

TOUGH MUDDER X – FINALS

If you missed the recap on episodes 1 or 2, click [HERE](#).

The final round of the 2018 Tough Mudder X Championship aired on CBS this past Saturday. Yancy Camp staffer Jack Bauer provides his final detailed breakdown of lead changes, who struggled/dominated certain zones, etc. during the finals. Even though CBS did a great job covering the race in its entirety on TV, in-depth data from the TMX Championship gives readers a deeper understanding about what they may have missed during the finals, including:

- Lead and position changes throughout the race
- Fastest splits for each zone
- Timing mat splits
- Comparison of CrossFit vs. OCR
- Comparison of finals vs. both previous rounds

Just like rounds 1 and 2, this data was delayed a few days to avoid spoiling any of the results for TV viewers. Let's take a look at how the qualifying rounds went down.

Course Map

Although much of the course remained the same throughout the day, Tough Mudder staff switched up 4/20 stations on the course during the finals (shown in orange text on the map):

- Workout 1 – replaced DB hang clean + jerks (50/35) with one-arm DB snatches (70/50)
- Workout 5 – added 10 KB deadlifts halfway through the farmer's carry (200/140)
- Workout 8 – replaced sandbag overhead press with sandbag thrusters
- Workout 10 – added 10 sandbag shoulder-overs before the atlas carries

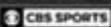
Here is a quick review of the timing mat locations that will be referenced repeatedly:

- Zone 1, 400m – after climbing down from Balls to the Wall (#5)
- Zone 2, 800m – just before climbing up Kong Infinity (#11)
- Zone 3, 1100m – just before #14 on the long running stretch
- Zone 4, 1200m – after Leap of Faith (#15) just before starting the sandbag cleans (#16)
- Zone 5, 1400m – just before Rope-A-Dope (#20)
- Zone 6, Finish line

Course Map



2018
Championship
Richmond, VA



Course Sequence:

- = Obstacle
- = Workout Zone



Workout List: **One-arm snatch (70/50)**

1. Dumbbell ~~Hang Clean and Jerk~~
2. Box Jumps
3. C2B Pull Ups
4. Wall Balls
5. Farmer's Carry + **15 deadlifts**
6. Sled Drag & Pull
7. Sandbag Cleans **Thrusters**
8. Sandbag ~~Shoulder to Overhead~~
9. Sandbag Lunges
10. Atlas Carry + **10 Shoulder-Overs**

Obstacle List:

1. Balls to the Wall
2. Berlin Walls
3. Just the Tip
4. Everest
5. Kiss of Mud
6. Kong
7. Skidmarked
8. Funky Monkey
9. Leap of Faith
10. Rope a Dope

Position Changes

Here are the official results for the finals, in order of finishing time. This was everyone's third race of the day, and it was obvious that the heat and hand blisters finally took their toll on several athletes during the finals. Take a quick look at this then move on, as I'll break down the data into way more detail in the next few sections. Seriously, don't spend too much time on this, as the next few tables are broken down in different ways that will be eye-opening as to how the race unfolded. You'll also see a lot of color-coded columns:

