Which would be more damaging:
Driving into a massive concrete wall, or
driving at the same speed into a head-on
collision with an identical car traveling
toward you at the same speed?
Answer: Same either way. Your car decelerates to a dead stop either way. The dead stop is easy to see when hitting the wall, and a little thought will show the same is true when hitting the car. If the oncoming car were traveling slower, with less momentum, you’d keep going after collision with more “give,” and less damage (to you). But if the oncoming car had more momentum than you, it would keep going and you’d snap into a sudden reverse with greater damage. Identical cars at equal speeds mean equal momenta—zero before, zero after collision.