

THE U.S. Energy DATABOOK

A summary of national and global energy indicators



JUNE 15, 2018

FEDERAL RESERVE BANK of KANSAS CITY

SUMMARY OF CURRENT ENERGY CONDITIONS

The number of total active drilling rigs in the United States edged up 1.2 percent from a month ago and increased 13.5 percent from a year ago. U.S. crude oil production was up 2.1 percent in March, while natural gas production rose 12 percent. Crude oil prices dipped in June, after hitting a four year peak in May. For the week ending June 8th, West Texas Intermediate (WTI) crude oil averaged \$65.35 per barrel and North Sea Brent averaged \$73.98 per barrel, falling nearly 7.4 percent and 3.5 percent respectively in the last month. The Henry Hub natural gas spot price averaged \$2.92 per million Btu for the week ending June 8th, an increase of 5.8 percent in the last month. U.S. crude oil and petroleum products imports grew 3.2 percent while exports declined by 6.6 percent over the last month. Global petroleum production improved by 0.5 percent in May, and global petroleum demand for the first quarter of 2018 also inched up 0.5 percent.

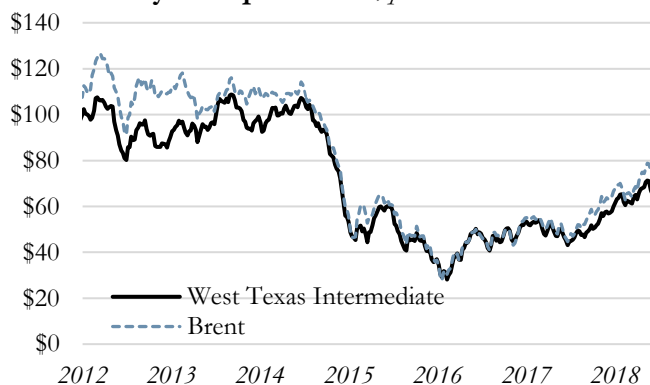
This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: oil and natural gas prices; global petroleum production and demand; U.S. oil production and petroleum demand; U.S. crude oil stocks; OECD petroleum stocks; U.S. oil imports; U.S. oil exports; oil and gas drilling rig counts; and U.S. natural gas production. These indicators can be found on the following pages.



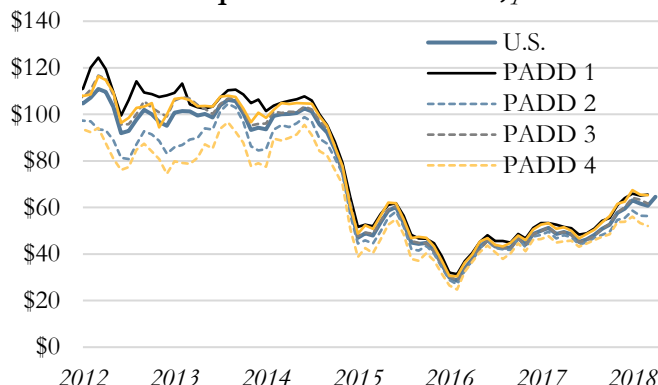
The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming. There are three branches across the Tenth Federal Reserve District located in Denver, Oklahoma City, and Omaha.

Weekly data through June 8, 2018

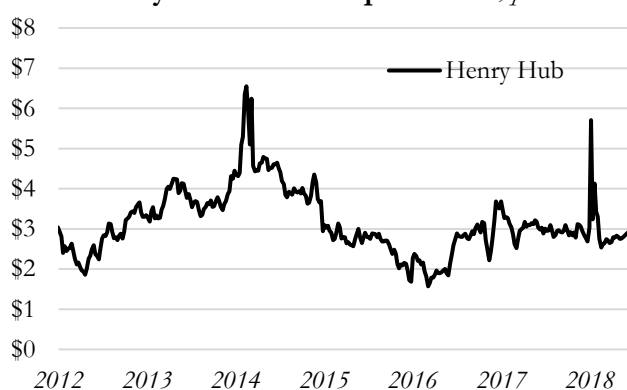
Weekly Oil Spot Prices, per barrel



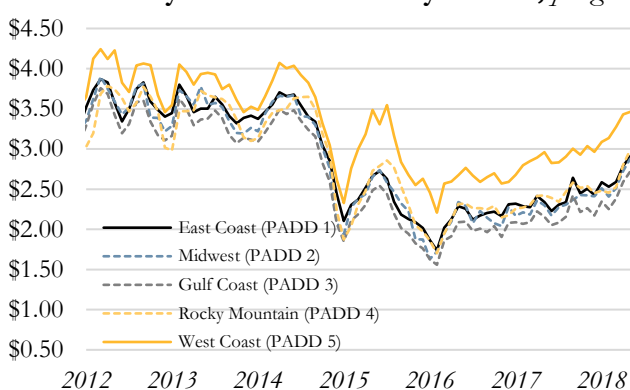
Refiner Acquisition Cost of Oil*, per barrel



