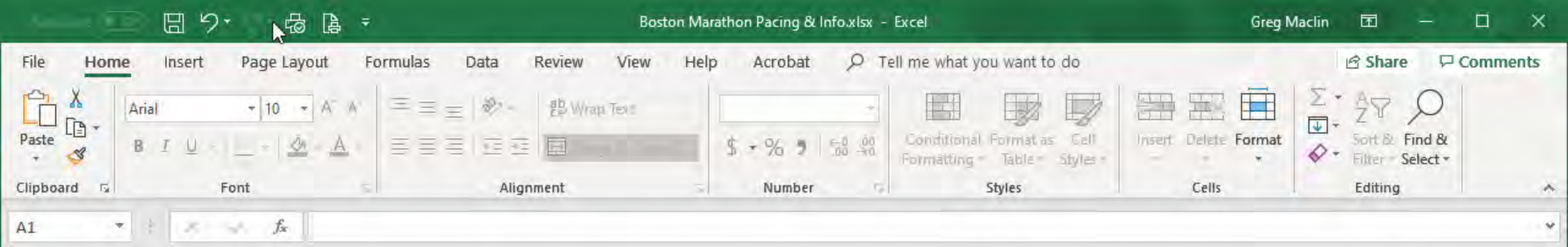


# ***MyMarathonPace.com***

## **Pacing Spreadsheet** **Overview/Tutorial**

This document explains how to navigate and configure ***MyMarathonPace.com*** terrain-adjusted pacing spreadsheets created for specific marathons, and also gives you an overview of the detailed pacing information they provide.

The pacing configuration method shown here is the same across all spreadsheets, but note that not all spreadsheets include some of the additional tabs (pages) that you see in this particular Boston-specific example.



**MyMarathonPace.com**  
*Terrain-adjusted marathon pace bands, pacing spreadsheets, elevation charts, training plans, running calculators, and other information for long distance runners*

**Terrain-Adjusted Pacing Calculator for the Boston Marathon**  
**(Fully Functional Version)**

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***Your use of this spreadsheet indicates your acceptance of the following terms and conditions:***

This "Pacing & Info" spreadsheet may not in whole or in part be copied or reverse engineered by any means for the purpose of creating a derivative work that will be used by you or sold, rented, leased, or given away without prior written consent from Greg Maclin. You also acknowledge that this spreadsheet may not be free from defects and may not satisfy all your needs. In no event will Greg Maclin be held liable for direct, indirect, incidental, or consequential damages or injuries resulting from the use of this spreadsheet.

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(Send any questions or issues regarding this spreadsheet to: [gregmaclin@gmail.com](mailto:gregmaclin@gmail.com))

**To start using this spreadsheet, click one of the "Tabs" along the bottom of this screen (e.g. "Pacing", "Wrist Bands", etc.)**

Full Version (XLS)

## **License Page**

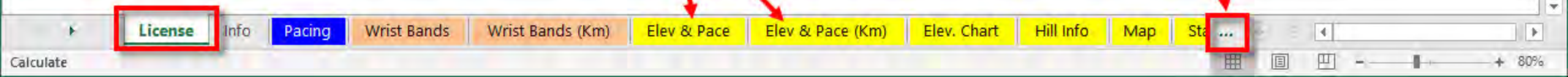
This is the page you see when first opening a freshly downloaded copy of the spreadsheet.  
**(Please make sure you read the entire license.)**

Each pacing spreadsheet has multiple tabs (pages) displayed along the bottom edge of the spreadsheet.  
To navigate to different pages, click on the tab representing the page you want to open.

If there are more tabs than can be displayed, you will see a button with a row of dots ("...") that you can click on the left or right end that allows you to scroll to any tabs that might be hidden.

**Click the tab for whichever page you want to open**

**Button with "... " means there are more tabs than can be displayed - click here to display more.**



## Boston Marathon Pacing and Information Guide

This spreadsheet helps you develop a terrain-based pacing strategy for this particular marathon and generate pace bands you can wear during the race. For the benefit of any spectators tracking your progress, it also calculates the estimated time of day you will be passing each mile marker and 5K check point. **To access this and other information, click the "tabs" at the bottom of each page.**

The default settings attempt to calculate a pace for each mile that will give you an even effort, taking into account the terrain and other factors encountered during the race. Anything shown in **RED** on the "Pacing" page may be changed and if you don't like any of the default pacing strategies, you may create your own customized version (see instructions below).

**Instructions:**

On the "Pacing" page, do the following:

- 1: Enter your **Estimated Start Time** in HH:MM:SS format (seconds are optional). If it exists, use the page labeled "Start Times" to help estimate your starting time.
- 2: Enter your marathon **Goal Time** in HH:MM:SS format (seconds are optional). Use the "What is a reasonable goal time for this race" tool to help determine your goal time.

Optional - You can also customize the following settings by selecting different values from the drop-down list for each option:

- 3: **Pacing Strategy** can take the terrain into account to adjust pace for uphill and downhill segments:
  - 1 = **Even effort** (faster on the downhills, slower on the uphills, etc.)
  - 2 = **Fairly even effort** (a more even pace than #1)
  - 3 = **Fairly even pace** (a more even pace than #2)
  - 4 = **Even pace** (same pace every mile)

**Start Strategy** adjusts how slowly you want to get up to pace after starting the race:

- 1 = **Slow start** (you expect to have a very crowded and slow start)
- 2 = **Fairly slow start** (you expect some crowding and a somewhat slow start)
- 3 = **Fairly fast start** (you expect to get up to pace fairly quickly)
- 4 = **Fast start** (you expect to get up to pace very quickly)

**Finish (Fade) Strategy** adjusts how much "fade" you want to allow towards the end of the race:

- 1 = **Max Fade** (you want to allow extra time for fatigue and slow-down during last 6 miles)
- 2 = **Medium Fade** (you want to allow for medium fatigue and slow-down during last 6 miles)
- 3 = **Slight Fade** (you want to allow for slight fatigue and slow-down during last 6 miles)
- 4 = **No Fade** (you don't want to allow for any fatigue or slow-down during last 6 miles)

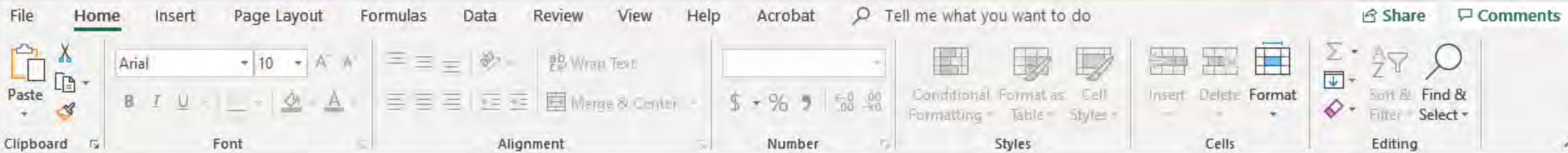
**Downhill Pace Limiter** slows pace on downhills while minimizing effect on uphill pace:

- 1 = **No Pace Limit** (no limit on maximum downhill pace)
- 2 = **Slight Pace Limit** (slight limit on maximum downhill pace)
- 3 = **Medium Pace Limit** (medium limit on maximum downhill pace)
- 4 = **Maximum Pace Limit** (maximum limit on downhill pace)

**Negative Split Bias** slows pace during first half of race:

- 1 = **Max Negative Split Bias** (maximum slow-down of pace during first half of race)
- 2 = **Medium Neg Split Bias** (medium slow-down of pace during first half of race)
- 3 = **Slight Neg Split Bias** (slight slow-down of pace during first half of race)

**Info Page**  
 This page provides instructions and additional information about each of the configuration options available on the "Pacing" page where you will be configuring your pacing strategy. (Scroll downwards on spreadsheet to see bottom of page)



A1

**Start Strategy** adjusts how slowly you want to get up to pace after starting the race:

- 1 = **Slow start** (you expect to have a very crowded and slow start)
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**Finish (Fade) Strategy** adjusts how much "fade" you want to allow towards the end of the race:

- 1 = **Max Fade** (you want to allow extra time for fatigue and slow-down during last 6 miles)
- 2 = **Medium Fade** (you want to allow for medium fatigue and slow-down during last 6 miles)
- 3 = **Slight Fade** (you want to allow for slight fatigue and slow-down during last 6 miles)
- 4 = **No Fade** (you don't want to allow for any fatigue or slow-down during last 6 miles)

**Downhill Pace Limiter** slows pace on downhills while minimizing effect on uphill pace:

- 1 = **No Pace Limit** (no limit on maximum downhill pace)
- 2 = **Slight Pace Limit** (slight limit on maximum downhill pace)
- 3 = **Medium Pace Limit** (medium limit on maximum downhill pace)
- 4 = **Maximum Pace Limit** (maximum limit on downhill pace)

**Negative Split Bias** slows pace during first half of race:

- 1 = **Max Negative Split Bias** (maximum slow-down of pace during first half of race)
- 2 = **Medium Neg Split Bias** (medium slow-down of pace during first half of race)
- 3 = **Slight Neg Split Bias** (slight slow-down of pace during first half of race)
- 4 = **No Neg Split Bias** (no effect on pacing)

**Leg Pace Rounding** rounds pace for each mile/kilometer:

- 1 = **No Rounding** (no effect on pace values)
- 5 = **Nearest 5 Seconds** (rounds pace for each mile/kilometer to nearest 5 seconds)
- 10 = **Nearest 10 Seconds** (rounds pace for each mile/kilometer to nearest 10 seconds)

**If you use the rounding feature:**

- Check **all** leg paces to make sure none are too fast for your training
- **NOTE: Goal time may be adjusted to account for rounding of each leg pace**

When done, click on the **"Wrist Bands"** tab and follow the directions for printing a pace band you can wear during the race. The **"Map"** page includes the predicted time of day you will arrive at each mile marker and can be used as a guide for spectators.

Boston Marathon web site:

<http://www.baa.org/>

← **Link to race web site**

Race date: **Monday, April ##, 20##**

Created by: Greg Maclin Full Version (XLS)

Detailed street-level map: <http://www.mapmyrun.com/routes/fullscreen/1850635/>

← **Link to detailed course map at [mapmyrun.com](http://www.mapmyrun.com)**

Updates to this spreadsheet will be posted at: [http://mymarathonpace.com/Pacing\\_Spreadsheets.html](http://mymarathonpace.com/Pacing_Spreadsheets.html)

Comments and feedback may be e-mailed to: [gregmaclin@gmail.com](mailto:gregmaclin@gmail.com)

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## **Info Page (Continued)**

This page provides instructions and additional information about each of the configuration options available on the **"Pacing"** page where you will be configuring your pacing strategy. (Scroll upwards on spreadsheet to see top of page)

File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

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### Boston Marathon Pace Calculator

**NOTE: Items in RED can be changed** Adjust the settings below to customize your pacing strategy

Est. Start Time: **10:50:00 AM**  
 Goal Time: **3:30:00**  
 Est. Finish Time of Day: **2:30:00 PM**

Pacing Strategy: **1 - Even Effort**  
 Start Strategy: **2 - Fairly Slow Start**  
 Finish (Fade) Strategy: **2 - Medium Fade**  
 Downhill Pace Limiter: **2 - Medium Pace Limit**  
 \* Negative Split Bias: **4 - No Neg Split Bias**  
 Leg Pace Rounding: **1 - No Rounding**  
 \* (Negative Split Bias slows avg pace in first half)

Pace Info		Negative/Positive Split	
Average Pace/Mile:	08:01	1st Half:	1:43:53
Slowest Pace/Mile:	08:47 +9.7%	2nd Half:	1:46:07
Fastest Pace/Mile:	07:40 -4.4%		0:02:13
		(Positive Split)	
Average Pace/Kilometer:	04:59		
Slowest Pace/Kilometer:	05:21 +7.6%		
Fastest Pace/Kilometer:	04:46 -4.5%		

**What is a Reasonable Goal Time for this Race? \***

Enter estimated finish time at flat, straight, marathon: **3:30:00**  
 2019 Boston Marathon predicted time: **3:32:00**

(\*Note: You must manually enter the predicted time as you

**Notes:** - If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 - For "Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 - For wrist band, click on "Wrist Band" tabs at bottom of page