- Blue = fast
- White = average
- Red = slow
- Darker color = very fast/slow

Rank	Bib	Racer Info	400m (After BTW)			800m (Before Kong)			1100m (Last Bale Bonds)			1200m (After Leap of Faith)			1400m (Before Rope Climb)			1600m (Finish Line)											
			Timing Mat		Change	Timing Mat		Change	Timing Mat		Change	Timing Mat		Change	Timing Mat		Change	Timing Mat		Change									
			Time	Position		Time	Position		Time	Position		Time	Position		Time	Position		Time	Position		Time	Position							
1	252	Chapman Emma	03:16.8	1	07:25.2	2	▼-1	04:08.54	3	10:52.9	1	▲1	03:27.7	2	12:35.6	1	▲0	01:42.57	2	16:42.6	1	▲0	04:07.0	1	18:27.8	1	▲0	01:45.2	6
2	253	Coffin Corinna	03:48.6	4	08:01.8	4	▲0	04:13.2	4	11:35.7	3	▲1	03:33.59	3	13:05.2	2	▲1	01:29.55	1	18:04.5	2	▲0	04:59.3	3	19:36.9	2	▲0	01:32.4	2
3	256	Lance Cassidy	03:45.8	3	08:03.4	5	▼-2	04:17.56	5	11:27.8	2	▲3	03:24.4	1	13:36.7	3	▼-1	02:08.59	6	18:42.1	3	▲0	05:05.54	4	20:11.7	3	▲0	01:29.6	1
4	255	Weeks Lauren	03:50.0	5	07:58.2	3	▲2	04:08.2	2	12:09.6	4	▼-1	04:11.4	6	14:23.5	5	▼-1	02:13.59	7	19:22.5	4	▲1	04:59.0	2	20:58.6	4	▲0	01:36.1	3
5	260	Watton Cassidy	03:59.9	6	08:38.8	6	▲0	04:38.59	7	12:23.0	5	▲1	03:44.52	4	14:13.8	4	▲1	01:50.8	3	19:48.5	5	▼-1	05:34.57	5	21:43.0	5	▲0	01:54.55	7
6	258	Fortunato Talayna	04:21.8	10	09:08.1	9	▲1	04:46.53	9	13:18.1	6	▲3	04:10.0	5	15:17.6	6	▲0	01:59.5	4	21:25.6	6	▲0	06:08.0	6	23:08.3	6	▲0	01:42.57	5
7	254	Wagner Candice	04:06.4	7	08:42.5	7	▲0	04:36.1	6	13:54.9	7	▲0	05:12.4	7	15:55.9	7	▲0	02:01.0	5	22:11.2	7	▲0	06:15.53	7	23:49.5	7	▲0	01:38.3	4
8	259	Dekrey Kimberlee	04:16.6	9	08:58.2	8	▲1	04:41.56	8	16:53.7	8	▲0	07:55.5	8	21:52.4	8	▲0	04:58.57	9	-	-	-	-	-	-	-	-	-	-
9	251	Prevost Carlyne	03:17.7	2	07:14.1	1	▲1	03:56.54	1	19:36.3	9	▼-8	12:22.2	9	22:40.9	9	▲0	03:04.6	8	-	-	-	-	-	-	-	-	-	-
10	257	Abbott Emily	04:07.6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

- There were 6 total position changes in the final 3 zones, but there were 13 in the prior 2 zones. Final placements were essentially cemented before the sandbag zone, as only 2 athletes traded places.
- Carlyne Prevost was looking strong at the halfway point, but she lost the lead and any chance at the podium after spending over 12 minutes getting through zone 3 (specifically on Kong Infinity).
- Last year's winner, Corinna Coffin, never led at any point during the finals, although she gradually moved up from 4th to 2nd throughout the final round.

Position at End of Zone

This chart shows the relative placement of everyone at various checkpoints. For instance, Emma Chapman was the 1st person to finish her wall balls, dropped to 2nd place at the 800m mark, then regained the lead for good. Here are some observations:

- The gap between 1st and 10th after the first workout zone was only 31.6 seconds in round 2, but that more than tripled to 1:05.0 during the finals. Keep in mind that Tough Mudder modified this zone for the finals by switching DB hang clean + jerks with one-arm DB snatches.
- During the semi-finals and round 1, all of the top-10 racers were still within 57 seconds of each other at the halfway point. During the finals, only 4 other racers were within 1:00 of the lead at the 800m checkpoint. This is the same exact ratio as in the men's race.
- Emma Chapman's margin of victory during the finals was larger than Hunter's win, but she actually didn't win every round:
 - Finals – 1:09.1
 - Semis – 0:02.5 (2nd place)
 - Qualifiers – 0:22.6
- Carlyne Prevost was in the lead by 11.1 seconds at the halfway point, but she lost the lead and any chance of ending on the podium after struggling on Kong Infinity for nearly 10 minutes.
- By the time the finals took place, many athletes were already dealing with nasty blisters on their hands. Even though it affected how smoothly they were able to get through workout zones and grip obstacles, most athletes in the final two rounds were still able to complete the course before the 25-minute time cap. Here are the number of DNFs by round:
 - Finals – 3/10
 - Semi-finals – 2/20
 - Qualifiers – 22/42

