

**Marathon Petroleum Corporation Market Data**

Price information through 12/31/2018

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	WTI Prompt Price (a)	LLS Prompt Price (a)	ANS Prompt Price (a)	Mid-Con WTI 3-2-1 Crack (ex-RIN) (b)	USGC LLS 3-2-1 Crack (ex-RIN) (b)	WC ANS 3-2-1 Crack (ex-RIN) (b)	Blended Crack (c)	Blended Prompt Crude Price (d)	RVO Cost in Crack	Sweet Delivered Differential (e)	(1) + (10)	(11) - (8)	Sour Delivered Diff. (e)	(1) + (13)	(14) - (8)	Market Structure (g)
Oct-18	70.76	78.93	80.16	15.65	5.74	15.57	11.87	76.12	0.82	(0.11)	70.65	(5.47)	(2.16)	68.60	(7.52)	0.45
Nov-18	56.69	64.75	66.99	13.92	3.62	9.36	8.91	62.23	0.81	(0.34)	56.36	(5.87)	(4.53)	52.16	(10.07)	0.12
Dec-18	48.98	55.87	58.80	7.56	3.29	10.15	6.56	53.96	1.27	(3.01)	45.98	(7.98)	(4.48)	44.50	(9.46)	(0.20)
<b>4Q18</b>	<b>59.34</b>	<b>67.48</b>	<b>69.54</b>	<b>13.08</b>	<b>4.32</b>	<b>11.74</b>	<b>9.43</b>	<b>64.88</b>	<b>0.95</b>	<b>(0.98)</b>	<b>58.36</b>	<b>(6.52)</b>	<b>(3.60)</b>	<b>55.74</b>	<b>(9.14)</b>	<b>0.15</b>

Hypothetical Other Margin Indicator Calculation									Provided Outlook			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	
Crude Throughput (mmbbls)	Non-Crude Throughput (mmbbls)	Total Throughput (mmbbls)	Blended Crack Spread (\$MM)	Sweet Differential (\$MM)	Sour Differential (\$MM)	Market Structure (\$MM)	R&M Margin Indicator (\$MM)	Crude Throughput (MBD)	Other Charge/Feedstocks (MBD)	Sweet Crude Oil Throughput Percentage	Sour Crude Oil Throughput Percentage	
(I) x Days in Qtr.	(J) x Days in Qtr.	(A) + (B)	(C) x Col 7	(A) x Col 12 x (K)	(A) x Col 15 x (L)	(A) x Col 16 x %	Sum of (D) thru (G)					
Quarter	255	25	281	2,646	833	1,167	(15)	4,630	2,775	275	50%	50%

(a) Prompt Price represents calendar workday average of prices quoted that month for crude delivered in immediately following month(s).

(b) Crack Spread Calculation: Mid-Con = ((Chicago CBOB Gasoline x 2 + Chicago Ultra Low Sulfur Distillate)/3) - WTI Prompt Price

USGC = ((U.S. Gulf Coast (USGC) CBOB Gasoline x 2 + USGC Ultra Low Sulfur Distillate) /3) - LLS Prompt Price

West Coast = ((LA California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) x 2+ LA California Air Resources Board (CARB) Diesel)/3) - ANS Prompt Price

(c) Beginning 4Q 2018, Blended Mid-Con/USGC/West Coast crack spread is weighted 38%/38%/24% based on MPC's refining capacity by PADD. From Q1 2017 through Q3 2018, the blended spread was weighted 40%/60% Mid-Con/USGC.

(d) Beginning 4Q 2018, Blended WTI/LLS/ANS prompt crude price is weighted 38%/38%/24% based on blended crack spread. From Q1 2017 through Q3 2018, the blended price was weighted 40%/60% Mid-Con/USGC.

(e) Delivered differentials (versus Prompt WTI) for the trade month period beginning with the 26th calendar day two months prior to the prompt month through the 25th day one month prior to the prompt month. The exception is the Maya delivered differential which is calculated on a prompt calendar month basis.

MPC's typical sweet crude oil basket consists of the following crudes: Bakken, Brent, LLS, WTI-Cushing, WTI-Midland

MPC's typical sour crude oil basket consists of the following crudes: ANS, ASCI, Maya, Western Canadian Select.