Weekly Natural Gas Spot Prices, per mmbtu



Monthly Gasoline Prices by PADD, per gallon



Weekly Spot Prices, Change from

	Current	1 Week	1 Month	6 Months	1 Year	Peak (2012-17)
Weekly Spot Prices	6/8/18	Ago	Ago	Ago	Ago	
West Texas Intermediate	\$65.35	-\$1.61	-\$5.21	\$8.43	\$18.78	-\$43.42
Brent	\$73.98	-\$1.37	-\$2.70	\$10.90	\$26.70	-\$52.64
Henry Hub	\$2.92	\$0.04	\$0.16	\$0.08	-\$0.06	-\$3.63

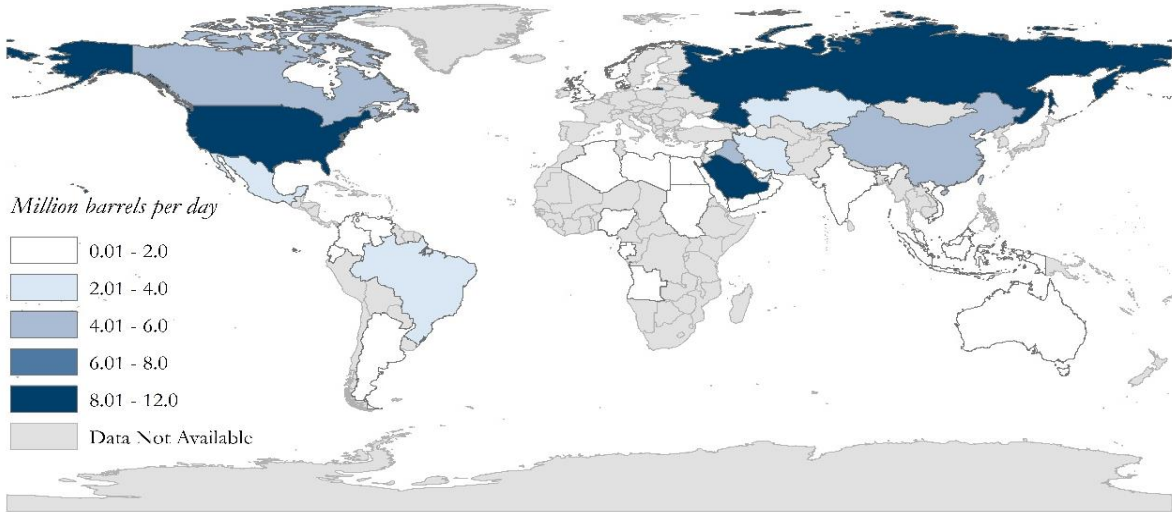
Monthly Gasoline Spot Prices, Change from

	Current	1 Month	6 Months	1 Year	Peak (2012-17)
Geographic Area	May-18	Ago	Ago	Ago	
East Coast (PADD 1)	\$2.91	\$0.12	\$0.40	\$0.57	-\$0.96
Midwest (PADD 2)	\$2.88	\$0.16	\$0.46	\$0.58	-\$1.02
Gulf Coast (PADD 3)	\$2.72	\$0.13	\$0.46	\$0.57	-\$1.04
Rocky Mountain (PADD 4)	\$2.99	\$0.19	\$0.45	\$0.57	-\$0.80
West Coast (PADD 5)	\$3.46	\$0.03	\$0.43	\$0.50	-\$0.78

*The cost of crude oil, including transportation and other fees paid by the refiner.

