

Olathe Marathon Pacing Strategy

Fact #1: The body needs to warm up for at least 2 miles. During that time, it goes from an inefficient fuel burning (converting oxygen, sugar/fat, electrolytes to energy) and waste removal (getting rid of lactic acid and built up heat) machine to a more efficient one.

If someone pushes it too hard (even doing even pace) in that time period, they will use up an inordinate amount of stored glycogen while accumulating an inordinate amount of lactic acid to set up an almost certain bonking or 'hitting the wall' for the last 1/3 of the marathon.

We are in the business of preparing our participants for the last 1/3 in a more intelligent and effective manner, so we'll EASE into the marathon. With a bridge to climb in the first mile and wind a possible factor for the first few miles, it only will exacerbate this situation for anyone determined to set an even pace from the get-go. Besides, the more noticeable hills won't come until the 2nd half of the race so we'd be wise to save a little bit for them. By not respecting the terrain and the body's need to warm up, we'll end up like most other marathon pace teams in races around the country – having little to no one to pace in the final miles since we innocently wasted them in the first 1/3 of the marathon.

Fact #2: Honor the Domino Effect. Imagine 26 dominos lined up. Which domino has the greatest impact? The first one, right? In the same manner, the first mile is the most crucial, make-or-break mile of the marathon. Therefore, you need to be the most conservative with this one. Vice versa, the last mile is the least critical so you can afford to be the most aggressive on that one. But, what do most people do? The opposite!

Just like the first mile, the first aid station is the most important, make-or-break aid station to determine how well people can keep their 'gas tank' from going on empty while the last aid station is the least important towards overall race performance. Again, what do most people do? They rush through the first ones until they're forced to walk through the last ones. We'll encourage you to get what you need in the first 20 miles of aid stations if you want to have any hope of getting what you want in the last 6.2 miles. And, it begins most importantly with the first aid station.

Fact #3: Most people will slow down in the final miles. The accumulating fatigue makes it likely that most people will start to go slower, even if they replenish with enough glucose, electrolytes and fluids. Therefore, it's smart to create a 1 to 2 minute cushion for the final 6.2 miles. The time to do so is after the warm up and up until this point – i.e. miles 4 to 18. Your body is efficient, it's fresh, and the adrenaline has worn off so you won't get too crazy.

Pacing Strategy: "Hold back, settle into a strong rhythm, and hang in there."

Hold back – We'll run the first mile about 1 minute per mile slower than the average pace of your goal time to properly warm up. We'll run the second mile about 30 seconds per mile slower than the average pace of your goal time to continue the transition from warm up to settling in. Finally, we'll run the 3rd mile at the average pace effort of your goal time to complete the transition.

Settle into a strong, but doable rhythm – Then, we'll run about 10 seconds faster per mile than the average pace of your goal time from miles 4 to 21 to get back the time we gave at the beginning and create a cushion for the end.

Hang in there – We'll give lots of encouragement to you at this time, but know that you can go up to 25 seconds per mile slower than the average pace of your goal time (it'll be 30-35 seconds slower than what you've been averaging so it should be doable for more people). Our job is to set the actual pace so even if participants lose contact, we may get a few that pick it up in the final mile to finish with us. We promise to run at least 1 second faster than our goal time (i.e. a 3:59:59 for the 4:00 group).

*Run/Walk method – In 2001, we had 20 Runner's Edge participants spread over 2 groups (4:00 and 4:30 pace teams) use the run a mile, walk a minute strategy both at the Hospital Hill Half Marathon and 2 weeks later at the Grandma's Marathon. We used it for the first 10 miles of the half marathon and for the first 18-20 miles of the marathon. The results were astounding as a few people ran PR's in the half marathon while nearly 1/3 of the group

PR'd despite very warm, humid sunny conditions at Grandma's. Thousands of runners have successfully used the run/walk method popularized by long time running coach Jeff Galloway.