(f) Delivered cost is based on WTI prompt price plus each respective grade's delivered differential and does not include market structure or other expenses such as transportation, demurrage, etc. Market structure effects are calculated as a separate adjustment (see column 16 and (G) above).

(g) Delivered month market structure (roll). Negative values represent contango and positive values represent backwardation. Beginning 4Q 2018, approximately 40% of MPC's crude oil acquisition volume uses market structure in its acquisition price formula.

All prices and differentials listed are in Dollars per Barrel

Data Sources: NYMEX, Argus, and MPC Estimate

# Marathon Petroleum Corporation Market Data

Price information through 12/31/2018

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
											(1) + (10)	(11) - (8)		(1) + (13)	(14) - (8)	
2018	WTI Prompt Price (a)	LLS Prompt Price (a)	ANS Prompt Price (a)	Mid-Con WTI 3-2-1 Crack (ex-RIN) (b)	USGC LLS 3-2-1 Crack (ex-RIN) (b)	WC ANS 3-2-1 Crack (ex-RIN) (b)	Blended Crack (c)	Blended Prompt Crude Price (d)	RVO Cost in Crack	Sweet Delivered Differential (e)	Sweet Delivered Cost (f)	Prompt Sweet Differential	Sour Delivered Diff. (e)	Sour Delivered Cost (f)	Prompt Sour Differential	Market Structure (g)
Jan-18	63.66	67.74	68.82	12.21	8.03	11.15	9.70	66.11	3.19	1.95	65.61	(0.50)	(2.62)	61.04	(5.07)	(0.03)
Feb-18	62.18	64.46	65.58	7.31	7.52	12.55	7.44	63.55	3.22	1.28	63.46	(0.09)	(4.45)	57.74	(5.81)	0.11
Mar-18	62.77	65.13	66.47	9.92	8.05	17.50	8.80	64.19	2.45	0.27	63.04	(1.15)	(6.75)	56.02	(8.17)	0.26
<b>1Q18</b>	<b>62.89</b>	<b>65.82</b>	<b>67.00</b>	<b>9.89</b>	<b>7.88</b>	<b>13.77</b>	<b>8.69</b>	<b>64.65</b>	<b>2.95</b>	<b>1.17</b>	<b>64.07</b>	<b>(0.59)</b>	<b>(4.60)</b>	<b>58.30</b>	<b>(6.35)</b>	<b>0.12</b>
Apr-18	66.33	69.46	70.73	14.20	10.57	19.62	12.02	68.20	2.00	0.28	66.60	(1.60)	(6.23)	60.10	(8.11)	0.13
May-18	69.98	75.23	76.31	17.93	10.57	18.02	13.51	73.13	1.70	(0.14)	69.84	(3.29)	(3.66)	66.33	(6.80)	0.11
Jun-18	67.32	74.31	75.25	17.54	7.89	13.42	11.75	71.52	1.46	(0.44)	66.88	(4.63)	(2.55)	64.77	(6.74)	0.14
<b>2Q18</b>	<b>67.91</b>	<b>73.03</b>	<b>74.14</b>	<b>16.58</b>	<b>9.69</b>	<b>17.03</b>	<b>12.45</b>	<b>70.98</b>	<b>1.72</b>	<b>(0.11)</b>	<b>67.80</b>	<b>(3.18)</b>	<b>(4.12)</b>	<b>63.79</b>	<b>(7.19)</b>	<b>0.12</b>
Jul-18	70.58	72.75	75.17	15.47	10.93	13.43	12.74	71.88	1.33	1.58	72.16	0.28	(1.18)	69.40	(2.48)	0.51
Aug-18	67.85	72.62	73.72	18.60	10.52	13.53	13.75	70.71	1.25	(1.32)	66.52	(4.19)	(5.77)	62.07	(8.64)	2.22
Sep-18	70.08	77.52	77.76	19.39	7.80	15.43	12.43	74.55	1.15	(1.35)	68.74	(5.81)	(5.46)	64.63	(9.92)	1.08
<b>3Q18</b>	<b>69.43</b>	<b>74.14</b>	<b>75.42</b>	<b>17.79</b>	<b>9.84</b>	<b>14.07</b>	<b>13.02</b>	<b>72.26</b>	<b>1.25</b>	<b>(0.39)</b>	<b>69.04</b>	<b>(3.22)</b>	<b>(4.11)</b>	<b>65.32</b>	<b>(6.94)</b>	<b>1.27</b>
Oct-18	70.76	78.93	80.16	15.65	5.74	15.57	11.87	76.12	0.82	(0.11)	70.65	(5.47)	(2.16)	68.60	(7.52)	0.45
Nov-18	56.69	64.75	66.99	13.92	3.62	9.36	8.91	62.23	0.81	(0.34)	56.36	(5.87)	(4.53)	52.16	(10.07)	0.12
Dec-18	48.98	55.87	58.80	7.56	3.29	10.15	6.56	53.96	1.27	(3.01)	45.98	(7.98)	(4.48)	44.50	(9.46)	(0.20)
<b>4Q18</b>	<b>59.34</b>	<b>67.48</b>	<b>69.54</b>	<b>13.08</b>	<b>4.32</b>	<b>11.74</b>	<b>9.43</b>	<b>64.88</b>	<b>0.95</b>	<b>(0.98)</b>	<b>58.36</b>	<b>(6.52)</b>	<b>(3.60)</b>	<b>55.74</b>	<b>(9.14)</b>	<b>0.15</b>