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

May 2018 Global Petroleum Production



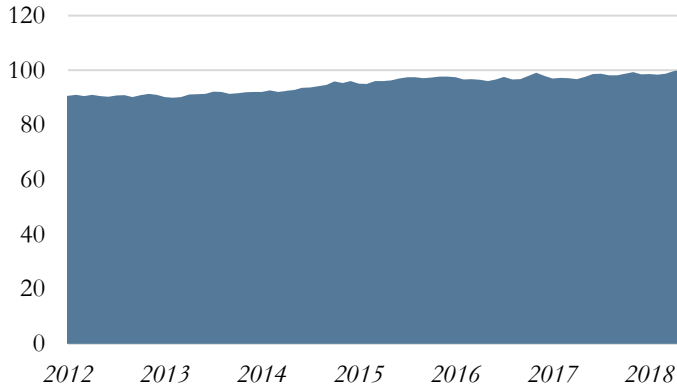
Million barrels per day

- 0.01 - 2.0
- 2.01 - 4.0
- 4.01 - 6.0
- 6.01 - 8.0
- 8.01 - 12.0
- Data Not Available

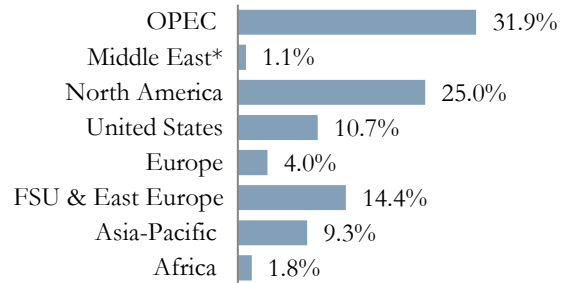
Source: Energy Information Administration/Haver Analytics

May 2018

Monthly Global Petroleum Production, million barrels per day

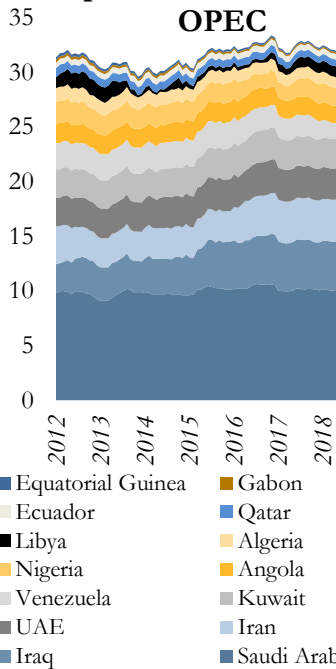


Regional Share of Production

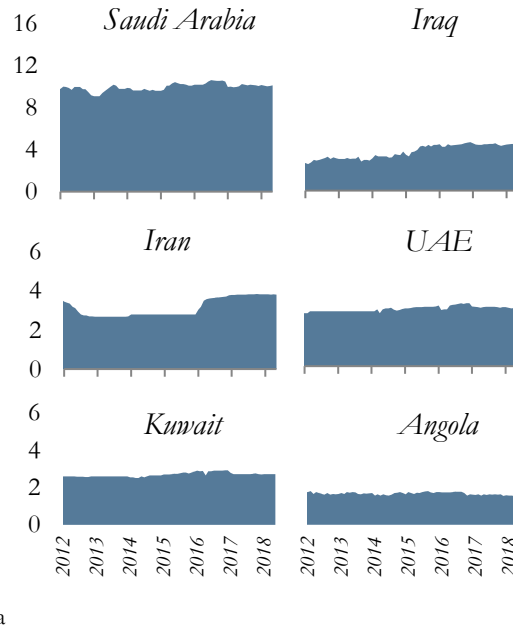


*Excludes OPEC

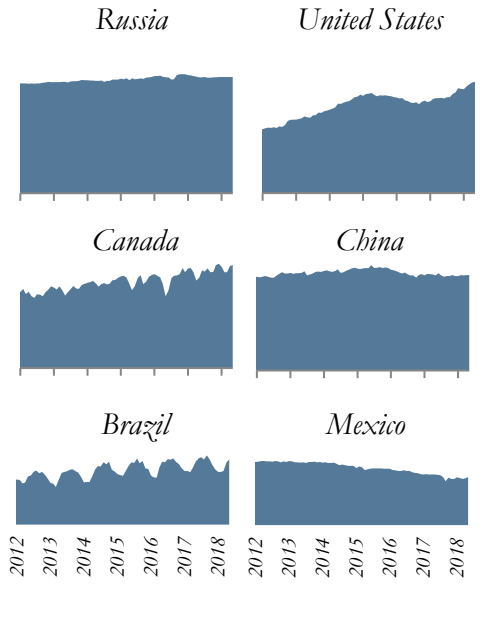
Top Crude Oil Producers, million barrels per day