Rank	400m (After BTW)	Behind Lead	800m (Before Kong)	Behind Lead	1100m (Last Bale Bonds)	Behind Lead	1200m (After Leap of Faith)	Behind Lead	1400m (Before Rope Climb)	Behind Lead	1600m (Finish Line)	Behind Lead
1	Emma Chapman	03:16.8	Carlyne Prevost	07:14.1	Emma Chapman	10:52.9	Emma Chapman	12:35.6	Emma Chapman	16:42.6	Emma Chapman	18:27.8
2	Carlyne Prevost	00:00.59	Emma Chapman	00:11.1	Cassidy Lance	00:34.59	Corinna Coffin	00:29.56	Corinna Coffin	01:21.59	Corinna Coffin	01:09.1
3	Cassidy Lance	00:29.0	Lauren Weeks	00:44.1	Corinna Coffin	00:42.58	Cassidy Lance	01:01.1	Cassidy Lance	01:59.55	Cassidy Lance	01:43.59
4	Corinna Coffin	00:31.58	Corinna Coffin	00:47.7	Lauren Weeks	01:16.57	Cassidy Watton	01:38.2	Lauren Weeks	02:39.59	Lauren Weeks	02:30.58
5	Lauren Weeks	00:33.52	Cassidy Lance	00:49.3	Cassidy Watton	01:30.51	Lauren Weeks	01:47.59	Cassidy Watton	03:05.59	Cassidy Watton	03:15.52
6	Cassidy Watton	00:43.1	Cassidy Watton	01:24.7	Talayna Fortunato	02:25.52	Talayna Fortunato	02:42.0	Talayna Fortunato	04:43.0	Talayna Fortunato	04:40.55
7	Candice Wagner	00:49.56	Candice Wagner	01:28.4	Candice Wagner	03:02.0	Candice Wagner	03:20.3	Candice Wagner	05:28.56	Candice Wagner	05:21.57
8	Emily Abbott	00:50.58	Kimberlee Dekrey	01:44.1	Kimberlee Dekrey	06:00.58	Kimberlee Dekrey	09:16.58			Kimberlee Dekrey	
9	Kimberlee Dekrey	00:59.58	Talayna Fortunato	01:54.0	Carlyne Prevost	08:43.54	Carlyne Prevost	10:05.3			Carlyne Prevost	
10	Talayna Fortunato	01:05.0									Emily Abbott	

