



NHTSA Data Show Safety Costs Little, Saves Thousands

Since 1968, Major Federal Safety Standards Have Saved 326,000, But Cost Consumers in Total Less Than A Quality Car Stereo System

According to data from the National Highway Traffic Safety Administration (NHTSA), major federal motor vehicle safety standards have added about \$839 in 2002 dollars to the consumer cost¹ of passenger cars and \$711 to the consumer cost of light trucks *since January 1, 1968*, and they saved more than 326,000 lives of passenger car and light truck occupants. These figures were released in January 2005 in a report entitled, "Regulatory Evaluation: Effectiveness of NHTSA's Regulations and Programs," (available at <http://www.nhtsa.dot.gov/cars/rules/regrev/evaluate/>).

All safety features together have added a 25 pounds to cars and 86 pounds to light trucks, since 1968, according to NHTSA.

In model year 2001, safety features² added about four percent to both the cost to consumer and weight of passenger cars, which had an average retail price of \$21,217 in 2002. Safety features added only about three percent to the cost and two percent to the weight to model year 2001 light trucks, which had an average retail price of \$23,995 in 2002.

NHTSA's study determined the consumer cost of a standard by including the price of all equipment added or changed to meet or exceed a standard's requirements, provided those modifications took place on or after the effective date. NHTSA also included equipment added or changed before the standard's effective date in the overall price figure if NHTSA had a rulemaking process underway and there was clear anticipation of a standard.

NHTSA's report says consumer costs for the standards may vary a bit because equipping vehicles with safety features could become less expensive as technology improves.

¹ The figure for consumer costs includes NHTSA's calculations for markups for both manufacturer and dealer profit.

² Compared to no Motor Vehicle Safety Standards.

The chart below provides the retail costs per safety feature for model year 2001 vehicles.

Average Retail Price for Major Safety Features, 1968-2001³

| Standard | Passenger Cars (added cost/weight) | Light Trucks (added cost/weight) |
|--|--|--|
| driver and passenger air bags | \$396.72/26.76 lbs. | \$382.52/26.40 lbs. |
| dynamic side-impact test | \$129.35/37.31 lbs. | |
| 6 safety belts | \$124.63/18.38 lbs | \$137.57/18.41 lbs. |
| static side-impact test | \$51.21/24.81 lbs. | \$29.44/23.76 lbs. |
| 2 front-seat head restraints | \$30.89/5.63 lbs. | \$30.97/3.98 lbs. |
| 2 side marker lamps | \$29.37/1.95 lbs. | \$29.37/1.95 lbs. |
| occupant protection from the steering control system | \$27.45/1.89 lbs. | \$27.45/1.89 lbs. |
| fuel system integrity | \$16.51/2.48 lbs. | \$16.51/2.48 lbs. |
| dual-speed windshield wipers and washers | | \$15.05/2.10 lbs |
| seat back padding | \$4.44/.66 lbs. | \$11.25/3.15 lbs. |
| hydraulic brake system | \$10.88/.95 lbs. | \$11/.96 lbs. |
| center high mounted stop lamps | \$9.74/.85 lbs. | \$9.74/.85 lbs. |
| occupant crash protection — on/off switches | | \$8.75/.2 lbs. |
| roof crush resistance | \$3.47/2.93 lbs. | |
| seat back locks | \$3.22/.79 lbs. | |
| power-operated window circuit breaker | \$.78/.03 lbs. | \$.77/.03 lbs. |
| accelerator control system | \$.47/.02 lbs. | \$.47/.02 lbs. |
| Total | \$839.13/125.44 lbs. | \$710.86/86.18 lbs. |

³ “Cost and Weight Added by the Federal Motor Vehicle Safety Standards for Model Years 1968-2001 in Passenger Cars and Light Trucks,” NHTSA. Released January 2005.

In sum, the total retail price of these items are comparable to options consumers often choose to purchase with their vehicles, such as a quality stereo (\$295-\$897) or moon/sun roofs (\$700-\$1,595).

The following chart shows the number of passenger car and light truck occupants who have been saved by safety features from 1960 through 2002. Note that these figures vary significantly because some of the features, such as safety belts, have been in effect since the 1960s or 1970s, while other features, such as frontal air bags, have only been in effect since the 1990s.

Occupant Lives Saved As a Result of Vehicle Safety Features, 1960-2002⁴

| Standard | Passenger Cars (lives saved) | Light Trucks (lives saved) |
|--|--|--------------------------------------|
| safety belts | 109,519 | 59,004 |
| energy-absorbing steering assemblies | 41,545 | 11,472 |
| improved door locks | 19,504 | 9,398 |
| voluntary mid/lower instrument panel improvements | 16,670 | 4,373 |
| side door beams and voluntarily (pre-1994) reducing the severity of thoracic injury scores | 14,002 | 701 |
| frontal air bags | 8,770 | 3,304 |
| | 14,000 through 2004 | |
| dual master cylinders & front disc brakes | 7,993 | 2,880 |
| adhesive windshield bonding | 5,248 | 1,462 |
| Child safety seats | 4,854 | 1,100 |
| roof crush strength (eliminate true hardtops) | 3,466 | |
| conspicuity tape for heavy trailers | 683 | 422 |
| Total | 232,254 | 94,116 |

⁴ “Cost and Weight Added by the Federal Motor Vehicle Safety Standards for Model Years 1968-2001 in Passenger Cars and Light Trucks,” NHTSA. Released January 2005.

Historically, automakers have inflated cost projections, claiming that safety technologies are too expensive. For instance, General Motors claimed in the late 1970s and early 1980s that air bags would add about \$700 to the price of a new car. Adjusted for inflation, that estimate today would equal \$1,346 – almost \$1,000, or 4 times, more than the actual consumer cost of both dual front air bags according to NHTSA.

All told, 328,550 lives were saved by the use of vehicle safety technologies, including 2,180 bicyclists, motorcyclists and pedestrians.

The historical record is clear: A modest investment in safety is worth tens of thousands of saved lives per year.