

# INSURANCE INSTITUTE FOR HIGHWAY SAFETY

## NEWS RELEASE

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### **TWO FORDS EARN GOOD CRASH TEST RATINGS; EDGE WINS INSTITUTE'S HIGHEST AWARD, *TOP SAFETY PICK***

ARLINGTON, VA — The Ford Fusion midsize car and Ford Edge midsize SUV earn the highest rating of good in front and side crash tests recently conducted by the Insurance Institute for Highway Safety. The Edge also earns a good rating for rear crash protection, so it wins the Institute's 2007 *TOP SAFETY PICK* award. This award recognizes cars and SUVs in each class that afford the best overall crash protection. The similar Lincoln MKX, a midsize luxury SUV, also wins *TOP SAFETY PICK*.

To qualify for *TOP SAFETY PICK*, vehicles must earn the highest rating of good in all three Institute tests (front, side, and rear) and be equipped with electronic stability control (ESC). This is a standard feature on both the Edge and the MKX. Award criteria were tightened for 2007 to include ESC because research shows it can prevent many single-vehicle crashes and rollovers.

"The criteria to win *TOP SAFETY PICK* are tough," says Institute president Adrian Lund. "This award is intended to drive continued safety improvements such as the highest crash test ratings and the rapid addition of ESC as standard equipment. Recognizing the winners also helps consumers distinguish vehicles with the best overall ratings without having to sort through multiple crash test results."

Initially only 13 cars, minivans, and SUVs qualified for 2007 awards. As automakers introduce new models or make safety changes to existing ones, the Institute adds *TOP SAFETY PICK* winners throughout the year. With the addition of the Edge and MKX, consumers now may choose among 9 SUVs offering superior crash protection. The award applies to Edge and MKX models built after January 2007 when Ford modified the head restraints to improve rear crash protection.

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**Changes to Fusion result in better ratings:** Last year the Institute first tested 2006 and early-production 2007 model Fusions. After making changes to improve both front and side crashworthiness, Ford asked the Institute to test this car again. In the new tests, the ratings for front and side protection improved to good. However, the Fusion doesn't win *TOP SAFETY PICK* because it's rated marginal for rear crash protection and ESC isn't available.

In the 2006 frontal offset test, the Fusion earned an acceptable rating because of high forces recorded on the driver dummy's right leg. Plus a steel pin in the dummy's ankle broke. Ford strengthened the Fusion's floorpan and modified a heel rest on the floor to improve protection of the right leg in frontal crashes. In the new test, right leg protection has improved. Although moderately high forces indicate the possibility of neck injury, Fusions built after January 2007 earn a good overall frontal rating, which also applies to the Mercury Milan and Lincoln MKZ.

In side impact tests, the 2006 Fusion was rated poor without its side airbags, which then were optional. When equipped with the side airbags, an early-production 2007 car was rated acceptable. Injury measures indicated that a fracture of the pelvis would be possible in a real-world crash of this severity.

Side airbags have been upgraded to standard equipment in all 2007 Fusions, and Ford has changed the interior door trim to improve side impact protection in Fusions built later in the 2007 model year. In the new test with these changes, the Fusion improves to good. This rating applies to Fusions built after January 2007 and to Mercury Milans but not to Lincoln MKZs because they don't have the same door trim design. The MKZ retains the earlier side rating of acceptable.

"The Fusion is one of only eight midsize moderately priced car designs that earn good ratings for both front and side crash protection," Lund points out. "As new car designs are introduced, they typically outperform the predecessor designs in terms of side protection, in large part because auto manufacturers are rapidly making side airbags standard features."

**How vehicles are evaluated:** The Institute's frontal crashworthiness evaluations are based on results of 40 mph frontal offset crash tests. Each vehicle's overall evaluation is based on measurements of intrusion into the occupant compartment, injury measures recorded on a Hybrid III dummy in the driver seat, and analysis of slow-motion film to assess how well the restraint system controlled dummy movement during the test.

Side evaluations are based on performance in a crash test in which the side of a vehicle is struck by a barrier moving at 31 mph. The barrier represents the front end of a pick-up or SUV. Ratings reflect injury measures recorded on two instrumented SID-IIIs dummies, assessment of head protection countermeasures, and the vehicle's structural performance during the impact. Injury measures obtained from the two dummies, one in the driver seat and the other in the back seat behind the driver, are used to determine the likelihood that a driver and/or passenger in a similar real-world crash would sustain serious injury to various parts of the body. The movements and contacts of the dummies' heads during the test also are evaluated. Structural performance is based on measurements indicating the amount of B-pillar intrusion into the occupant compartment.

Rear crash protection is rated according to a two-step procedure. Starting points for the ratings are measurements of head restraint geometry — the height of a restraint and its horizontal distance behind the back of the head of an average-size man. Seat/head restraints with good or acceptable geometry are tested dynamically using a dummy that measures forces on the neck. This test simulates a collision in which a stationary vehicle is struck in the rear at 20 mph. Seats without good or acceptable geometry are rated poor overall because they cannot be positioned to protect many people.

**End 3-page news release on crashworthiness ratings of Ford vehicles**

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