The longer your time goal, the more important this strategy becomes towards conserving energy for the final 1/3 of the race. At a minimum, I suggest a 30 second brisk walk through the aid stations to make sure you get enough fluids in you instead of on you. You'll need to compensate by going 5-10 seconds per mile faster when running. When walking, be sure to make it a brisk pace so you don't lose too much time – it will give the running muscles a break along with providing a mental break. Since the primary goal is to prepare for the last part of the marathon, you can stop taking the walk breaks including through the aid stations any time past mile 18. The marathon pacers will let you know if they plan to do so. If you choose to do this, I strongly encourage you to practice this during your long runs.

Aid Station Strategy: “Don't rush, drink enough”

We will briskly walk through the first 18-20 miles of aid stations to ensure that you get enough to prevent an empty 'gas tank'.

Example of a Specific Kansas City Marathon terrain based 'Smart Pace' strategy

Example for a 4:00 Pacer

Mile	Terrain description	Effect on Pace for same effort	Total Changes to even pace	Split / Total Time	Ave. Pace/Total Time
1	Flat, gradual uphill over bridge	+ 5 seconds	+60 seconds	10:09 / 10:09	9:09 / 9:09
2	Gradual downhill, flat	- 5 seconds	+25 seconds	9:34 / 19:43	9:09 / 18:18
3	Nearly flat with a small rise	none	none	9:09 / 28:52	9:09 / 27:27
4	Flat	none	-5 seconds	9:04 / 37:56	9:09 / 36:36
5	Flat	none	-10 seconds	8:59 / 46:55	9:09 / 45:45
6	Flat, very gradual rise	none	-10 seconds	8:59 / 55:54	9:09 / 54:54
7	Gently rolling	none	-10 seconds	8:59 / 1:04:53	9:09 / 1:04:03
8	Gently rolling	none	-10 seconds	8:59 / 1:13:52	9:09 / 1:13:12
9	Gently rolling with one hill	+ 5 seconds	-5 seconds	9:04 / 1:22:56	9:09 / 1:22:21
10	Gently rolling	none	-10 seconds	8:59 / 1:31:55	9:09 / 1:31:30
11	Flat	none	-10 seconds	8:59 / 1:40:54	9:09 / 1:40:39
12	Gradual downhill	- 5 seconds	-15 seconds	8:54 / 1:49:48	9:09 / 1:49:48
13	Gently rolling	none	-10 seconds	8:59 / 1:58:47	9:09 / 1:58:57
13.1	Gently rolling	none	none	1:00 / 1:59:47	1:00 / 1:59:57
14	Gently rolling	none	-10 seconds	8:59 / 2:07:46	9:09 / 2:08:06
15	Gently rolling	none	-10 seconds	8:59 / 2:16:45	9:09 / 2:17:15
16	Gently rolling	none	-10 seconds	9:04 / 2:25:49	9:09 / 2:26:24
17	Very gradual uphill	+ 5 seconds	-5 seconds	8:59 / 2:34:48	9:09 / 2:35:33
18	Very gradual downhill	- 5 seconds	-15 seconds	8:54 / 2:43:42	9:09 / 2:44:42
19	Noticeable uphill	+15 seconds	+15 seconds	9:19 / 2:53:01	9:09 / 2:53:51
20	Flat, very gradual downhill	- 5 seconds	-10 seconds	8:59 / 3:02	9:09 / 3:03
21	Gradual downhill	- 5 seconds	-10 seconds	8:59 / 3:10:59	9:09 / 3:12:09
22	Gently rolling	none	none	9:09 / 3:20:08	9:09 / 3:21:18
23	Gently rolling	none	+5 seconds	9:14 / 3:29:22	9:09 / 3:30:27
24	Gently rolling	none	+15 seconds	9:24 / 3:38:46	9:09 / 3:39:36
25	Rolling with one small hill	+ 5 seconds	+25 seconds	9:34 / 3:48:20	9:09 / 3:48:45
26	Rolling with one small hill	+ 5 seconds	+25 seconds	9:34 / 3:57:54	9:09 / 3:57:54
26.2	Flat	none	none	2:05 / 3:59:59	2:05 / 3:59:59

Comments – As you can see, the pace depends on the terrain, factoring in the warm up at the beginning, settling into a strong rhythm in the middle, and hanging in there at the end. In using this strategy, a higher percentage of race participants will be able to stay with our marathon pacers into the latter stages of the marathon.