

## Turn Time - The Hidden Fraction

"Turn time" - the "hidden fraction" - whatever you want to call it - is arguably the most important segment in a horse race. A lot has been written about this (as with most subjects having to do with horse handicapping), but it's an important enough topic to deserve another go-around.

"Turn time" is the second fraction (as given in the past performances) of a race - the quarter-of-a-mile (at distances up to a mile and three sixteenths) distance that is run around the turn for home.

Why is it more important than other fractions, or the other quarter-mile segments of the race? A couple of important reasons:

1. It is the portion of a race whose time has to be extrapolated from the fractional times given in the past performances (thus the "hidden fraction").

Because of the simple math, and time involved in calculating this number - few handicappers bother. As always in the pari-mutuel game, little used information (like turn time) is much more valuable than over-used information (like Beyer numbers).

2. Perhaps more important: Many races are won or lost during the run around the turn heading for home. This is a fact quickly noted by every newbie when he watches his brave front-runner who was ahead by daylight down the back-stretch start to sputter and cough it up on the turn as other pace pressers begin to exert themselves.

Why does this happen (#2 above)?

Again, a couple of reasons:

**- Physical:** It is difficult for a horse (especially a younger inexperienced horse) to maintain its velocity and path while also negotiating a turn. Some horses will feel uncomfortable being on their right or left lead (which leg is hitting the ground first), yet they will have a fear of trying to change leads while in the process of running the turn. For this reason, you'll often see horses slowing down dramatically, bearing out, or even bolting to the outside fence on that turn. They are often apprehensive and make it worse on themselves because of that apprehension.

**- Psychological:** Class will often exert itself during this part of a race, In lower level allowance and mid to low level claiming races (as well as maiden and maiden claimers), true heart and determination are

exhibited less often than in the higher level stakes and handicaps. A horse that can win if things set up perfectly - will often through in the towel when challenged by a stoutly closing runner on the turn.

The anxiety of negotiating the turn mentioned earlier is compounded by the anxiety of hearing pounding hoof beats closing inexorably behind and just out of sight. Remember, these are herd animals with thousands of years of evolution in their genes. Most horses are not natural-born leaders. In the wild, they would not have assumed that role. When the 'leader' in that situation advances on you, you had better take a back-seat or risk being bit, kicked or otherwise savaged. This kind of instinct is overcome by only the best of runners.

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An important aspect of turn time arises as a corollary to the above ideas: **The ability, and running times, of a horse on the turn remains the most consistent part of its race.** Early pace and fractional times can be radically affected by the pace mix in any particular race. Several "need-to-lead" types thrown in against each other can create an especially hot early pace. Then too - the late part of a race is impacted by the waning stamina of the runners and their reaction to whatever kind of pace was forced upon them earlier in that race.

### How is Turn Time figured? -

Take the 1st listed fractional time in the running lines of a past race (which is the quarter-mile time in sprints, and the half-mile time in most routes) and subtract it from the 2nd listed fractional time (the half-mile in sprints and the 3/4 mile time in routes). Adjust for lengths gained or lost against the pace of the race.

#### Example for a 6-furlong race:

Fractional times as listed in the past performances (with beaten lengths below the fraction time):

22<sup>4</sup> 45<sup>4</sup> 110<sup>3</sup>  
 0 1 2

(If using times in 10ths - the above would be 22.8, 45.6, 110.8 - divide the 10ths by 2 to approximate the old length = a fifth of a second format)

The raw turn time is 45.4 (45 and 4/5 seconds) minus 22.4 (22 and 4/5 seconds) = 23 seconds.

The horse lost one length (which is approximately 1/5th of a second) =

23.1 seconds for the adjusted turn time.

Below is another horse in that same race:

$$\begin{array}{r} 22^4 \ 45^4 \ 110^3 \\ 4 \ 2 \ 1 \end{array}$$

The raw turn time is the same, but this runner gained 2 lengths on the turn, so his adjusted TT is 22.3.

**Now a route example:**

$$\begin{array}{r} 45^4 \ 110^2 \ 142^4 \\ 2 \ 0 \ 0 \end{array}$$

The raw TT was 24.3 and the horse gained 2 lengths., so adj. TT is 24.1

Below is another horse in that race:

$$\begin{array}{r} 45^4 \ 110^2 \ 142^4 \\ 0 \ 1 \ 1 \end{array}$$

Raw 24.3 - lost 1 length., so adj. TT is 24.4

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A recent actual example of the use of turn time to help steer towards a good winner occurred in the 10th race at Hawthorne on Nov. 13th. It was a 35K optional claimer for 3 year-olds and up - non winners of 3 lifetime - going 6 furlongs.

The favorite was off at 8/5. This 5 year old horse, Onlyinurimagination, was suspect class-wise, as previous to its last two Allowance races it had been running at 18K, 14K, 7K, and 5K. Average earnings per start were \$3,965. Turn time in last 3 races were (most recent first): 23, 23.2, 23

The horse that we bet was a 3 year-old, Shamuuu, who had never been offered for a claiming tag and whose average earnings per start were \$5,736. Turn time in last 3 races were (most recent first): 22.4, 23.1, 23

As well, the favorite Onlyinurimagination was a committed early-type horse while Shamuuu was a presser who had been no more than a length and a half off the lead in its last 5 races. His improving turn time

and the fact that he could be breathing down the other horses neck all the way down the back stretch - coupled with his apparent class edge - pointed him out as the superior wager (especially at the odds of 10/1) . .

Only in our imagination ended up running the turn in 23.2 while Shaamu ran it in 22.4 while closing from a bit further back than usual. Results: The weak favorite ran 4th, and Shamu won it.

**Shamuuu    23.80   10.40   5.60**

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There are some other subtleties involved when using turn time - like: at some distances the run is mostly on the straight and only a portion on the turn - also there are turn time pars that differ from track to track and between class levels - but you've got enough to begin using the concept profitably.

Turn Time is one of the factors to which special attention should be paid. Here are some extra hints and points to keep in mind when using "Turn Time" . . .

- "TT" is especially meaningful when handicapping younger horses that are still learning.
- "TT" is more reliable in sprints than routes.
- "TT" is one of the best indicators of "form cycle" and improving turn times can be used to spot an improving horse.
- "TT" is a good way to estimate a maiden graduate's potential against winners next out.
- "TT" points to whether or not a lone front-runner can hold his advantage into the stretch.

For an even more in-depth look at Turn Time, I recommend Tom Brohamer's book, "Modern Pace Handicapping."

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