**Pacing Page**  
 All pacing parameters are configured in this area (only modify items in red)

Mile	Description	Time of Day
0-1	E. Main St. in Hopkinton	
1-2	W. Union St	
2-3	Union St (Ashland)	
3-4	Union St (Ashland), Waverly St	
4-5	Waverly St	
5-6	Waverly St	
6-7	Waverly St (Framingham)	
7-8	Waverly St	
8-9	W. Central St (Fisk Pond)	
9-10	(Fisk Pond), W. Central St	
10-11	E. Central St (Natick)	
11-12	E. Central St.	
12-13	Central St. (Wellesley College)	07:54
13-14	Washington St. (Wellesley)	1:43:01
14-15	Washington St.	12:33:01 PM
15-16	Washington St. (Newton Lower Falls)	
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	
18-19	Commonwealth Ave.	
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	
21-22	Commonwealth Ave. (Boston College)	
22-23	Commonwealth Ave, Beacon St. (Cleveland Circle)	
23-24	Beacon St (Coolidge Corner)	
24-25	Beacon St (Citgo Hill)	08:01
25-26	Kenmore Sqr, Commonwealth., Hereford St, Boylston St	3:20:02
26-26.2	Boylston St (Boston Pub Library, Old South Church)	2:10:02 PM

**Check Points**

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:25:05	11:15:05 AM
10K	6.2137		
15K	9.3205		
20K	12.4274		
<b>Half</b>	<b>13.1094</b>	<b>1:43:53</b>	<b>12:33:53 PM</b>
25K	15.5343		
30K	18.6411		
35K	21.748		
40K	24.8548		
<b>Full</b>	<b>26.2187</b>	<b>3:30:00</b>	<b>2:20:00 PM</b>

MyMarathonPace.com

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## Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time:

Goal Time:

Est. Finish Time of Day:

Adjust the settings below to customize your pacing strategy

Pacing Strategy:

Start Strategy:

Finish (Fade) Strategy:

Downhill Pace Limiter:

\* Negative Split Bias:

Leg Pace Rounding:

\* (Negative Split Bias slows avg pace in first half)

### Pace Info

Average Pace/Mile:

Slowest Pace/Mile:  +9.7%

Fastest Pace/Mile:  -4.4%

Average Pace/Kilometer:

Slowest Pace/Kilometer:  +7.6%

Fastest Pace/Kilometer:  -4.5%

### Negative/Positive Split

1st Half:

2nd Half:

(Positive Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at flat, straight road. (Note: You must manually enter the predicted finish time.)

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding. Select 1, 2, 3, or 4 from drop-down lists. Click on "Wrist Band" tabs at bottom of page to the "Info" tab for more information on each of pacing strategy options.

**Pacing Page**  
Enter your estimated start time in HH:MM format and press ENTER

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:13	0:08:13	10:58:13 AM
1-2	W. Union St	08:01	0:16:15	11:06:15 AM
2-3	Union St (Ashland)	07:46	0:24:00	11:14:00 AM
3-4	Union St (Ashland), Waverly St	07:59	0:31:59	11:21:59 AM
4-5	Waverly St	07:34	0:39:33	11:29:33 AM
5-6	Waverly St	07:10	0:46:43	11:37:43 AM
6-7	Waverly St (Framingham)	07:25	0:54:08	11:45:58 AM
7-8	Waverly St	07:16	1:01:24	11:54:14 AM
8-9	W. Central St (Fisk Pond)	07:30	1:08:54	12:02:44 PM
9-10	(Fisk Pond), W. Central St	07:37	1:16:31	12:11:21 PM
10-11	E. Central St (Natick)	07:38	1:24:09	12:20:09 PM
11-12	E. Central St.	07:46	1:31:55	12:29:05 PM
12-13	Central St. (Wellesley College)	07:54	1:40:09	12:38:19 PM
13-14	Washington St. (Wellesley)	07:59	1:48:08	12:47:18 PM
14-15	Washington St.	07:59	1:56:07	12:56:17 PM
15-16	Washington St. (Newton Lower Falls)	07:46	2:04:13	1:05:23 PM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	07:59	2:12:12	1:14:22 PM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	07:59	2:20:11	1:23:21 PM
18-19	Commonwealth Ave.	07:59	2:28:10	1:32:20 PM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	07:59	2:36:09	1:41:19 PM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	07:59	2:44:08	1:50:18 PM

### Check Points

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:25:05	11:15:05 AM
10K	6.2137	0:50:10	11:30:10 AM
15K	9.3205	1:15:15	11:45:15 AM
20K	12.4274	1:40:20	12:00:20 PM
<b>Half</b>	<b>13.1094</b>	<b>1:43:53</b>	<b>12:33:53 PM</b>
25K	15.5343	2:05:35	12:25:35 PM
30K	18.6411	2:30:40	1:00:40 PM

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## Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: **10:53:00 AM**  
 Goal Time: **3:45**

Est. Finish Time of Day: **2:23:00 PM**

Adjust the settings below to customize your pacing strategy

- Pacing Strategy: **1 - Even Effort**
- Start Strategy: **2 - Fairly Slow Start**
- Finish (Fade) Strategy: **2 - Medium Fade**
- Downhill Pace Limiter: **2 - Medium Pace Limit**
- \* Negative Split Bias: **4 - No Neg Split Bias**
- Leg Pace Rounding: **1 - No Rounding**

\* (Negative Split Bias slows avg pace in first half)

### Pace Info

Average Pace/Mile: 08:01  
 Slowest Pace/Mile: 08:47 +9.7%  
 Fastest Pace/Mile: 07:40 -4.4%

Average Pace/Kilometer: 04:59  
 Slowest Pace/Kilometer: 05:21 +7.6%  
 Fastest Pace/Kilometer: 04:46 -4.5%

### Negative/Positive Split

1st Half: 1:43:53  
 2nd Half: 1:46:07  
**0:02:13**  
 (Positive Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at flat, straight  
 2019 Boston Marathon  
 (\*Note: You must manually enter the predicted

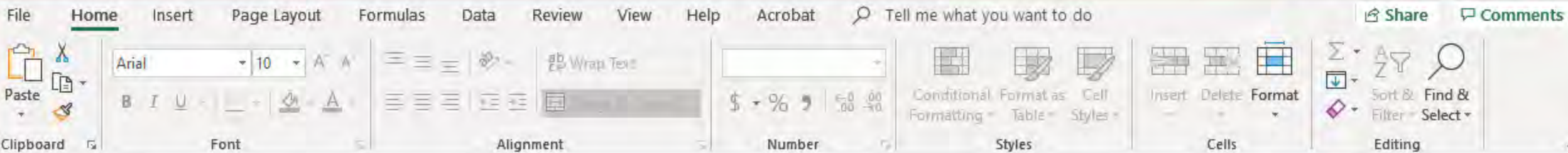
**Pacing Page**  
 Enter your goal time in  
**HH:MM** format and press  
**ENTER**

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 1st band, click on "Wrist Band" tabs at bottom of page  
 to the "Info" tab for more information on each of pacing strategy options

### Check Points

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:13	0:08:13	11:01:13 AM
1-2	W. Union St	08:01	0:16:15	11:09:15 AM
2-3	Union St (Ashland)	07:46	0:24:00	11:17:00 AM
3-4	Union St (Ashland), Waverly St	07:59	0:31:59	11:24:59 AM
4-5	Waverly St	07:34	0:39:33	11:32:33 AM
5-6	Waverly St	07:10	0:47:03	11:40:03 AM
6-7	Waverly St (Framingham)	07:26	0:54:29	11:47:29 AM
7-8	Waverly St	07:16	1:02:05	11:55:05 AM
8-9	W. Central St (Fisk Pond)	07:30	1:09:35	12:02:35 PM
9-10	(Fisk Pond), W. Central St	07:37	1:17:12	12:10:12 PM
10-11	E. Central St (Natick)	07:36	1:24:48	12:17:48 PM
11-12	E. Central St.	07:46	1:32:34	12:25:34 PM
12-13	Central St. (Wellesley College)	07:54	1:40:28	12:33:28 PM
13-14	Washington St. (Wellesley)	07:59	1:48:27	12:41:27 PM
14-15	Washington St.	07:59	1:56:26	12:49:26 PM
15-16	Washington St. (Newton Lower Falls)	07:46	2:04:40	12:57:40 PM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	07:59	2:12:39	1:05:39 PM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	07:59	2:20:38	1:13:38 PM
18-19	Commonwealth Ave.	07:59	2:28:37	1:21:37 PM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	07:59	2:36:36	1:29:36 PM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	07:59	2:44:35	1:37:35 PM

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:25:05	11:18:05 AM
10K	6.2137	0:49:57	11:42:57 AM
15K	9.3205	1:14:50	12:07:50 PM
20K	12.4274	1:39:42	12:32:42 PM
<b>Half</b>	<b>13.1094</b>	<b>1:43:53</b>	<b>12:36:53 PM</b>
25K	15.5343	2:04:35	12:53:25 PM
30K	18.6411	2:29:27	1:18:17 PM



## Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: 10:53:00 AM  
 Goal Time: 3:45:00

Est. Finish Time of Day: 2:38:00 PM

Adjust the settings below to customize your pacing strategy

Pacing Strategy: 1 - Even Effort   
 Start Strategy: 1 - Even Effort  
 Finish (Fade) Strategy: 2 - Fairly Even Effort   
 Downhill Pace Limiter: 3 - Fairly Even Pace  
 4 - Even Pace  
 \* Negative Split Bias: 4 - No Neg Split Bias  
 Leg Pace Rounding: 1 - No Rounding  
 \* (Negative Split Bias slows avg pace in first half)

### Pace Info

Average Pace/Mile: 08:35  
 Slowest Pace/Mile: 09:25 +9.7%  
 Fastest Pace/Mile: 08:13 -4.4%  
 Average Pace/Kilometer: 05:20  
 Slowest Pace/Kilometer: 05:44 +7.6%  
 Fastest Pace/Kilometer: 05:06 -4.5%

### Negative/Positive Split

1st Half: 1:51:19  
 2nd Half: 1:53:41  
0:02:23  
 (Positive Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at **flat, straight**  
 2019 Boston Marathon  
 (\*Note: You must **manually** enter the predicted

**Pacing Page**  
 Click once on "Pacing Strategy" cell then click down-arrow on right to select a pacing strategy.

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 1st band, click on "Wrist Band" tabs at bottom of page  
 to the "Info" tab for more information on each of pacing strategy options

### Check Points

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:48	0:08:48	11:01:48 AM
1-2	W. Union St	08:36	0:17:24	11:10:24 AM
2-3	Union St (Ashland)	08:19	0:25:43	11:18:43 AM
3-4	Union St (Ashland), Waverly St	08:19	0:34:02	11:27:02 AM
4-5	Waverly St	08:19	0:42:21	11:35:21 AM
5-6	Waverly St	08:19	0:50:40	11:43:40 AM
6-7	Waverly St (Framingham)	08:19	0:58:59	11:51:59 AM
7-8	Waverly St	08:19	1:07:18	12:00:18 PM
8-9	W. Central St (Fisk Pond)	08:19	1:15:37	12:08:37 PM
9-10	(Fisk Pond), W. Central St	08:19	1:23:56	12:16:56 PM
10-11	E. Central St (Natick)	08:19	1:32:15	12:25:15 PM
11-12	E. Central St.	08:19	1:40:34	12:33:34 PM
12-13	Central St. (Wellesley College)	08:28	1:50:23	12:43:23 PM
13-14	Washington St. (Wellesley)	08:28	1:58:51	12:51:51 PM
14-15	Washington St.	08:28	2:07:19	1:00:19 PM
15-16	Washington St. (Newton Lower Falls)	08:28	2:15:47	1:08:47 PM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	08:28	2:24:15	1:17:15 PM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	08:28	2:32:43	1:25:43 PM
18-19	Commonwealth Ave.	08:28	2:41:11	1:34:11 PM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	08:28	2:49:39	1:42:39 PM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	08:28	2:58:07	1:51:07 PM

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:52	11:19:52 AM
10K	6.2137	0:53:44	11:46:44 AM
15K	9.3205	1:20:36	12:13:36 PM
20K	12.4274	1:47:28	12:40:28 PM
<b>Half</b>	<b>13.1094</b>	<b>1:51:19</b>	<b>12:44:19 PM</b>
25K	15.5343	2:14:11	1:03:11 PM
30K	18.6411	2:41:03	1:30:03 PM



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Clipboard Font Alignment Number Styles Cells Editing

## Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: **10:53:00 AM**  
 Goal Time: **3:45:00**  
 Est. Finish Time of Day: **2:38:00 PM**

Adjust the settings below to customize your pacing strategy

Pacing Strategy: **2 - Fairly Even Effort**  
 Start Strategy: **2 - Fairly Slow Start**  
 Finish (Fade) Strategy: 1 - Slow Start  
 Downhill Pace Limiter: 2 - Fairly Slow Start  
 3 - Fairly Fast Start  
 4 - Fast Start  
 \* Negative Split Bias:  
 Leg Pace Rounding: **1 - No Rounding**  
 \* (Negative Split Bias slows avg pace in first half)

### Pace Info

Average Pace/Mile: 08:35  
 Slowest Pace/Mile: 09:09 +6.5%  
 Fastest Pace/Mile: 08:19 -3.3%  
 Average Pace/Kilometer: 05:20  
 Slowest Pace/Kilometer: 05:37 +5.2%  
 Fastest Pace/Kilometer: 05:10 -3.3%

### Negative/Positive Split

1st Half: 1:51:39  
 2nd Half: 1:53:21  
**0:01:42**  
 (Positive Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at flat, straight  
 2019 Boston Marathon  
 (\*Note: You must manually enter the predicted

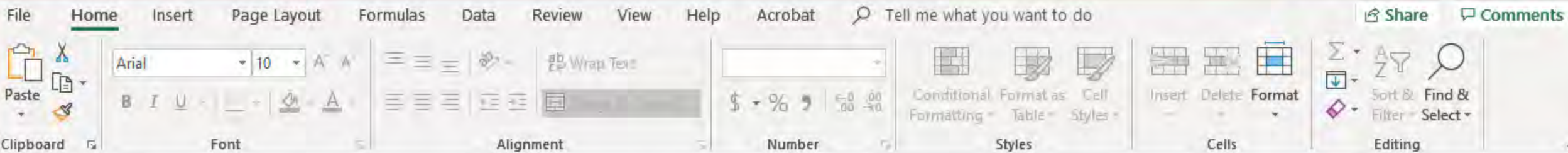
**Pacing Page**  
 Click once on "Start Strategy" cell then click down-arrow on right to select a pacing strategy.