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
											(1) + (10)	(11) - (8)		(1) + (13)	(14) - (8)	
2017	WTI Prompt Price (a)	LLS Prompt Price (a)	ANS Prompt Price (a)	Mid-Con WTI 3-2-1 Crack (ex-RIN) (b)	USGC LLS 3-2-1 Crack (ex-RIN) (b)	WC ANS 3-2-1 Crack (ex-RIN) (b)	Blended Crack (c)	Blended Prompt Crude Price (d)	RVO Cost in Crack	Sweet Delivered Differential (e)	Sweet Delivered Cost (f)	Prompt Sweet Differential	Sour Delivered Diff. (e)	Sour Delivered Cost (f)	Prompt Sour Differential	Market Structure (g)
Jan-17	52.61	54.06	54.21	7.66	7.71	10.61	7.69	53.48	3.55	(0.01)	52.60	(0.88)	(5.65)	46.96	(6.52)	(1.29)
Feb-17	53.46	55.14	55.10	6.47	7.11	14.85	6.85	54.47	2.71	0.40	53.86	(0.61)	(5.40)	48.06	(6.41)	(1.08)
Mar-17	49.67	51.36	52.18	10.30	8.38	15.07	9.15	50.69	2.63	0.20	49.88	(0.81)	(4.82)	44.86	(5.83)	(0.72)
<b>1Q17</b>	<b>51.78</b>	<b>53.39</b>	<b>53.73</b>	<b>8.28</b>	<b>7.77</b>	<b>13.56</b>	<b>7.97</b>	<b>52.75</b>	<b>2.95</b>	<b>0.19</b>	<b>51.97</b>	<b>(0.77)</b>	<b>(5.28)</b>	<b>46.50</b>	<b>(6.24)</b>	<b>(1.03)</b>
Apr-17	51.12	53.14	53.68	12.52	9.21	15.82	10.53	52.33	2.90	0.13	51.25	(1.09)	(4.58)	46.53	(5.80)	(0.62)
May-17	48.54	50.58	50.91	11.13	7.84	16.44	9.16	49.76	3.02	0.67	49.21	(0.56)	(3.21)	45.33	(4.43)	(0.56)
Jun-17	45.20	47.21	47.46	9.92	6.84	14.57	8.07	46.40	3.74	0.43	45.62	(0.78)	(2.93)	42.26	(4.14)	(0.45)
<b>2Q17</b>	<b>48.15</b>	<b>50.17</b>	<b>50.54</b>	<b>11.13</b>	<b>7.90</b>	<b>15.60</b>	<b>9.19</b>	<b>49.36</b>	<b>3.23</b>	<b>0.42</b>	<b>48.57</b>	<b>(0.80)</b>	<b>(3.53)</b>	<b>44.62</b>	<b>(4.75)</b>	<b>(0.54)</b>
Jul-17	46.68	49.01	49.22	12.66	8.80	15.43	10.35	48.08	3.95	0.34	47.01	(1.07)	(3.10)	43.58	(4.50)	(0.30)
Aug-17	48.06	51.08	51.85	15.75	11.55	16.68	13.23	49.87	4.30	0.50	48.56	(1.31)	(2.69)	45.36	(4.51)	(0.27)
Sep-17	49.88	54.84	55.52	17.08	13.64	17.70	15.01	52.85	4.03	0.81	50.68	(2.17)	(2.35)	47.52	(5.33)	(0.20)
<b>3Q17</b>	<b>48.20</b>	<b>51.61</b>	<b>52.18</b>	<b>15.19</b>	<b>11.34</b>	<b>16.61</b>	<b>12.88</b>	<b>50.25</b>	<b>4.11</b>	<b>0.56</b>	<b>48.75</b>	<b>(1.49)</b>	<b>(2.70)</b>	<b>45.50</b>	<b>(4.75)</b>	<b>(0.26)</b>
Oct-17	51.59	57.47	57.71	19.57	8.16	13.54	12.73	55.12	4.04	1.81	53.41	(1.71)	(1.49)	50.11	(5.01)	(0.58)
Nov-17	56.66	62.38	63.02	16.24	7.25	11.38	10.85	60.09	4.35	2.50	59.16	(0.93)	(0.66)	56.00	(4.09)	(0.39)
Dec-17	57.95	63.31	63.85	12.87	5.99	5.44	8.74	61.16	3.59	2.44	60.38	(0.78)	(1.02)	56.93	(4.23)	(0.26)
<b>4Q17</b>	<b>55.30</b>	<b>60.94</b>	<b>61.40</b>	<b>16.31</b>	<b>7.17</b>	<b>10.23</b>	<b>10.83</b>	<b>58.68</b>	<b>3.99</b>	<b>2.25</b>	<b>57.55</b>	<b>(1.13)</b>	<b>(1.05)</b>	<b>54.25</b>	<b>(4.43)</b>	<b>(0.41)</b>
<b>2017 YTD</b>	<b>50.85</b>	<b>54.00</b>	<b>54.44</b>	<b>12.71</b>	<b>8.55</b>	<b>14.02</b>	<b>10.22</b>	<b>52.74</b>	<b>3.57</b>	<b>0.85</b>	<b>51.71</b>	<b>(1.04)</b>	<b>(3.13)</b>	<b>47.72</b>	<b>(5.02)</b>	<b>(0.56)</b>