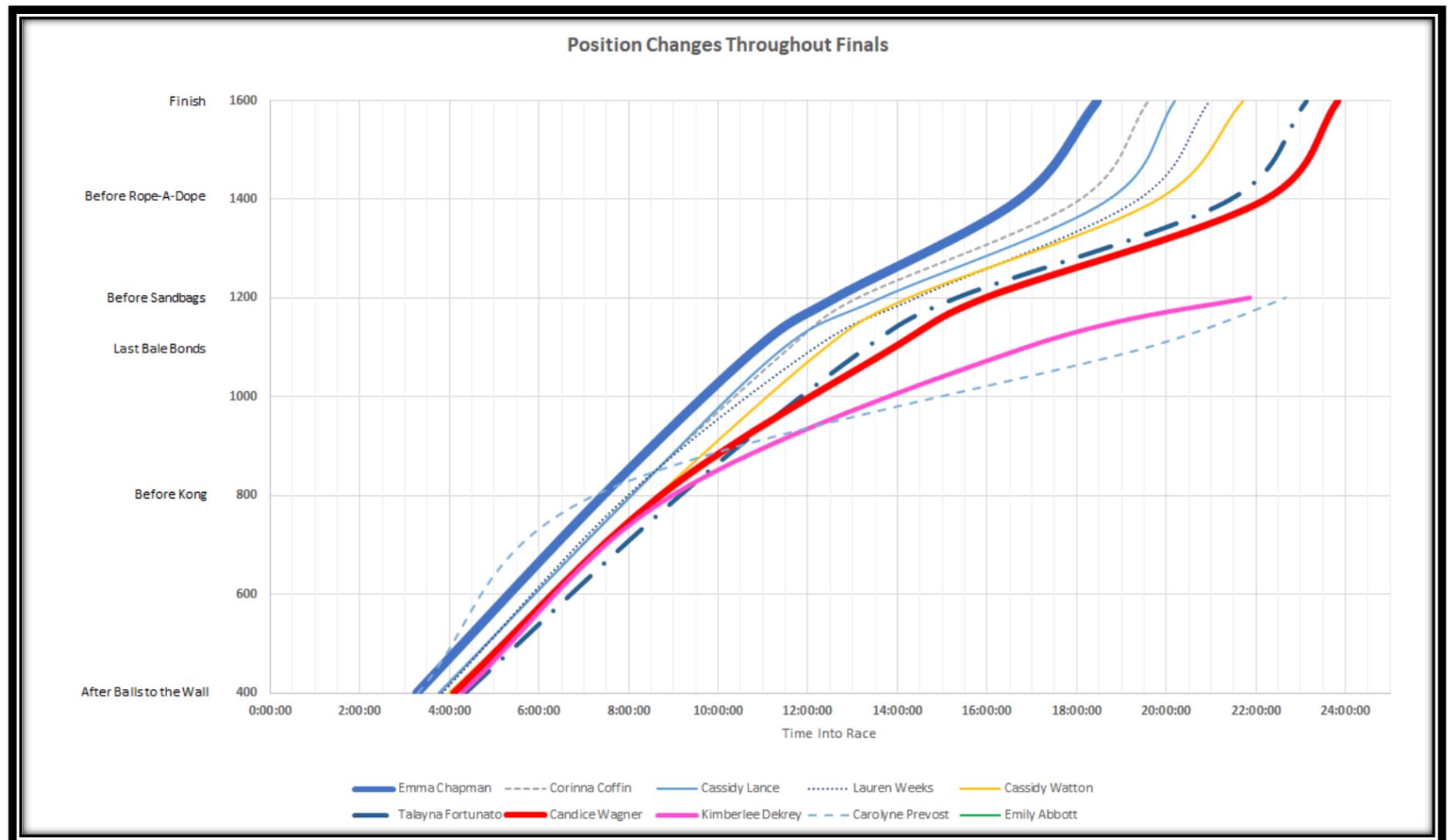
Lead Changes Visual

Another way of looking at how positions changed throughout the race is shown in the graph below (which may look intimidating but isn't as difficult to follow as you think).

- X-axis – how long it takes someone (minutes) to reach each checkpoint
- Y-axis – distance into the race/checkpoint (meters).
- Whenever lines are very close to each other across multiple checkpoints, that suggest that those athletes were battling neck-and-neck for a while.
 - Unlike the men's field, where there were several competitors with close battles from start to finish, the women were much more spread out.
 - Only 2 times during the second half of the finals were 2 women within 15 seconds of each other crossing a timing mat.
- Whenever a line crosses the top, that means that athlete has finished the race.
 - The further to the left, the better you placed (e.g., closer to 1st)
 - The further to the right, the worse you placed (e.g., closer to 10th)

Here are other examples of how to interpret this graph:

- If you look at the thick blue line furthest to the left, you can see that Emma Chapman was the first to cross the finish line but was in second place until the halfway point, as there was an overlap with Carlyne Prevost's line before 800m.
- Kimberley Dekrey, Carlyne Prevost, and Emily Abbott all DNF'd, so their lines do not reach the top of the chart (finish line).



Comparison of Splits per Round by Competitor

How did each athlete who advanced to the finals do each round?

- Only two women finished outside the top-10 overall in any of the 3 rounds: Lauren Weeks and Kimberley Dekrey.
- Lauren Weeks's journey to a 4th-place finish is incredible. She booked a red-eye flight from Las Vegas to Washington, D.C. the night before the competition and slept for only a couple hours at the airport. After barely qualifying for round 2 with a 19th-place finish in round 1 (only the top-20 qualified), she moved up to 5th in the semis and finished 4th overall in the finals.
- Carlyne Prevost was without question the top-performer in the sandbag zone during each of the first 2 rounds, but her struggles on Kong in the finals resulted in a DNF after leading the first half of the race. There are a lot of "what if" scenarios regarding possible outcomes, but at the end of the day, those who finished at the top were those who dealt the best with adverse conditions. However, it would have been interesting to see what could have happened if Carlyne closed in on Emma in the sandbag zone, just like Jacob Heppner did to Isaiah Vidal.