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 Wrist Band, click on "Wrist Band" tabs at bottom of page  
 to the "Info" tab for more information on each of pacing strategy options

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:54	0:08:54	11:01:54 AM
1-2	W. Union St	08:40	0:17:34	11:10:34 AM
2-3	Union St (Ashland)	08:23	0:25:57	11:18:57 AM
3-4	Union St (Ashland), Waverly St	08:28	0:34:25	11:27:25 AM
4-5	Waverly St	08:35	0:43:00	11:36:00 AM
5-6	Waverly St	08:35	0:51:35	11:44:35 AM
6-7	Waverly St (Framingham)	08:25	1:00:00	11:53:00 AM
7-8	Waverly St	08:31	1:08:31	12:01:31 PM
8-9	W. Central St (Fisk Pond)	08:35	1:17:06	12:10:06 PM
9-10	(Fisk Pond), W. Central St	08:35	1:25:41	12:18:41 PM
10-11	E. Central St (Natick)	08:35	1:34:16	12:27:16 PM
11-12	E. Central St.	08:35	1:43:01	12:36:01 PM
12-13	Central St. (Wellesley College)	08:28	1:50:43	12:43:43 PM
13-14	Washington St. (Wellesley)	08:35	1:59:18	12:52:18 PM
14-15	Washington St.	08:35	2:08:03	13:01:03 PM
15-16	Washington St. (Newton Lower Falls)	08:35	2:16:38	13:09:38 PM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	08:37	2:25:15	13:18:15 PM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	08:35	2:34:00	13:27:00 PM
18-19	Commonwealth Ave.	08:37	2:42:37	13:35:37 PM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	08:35	2:51:12	13:44:12 PM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	08:35	3:00:00	13:53:00 PM

### Check Points

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:27:02	11:20:02 AM
10K	6.2137	0:54:04	11:48:04 AM
15K	9.3205	1:21:06	12:16:06 PM
20K	12.4274	1:48:08	12:44:08 PM
<b>Half</b>	<b>13.1094</b>	<b>1:51:39</b>	<b>12:44:39 PM</b>
25K	15.5343	2:15:06	1:08:06 PM
30K	18.6411	2:42:08	1:35:08 PM



# Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: **10:53:00 AM**  
Goal Time: **3:45:00**

Est. Finish Time of Day: **2:38:00 PM**

Adjust the settings below to customize your pacing strategy

- Pacing Strategy: **2 - Fairly Even Effort**
- Start Strategy: **3 - Fairly Fast Start**
- Finish (Fade) Strategy: **2 - Medium Fade**
- Downhill Pace Limiter:
  - 1 - Maximum Fade
  - 2 - Medium Fade
  - 3 - Slight Fade
  - 4 - No Fade
- \* Negative Split Bias: **+**
- Leg Pace Rounding: **+**

\* (Negative Split Bias slows avg pace in first half)

## Pace Info

Average Pace/Mile: **08:35**  
 Slowest Pace/Mile: **09:10** +6.8%  
 Fastest Pace/Mile: **08:20** -3.0%

Average Pace/Kilometer: **05:20**  
 Slowest Pace/Kilometer: **05:37** +5.4%  
 Fastest Pace/Kilometer: **05:10** -3.1%

## Negative/Positive Split

1st Half: **1:51:25**  
 2nd Half: **1:53:35**  
**0:02:10**  
 (Positive Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at **flat, straight**  
 2019 Boston Marathon  
 (\*Note: You must **manually** enter the predicted

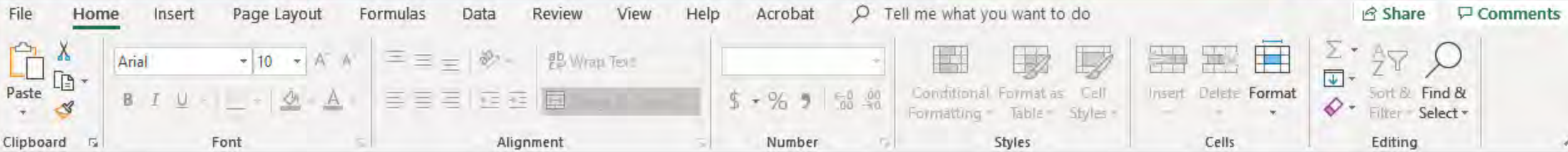
**Pacing Page**  
 Click once on "Finish Strategy" cell then click down-arrow on right to select a pacing strategy.

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 list band, click on "Wrist Band" tabs at bottom of page  
 to the "Info" tab for more information on each of pacing strategy options

## Check Points

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:38	0:08:38	11:01:38 AM
1-2	W. Union St	08:32	0:17:10	11:10:10 AM
2-3	Union St (Ashland)	08:23	0:25:33	11:18:33 AM
3-4	Union St (Ashland), Waverly St	08:29	0:34:02	11:27:02 AM
4-5	Waverly St	08:38	0:42:40	11:35:40 AM
5-6	Waverly St	08:27	0:51:13	11:44:13 AM
6-7	Waverly St (Framingham)	08:28	1:00:01	11:52:41 AM
7-8	Waverly St	08:32	1:08:33	12:01:13 PM
8-9	W. Central St (Fisk Pond)	08:27	1:17:06	12:09:46 PM
9-10	(Fisk Pond), W. Central St	08:38	1:25:44	12:18:24 PM
10-11	E. Central St (Natick)	08:27	1:34:17	12:26:57 PM
11-12	E. Central St.	08:29	1:42:46	12:35:26 PM
12-13	Central St. (Wellesley College)	08:29	1:51:15	12:43:55 PM
13-14	Washington St. (Wellesley)	08:38	1:59:53	12:52:33 PM
14-15	Washington St.	08:38	2:08:21	1:01:01 PM
15-16	Washington St. (Newton Lower Falls)	08:38	2:16:59	1:09:39 PM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	08:38	2:25:27	1:18:07 PM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	08:38	2:34:05	1:26:45 PM
18-19	Commonwealth Ave.	08:38	2:42:43	1:35:23 PM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	08:38	2:51:21	1:44:01 PM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	08:38	3:00:00	1:52:40 PM

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:37	11:19:37 AM
10K	6.2137	0:52:14	11:45:14 AM
15K	9.3205	1:17:51	12:20:51 PM
20K	12.4274	1:43:28	12:46:28 PM
Half	13.1094	1:51:25	12:44:25 PM
25K	15.5343	2:17:02	1:22:02 PM
30K	18.6411	2:42:39	1:47:39 PM



# Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: **10:53:00 AM**  
Goal Time: **3:45:00**

Est. Finish Time of Day: **2:38:00 PM**

Adjust the settings below to customize your pacing strategy

- Pacing Strategy: **2 - Fairly Even Effort**
- Start Strategy: **3 - Fairly Fast Start**
- Finish (Fade) Strategy: **4 - No Fade**
- Downhill Pace Limiter: **2 - Medium Pace Limit**
- \* Negative Split Bias: 1 - Max Pace Limit, 2 - Medium Pace Limit, 3 - Slight Pace Limit, 4 - No Pace Limit
- Leg Pace Rounding: **3 - Slight Pace Limit**
- \* (Negative Split Bias slow)

## Pace Info

Average Pace/Mile: **08:35**  
 Slowest Pace/Mile: **09:06** +6.1%  
 Fastest Pace/Mile: **08:22** -2.5%

Average Pace/Kilometer: **05:20**  
 Slowest Pace/Kilometer: **05:36** +5.1%  
 Fastest Pace/Kilometer: **05:12** -2.5%

## Negative/Positive Split

1st Half: **1:52:03**  
 2nd Half: **1:52:57**  
**0:00:54**  
 (Positive Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at **flat, straight**  
2019 Boston Marathon

(\*Note: You must **manually** enter the predicted

**Pacing Page**  
 Click once on "Downhill Pace Limiter" cell then click down-arrow on right to select a pacing strategy.

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding

Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists

ist band, click on "Wrist Band" tabs at bottom of page

to the "Info" tab for more information on each of pacing strategy options

## Check Points

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:40	0:08:40	11:01:40 AM
1-2	W. Union St	08:35	0:17:15	11:10:15 AM
2-3	Union St (Ashland)	08:26	0:25:42	11:18:42 AM
3-4	Union St (Ashland), Waverly St			
4-5	Waverly St			
5-6	Waverly St			
6-7	Waverly St (Framingham)			
7-8	Waverly St			
8-9	W. Central St (Fisk Pond)			
9-10	(Fisk Pond), W. Central St			
10-11	E. Central St (Natick)			
11-12	E. Central St.			
12-13	Central St. (Wellesley College)	08:32	1:51:07	12:44:07 PM
13-14	Washington St. (Wellesley)			
14-15	Washington St.			
15-16	Washington St. (Newton Lower Falls)			
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)			
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)			
18-19	Commonwealth Ave.			
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)			
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)			

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:46	11:19:46 AM
10K	6.2137		
15K	9.3205		
20K	12.4274		
<b>Half</b>	<b>13.1094</b>	<b>1:52:03</b>	<b>12:45:03 PM</b>
25K	15.5343		
30K	18.6411		

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## Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: **10:53:00 AM**  
 Goal Time: **3:45:00**  
 Est. Finish Time of Day: **2:38:00 PM**

Adjust the settings below to customize your pacing strategy

Pacing Strategy: **2 - Fairly Even Effort**  
 Start Strategy: **3 - Fairly Fast Start**  
 Finish (Fade) Strategy: **4 - No Fade**  
 Downhill Pace Limiter: **3 - Slight Pace Limit**  
 \* Negative Split Bias: **4 - No Neg Split Bias**  
 Leg Pace Rounding: 1 - Max Neg Split Bias  
 \* (Negative Split Bias slow)

### Pace Info

Average Pace/Mile: 08:35  
 Slowest Pace/Mile: 09:06 +6.1%  
 Fastest Pace/Mile: 08:22 -2.6%  
 Average Pace/Kilometer: 05:20  
 Slowest Pace/Kilometer: 05:37 +5.2%  
 Fastest Pace/Kilometer: 05:09 -3.5%

### Negative/Positive Split

1st Half: 1:52:02  
 2nd Half: 1:52:58  
**0:00:55**  
 (Positive Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at flat, straight  
 2019 Boston Marathon  
 (\*Note: You must manually enter the predicted

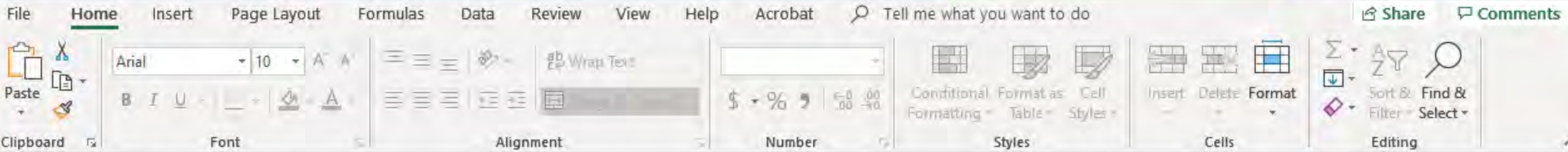
**Pacing Page**  
 Click once on "Negative Split Bias" cell then click down-arrow on right to select a pacing strategy.