Top OPEC Producers

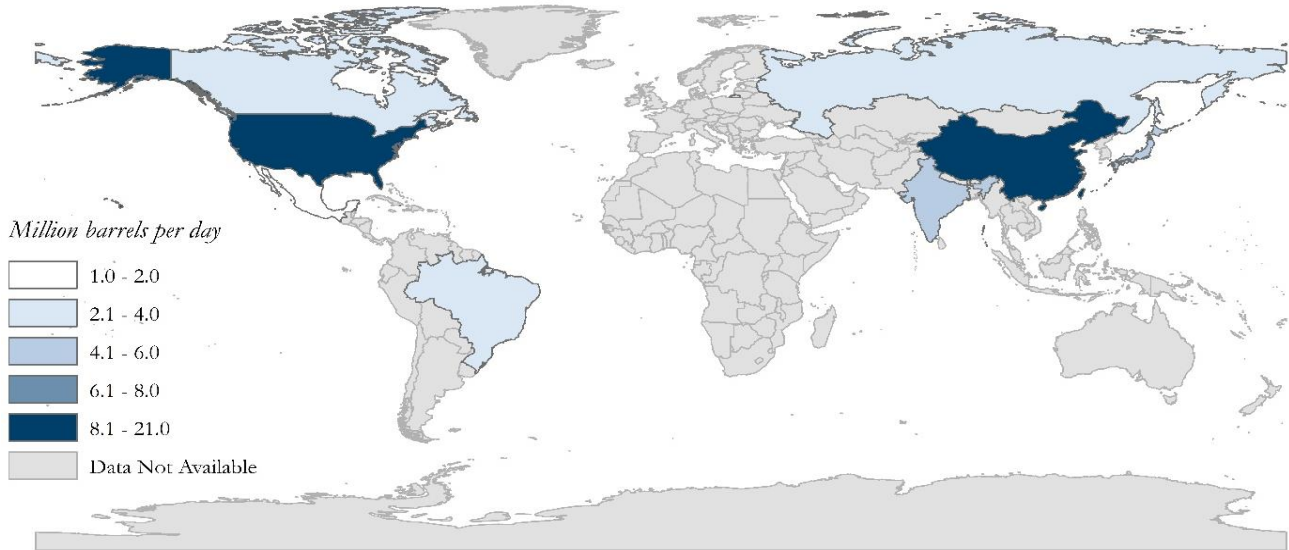


Top Non-OPEC Producers

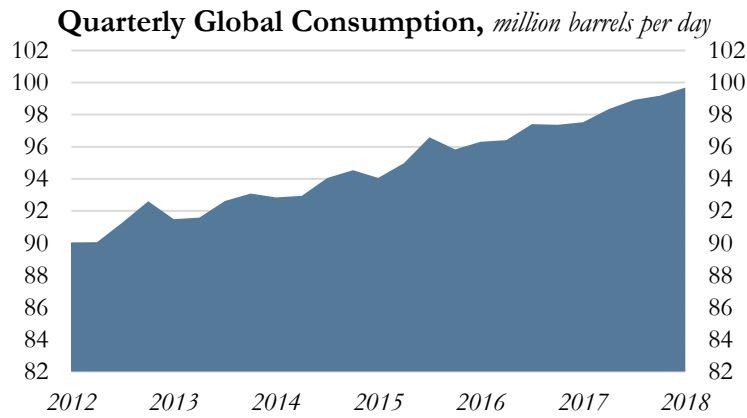


Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

First Quarter 2018 Global Petroleum Consumption

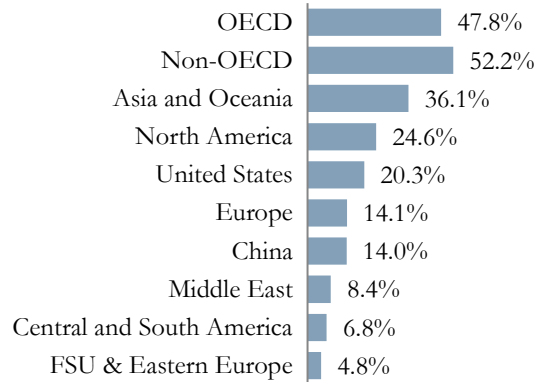


Source: Energy Information Administration/Haver Analytics