Rank	Round	Name	400m (After BTTW)*	800m (Before Kong)*	1100m (Last Bale Bonds)	1200m (After Leap of Faith)	1400m (Before Rope Climb)*	1600m (Finish Line)
1	Finals	Emma Chapman	03:16.8	04:08.54	03:27.7	01:42.57	04:07.0	01:45.2
2	Semi-Finals		03:23.1	---	---	---	---	01:33.0
1	Qualifiers		03:28.7	03:47.0	03:21.59	01:40.55	02:53.8	01:37.0
-	Average		03:22.25	03:57.57	03:24.33	01:41.56	03:30.4	01:38.21
2	Finals	Corinna Coffin	03:48.6	04:13.2	03:33.59	01:29.55	04:59.3	01:32.4
3	Semi-Finals		03:42.7	03:37.1	03:11.53	01:25.0	03:52.2	01:27.0
3	Qualifiers		03:51.4	03:37.2	03:18.54	01:27.1	03:31.5	01:37.56
-	Average		03:47.6	03:49.2	03:21.35	01:27.19	04:07.23	01:32.20
3	Finals	Cassidy Lance	03:45.8	04:17.56	03:24.4	02:08.59	05:05.54	01:29.6
6	Semi-Finals		03:44.4	03:58.0	03:29.56	01:49.2	02:59.7	01:31.53
4	Qualifiers		03:53.1	04:21.6	03:22.1	01:42.57	02:40.57	01:50.5
-	Average		03:47.24	04:12.21	03:25.20	01:53.39	03:35.19	01:37.1
4	Finals	Lauren Weeks	03:50.0	04:08.2	04:11.4	02:13.59	04:59.0	01:36.1
5	Semi-Finals		03:54.1	03:34.7	03:34.59	01:57.0	02:56.58	01:26.59
19	Qualifiers		04:05.3	04:07.59	05:46.1	03:02.58	03:31.0	01:33.5
-	Average		03:56.21	03:56.43	04:30.41	02:24.39	03:48.59	01:32.2
5	Finals	Cassidy Watton	03:59.9	04:38.59	03:44.52	01:50.8	05:34.57	01:54.55
10	Semi-Finals		04:03.9	03:47.0	03:33.59	01:42.54	04:05.2	01:31.58
7	Qualifiers		04:16.7	03:42.59	03:25.3	01:44.53	03:34.7	01:42.54
-	Average		04:06.8	04:02.59	03:34.38	01:45.58	04:24.42	01:43.16
6	Finals	Talayna Fortunato	04:21.8	04:46.53	04:10.0	01:59.5	06:08.0	01:42.57
8	Semi-Finals		04:28.0	03:45.2	03:36.7	01:53.59	02:59.55	01:36.6
10	Qualifiers		04:29.1	04:14.2	03:54.2	01:52.59	02:53.59	01:40.1
-	Average		04:26.3	04:15.19	03:53.23	01:55.21	04:00.38	01:39.41
7	Finals	Candice Wagner	04:06.4	04:36.1	05:12.4	02:01.0	06:15.53	01:38.3
4	Semi-Finals		03:55.7	03:44.54	03:14.6	01:43.54	03:17.3	01:20.56
5	Qualifiers		03:52.6	03:45.57	03:27.2	01:41.3	03:25.53	01:42.5
-	Average		03:57.46	04:02.17	03:57.44	01:48.39	04:19.36	01:33.41
8	Finals	Kimberlee Dekrey	04:16.6	04:41.56	07:55.5	04:58.57	---	---
9	Semi-Finals		04:07.1	04:03.4	03:50.58	01:53.0	03:16.4	01:29.59
18	Qualifiers		04:36.9	04:18.54	03:56.3	02:13.54	05:11.8	01:40.52
-	Average		04:19.45	04:21.18	05:14.2	03:01.57	04:13.36	01:35.26
9	Finals	Carolyne Prevost	03:17.7	03:56.54	12:22.2	03:04.6	---	---
1	Semi-Finals		03:32.8	03:49.56	03:25.59	01:46.58	02:24.5	01:42.2
2	Qualifiers		03:40.8	04:06.1	03:29.58	01:50.56	02:28.57	01:35.7
-	Average		03:29.48	03:57.37	06:26.0	02:14.0	02:26.31	01:38.34
10	Finals	Emily Abbott	04:07.6	---	---	---	---	---
7	Semi-Finals		03:57.1	04:09.2	03:46.3	01:44.57	02:37.58	01:41.2
6	Qualifiers		03:51.8	04:05.57	03:46.4	01:53.59	02:57.58	01:48.54
-	Average		03:58.25	04:07.30	03:46.4	01:49.28	02:47.58	01:44.58

* Finals featured modification of a workout station within this zone vs. format during semi-finals and qualifying rounds

Fastest Splits

You'll see where everyone made up ground or faded for each zone:

- Tough Mudder changed the first workout zone by switching from 35-lb DB hang clean + jerks to 50-lb one-arm DB snatches. This 15-lb increase resulted in 5/10 female finalists getting through this first workout zone faster than both of their splits during the first 2 rounds, compared to 8/10 for the men.
- 9/10 athletes ran their slowest split of the day by at least 19.5 seconds from 400m-800m during the finals, but those figures are significantly affected by the added 15 KB deadlifts halfway through the farmer's walk zone.
- Every woman ran slower during the long running section from 800m-1100m during the finals than their split in the semi-finals.
- After adding shoulder-overs at the end of the sandbag zone during the finals, every athlete's split was between 1:07-3:09 slower than their respective semi-final split. Note: Emma Chapman's timing chip malfunctioned in round 2, so her split data was not available for comparison.
- Emma Chapman dominated the sandbag zone during the finals, completing it 52 seconds faster than any other athlete.