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 Wrist Band, click on "Wrist Band" tabs at bottom of page  
 to the "Info" tab for more information on each of pacing strategy options

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:39	0:08:39	11:01:39 AM
1-2	W. Union St	08:35	0:17:14	11:10:14 AM
2-3	Union St (Ashland)	08:26	0:25:40	11:18:40 AM
3-4	Union St (Ashland), Waverly St	08:32	0:34:12	11:27:12 AM
4-5	Waverly St	08:37	0:42:49	11:35:49 AM
5-6	Waverly St	08:35	0:51:24	11:44:24 AM
6-7	Waverly St (Framingham)	08:32	1:00:06	11:52:58 AM
7-8	Waverly St	08:35	1:08:41	12:01:33 AM
8-9	W. Central St (Fisk Pond)	08:32	1:17:13	12:10:05 AM
9-10	(Fisk Pond), W. Central St	08:32	1:25:45	12:18:37 AM
10-11	E. Central St (Natick)	08:32	1:34:17	12:27:09 AM
11-12	E. Central St.	08:32	1:42:49	12:35:41 AM
12-13	Central St. (Wellesley College)	08:32	1:51:21	12:44:13 AM
13-14	Washington St. (Wellesley)	08:32	2:00:03	12:52:45 AM
14-15	Washington St.	08:32	2:08:35	1:01:17 AM
15-16	Washington St. (Newton Lower Falls)	08:32	2:17:07	1:10:09 AM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	08:32	2:25:39	1:18:41 AM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	08:32	2:34:11	1:27:13 AM
18-19	Commonwealth Ave.	08:32	2:42:43	1:35:45 AM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	08:32	2:51:15	1:44:17 AM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	08:32	3:00:06	1:52:58 AM

### Check Points

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:39	11:19:39 AM
10K	6.2137	0:52:18	11:45:18 AM
15K	9.3205	1:17:57	12:10:57 AM
20K	12.4274	1:43:36	12:36:36 AM
Half	13.1094	1:52:02	12:45:02 PM
25K	15.5343	2:17:41	1:10:41 PM
30K	18.6411	2:43:20	1:36:20 PM



# Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: **10:53:00 AM**  
Goal Time: **3:45:00**

Est. Finish Time of Day: **2:38:00 PM**

Adjust the settings below to customize your pacing strategy

- Pacing Strategy: **2 - Fairly Even Effort**
- Start Strategy: **3 - Fairly Fast Start**
- Finish (Fade) Strategy: **4 - No Fade**
- Downhill Pace Limiter: **3 - Slight Pace Limit**
- \* Negative Split Bias: **3 - Slight Neg Split Bias**
- Leg Pace Rounding: **1 - No Rounding**
- \* (Negative Split Bias slow)

### Pace Info

Average Pace/Mile: **08:35**  
 Slowest Pace/Mile: **09:02** +5.3%  
 Fastest Pace/Mile: **08:21** -2.8%

Average Pace/Kilometer: **05:20**  
 Slowest Pace/Kilometer: **05:36** +5.0%  
 Fastest Pace/Kilometer: **05:08** -4.0%

### Negative/Positive Split

1st Half: **1:52:38**  
 2nd Half: **1:52:22**  
**0:00:17**  
 (Negative Split)

### What is a Reasonable Goal Time for this Pace?

Enter estimated finish time at **flat, straight**

2019 Boston Marathon

(\*Note: You must **manually** enter the predicted

**Pacing Page**  
 Click once on "Leg Pace Rounding" cell then click down-arrow on right to select a rounding option.

... if fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 ... "Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 ... band, click on "Wrist Band" tabs at bottom of page  
 ... to the "Info" tab for more information on each of pacing strategy options

### Check Points

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:43	0:08:43	11:01:43 AM
1-2	W. Union St	08:38	0:17:21	11:10:21 AM
2-3	Union St (Ashland)	08:30	0:25:51	11:18:51 AM
3-4	Union St (Ashland), Waverly St	08:33	0:34:24	11:27:24 AM
4-5	Waverly St	08:34	0:42:58	11:35:58 AM
5-6	Waverly St	08:34	0:51:32	11:44:32 AM
6-7	Waverly St (Framingham)	08:32	1:00:04	11:53:04 AM
7-8	Waverly St	08:35	1:08:39	12:01:39 PM
8-9	W. Central St (Fisk Pond)	08:33	1:17:12	12:10:12 PM
9-10	(Fisk Pond), W. Central St	08:34	1:25:46	12:18:46 PM
10-11	E. Central St (Natick)	08:34	1:34:20	12:27:20 PM
11-12	E. Central St.	08:37	1:42:57	12:35:57 PM
12-13	Central St. (Wellesley College)	08:33	1:51:42	12:44:42 PM
13-14	Washington St. (Wellesley)	08:34	2:00:16	12:53:16 PM
14-15	Washington St.	08:34	2:08:50	1:01:50 PM
15-16	Washington St. (Newton Lower Falls)	08:34	2:17:24	1:10:24 PM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	08:34	2:25:58	1:18:58 PM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	08:34	2:34:32	1:27:32 PM
18-19	Commonwealth Ave.	08:34	2:43:06	1:36:06 PM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	08:34	2:51:40	1:44:40 PM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	08:34	3:00:14	1:53:14 PM

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:50	11:19:50 AM
10K	6.2137	0:53:40	11:46:40 AM
15K	9.3205	1:20:30	12:13:30 PM
20K	12.4274	1:47:20	12:40:20 PM
<b>Half</b>	<b>13.1094</b>	<b>1:52:38</b>	<b>12:45:38 PM</b>
25K	15.5343	2:24:10	1:32:10 PM
30K	18.6411	2:55:00	2:03:00 PM

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Clipboard Font Alignment Number Styles Cells Editing

## Boston Marathon Pace Calculator

NOTE: Items in **RED** can be changed

Est. Start Time: **10:53:00 AM**  
 Goal Time: **3:45:00**

Est. Finish Time of Day: **2:38:00 PM**

Adjust the settings below to customize your pacing strategy

Pacing Strategy: **2 - Fairly Even Effort**  
 Start Strategy: **3 - Fairly Fast Start**  
 Finish (Fade) Strategy: **4 - No Fade**  
 Downhill Pace Limiter: **3 - Slight Pace Limit**  
 \* Negative Split Bias: **3 - Slight Neg Split Bias**  
 Leg Pace Rounding: **5 - Nearest 5 Seconds**

\* (Negative Split Bias slows avg pace in first half)

### Pace Info

Average Pace/Mile: **08:35**  
 Slowest Pace/Mile: **09:00** +4.9%  
 Fastest Pace/Mile: **08:20** -3.0%

Average Pace/Kilometer: **05:20**  
 Slowest Pace/Kilometer: **05:35** +4.7%  
 Fastest Pace/Kilometer: **05:10** -3.2%

### Negative/Positive Split

1st Half: **1:52:46**  
 2nd Half: **1:52:14**  
**0:00:33**  
 (Negative Split)

### What is a Reasonable Goal Time for this Race?

Enter estimated finish time at **flat, straight**  
 2019 Boston Marathon  
 (\*Note: You must **manually** enter the predicted

**Pacing Page**  
 After you complete your configuration, review the results on one of the "Elev. & Pace" pages, then make further changes here as needed.

Notes: If fastest pace is too fast, increase Goal Time, adjust Downhill Pace Limiter, or adjust Pace Rounding  
 Pacing, Start, Finish, and Neg Split", select 1,2,3, or 4 from drop-down lists  
 list band, click on "Wrist Band" tabs at bottom of page  
 to the "Info" tab for more information on each of pacing strategy options

### Check Points

Mile	Description	Leg Pace	Elapsed Time	Time of Day
0-1	E. Main St. in Hopkinton	08:45	0:08:45	11:01:45 AM
1-2	W. Union St	08:40	0:17:25	11:10:25 AM
2-3	Union St (Ashland)	08:30	0:25:55	11:18:55 AM
3-4	Union St (Ashland), Waverly St	08:35	0:34:30	11:27:30 AM
4-5	Waverly St	08:30	0:43:00	11:36:00 AM
5-6	Waverly St	08:25	0:51:35	11:44:35 AM
6-7	Waverly St (Framingham)	08:30	1:00:05	11:53:05 AM
7-8	Waverly St	08:30	1:08:35	12:01:35 PM
8-9	W. Central St (Fisk Pond)	08:35	1:17:10	12:10:10 PM
9-10	(Fisk Pond), W. Central St	08:35	1:25:45	12:18:45 PM
10-11	E. Central St (Natick)	08:40	1:34:25	12:27:25 PM
11-12	E. Central St.	08:35	1:43:00	12:36:00 PM
12-13	Central St. (Wellesley College)	08:35	1:51:50	12:44:50 PM
13-14	Washington St. (Wellesley)	08:35	2:00:25	12:53:25 PM
14-15	Washington St.	08:35	2:09:00	1:02:00 PM
15-16	Washington St. (Newton Lower Falls)	08:35	2:17:35	1:10:35 PM
16-17	Washington St. (Hill #1, Newton-Wellesley Hospital)	08:35	2:26:10	1:19:10 PM
17-18	Washington, Commonwealth (Newton Fire Station, Hill #2)	08:35	2:34:45	1:27:45 PM
18-19	Commonwealth Ave.	08:35	2:43:20	1:36:20 PM
19-20	Commonwealth Ave (John Kelly Statue, Hill #3)	08:35	2:51:55	1:44:55 PM
20-21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	08:35	3:00:30	1:53:30 PM

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:45	11:19:45 AM
10K	6.2137	0:53:30	11:46:30 AM
15K	9.3205	1:20:15	12:13:15 PM
20K	12.4274	1:47:00	12:40:00 PM
<b>Half</b>	<b>13.1094</b>	<b>1:52:46</b>	<b>12:45:46 PM</b>
25K	15.5343	2:13:45	1:01:00 PM
30K	18.6411	2:40:30	1:27:45 PM

File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

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**Mile Splits With Pace**

Boston Marathon  
3:45:00

Pace	Elapsed
08:45	1 0:08:45
08:40	2 0:17:25
08:30	3 0:25:55
08:30	4
08:40	5
08:35	6
08:30	7
08:40	8
08:35	9
08:45	10
08:40	11
08:25	12
08:35	13 1:51:50
08:35	14
08:40	15
08:20	16
08:50	17
08:45	18
08:25	19
08:45	20
09:00	21
08:20	22
08:25	23
08:20	24
08:25	25 3:34:40
08:30	26 3:43:10
08:25	F 3:45:00

3:45:00

Boston Marathon

**Mile Splits**

Boston Marathon  
3:45:00

Elapsed
1 0:08:45
2 0:17:25
3 0:25:55
4
5
6
7
8
9
10
11
12
13 1:51:50
14
15
16
17
18
19
20
21
22
23
24
25 3:34:40
26 3:43:10
F 3:45:00

3:45:00

Boston Marathon

**Mile Splits (Large Font)**

Boston Marathon  
3:45:00

Elapsed	Elapsed
1 0:08:45	14 3:08:25
2 0:17:25	15 3:25:50
3 0:25:55	16 3:51:45
4 3:34:40	17 3:28:15
5 3:43:10	18 3:38:00
6 3:34:40	19 3:43:25
7 3:34:40	20 3:52:15
8 3:34:40	21 3:57:55
9 3:57:25	22 3:58:30
10 3:28:15	23 3:57:55
11 3:34:40	24 3:28:15
12 3:43:10	25 3:34:40
13 1:51:50	26 3:43:10

Finish: 3:45:00

Boston Marathon

To create your pace band, print this page. If possible, use a laser printer or waterproof paper ordered from: <http://www.waterproofpaper.com>

If using **normal** paper, cover back-side with clear packing tape **before** cutting it out. To protect the edges from moisture, cover front side after cutting it out then trim tape 1/4 inch from edges. Cut tape diagonally at all corners then fold over each edge as shown below:

Sized to fit the Nike Pace Band Holder

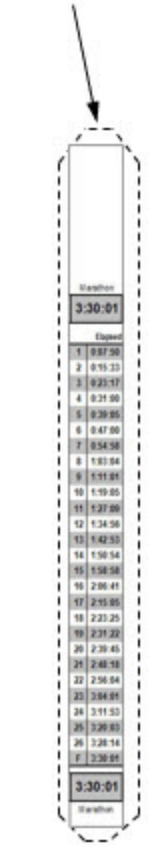
(To add stiffness, put clear packing tape on one or both sides before cutting out then fold in half)

Boston Marathon

Fold Here

Mile Splits With Pace	
3:45:00	
1 0:08:45	14
2 0:17:25	15
3 0:25:55	16
4	17
5	18
6	19
7	20
8	21
9	22
10	23
11	24
12	25 3:34:40
13 1:51:50	26 3:43:10
3:45:00	

Finish 3:45:00



**Note:**  
Pace band text not readable on computer screen should look fine when printed.

## Wrist Bands Page (Mile Format)

The mile splits on this page are automatically updated whenever any of the settings are changed on the "Pacing" page. When you are satisfied with your overall pacing strategy, print one of the two "Wrist Bands" pages (miles or km) then follow the directions on this page to wrap the band with clear packing tape to make it water proof. (If possible, use a laser printer to print the pace bands)

Note: This is page 1 of 2 - scroll down on spreadsheet to see additional pace bands in mile format.

