INSURANCE INSTITUTE
FOR HIGHWAY SAFETY

NEWS RELEASE

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2007 *TOP SAFETY PICK* AWARD WINNERS

AWARD CRITERIA ARE TOUGHER; SUVs ELIGIBLE FOR FIRST TIME

ARLINGTON, VA — The Insurance Institute for Highway Safety announces 13 vehicles that earn *TOP SAFETY PICK* awards for 2007. Winners include 4 cars, 7 SUVs, and 2 minivans. This award recognizes vehicles that do the best job of protecting people in front, side, and rear crashes based on ratings in Institute tests. Winners also have to be equipped with electronic stability control (ESC).

WINNERS

Large car
Audi A6
manufactured in Dec. 2006 and later

Midsize cars
Audi A4
Saab 9-3
Subaru Legacy
equipped with optional electronic stability control

Minivans
Hyundai Entourage
Kia Sedona

Luxury SUVs
Mercedes M class
Volvo XC90

Midsize SUVs
Acura RDX
Honda Pilot
Subaru B9 Tribeca

Small SUVs
Honda CR-V
Subaru Forester
equipped with optional electronic stability control

Vehicles eligible to win are current small, midsize, and large car models plus minivans and small and midsize SUVs. Pickups aren't included in this round of awards because the Institute hasn't begun to evaluate their side crashworthiness.

"Our crash tests cover the most common kinds of real-world collisions," says Institute president Adrian Lund. "Designating *TOP SAFETY PICK* winners based on the tests makes it easier for consumers to identify vehicles that afford the best overall protection without sifting through multiple sets of comparative test results."

Tougher criteria to win: The Institute rates vehicles good, acceptable, marginal, or poor based on performance in high-speed front and side crash tests plus evaluations of seat/head restraints for protection against neck injuries in rear impacts. The first requirement for a vehicle to become a *TOP SAFETY PICK* is to earn good ratings in all three Institute tests.

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A new requirement for 2007 is that the winning vehicles must offer ESC. This addition is based on Institute research indicating that ESC significantly reduces crash risk, especially the risk of fatal single-vehicle crashes, by helping drivers maintain control of their vehicles during emergency maneuvers.

"The idea of tightening the criteria for the award is to encourage more vehicle safety improvements," Lund says. "Last year a car could win with an acceptable rating in the rear test instead of the highest rating of good, and ESC wasn't considered. Now it's tougher to win, and some of the 2006 winners don't meet the criteria for this year's award because the manufacturers haven't improved the head restraints from acceptable to good or don't offer ESC."

In particular, the Ford Five Hundred and Mercury Montego, large family cars, are good crash test performers but don't have ESC, even optional. The midsize Chevrolet Malibu doesn't have ESC either, and its seat/head restraints aren't rated good. These cars won in 2006 but not 2007.

No small cars won this year's award. The four-door Honda Civic won last year, but most 2007 Civics don't have ESC. Those that do don't have seat/head restraints rated good for rear crash protection.

Each year the Institute offers to test early the vehicles that manufacturers think will be candidates to win *TOP SAFETY PICK*. All current car and minivan models plus small and midsize SUVs are eligible. Three of the 13 winning vehicles for 2007 are from Honda, including an Acura SUV. Three winners are Subarus.

Vehicle size and type are factored in: *TOP SAFETY PICK* is awarded by vehicle size because size and weight are closely related, and both influence how well occupants will be pro-

tected in serious crashes. Larger, heavier vehicles generally afford better protection in crashes than smaller, lighter ones.

"The awards recognize the cream of the crop for safety in the vehicle size classes, but they don't mean a smaller vehicle that's an award winner affords better protection than a larger vehicle that didn't win *TOP SAFETY PICK*," Lund points out.

Automakers heed ratings and make changes to win: Crash tests have driven major improvements in the designs of all kinds and sizes of passenger vehicles. The Institute began frontal crash tests for consumer information in 1995. Side tests were added in 2003, and the following year a dynamic test to evaluate rear crash protection was introduced. Most vehicles now earn good ratings in the Institute's frontal test, but significant differences still are apparent in the performances of vehicles in side and rear crashes.