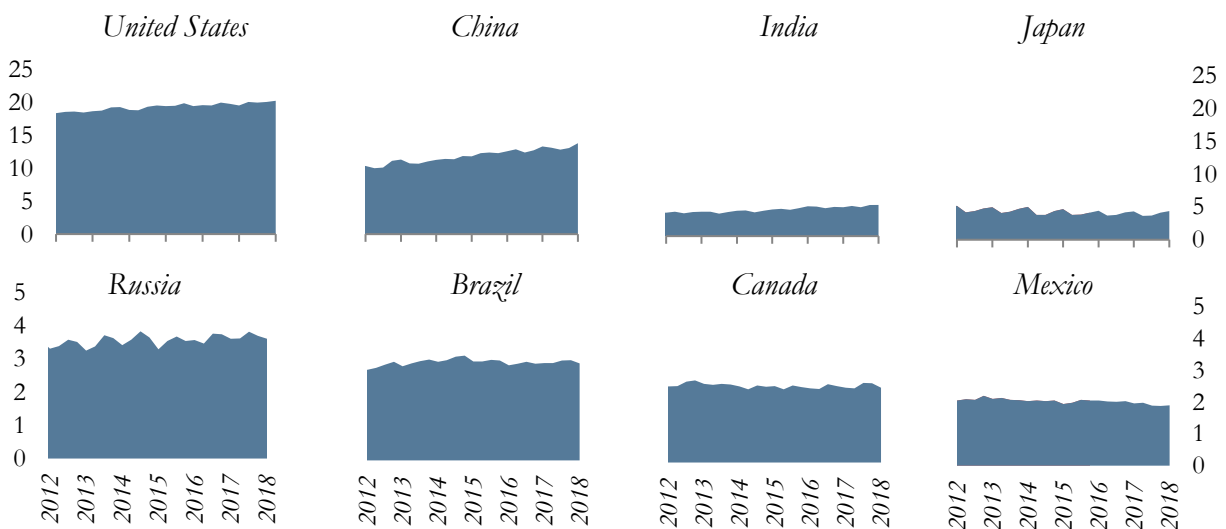


First Quarter 2018

Regional Share of Consumption

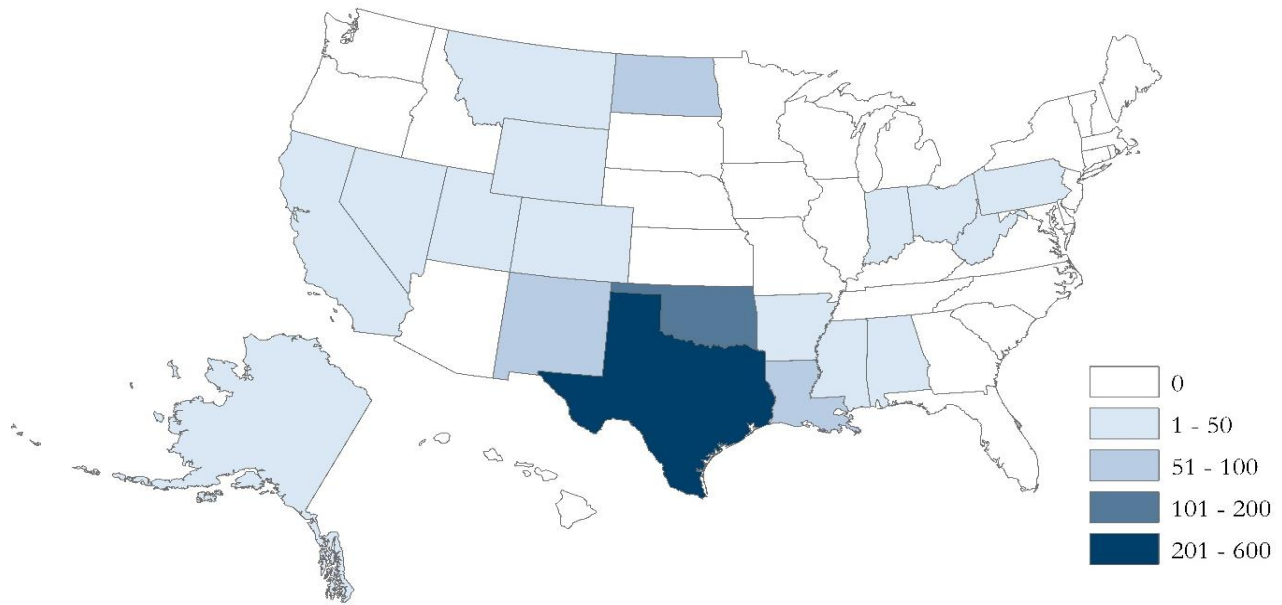


Top Petroleum Consumers, million barrels per day



Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

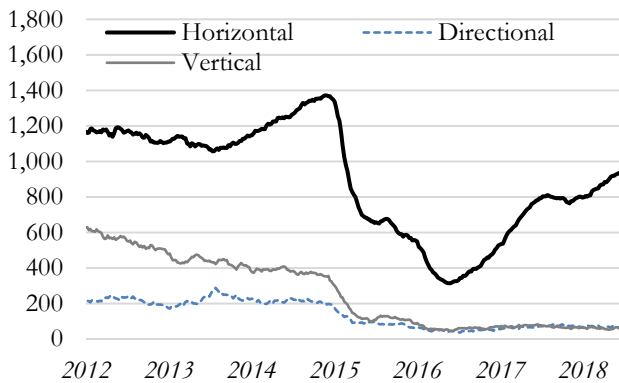
June 2018 Weekly Active Oil & Gas Drilling Rig Counts