Rank	400m (After BTTW)	Slower	800m (Before Kong)	Slower	1100m (Last Bale Bonds)	Slower	1200m (After Leap of Faith)	Slower	1400m (Before Rope Climb)	Slower	1600m (Finish Line)	Slower
1	Emma Chapman	03:16.8	Carolyne Prevost	03:56.54	Cassidy Lance	03:24.4	Corinna Coffin	01:42.57	Emma Chapman	04:07.0	Cassidy Lance	01:29.6
2	Carolyne Prevost	00:00.59	Lauren Weeks	00:11.8	Emma Chapman	00:03.3	Emma Chapman	00:00.0	Lauren Weeks	00:52.0	Corinna Coffin	00:02.58
3	Cassidy Lance	00:29.0	Emma Chapman	00:12.0	Corinna Coffin	00:09.55	Cassidy Watton	00:07.11	Corinna Coffin	00:52.3	Lauren Weeks	00:06.55
4	Corinna Coffin	00:31.58	Corinna Coffin	00:16.8	Cassidy Watton	00:20.48	Talayna Fortunato	00:16.8	Cassidy Lance	00:58.54	Candice Wagner	00:08.57
5	Lauren Weeks	00:33.52	Cassidy Lance	00:21.2	Talayna Fortunato	00:45.56	Candice Wagner	00:18.3	Cassidy Watton	01:27.57	Talayna Fortunato	00:13.51
6	Cassidy Watton	00:43.1	Candice Wagner	00:39.7	Lauren Weeks	00:47.0	Cassidy Lance	00:26.2	Talayna Fortunato	02:01.0	Emma Chapman	00:15.56
7	Candice Wagner	00:49.56	Cassidy Watton	00:42.5	Candice Wagner	01:48.0	Lauren Weeks	00:31.2	Candice Wagner	02:08.53	Cassidy Watton	00:25.49
8	Emily Abbott	00:50.58	Kimberlee Dekrey	00:45.2	Kimberlee Dekrey	04:31.1	Carolyne Prevost	01:21.9			Kimberlee Dekrey	
9	Kimberlee Dekrey	00:59.58	Talayna Fortunato	00:49.59	Carolyne Prevost	08:57.58	Kimberlee Dekrey	03:16.0			Carolyne Prevost	
10	Talayna Fortunato	01:05.0									Emily Abbott	

Completion Time vs. Fastest Split Per Zone

Here's how to interpret this chart:

- 1.00 – this person had the fastest split in this zone
- Every number above 1.00 is how much extra time it took someone to complete that zone compared to the fastest split
- For instance, Cassidy Lance had the fastest split in the "1100m" column since her value is 1.00. Emma Chapman (2nd fastest split of the round) has a 1.01 value, meaning it took her 1.01 times longer (or 1% longer) to complete Zone 3 than Emma.
- If a value is 2.00, it took twice as long to complete a zone as the fastest person that round.
- Blue = fast, red = slow

Some observations from the final round data:

- Emma Chapman had within 5 seconds of the fastest overall split during each of the first 3 zones and the fastest split during the sandbag zone. Carolyne Prevost was giving Emma a run for her money until she struggled on Kong for several minutes. By then, Emma sealed the victory and had no close competition in the second half of the race.
- CrossFit athletes claimed 8 of the top-10 spots during the finals, suggesting that strength endurance was more important than speed endurance during the TMX Championship, especially on the female side. OCR women struggled in the heavy workout zones, in general, much more than OCR-focused men.
- Many of the dark red cells are the result of hand injuries sustained during the earlier rounds, with blisters making it extremely tough during the finals for some athletes to complete obstacles like Kong or Funky Monkey.
- Of the 10 people who qualified for the finals, 8+ were CrossFit athletes and 1-2 were OCR athletes. Note: I'm counting Corinna Coffin and Cassidy Watton as OCR athletes, although they are both more hybrid athletes, with Corinna qualifying for the CrossFit Games team competition this year.

Rank	Bib	Last	First	Cat.	Wave	400m (After BTTW)	800m (Before Kong)	1100m (Last Bale Bonds)	1200m (After Leap of Faith)	1400m (Before Rope Climb)	1600m (Finish Line)	Discipline
1	252	Chapman	Emma	F	F1	1.00	1.05	1.01	1.14	1.00	1.18	CrossFit
2	253	Coffin	Corinna	F	F2	1.16	1.07	1.05	1.00	1.21	1.03	OCR + CrossFit
3	256	Lance	Cassidy	F	F3	1.15	1.09	1.00	1.43	1.24	1.00	CrossFit
4	255	Weeks	Lauren	F	F4	1.17	1.05	1.23	1.49	1.21	1.08	CrossFit
5	260	Watton	Cassidy	F	F5	1.22	1.18	1.10	1.22	1.36	1.29	OCR
6	258	Fortunato	Talayna	F	F6	1.33	1.21	1.23	1.32	1.49	1.16	CrossFit
7	254	Wagner	Candice	F	F7	1.25	1.17	1.53	1.35	1.52	1.10	CrossFit
8	259	Dekrey	Kimberlee	F	F8	1.31	1.19	2.33	3.32			CrossFit
9	251	Prevost	Carolyne	F	F9	1.01	1.00	3.64	2.05			CrossFit
10	257	Abbott	Emily	F	F10	1.26						CrossFit