File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

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A1

Page 2 of 2

**Mile Splits with Pace (Alternate)**

Boston Marathon  
**3:45:00**

Pace		Elapsed
08:45	1	0:08:45
08:40	2	0:17:25
08:30	3	0:25:55
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
08:35	13	1:51:50
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	
08:25	25	3:34:40
08:30	26	3:43:10
08:25	F	3:45:00

**3:45:00**  
Boston Marathon

**Wrist Bands Page (Mile Format)**

Page 2 of 2 - scroll up on spreadsheet to see page 1.



File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

A1

Page 1 of 1

### 5K Splits

Boston Marathon

3:45:00

Elapsed

5K 0:26:50

10K 0:53:20

15K 1:19:50

20K 1:46:20

Half 1:52:46

25K 2:18:50

30K 2:45:00

35K 3:11:10

40K 3:37:20

Full 3:45:00

3:45:00

### 1K Splits

Boston Marathon

3:45:00

	Elapsed	Elapsed	
1	0:05:20	22	1:07:00
2	0:10:50	23	1:17:50
3	0:16:15	24	1:28:05
4	0:21:50	25	1:38:55
5	0:27:20	26	1:49:15
6	0:32:50	27	2:00:05
7	0:38:20	28	2:10:25
8	0:43:50	29	2:20:15
9	0:49:20	30	2:30:35
10	0:54:50	31	2:40:25
11	1:00:20	32	2:50:45
12	1:05:50	33	3:00:35
13	1:11:20	34	3:10:55
14	1:16:50	35	3:21:05
15	1:22:20	36	3:31:25
16	1:27:50	37	3:41:15
17	1:33:20	38	3:51:35
18	1:38:50	39	4:01:25
19	1:44:20	40	4:11:45
20	1:49:50	41	3:38:40
21	1:52:00	42	3:44:00

### 2K Splits

Boston Marathon

	Pace	Elapsed
05:25	2	0:10:50
05:22	4	0:21:35
05:12	6	0:32:00
	8	
	10	
	12	
	14	
	16	
	18	
	20	
05:17	22	1:57:20
	24	
	26	
	28	
	30	
	32	
	34	
	36	
	38	
	40	3:33:25
05:17	42	3:44:00

## Wrist Bands Page (Km Format)

Page 1 of 1

# Elevation/Pace Profile - Boston Marathon

(Elapsed Time) **Pace** **Elapsed Time**  
 (Time of Day) **(Pace)** **Time of day**

MyMarathonPace.com

Goal Time: **3:45:00**

### Check Points:

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:45	11:19:45 AM
10K	6.2137	0:53:26	11:46:26 AM
15K	9.3205	1:20:07	12:13:07 PM
20K	12.4273	1:46:48	12:39:48 PM
Half	13.1	1:52:14	12:45:14 PM
25K	15.7137	2:13:07	1:06:07 PM
30K	18.3273	2:33:58	1:26:58 PM
35K	20.9410	2:54:49	1:47:49 PM
40K	23.5547	3:15:40	2:08:40 PM
Full	26.2	3:45:00	2:38:00 PM

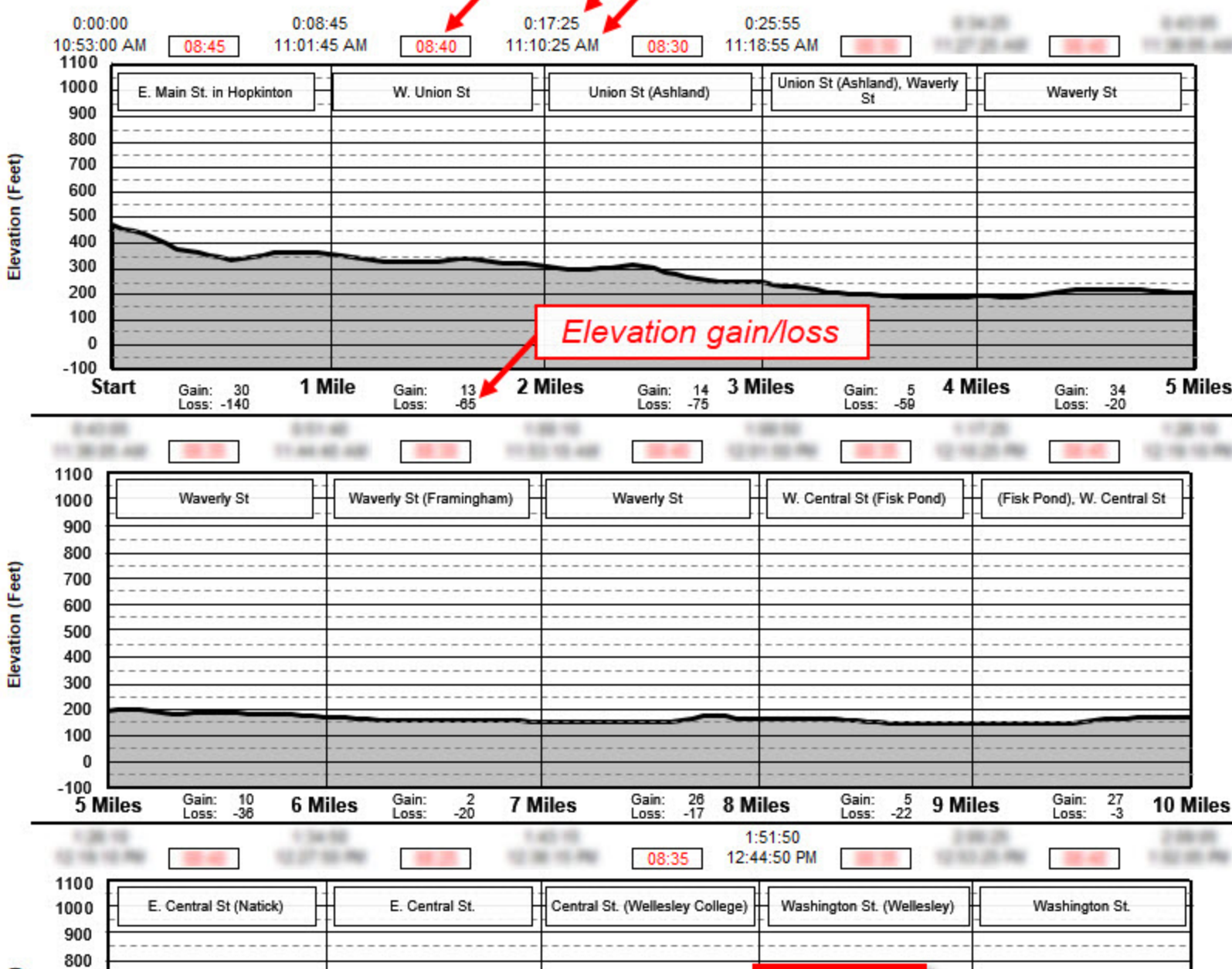
## Elevation & Pace Page (Miles)

Use this page to review your pacing strategy super-imposed on an elevation chart of the marathon course (Scroll down on spreadsheet to see bottom of page)

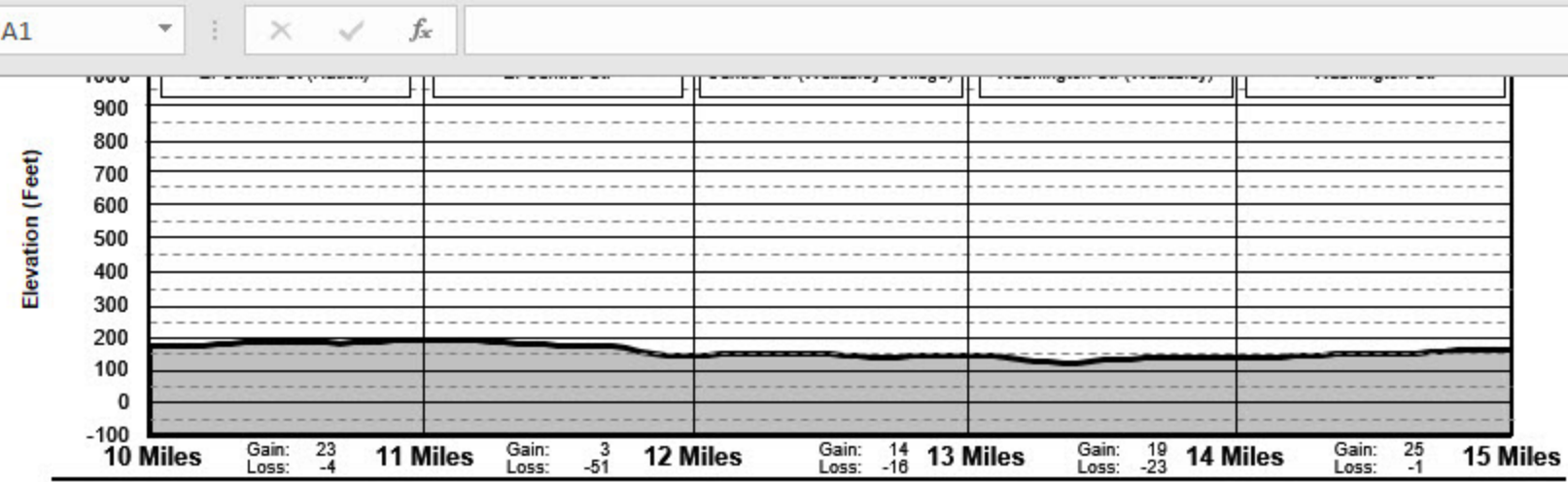
Second Half: 1:52:14  
 Difference: 0:00:33  
 (Negative Split)

### Pace Data (Min/Mile):

Average Pace: 08:35  
 Slowest Mile(s): 09:00



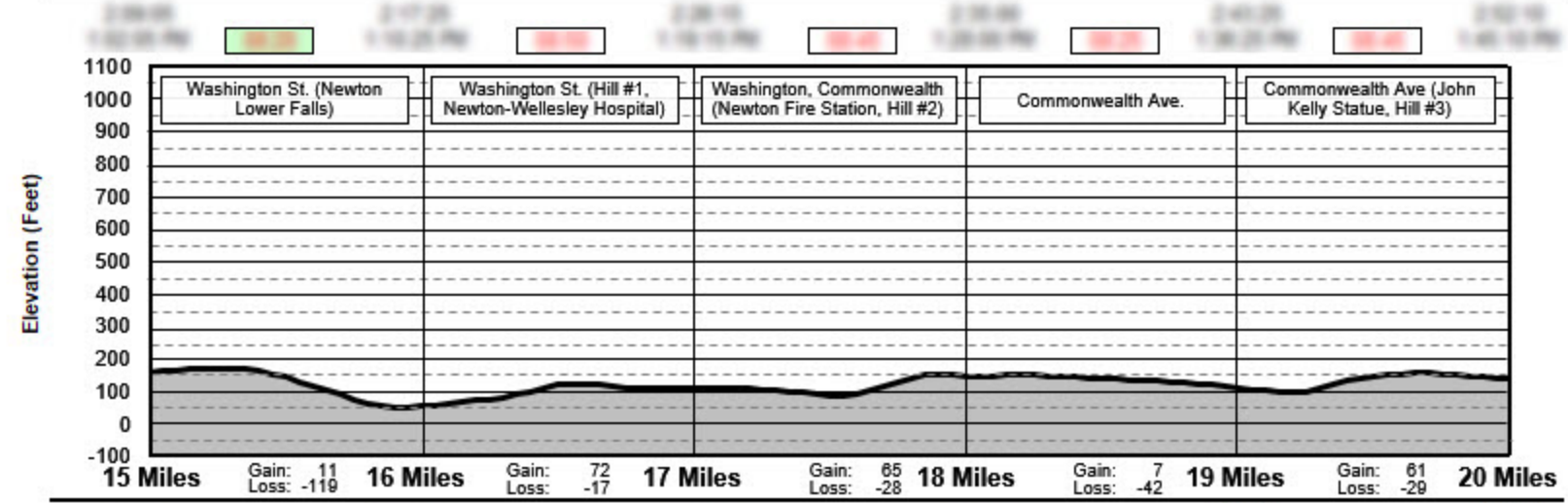
Excel ribbon: File, Home, Insert, Page Layout, Formulas, Data, Review, View, Help, Acrobat. Home tab includes Clipboard, Font, Alignment, Number, Styles, Cells, and Editing groups.