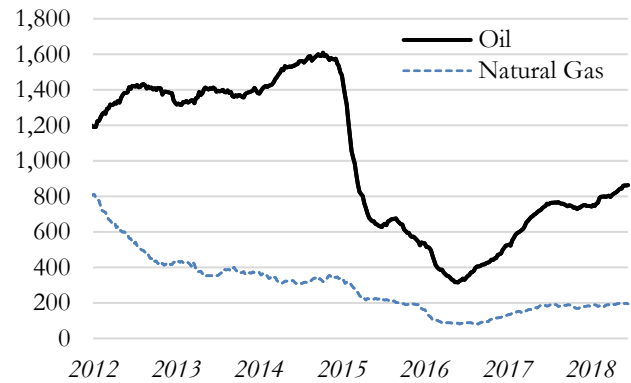
Source: Baker Hughes/Haver Analytics

June 15, 2018

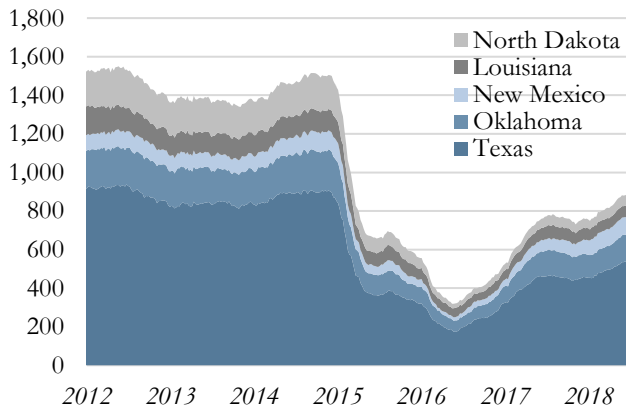
U.S. Active Drilling Rigs by Trajectory



U.S. Active Drilling Rigs by Type



Top Five States for Drilling Activity (Total Active Rigs)



Rig Count By Type

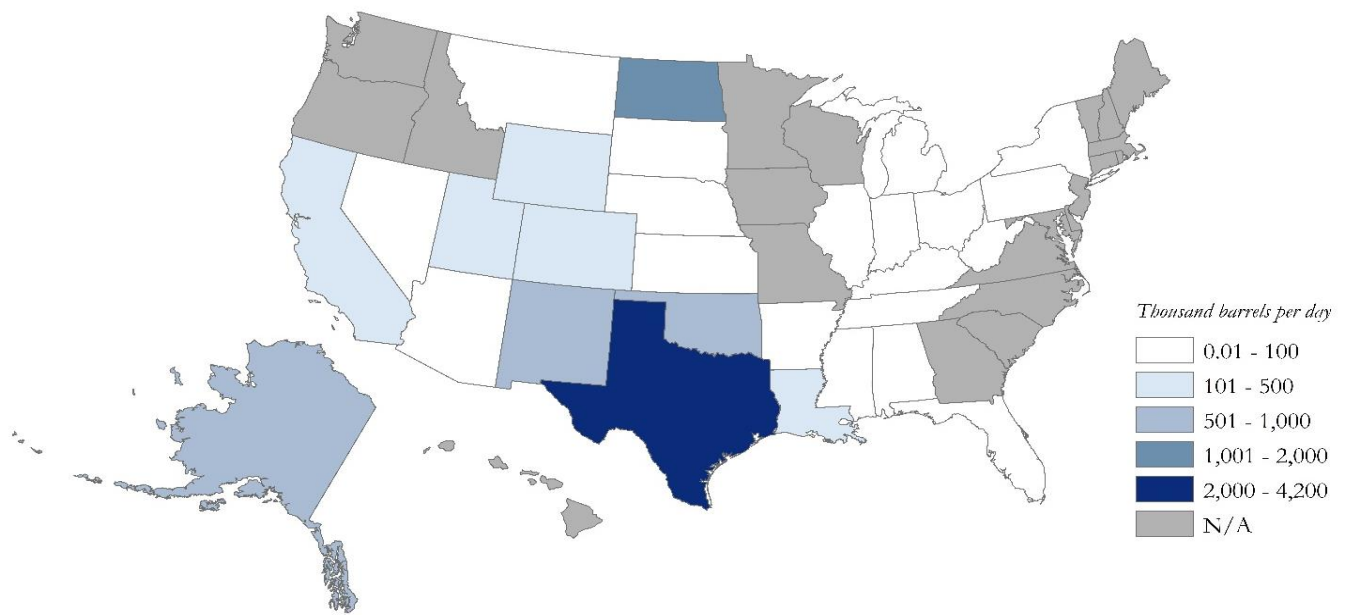
Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	863	844	800	747
Gas	194	200	189	186
Misc	2	2	1	0
Total	1059	1046	990	933