OCR vs. CrossFit

Qualifying rounds stats are combined with semi-finals stats to see how well OCR athletes did compared to CrossFit athletes in each zone during all 3 rounds:

AVG SPLIT -- ALL						
Sport	400m (After BTTW)	800m (Before Kong)	1100m (Last Bale Bonds)	1200m (After Leap of Faith)	1400m (Before Rope Climb)	1600m (Finish Line)
Finals						
OCR	03:59.9	04:38.59	03:44.52	01:50.8	05:34.57	01:54.55
CrossFit	03:52.21	04:22.22	05:48.47	02:35.35	05:19.9	01:38.14
Semis						
OCR	05:04.51	03:53.43	04:09.1	02:12.58	04:23.22	01:56.20
CrossFit	04:00.5	04:01.33	03:45.33	02:17.28	03:18.32	01:39.5
Qualifiers						
OCR	05:56.52	04:48.13	06:01.42	02:07.27	04:54.13	01:31.18
CrossFit	04:33.22	05:20.20	05:09.1	02:09.19	03:30.39	01:41.9
COMPLETION TIME vs. FASTEST SPLIT PER ZONE -- ALL						
Sport	400m (After BTTW)	800m (Before Kong)	1100m (Last Bale Bonds)	1200m (After Leap of Faith)	1400m (Before Rope Climb)	1600m (Finish Line)
Finals						
OCR	1.03	1.06	1.00	1.00	1.05	1.17
CrossFit	1.00	1.00	1.55	1.41	1.00	1.00
Semis						
OCR	1.27	1.00	1.10	1.00	1.33	1.17
CrossFit	1.00	1.03	1.00	1.03	1.00	1.00
Qualifiers						
OCR	1.31	1.00	1.17	1.00	1.40	1.00
CrossFit	1.00	1.11	1.00	1.01	1.00	1.11

- These comparisons are very skewed since there were 8+ CrossFit athletes in the finals and only 2 athletes with OCR experience in the finals. Even when just one athlete struggled in a zone, it increased that sport’s average for the zone and may not reflect how the remainder of athletes in that sport performed.
- At the end of the day, CrossFit female athletes outperformed OCR female athletes from start to finish in all rounds. Bottom line: strength endurance was significantly more of a factor for success than speed endurance on the women’s side.

Checkpoints

Here’s another visual of the data and where people ranked throughout the race. The further to the right that a cell is blue, the more likely that they would finish in the top half of the 10 finalists. Similarly, the further to the right that a cell is red, the more likely that they would finish in the bottom-5 of the 10 finalists.

- For example, Carlyne Prevost is blue for the first half of the race, meaning she was on track to finish on the podium/win until she struggled on Kong for several minutes.
- Aside from Carlyne, there weren’t many lead changes in the women’s race, as athletes who finished tended to stay in close to the same order from start to finish.

Rank	Bib	Last	First	Cat.	Wave	400m (After BTTW)	800m (Before Kong)	1100m (Last Bale Bonds)	1200m (After Leap of Faith)	1400m (Before Rope Climb)	1600m (Finish Line)
1	252	Chapman	Emma	F	F1	03:16.8	07:25.2	10:52.9	12:35.6	16:42.6	18:27.8
2	253	Coffin	Corinna	F	F2	03:48.6	08:01.8	11:35.7	13:05.2	18:04.5	19:36.9
3	256	Lance	Cassidy	F	F3	03:45.8	08:03.4	11:27.8	13:36.7	18:42.1	20:11.7
4	255	Weeks	Lauren	F	F4	03:50.0	07:58.2	12:09.6	14:23.5	19:22.5	20:58.6
5	260	Watton	Cassidy	F	F5	03:59.9	08:38.8	12:23.0	14:13.8	19:48.5	21:43.0
6	258	Fortunato	Talayna	F	F6	04:21.8	09:08.1	13:18.1	15:17.6	21:25.6	23:08.3
7	254	Wagner	Candice	F	F7	04:06.4	08:42.5	13:54.9	15:55.9	22:11.2	23:49.5
8	259	Dekrey	Kimberlee	F	F8	04:16.6	08:58.2	16:53.7	21:52.4	-	-
9	251	Prevost	Carolyne	F	F9	03:17.7	07:14.1	19:36.3	22:40.9	-	-
10	257	Abbott	Emily	F	F10	04:07.6	-	-	-	-	-

Splits Between Timing Mats

This is essentially the same thing as the table in the “Checkpoints” section above, except that it lists split times (rather than finishing time) in order of overall finishing place in the qualifying rounds.

