

Rock n Roll Marathons Insights

Exploration of half and full marathon data 2016-2019

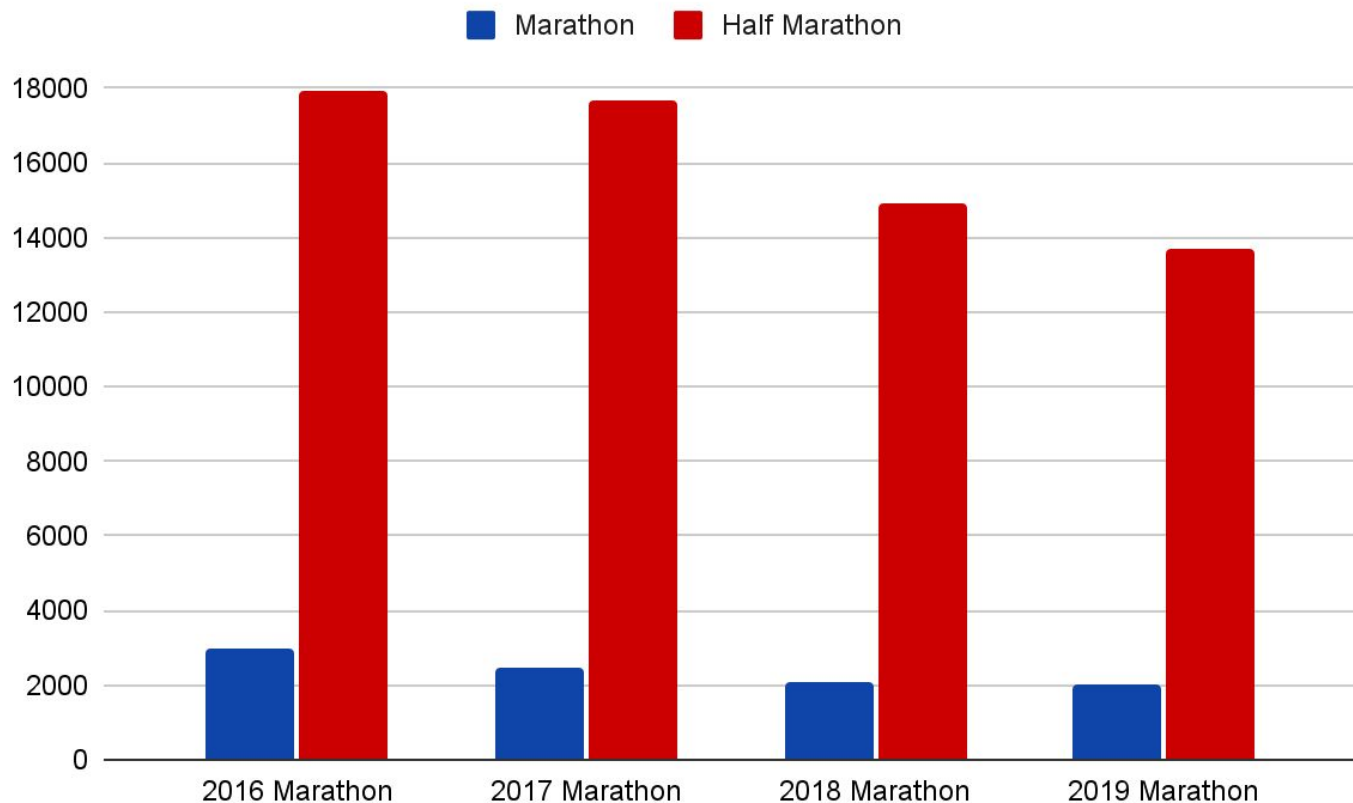
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Rock and Roll Marathon 2016-2019