Rig Count By Type, Change from

Rig Type	Current Week	1 Month Ago	3 Months Ago	1 Year Ago
Oil	-	2.3%	7.9%	15.5%
Gas	-	-3.0%	2.6%	4.3%
Misc	-	0.0%	100.0%	-
Total	-	1.2%	7.0%	13.5%

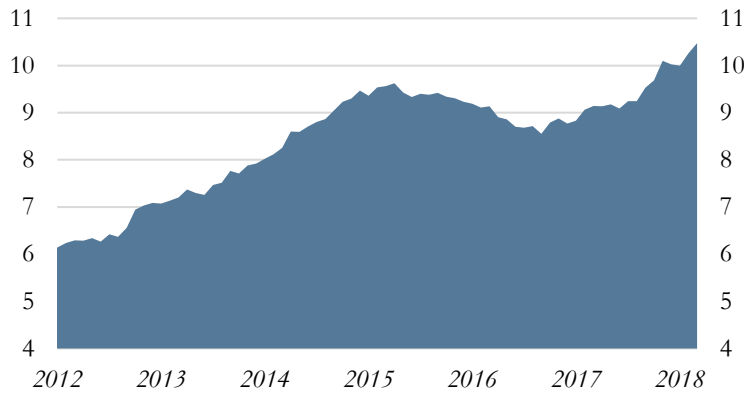
Source: Baker Hughes/Haver Analytics

March 2018 U.S. Crude Oil Production

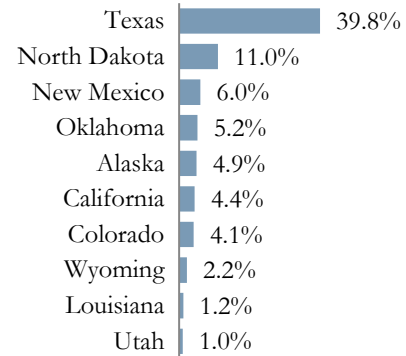


Source: Baker Hughes/Haver Analytics

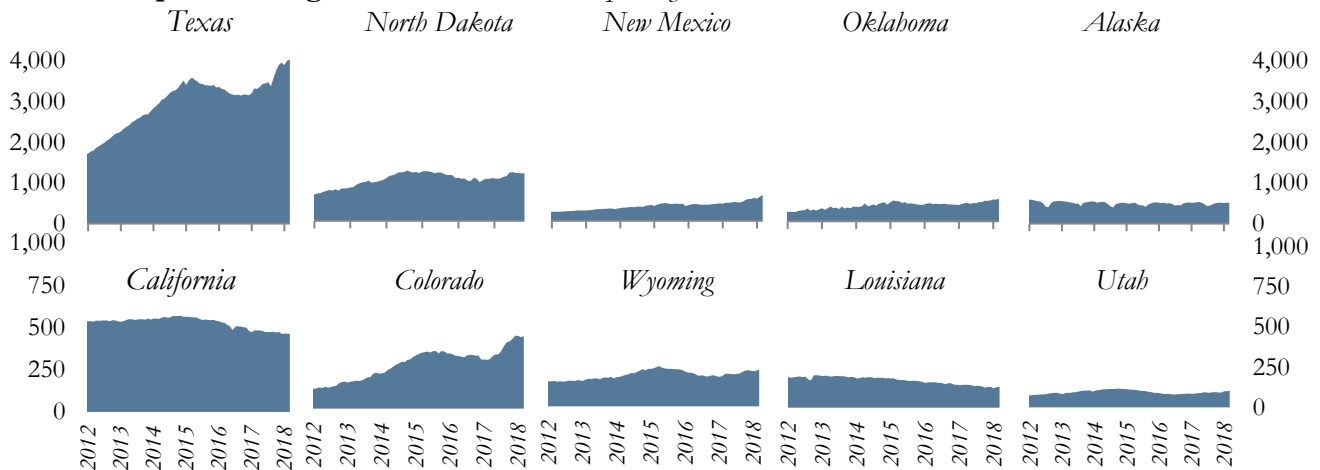
Monthly U.S. Production, million barrels per day