- Corinna Coffin and Cassidy Lance, who finished 2nd and 3rd respectively, had a split difference of less than 9 seconds for 5/6 zones during the finals.
- Corinna had the fastest split on Funky Monkey during all 3 rounds and was 39 seconds faster than Cassidy Lance during the finals. Obstacle proficiency proved to make the difference between silver and bronze on the podium for these two ladies.

Rank	Bib	Last	First	Cat.	Wave	400m (After BTTW)	800m (Before Kong)	1100m (Last Bale Bonds)	1200m (After Leap of Faith)	1400m (Before Rope Climb)	1600m (Finish Line)
1	252	Chapman	Emma	F	F1	03:16.8	04:08.54	03:27.7	01:42.57	04:07.0	01:45.2
2	253	Coffin	Corinna	F	F2	03:48.6	04:13.2	03:33.59	01:29.55	04:59.3	01:32.4
3	256	Lance	Cassidy	F	F3	03:45.8	04:17.56	03:24.4	02:08.59	05:05.54	01:29.6
4	255	Weeks	Lauren	F	F4	03:50.0	04:08.2	04:11.4	02:13.59	04:59.0	01:36.1
5	260	Watton	Cassidy	F	F5	03:59.9	04:38.59	03:44.52	01:50.8	05:34.57	01:54.55
6	258	Fortunato	Talayna	F	F6	04:21.8	04:46.53	04:10.0	01:59.5	06:08.0	01:42.57
7	254	Wagner	Candice	F	F7	04:06.4	04:36.1	05:12.4	02:01.0	06:15.53	01:38.3
8	259	Dekrey	Kimberlee	F	F8	04:16.6	04:41.56	07:55.5	04:58.57	---	---
9	251	Prevost	Carolyne	F	F9	03:17.7	03:56.54	12:22.2	03:04.6	---	---
10	257	Abbott	Emily	F	F10	04:07.6	---	---	---	---	---

CONCLUSION

Hopefully this data gives you a better perspective on how racers performed in each of the various zones throughout the qualifying rounds since it would have been impossible to realize all of this info watching on TV or even as a spectator at the event. After looking through the data, here are some of my takeaways:

- As dominating as Hunter McIntyre was in the men's race, Emma Chapman was even more dominant on the women's side. Her margin of victory was 8.7 seconds faster than Hunter McIntyre's over 2nd place in the men's race. Think about that for a second when comparing race results. Emma was also on a whole different level than her competition in Virginia.
- All 10 finalists deserved to be there. Two people finished outside the top-10 overall in any of the 3 rounds, and that was Lauren Weeks (19th) and Kimberlee Dekrey (18th) during round 1. Neither Lauren or Kimberlee had ever done an obstacle course race prior to TMX, so their lower first-round placement was likely caused by working out the kinks on how to approach each new obstacle.
- No female athletes finished in the same exact order during all 3 rounds, unlike 3 in the men's field.
- Corinna Coffin explained it a Facebook Live interview. It's not the top-level CrossFit Games athletes who make a living at their sport that she was worried about beating her. Instead, CrossFit Regional athletes hungry to make the next step are the most dangerous. She was right, as that's exactly the type of athletes that Emma Chapman (1st) and Lauren Weeks (4th) are.
- Emma Chapman didn't have the fastest split in any of the workout zones during round 1 but ended up winning the finals. TMX proved to be a war of attrition and athletes whose hands survived all 3 rounds tended to be the ones who had the most success. Durability was key at TMX and clearly it helped Emma win the race.
- CrossFit athletes performed better than OCR athletes. Period. Essentially 9 of the top-10 females overall were CrossFit athletes. Just like the men's race, female OCR athletes thinking of making the switch to TMX next year better start spending some serious time in the weight room. There's a huge difference between "OCR strong" and "CrossFit strong."

Note: Thank you Tough Mudder HQ for providing the split data so I could nerd-out on race results and help athletes tweak their training for the 2019 TMX season. Also, if you liked this data analysis, give some feedback (good or bad) so the next data analysis article will be even better. It's always nice knowing it was worth the time providing content like this, too.