(a) Prompt Price represents calendar workday average of prices quoted that month for crude delivered in immediately following month(s).

(b) Crack Spread Calculation:

Mid-Con = ((Chicago CBOB Gasoline x 2 + Chicago Ultra Low Sulfur Distillate)/3) - WTI Prompt Price

USGC = ((U.S. Gulf Coast (USGC) CBOB Gasoline x 2 + USGC Ultra Low Sulfur Distillate) /3) - LLS Prompt Price

West Coast = ((LA California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) x 2+ LA California Air Resources Board (CARB) Diesel)/3) - ANS Prompt Price

(c) Beginning 4Q 2018, Blended Mid-Con/USGC/West Coast crack spread is weighted 38%/38%/24% based on MPC's refining capacity by PADD. From Q1 2017 through Q3 2018, the blended spread was weighted 40%/60% Mid-Con/USGC.

(d) Beginning 4Q 2018, Blended WTI/LLS/ANS prompt crude price is weighted 38%/38%/24% based on blended crack spread. From Q1 2017 through Q3 2018, the blended price was weighted 40%/60% Mid-Con/USGC.

(e) Delivered differentials (versus Prompt WTI) for the trade month period beginning with the 26th calendar day two months prior to the prompt month through the 25th day one month prior to the prompt month. The exception is the Maya delivered differential which is calculated on a prompt calendar month basis.

MPC's typical sweet crude oil basket consists of the following crudes: Bakken, Brent, LLS, WTI-Cushing, WTI-Midland

MPC's typical sour crude oil basket consists of the following crudes: ANS, ASCI, Maya, Western Canadian Select.

(f) Delivered cost is based on WTI prompt price plus each respective grade's delivered differential and does not include market structure or other expenses such as transportation, demurrage, etc. Market structure effects are calculated as a separate adjustment (see column 16 and (G) above).

(g) Delivered month market structure (roll). Negative values represent contango and positive values represent backwardation. Beginning 4Q 2018, approximately 40% of MPC's crude oil acquisition volume uses market structure in its acquisition price formula. The formula factor utilized was 60% 1Q through 3Q 2018 and 65% in 2017.

