to the rear impact standard. We have found that NHTSA often fails to classify crashes involving fire properly and therefore has substantially underestimated the number of people who have been saved from being killed in a vehicle fire. We would put the number into the hundreds at least. Mr. Ditlow has been a major critic of NHTSA's tardiness in upgrading the standards affecting fire in motor vehicles. In particular, the Center sponsored rear impact tests of Jeep Grand Cherokees that have gas

tanks located behind the rear axle. In these tests the fuel tanks and fullers ruptured. He publicized the fact that NHTSA had failed to even properly investigate these disastrous Jeep fires that were similar to Ford Pinto fires. NHTSA finally found the Jeeps defective, but the recall action that was approved will not address the fundamental vulnerability of these Jeeps. In vehicles built fairly recently, vehicle fires have become relatively rare because of the upgrade to the rear impact standard advocated by the Center.

### ***Crash Avoidance***

- Clarence Ditlow played a role in advocating for a standard requiring Electronic Stability Systems (ESC) on all light vehicles. While much of the life saving from this standard has been in a reduction in rollovers and is accounted for the total for rollover above, some have been from averting other types of crashes where a vehicle goes out of control. NHTSA estimates that the savings from this standard has been at least 9,000 lives, we would estimate that roughly a third of this total would be in non-rollover cases.

### ***Other Standards***

- The Center under Mr. Ditlow's leadership has played a substantial role in a number of other standards where the savings have not been dramatic, but where the benefits of a new or upgraded standard outweighed the costs. These include:
  - Controls and Displays
  - Transmission Shift Sequence
  - Reflective Material on Truck Trailers
  - Windshield Wiping and Washing
  - Theft and Rollaway Standards
  - Tires and Tire Pressure Monitoring Systems now required on all new vehicles
  - Power Windows (to prevent accidental strangulation)
  - Bus Windows and Emergency Exits
  - School Bus Occupant Protection
  - Rear Impact Guards on Heavy Trucks
  - Flammability of Interior Materials
- The lives saved from these standards may be in the tens to hundreds, but they are not unimportant, particularly considering the long-term goal of zero fatalities.