Average Pace:	08:33
Slowest Mile(s):	09:00
Fastest Mile(s):	08:20

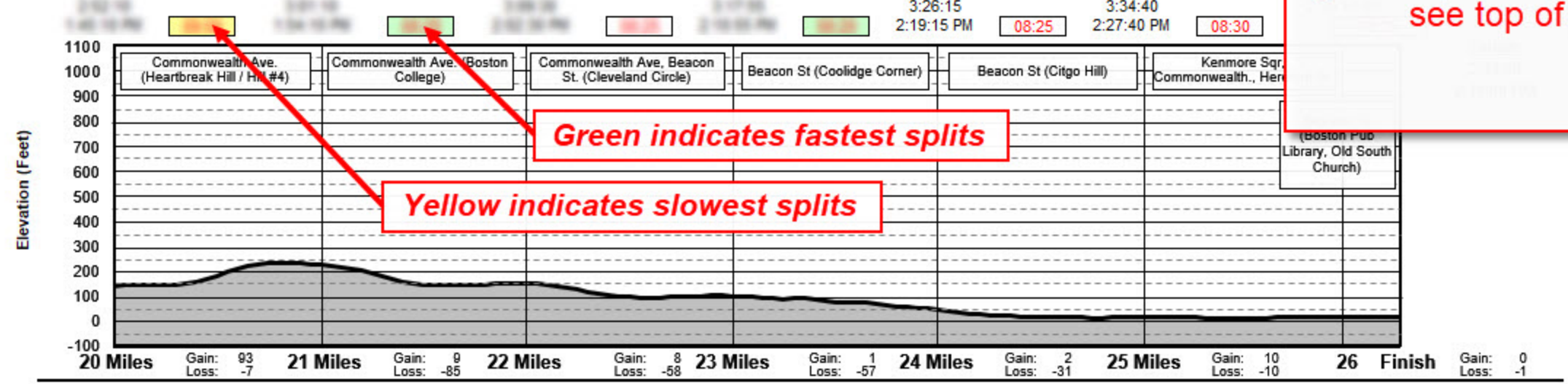
**Altitude Data (Feet):**

Starting Altitude:	463
Finishing Altitude:	17
Altitude Gain:	585
Altitude Loss:	-1,031
Net Gain/Loss:	-446



Note: Elevation chart gain/loss data and diff altitude every some

**Elevation & Pace Page (Miles)**  
 (Scroll up on spreadsheet to see top of page)



**Green indicates fastest splits**

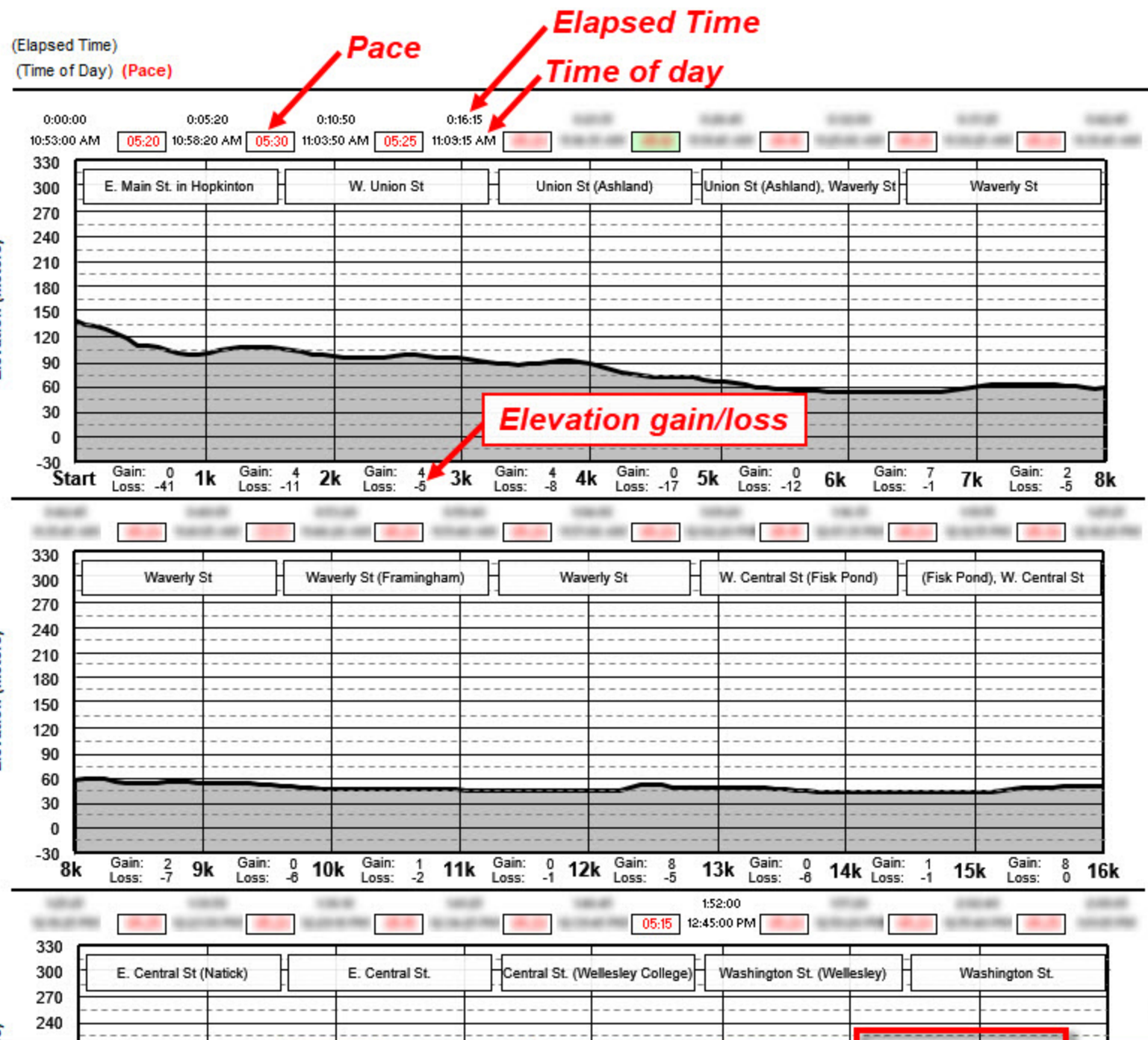
**Yellow indicates slowest splits**

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# Elevation/Pace Profile (Metric) - Boston Marathon



MyMarathonPace.com

Goal Time: **3:45:00**

**Check Points:**

K	Miles	Elapsed Time	Time of Day
5K	3.1069	0:26:45	11:19:45 AM
10K	6.2137		
15K	9.3205		
20K	12.4274		
Half	13.1094		
25K	15.5343		
30K	18.6411		
35K	21.748		
40K	24.8548		
Full	26.2187		

**Elevation & Pace Page (Km)**  
 Use this page to review your pacing strategy super-imposed on an elevation chart of the marathon course (Scroll down on spreadsheet to see bottom of page)

Second Half: 1:52:14  
 Difference: 0:00:33  
 (Negative Split)

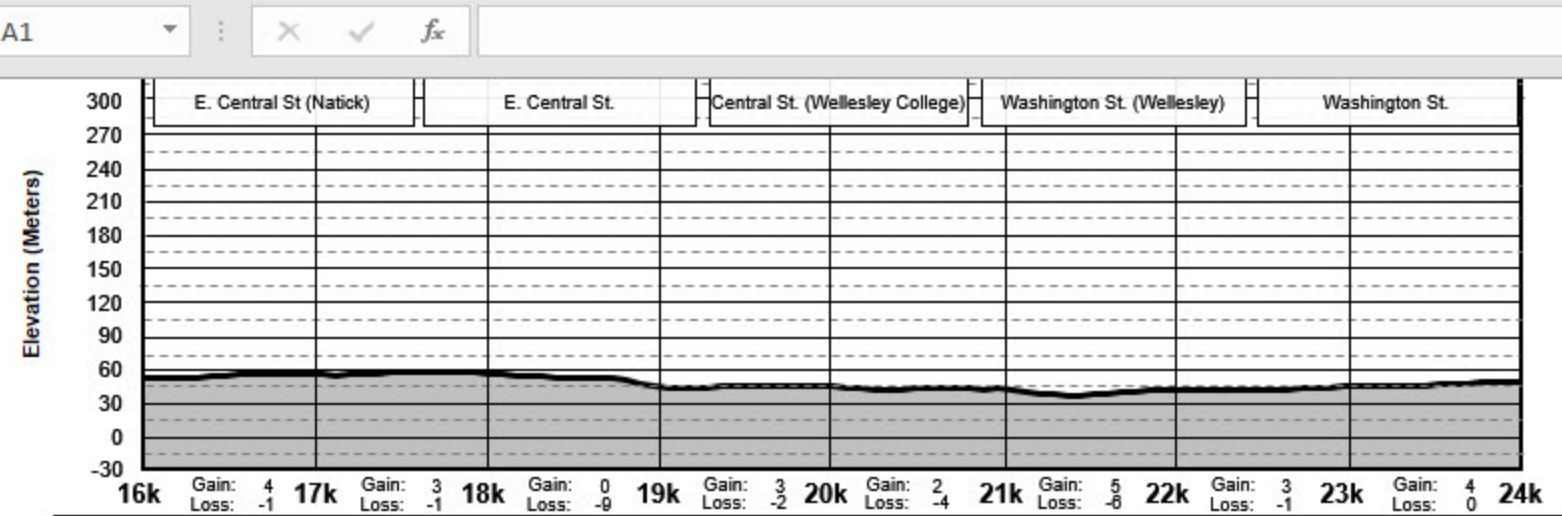
**Pace Data (Min/Km):**

Average Pace:	05:20
Slowest Kilometer(s):	05:35

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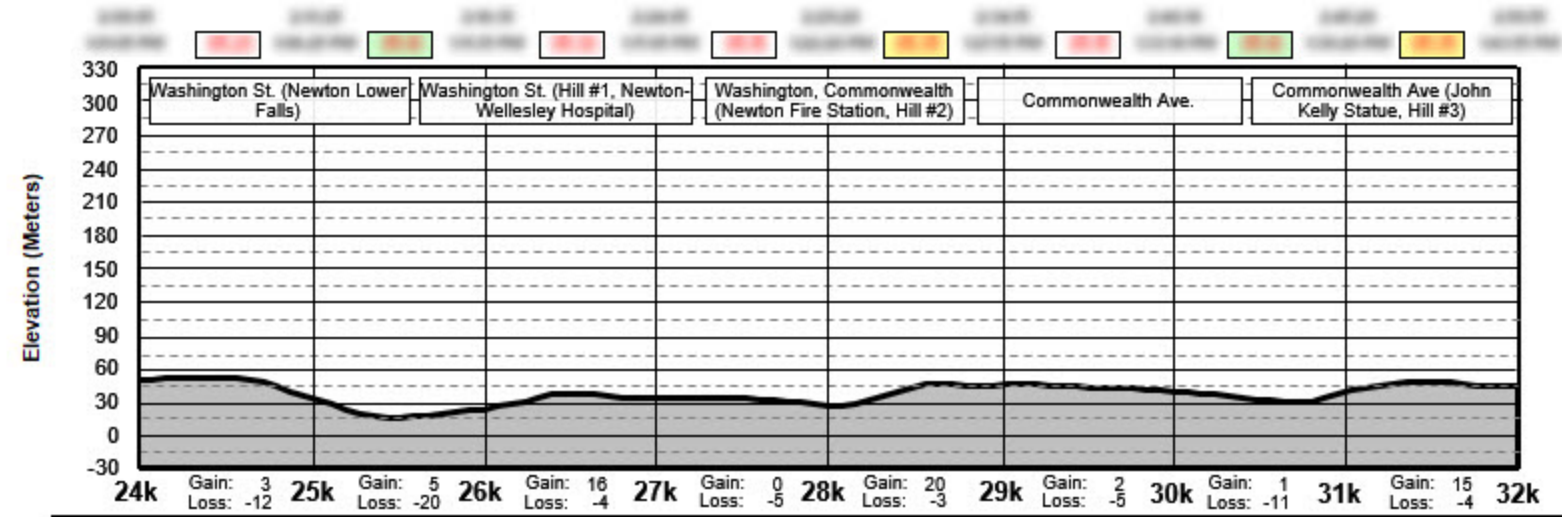


