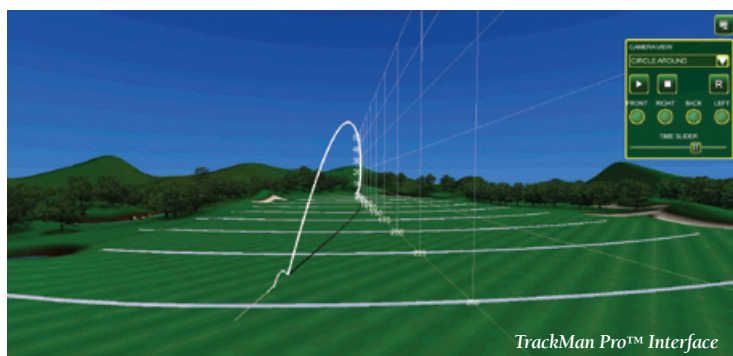




## Golf Statistics Compiled Through *TrackMan Pro*<sup>TM</sup>

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TrackMan Pro<sup>TM</sup> Interface

**TrackMan Pro<sup>TM</sup>** is a staple on the professional tours for leading club fitters, manufacturers, retailers, and instructors. The PGA, The R&A and USGA have come to rely on this radar-based system to provide swing and ball flight analysis, as does the broadcast networks to improve its coverage. TrackMan Pro<sup>TM</sup> is the first of its kind to map the entire flight of the golf ball from impact to landing, displaying 3D trajectory in real time. The system provides a complete statistical analysis of the club delivery, launch and ball flight. Listed below are a few interesting statistics compiled from Trackman Pro that might shed some light on a few of golf's oldest myths:

### PGA Tour Professionals

- All clubs are struck with a descending blow from a PW (-5.0 degrees) to a Driver (-1.3 degrees).
- Every club in the bag hits the ball at the same height – 30 yards.
- The average clubhead speed with the Driver is 112 mph; ball speed is 165 mph and carry distance is 269 yards.
- The average clubhead speed with an 8-iron is 87 mph; ball speed is 115mph and carry distance is 160 yards.
- Clubhead speed increased by 2 mph from club to club.
- The distance difference between each iron is 12 yards (8-iron 160 yards and 7-iron 172 yards).

### LPGA Tour professionals

- All clubs are struck with a descending blow other than the driver which is 3.0 degrees upward.
- Every club in the bag hits the ball the same height – 25 yards.
- The average clubhead speed with the Driver is 94 mph; ball speed is 139mph and carry distance is 220 yards.
- The average clubhead speed with an 8-iron is 74 mph; ball speed is 100 mph and carry distance is 130 yards.
- The distance difference between each iron is 11 yards (8-iron 130 yards and 7-iron 141 yards).

### General Information

- Shot accuracy is primarily determined by a combination of face angle and swing path, with face angle being the dominant factor - approximately 85%.
- For putting, shot accuracy is also determined primarily by the clubface, but the softer the hit (as in chipping and putting) the greater the effect of clubface. In putting the face accounts for 95+% of where the ball goes.
- Face angle determines the launch direction while shot curvature/shape is determined by the swing path relative to the face angle – the opposite of what has been taught for years. Think of it this way: when a ball is struck with a descending blow, i.e. ball first, divot second, the attack angle is down, yet the ball goes up. The ball goes up due to the angle/loft of the face!
- The highest recorded clubhead speed on the PGA Tour in 2009 was Bubba Watson at 128 mph while the World Long Drive Champion, Jamie Sadlowksi used a clubhead speed of 145 mph (418 yards!) to win. The average male golfer swings a driver somewhere between 82 and 90mph.
- A carry distance of 100 yards for ladies is equivalent to a carry distance of 130 yards for men; 200 yards for ladies is equivalent to 250 yards for men.
- A par four of 350 yards for ladies is equivalent to a par four of 430 yards for the men.
- The most important factor in increasing carry distance is clubhead speed. For every 1 mph you can add to your swing speed you stand to gain 4 yards.
- An increase of 1" in the length of a club can increase the clubhead speed by as much as 4 mph.
- The quality of the hit is very important as it relays clubhead speed into ball speed. Smash factor is the measurement of the quality of the hit and it is calculated by dividing the ball speed by the clubhead speed. The maximum smash factor is 1.5 (e.g. 100 mph clubhead speed divided into 150 mph ball speed) and indicates an ideal strike on the ball.

Something to keep in mind ~ **NO GOLFER SHOULD DISCARD ACCURACY IN SEARCH OF DISTANCE.** There should always be a balance between the two. It is, however, possible for just about any golfer to **significantly increase** their distance with very little decrease in accuracy, as a result of a long-term plan that couples commitment and discipline. **Please contact either Derek Lemire, Director of the Spa & Fitness Center and Certified Personal Trainer, Krista Dunton or myself if you would like to create a program to increase your distance.**