Some manufacturers improved their vehicles specifically to earn *TOP SAFETY PICK* awards. Audi redesigned the seat/head restraints in the A4 and A6 to improve performance in the Institute's rear test. Subaru accelerated plans to offer ESC on some versions of the Forester and Legacy.

"But ESC isn't on every version of these two Subarus. Initially it's only on the sporty or pricier models. It's disappointing that Subaru didn't add ESC across the board," Lund says. The company plans to expand ESC availability later.

Other vehicles are in the process of being changed to earn *TOP SAFETY PICK* status. For example, Ford will add ESC to 2008 Freestyles, so when this SUV is introduced next year it will qualify. Automakers also have been adding standard side

ALSO-RANS
Rear protection isn't good

These vehicles earned good ratings in front and side crash tests. They have electronic stability control, standard or optional. They would have won 2007 *TOP SAFETY PICK* awards if their seat/head restraints also had earned good ratings. Instead rear crash protection is rated acceptable, marginal, or poor (Honda reports that the seat/head restraints in the only Civic model with electronic stability control wouldn't be rated good).

Acceptable rear protection
Audi A3
BMW 3-series 4dr
Lexus IS 250/350

Marginal rear protection
Acura TL
Honda Odyssey
Lexus ES 350
Lexus GS 350
Toyota Camry
Toyota FJ Cruiser
Toyota Prius
Toyota RAV4

Poor rear protection
Honda Accord 4dr
Infiniti M35
Nissan Quest
Toyota Avalon
Toyota Sienna

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airbags with head protection, even though government regulations don't require them. All 2007 *TOP SAFETY PICK* winners have standard side airbags.

Seventeen other vehicles would have won 2007 awards if they had good seat/head restraint designs. Toyota could have claimed nine *TOP SAFETY PICK* awards, including three Lexus winners. Honda could have picked up four additional awards, including one for an Acura.

"Protection in rear crashes is an area where many vehicles lag behind in safety," Lund notes. "As manufacturers continue to improve seat/head restraints, we expect to see more winners."

SUVs qualify for 2007: SUVs weren't eligible to win in 2006 because the Institute hadn't evaluated the side crashworthiness of many of them. Now more SUVs have been rated, and 2007 winners reflect the safety improvements manufacturers have been making to these vehicles.

"In the past SUVs, especially the smaller ones, weren't good safety choices compared with cars," Lund explains. "Many SUVs didn't earn good ratings in our crash tests, and on the road they were more likely than cars to get in serious single-vehicle crashes, including rollovers, because of their higher centers of gravity. Newer SUVs perform better in crash tests and, when equipped with ESC, are much less likely to roll over. All but one of the seven SUVs that win our 2007 *TOP SAFETY PICK* have ESC as standard equipment."

Recent Institute research found that ESC reduces the risk of serious crashes involving both SUVs and cars. The largest effect is in single-vehicle crashes, which were reduced 40 percent with the addition of ESC. Fatal single-vehicle crashes went down 56 percent, and fatal rollovers of cars and SUVs were reduced by about 80 percent.

How vehicles are evaluated: The Institute's frontal crashworthiness evaluations are based on results of frontal offset crash tests at 40 mph. Each vehicle's overall evaluation is based on measurements of intrusion into the occupant compartment, injury measures from 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.

Each vehicle's overall side evaluation is based on performance in a crash test in which the side of the vehicle is struck by a barrier moving at 31 mph that represents the front

end of a pickup or SUV. Ratings reflect injury measures recorded on two instrumented SID-IIs 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 real-world crash would have sustained serious injury. The movements and contacts of the dummies' heads during the crash 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. Seats with good or acceptable restraint 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 can't be positioned to protect many people.

End 5-page news release on 2007 *TOP SAFETY PICK* award winners
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