- Fastest & Slowest Times
- Mean & Median Times
- Why?
- Outliers



Race participants over the years



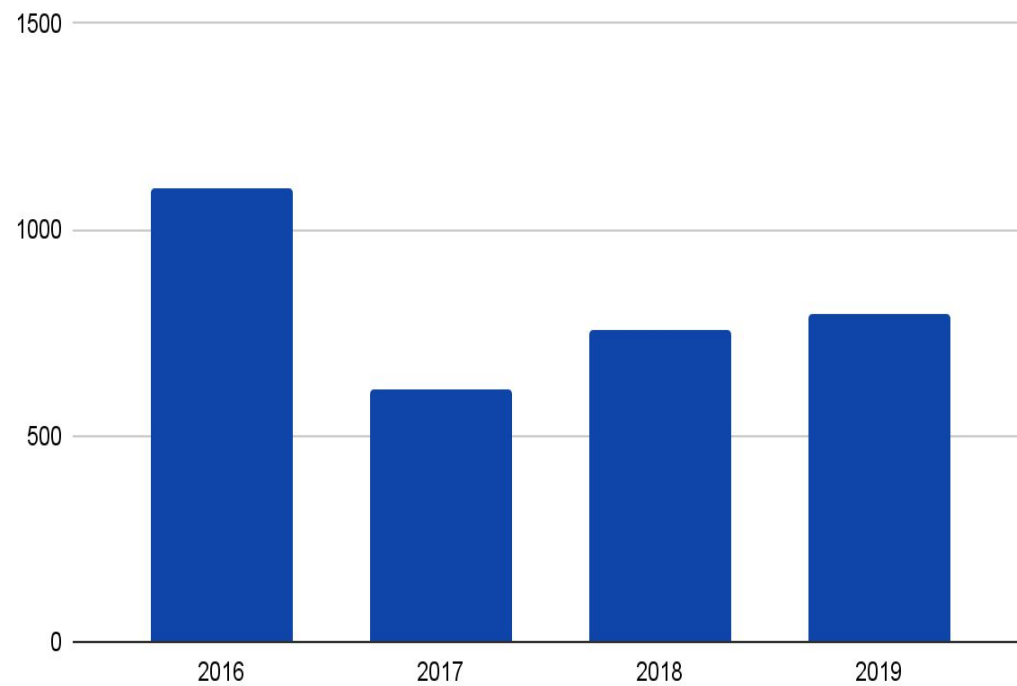
Time Statistics

Race	Fastest Time	Slowest Time	Median Time	Mean Time
2016 Marathon	2:25:42	7:00:00	4:45:19	4:47:48
2017 Marathon	2:40:25	6:38:19	4:58:14	4:54:26
2018 Marathon	2:28:16	6:34:41	4:48:21	4:48:23
2019 Marathon	2:34:59	6:43:55	4:41:57	4:42:09
2016 Half	1:11:15	4:54:41	2:26:18	2:31:57
2017 Half	1:10:58	6:18:24	2:39:34	2:43:59
2018 Half	1:09:25	4:48:06	2:25:32	2:31:46
2019 Half	1:10:03	5:03:35	2:26:07	2:32:07

YOU GET A FASTER TIME!



Racers who beat Oprah's time



Slowest Year

By our analysis we determined that 2017 was the slowest year of marathon runners

Quartiles				
	Quartiles for half marathons	1st Quartile	2nd Quartile	3rd Quartile
	2016	2:08:18	2:26:18	2:50:11
	2017	2:18:17	2:39:34	3:05:10
	2018	2:07:21	2:25:32	2:51:16
	2019	2:07:04	2:26:07	2:51:30

Weather

2017 had the hottest weather out of the marathons based on

<https://www.timeanddate.com/>

weather of marathons 6a-12pm				
	date	temp low	temp high	humidity
2016	4/30/2016	64°	70°	87%
2017	4/29/2017	73°	91°	69%
2018	4/28/2018	50°	72°	52%
2019	4/27/2019	45°	45°	48%

Participation

- Participation was high in 2017

Year	Runner Count
2016	17917
2017	17699
2018	14925
2019	13703



Participation Decline

- New ownership in 2018 ([article](#))
- Participation of Marathons has declined 13% since 2016 according to [report](#).
- Less experienced runners each year can cause slower times



Outliers



Scott Wietecha will aim for his 8th consecutive win at the St. Jude Rock 'n' Roll Nashville Marathon & Half-Marathon

Scott Wietecha will aim for his 8th win in a row at the St. Jude Rock 'n' Roll Nashville Marathon & Half-Marathon on Nov. 21.

Historic win streak

Repeat Winner

Scott Wietecha

2016 - **2:25:42**

2017 - **2:40:25**

2018 - **2:28:16**

2019 - **2:34:59**

Routine: 100 miles weekly, running coach, and multiple marathons per year.

A Slow Year

In 2017 -

- Both the full and half marathons had slower times.
- 4th Quartile difference: **0:19:55**
- Full Marathon: **2466 runners**
- Half Marathon: **17699 runners**
- **> 6:00:00**
 - Full Marathon: **67 runners**
 - Half Marathon: **1 runner**



<6:00:00

2016 Full: **241 Runners, 8%**

2018 Full: **153 Runners, 7%**


2019 Full: **78 Runners, 4%**

<4:00:00

2016 Half: **264 Runners, 1%**

2018 Half: **234, 2%**

2019 Half: **225, 2%**



4% & 1%

Average <**3:00:00** marathon completion for each gender

Is Nashville Fast?

Times <3:00:00

2016: **16 Runners, 1%**

2017: **2 Runners, 0%**

2018: **16 Runners, 1%**

2019: **16 Runners, 1%**



Thank You
&
Questions