Average Pace:	05:20
Slowest Kilometer(s):	05:35
Fastest Kilometer(s):	05:10

**Altitude Data (Meters):**

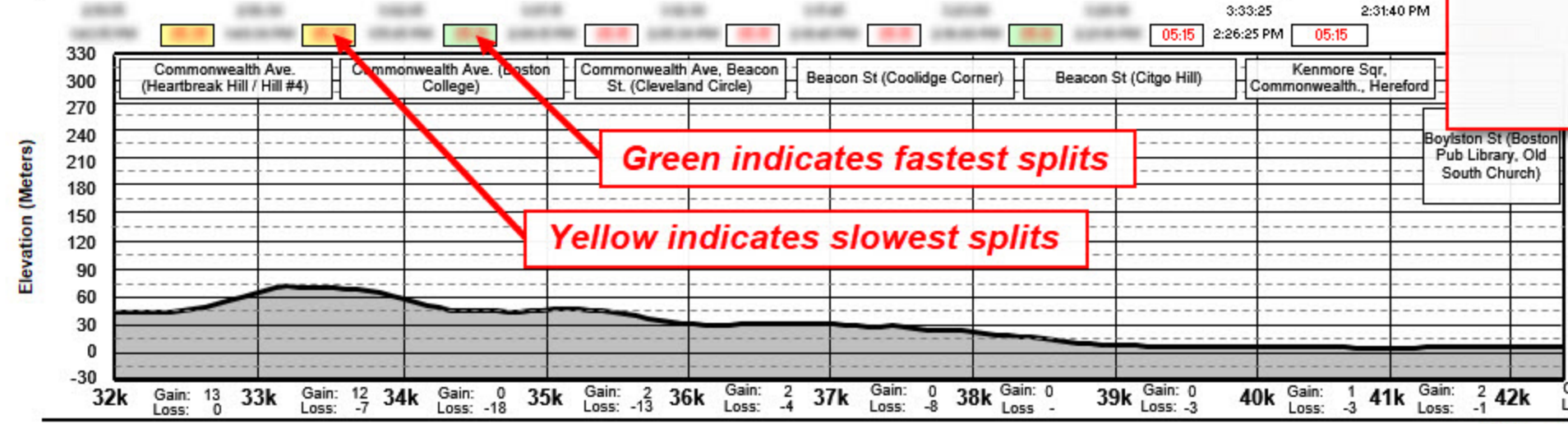
Starting Altitude:	141
Finishing Altitude:	5
Altitude Gain:	178
Altitude Loss:	-314
Net Gain/Loss:	-136

Note: Elev data, and based on a interpolated (This may "smoothing"



3:38:40 3:33:25 2:31:40 PM 2:26:25 PM

**Elevation & Pace Page (Km)**  
 (Scroll up on spreadsheet to see top of page)



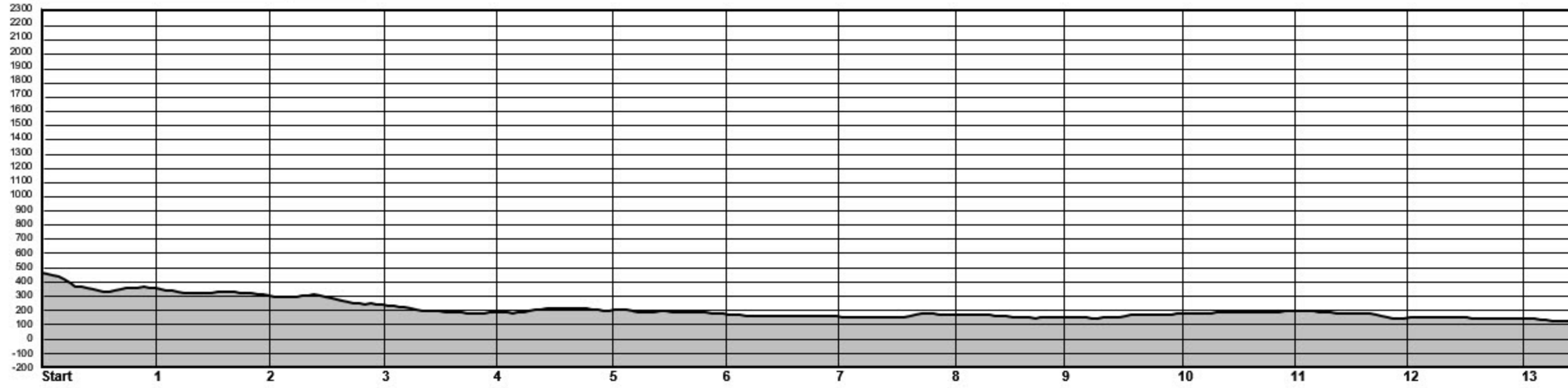
File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

Clipboard Font Alignment Number Styles Cells Editing

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A1

# Boston Marathon



Starting Altitude: 463      Max Elevation: 463      Elevation Gain: +585      Net Gain/Loss: -446  
 Finish Altitude: 17      Min Elevation: 11      Elevation Loss: -1,031

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**Elevation Chart**  
**Page**

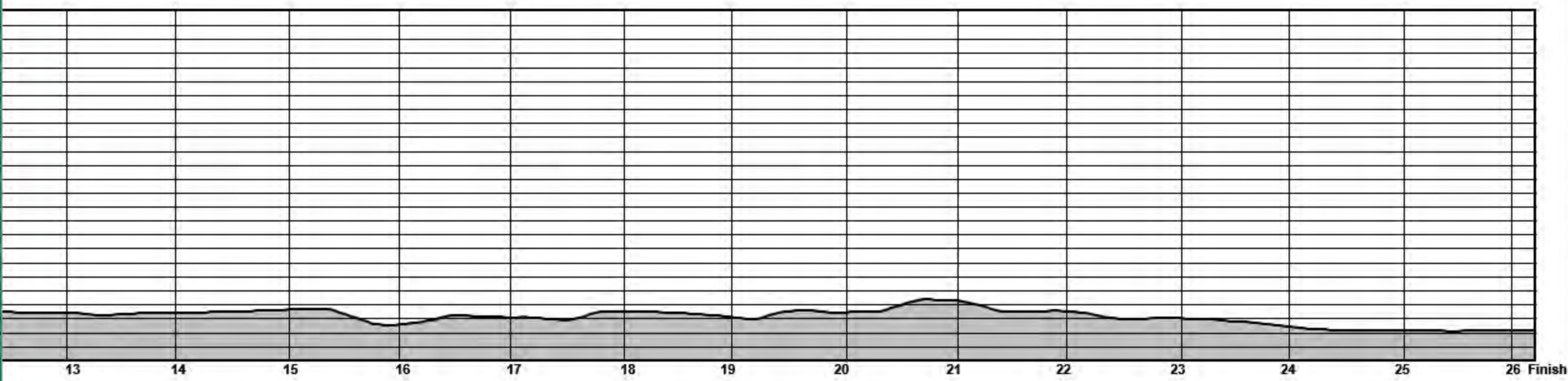
**Scroll right on spreadsheet to see rest of chart**



File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do Share Comments

Paste Font Alignment Number Styles Cells Editing

A1



**Elevation Chart**  
**Page**

***Scroll left on spreadsheet to see rest of chart***



File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do Share Comments

Clipboard Font Alignment Number Styles Cells Editing

Clipboard: Paste, Copy, Cut, Undo, Redo, Format Painter

Font: Arial, 10, Bold, Italic, Underline, Text Color, Background Color, Font Color, Font Style, Font Size, Font Color, Font Size, Font Color, Font Size

Alignment: Wrap Text, Merge & Center, Text Alignment, Orientation, Text Direction, Text Wrapping

Number: Currency, Percentage, Decimals, Thousands Separator, Negative Numbers, Number Format, Number Style, Number Color, Number Size

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: Sort & Filter, Find & Select

## Boston Marathon Hill Information

Mode: **Miles**

(MyMarathonPace.com)

Starting Mile:	Up/Down:	Length (Miles):	Ending Mile:	Gain/Loss (Feet):	Average Grade:	Steepest Grade:	Comment:
0.00	Downhill	0.60	0.60	-135	-4.3%	-5.7%	Starting line
0.60	Uphill	0.14	0.74	+33	+4.5%	+5.2%	Very short uphill
0.70	Downhill	3.00	3.70	-223	-1.4%	-4.3%	Very long downhill section
4.20	Uphill	0.45	4.65	+40	+1.7%	+3.8%	Very short uphill
4.74	Downhill	0.30	5.04	-20	-1.3%	-3.5%	Very short downhill
15.40	Downhill	0.65	16.05	-118	-3.4%	-5.2%	Just before Newton Lower Falls
16.00	Uphill	0.65	16.65	+75	+2.2%	+4.1%	Just past Newton Lower Falls
17.65	Uphill	0.35	18.00	+75	+4.1%	+5.6%	Just past Newton Fire Station
19.30	Uphill	0.60	19.90	+63	+2.0%	+4.5%	Newton City Hall
20.45	Uphill	0.45	20.90	+95	+4.0%	+5.5%	Heartbreak Hill
21.15	Downhill	0.50	21.65	-89	-3.4%	-5.0%	Boston College
22.30	Downhill	0.45	22.75	-60	-2.5%	-4.8%	Cleveland Circle
23.10	Downhill	1.15	24.25	-100	-1.6%	-3.8%	Beacon Street

**Hill Information**  
**Page (Miles/Feet)**



File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

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### Boston Marathon Hill Information

(MyMarathonPace.com)

Mode: Miles

Starting Mile:	Up/Down:	Length (Miles):	Ending Mile:	Gain/Loss (Feet):	Average Grade:	Steepest Grade:	Comment:
0.00	Downhill	0.60	0.60	-135	-4.3%	-5.7%	Starting line
0.60	Uphill	0.14	0.74	+22	+4.5%	+5.2%	Very short uphill
0.70	Downhill	3.00					hill section
4.20	Uphill	0.45					hill
4.74	Downhill	0.30					hill
15.40	Downhill	0.65					Newton Lower Falls
16.00	Uphill	0.65	16.65	+75	+2.2%	+4.1%	Just past Newton Lower Falls
17.65	Uphill	0.35	18.00	+75	+4.1%	+5.6%	Just past Newton Fire Station
19.30	Uphill	0.60	19.90	+63	+2.0%	+4.5%	Newton City Hall
20.45	Uphill	0.45	20.90	+95	+4.0%	+5.5%	Heartbreak Hill
21.15	Downhill	0.50	21.65	-89	-3.4%	-5.0%	Boston College
22.30	Downhill	0.45	22.75	-60	-2.5%	-4.8%	Cleveland Circle
23.10	Downhill	1.15	24.25	-100	-1.6%	-3.8%	Beacon Street

To change units of measure, click once on "Mode" cell then click down-arrow to change mode.

