tions of the time required for one of the vehicles to make a turn, I was able to determine that the driver who had become the plaintiff in the case was a minimum of four seconds away from a driveway into which the other driver turned when that oncoming driver saw the turning vehicle. That oncoming person only had to maintain speed and direction and there would have been no contact, if she had been traveling at the speed limit. That conclusion was supported by the testimony of witnesses to the incident. The jury didn't buy her allegation that her swerve was necessitated by the proximity of the other driver's turn and returned a verdict for the defendant. Without knowledge of the involved distances and calculations concerning the time involved to cover those distances at the speed limit, a defense would have been difficult, if not impossible.

There seems to be constant disagreement among parties and reconstructionists regarding the topic of coefficient of friction/drag factor/rate of deceleration. The coefficient of friction is the ratio of the force required to move (slide) an object over a surface and the weight of that object; as a ratio of two forces, it is dimensionless. It is, technically, a physics term, but it can have useful application in the "real" world. On a flat, dry, level surface, the coefficient of friction is, at least in theory, numerically the same as the drag factor for a skidding car. In practice, modern cars on radial-ply tires can decelerate at "drag factors" which are higher than the coefficient of friction value one would obtain using a drag sled or other essentially static device to measure that value on a given road surface. Cars with four-wheel-disc, anti-lock braking systems (ABS) can stop at even higher "drag factors." The best way to determine a drag factor for a particular vehicle is to do a skid test at the accident site with the same vehicle or an exemplar vehicle in which an accurate accelerometer has been placed. I use a Vericom VC-3000 Performance Computer for that application when necessary. The result of such tests provides answers in terms of the rate of deceleration in g's, where one g is the acceleration of gravity. For example, a car which can decelerate at 0.80 g is losing speed at the rate of 25.76 feet per second per second. In years past, cars with bias-ply tires, softer suspensions, and four-wheel-drum brakes would be lucky to pull 0.70 g—more likely 0.55 g to 0.65 g. Here in Georgia, the DOT has done a commendable job of keeping the traveling surfaces of highways in good to excellent condition; almost any modern car can skid at a minimum rate of 0.70 g on most dry, essentially level Georgia roads, and most of those with four-wheel-disc ABS can exceed 0.80 g. There are a few specialty cars which can decelerate at levels near or above 1.00 g, but they are rare. Interestingly, almost every modern motorcycle can be decelerated at a rate of at least 1.00 g; some can reach a deceleration rate of 1.20 g. Yes, almost any modern motorcycle can stop faster than most cars and virtually every light truck.

In these very lean economic times, I am especially grateful for your consideration of my services. Please call me anytime you have a question concerning accident reconstruction details, crash data retrieval, pedestrian accident reconstruction, night conspicuity evaluations, vehicle component failure evaluations, or other services. I thank you for reading my newsletter.

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