All prices and differentials listed are in Dollars per Barrel

Data Sources: NYMEX, Argus, and MPC Estimate

## Prompt LLS versus Calendar Month Average (CMA) Delivered Cost example

	1	2	3	4		5	
		<u>Spot LLS</u>	<u>Spot WTI</u>	<u>Spot LLS-WTI Differential</u>		<u>NYMEX WTI</u>	
1	09/26/11	106.94	80.24	26.70		80.24	1
2	09/27/11	109.58	84.45	25.13		84.45	2
3	09/28/11	106.29	81.21	25.08		81.21	3
4	09/29/11	106.14	82.14	24.00		82.14	4
5	09/30/11	103.93	79.20	24.73		79.20	5
6	10/03/11	103.49	77.61	25.88		77.61	6
7	10/04/11	102.27	75.67	26.60		75.67	7
8	10/05/11	106.06	79.68	26.38		79.68	8
9	10/06/11	108.52	82.59	25.93		82.59	9
10	10/07/11	109.31	82.98	26.33		82.98	10
11	10/10/11	111.89	85.41	26.48		85.41	11
12	10/11/11	113.59	85.81	27.78		85.81	12
13	10/12/11	114.72	85.57	29.15		85.57	13
14	10/13/11	113.06	84.23	28.83		84.23	14
15	10/14/11	115.58	86.80	28.78		86.80	15
16	10/17/11	113.58	86.38	27.20		86.38	16
17	10/18/11	113.94	88.34	25.60		88.34	17
18	10/19/11	111.66	86.11	25.55		86.11	18
19	10/20/11	113.10	85.30	27.80		85.30	19
20	10/21/11	115.51	87.23	28.28		87.40	20
21	10/24/11	115.92	91.09	24.83		91.27	21
22	10/25/11	114.88	93.00	21.88		93.17	22
23	Trade Day Average	<b>110.45</b>	<b>84.14</b>	<b>26.31</b>	<b>November Trade Month (Sep 26 - Oct 25)</b>	<b>84.16</b>	23
24	10/26/11	110.55	90.20	20.35		90.20	24
25	10/27/11	114.59	93.96	20.63		93.96	25
26	10/28/11	112.62	93.32	19.30		93.32	26
27	10/31/11	111.79	93.19	18.60		93.19	27
28	Calendar Work Day Average	111.74	86.40	<b>25.34</b>	<b>October Calendar Month Average</b>	86.43	28
29	11/01/11	110.27	92.19	18.08		92.19	29
30	11/02/11	110.54	92.51	18.03		92.51	30
31	11/03/11	111.52	94.07	17.45		94.07	31
32	11/04/11	112.56	94.26	18.30		94.26	32
33	11/07/11	115.47	95.52	19.95		95.52	33
34	11/08/11	116.58	96.80	19.78		96.80	34
35	11/09/11	114.29	95.74	18.55		95.74	35
36	11/10/11	114.78	97.78	17.00		97.78	36
37	11/11/11	115.74	98.99	16.75		98.99	37
38	11/14/11	113.52	98.14	15.38		98.14	38
39	11/15/11	113.95	99.37	14.58		99.37	39
40	11/16/11	114.84	102.59	12.25		102.59	40
41	11/17/11	110.32	98.82	11.50		98.82	41
42	11/18/11	109.91	97.41	12.50		97.41	42
43	11/21/11	108.03	96.68	11.35		96.92	43
44	11/22/11	108.51	97.71	10.80		98.01	44
45	11/23/11	107.77	95.87	11.90		96.17	45
46	11/25/11					96.77	46
47	Trade Day Average	<b>112.29</b>	<b>95.96</b>	<b>16.33</b>	<b>December Trade Month (Oct 26 - Nov 25)</b>	96.03	47
48	11/28/11	109.91	98.21	11.70		98.21	48
49	11/29/11	112.49	99.79	12.70		99.79	49
50	11/30/11	111.91	100.36	11.55		100.36	50
51	Calendar Work Day Average	<b>112.14</b>	<b>97.14</b>	<b>15.00</b>	<b>November Calendar Month Average</b>	<b>97.16</b>	51
52				LLS-WTI November Trade Month Differential		<b>26.31</b>	52
53				November Delivered LLS Value		<b>123.47</b>	53
54				November Prompt LLS Value		<b>112.14</b>	54
55				<b>November Prompt - November CMA Delivered</b> (excludes market structure adjustment)		<b>(11.33)</b>	55