**Hill Information**  
**Page (Miles/Feet)**

File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do Share Comments

Clipboard Font Alignment Number Styles Cells Editing

Clipboard: Paste, Copy, Cut, Undo, Redo

Font: Arial, 10, Bold, Italic, Underline, Text Color, Background Color

Alignment: Wrap Text, Merge & Center

Number: \$, %, #, 0.00, 0.00

Styles: Conditional Formatting, Format as Table, Cell Styles

Cells: Insert, Delete, Format

Editing: Sort & Filter, Find & Select

## Boston Marathon Hill Information

Mode: **Kilometers**

(MyMarathonPace.com)

Starting Km:	Up/Down:	Length (Km):	Ending Km:	Gain/Loss (Meters):	Average Grade:	Steepest Grade:	Comment:
0.00	Downhill	0.97	0.97	-41	-4.3%	-5.7%	Starting line
0.97	Uphill	0.23	1.19	+10	+4.5%	+5.2%	Very short uphill
1.13	Downhill	4.83	5.95	-68	-1.4%	-4.3%	Very long downhill section
6.76	Uphill	0.72	7.48	+12	+1.7%	+3.8%	Very short uphill
7.63	Downhill	0.48	8.11	-06	-1.3%	-3.5%	Very short downhill
24.78	Downhill	1.05	25.83	-36	-3.4%	-5.2%	Just before Newton Lower Falls
25.75	Uphill	1.05	26.80	+23	+2.2%	+4.1%	Just past Newton Lower Falls
28.40	Uphill	0.56	28.97	+23	+4.1%	+5.6%	Just past Newton Fire Station
31.06	Uphill	0.97	32.03	+19	+2.0%	+4.5%	Newton City Hall
32.91	Uphill	0.72	33.64	+29	+4.0%	+5.5%	Heartbreak Hill
34.04	Downhill	0.80	34.84	-27	-3.4%	-5.0%	Boston College
35.89	Downhill	0.72	36.61	-18	-2.5%	-4.8%	Cleveland Circle
37.18	Downhill	1.85	39.03	-30	-1.6%	-3.8%	Beacon Street

**Hill Information**  
**Page (Km/Meters)**

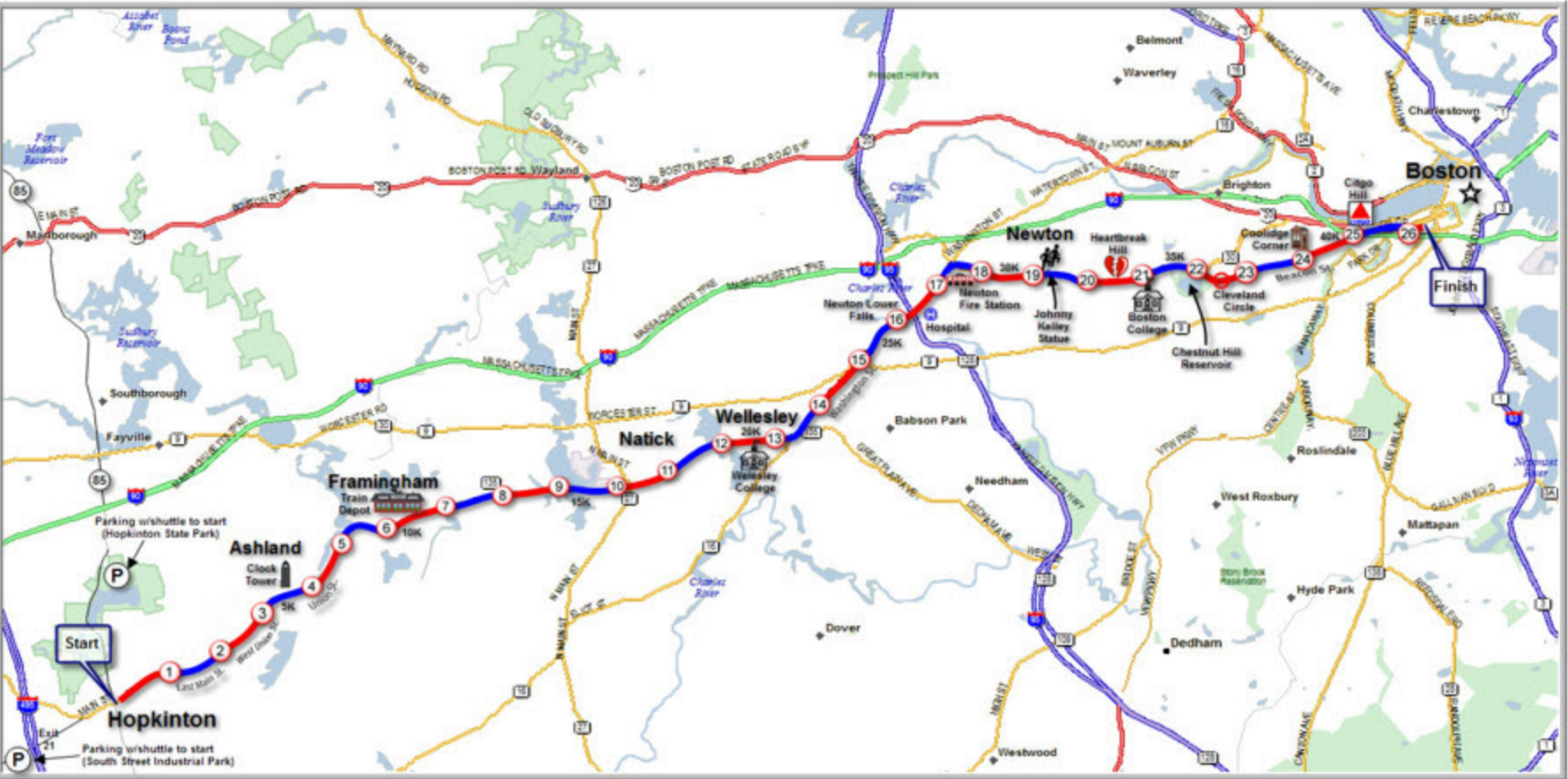
File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

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## Boston Marathon Course Map

(Print and use this page as a spectator guide)



**Predicted time of day for each mile marker:**

Mile	Description	Time
1	E. Main St. in Hopkinton	11:01:45 AM
2	W. Union St	11:10:25 AM
3	Union St (Ashland)	11:18:55 AM
4	Union St (Ashland), Waverly St	
5	Waverly St	
6	Waverly St	
7	Waverly St (Framingham)	
8	Waverly St	
9	W. Central St (Fisk Pond)	
10	(Fisk Pond), W. Central St	
11	E. Central St (Natick)	
12	E. Central St	
13	Central St. (Wellesley College)	12:44:50 PM
14	Washington St. (Wellesley)	

Mile	Description	Time
15	Washington St.	
16	Washington St. (Newton Lower Falls)	
17	Washington St. (Hill #1, Newton-Wellesley Hospital)	
18	Washington, Commonwealth (Newton Fire Station, Hill #)	
19	Commonwealth Ave.	
20	Commonwealth Ave (John Kelly Statue, Hill #3)	
21	Commonwealth Ave. (Heartbreak Hill / Hill #4)	
22	Commonwealth Ave. (Boston College)	
23	Commonwealth Ave, Beacon St. (Cleveland Circle)	
24	Beacon St (Coolidge Corner)	
25	Beacon St (Citgo Hill)	2:27:40 PM
26	Kenmore Sqr, Commonwealth., Hereford St, Boylston St	2:36:10 PM
26	Boylston St (Boston Pub Library, Old South Church)	2:38:00 PM

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**Predicted check point times**

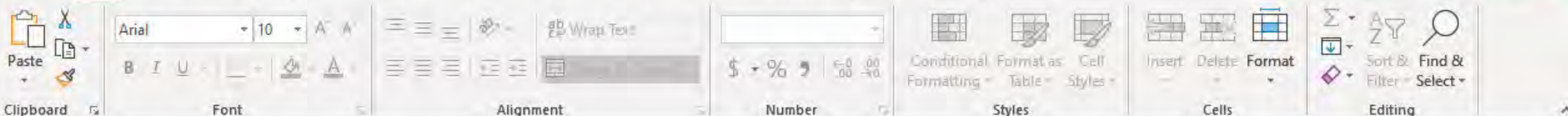
Miles	Elapsed	Time of Day
5K	3.107	0:26:45 11:19:45 AM
10K	6.214	
15K	9.321	
20K	12.427	
Half	13.109	1:52:46 12:45:46 PM
25K	15.534	
30K	18.641	
35K	21.748	
40K	24.855	
Full	26.219	3:45:00 2:38:00 PM

Avg Pace:	05:20	Min/Km
	08:35	Min/Mile

MyMarathonPace.com

**Map Page**  
 This page gives you an overview of the marathon course along with the expected time of day you will pass each mile marker.  
 (Print this page and give to anyone waiting for you along the course.)





B6

## Qualifying for the Boston Marathon

The Boston Marathon registration process and qualifying standards most recently changed for the 2012 race and again for the 2013 race. For up to date details on the current qualifying standards, please visit the official BAA web site at: <http://baa.org>

### Qualifying Times, Effective as of September 15, 2018

Age Groups	Men			Women		
	Qualifying Time	*Avg Age Grade %	*Age Graded Avg Time	Qualifying Time	*Avg Age Grade %	*Age Graded Avg Time
18-34	3:00:00	67.6%	3:01:58	3:30:00	64.3%	3:30:35
35-39	3:05:00	66.2%	3:04:26	3:35:00	63.5%	3:33:24
40-44	3:10:00	65.6%	3:05:54	3:40:00	63.3%	3:33:51
45-49	3:20:00	66.3%	3:05:21	3:50:00	64.4%	3:30:30
50-54	3:25:00	66.8%	3:04:00	3:55:00	66.3%	3:24:22
55-59	3:35:00	66.0%	3:06:16	4:05:00	67.4%	3:21:04
60-64	3:50:00	64.9%	3:09:35	4:20:00	68.3%	3:18:19
65-69	4:05:00	64.1%	3:11:44	4:35:00	69.9%	3:13:54
70-74	4:20:00	64.2%	3:11:32	4:50:00	72.1%	3:07:47
75-79	4:35:00	66.0%	3:06:18	5:05:00	76.3%	2:57:46
80+	4:50:00	67.5%	3:02:02	5:20:00	79.1%	2:51:16

\* Age grading based on 2015 factors (see "Notes" at bottom of page)

### Registration Process

A two week registration period, with four registration "windows", starts on the second Monday of September. The first week is for "Early Acceptance" of runners who qualified with at least 5 minutes to spare for their age and gender (see charts above).

Faster runners will be given priority during the registration process as follows:

#### Week 1:

Window #1 (Mon/Tue): Runners qualifying with 20:00+ minutes to spare

Window #2 (Wed/Thu): Runners qualifying with 10:00+ minutes to spare

Window #3 (Fri/Sat/Sun): Runners qualifying with 5:00+ minutes to spare

#### Week 2:

Window #4 (Mon-Fri): Any runner who met their qualifying time

If the field limit is reached prior to the end of this two week period, then only the fastest runners applying for entry during that "window" will be accepted. If space remains available, registration will remain open until the maximum field size is reached.

**Qualifying Times**  
Additional information  
specific to the Boston  
Marathon.

(Scroll down on  
spreadsheet to see  
bottom of page)

B6

Window #4 (Mon-Fri): Any runner who met their qualifying time

If the field limit is reached prior to the end of this two week period, then only the fastest runners applying for entry during that "window" will be accepted. If space remains available, registration will remain open until the maximum field size is reached.

**Registration Process History**

During registration for the 2011 Boston Marathon, it reached capacity in 8-1/2 hours. For 2012, the registration process was modified so qualifiers in each of the male/female age groups are now accepted into the race starting with the fastest in each age group then working downwards to the slowest qualifiers.

The bottom line is that a qualifying time no longer guarantees entry into the race - it only allows you to participate in the registration process and you must now beat your qualifying time by a certain number of minutes and/or seconds (cut-off time) to make it into the race before it fills up.

**History of Qualifying Cut-Off Times\***

<u>Registration for</u>	<u>Cut-Off Times (mm:ss)</u>	
Earlier than 2011:	-00:00	(Registration stayed open for at least a month)
2011:	-00:00	(Race filled in 8-1/2 hours)
2012:	-01:14	(New registration process implemented)
2013:	-00:00	(Qualifying times tightened by 05:59 - fills up Oct 11)
2014:	-01:38	
2015:	-01:02	
2016:	-02:28	
2017:	-02:09	
2018:	-03:23	
2019:	-04:52	(Qualifying times tightened by 5 minutes for 2020)
2020:	-01:39	

\* You had to beat your qualifying time by the specified number of minutes and seconds

**Notes:**

Qualifying times must be run on a USATF certified marathon course and are based upon your age on the date of the Boston Marathon in which you will be participating.

The WMA (World Masters Athletics) Age Grade % and times are calculated by a comparison with actual or predicted world record marathon times for each age.

[WMA Age-grading calculator \(2015 Factors\)](#)  
[More Info About Age Graded Scoring](#)

**Qualifying Times**  
 Additional information specific to the Boston Marathon.

(Scroll up on spreadsheet to see top of page)