March, 2018
Share of Production

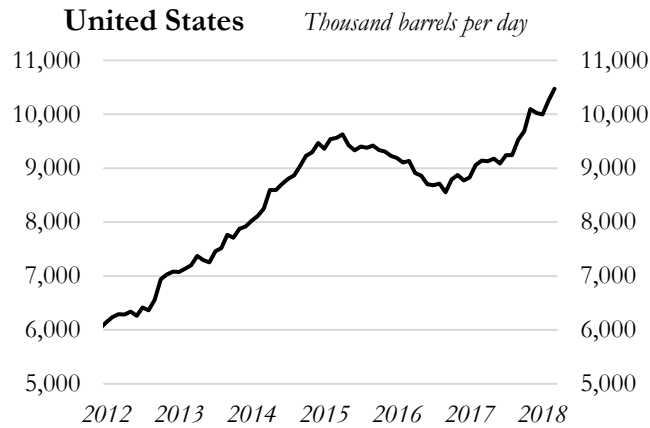


Top Producing States, thousand barrels per day

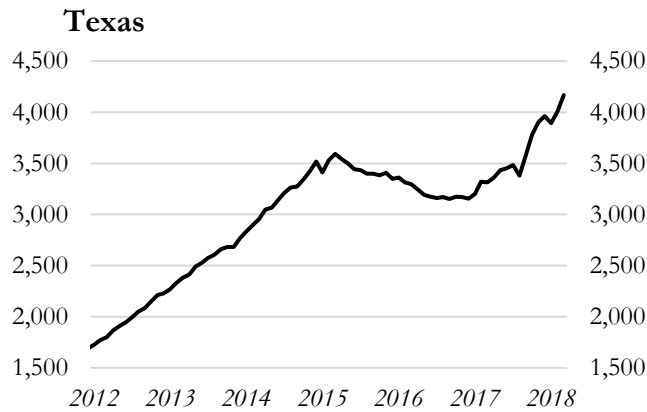


Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

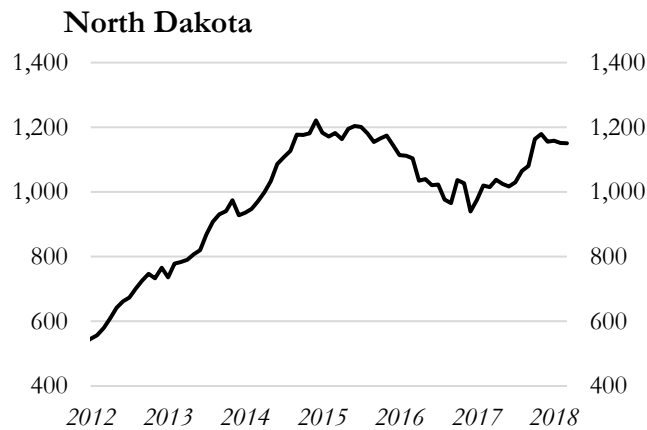
Data through March 2018



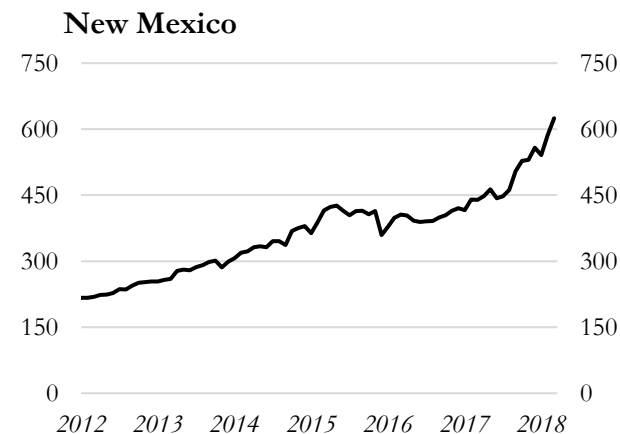
United States		Change
Thousand barrels per day		from
Mar-18	10,474	
Month Ago	10,259	2.1%
3 Months Ago	10,024	4.5%
6 Months Ago	9,528	9.9%
1 Year Ago	9,140	14.6%



Texas		Change
Thousand barrels per day		from
Mar-18	4,168	
Month Ago	4,009	4.0%
3 Months Ago	3,963	5.2%
6 Months Ago	3,572	16.7%
1 Year Ago	3,316	25.7%
Share of U.S. Production		39.8%



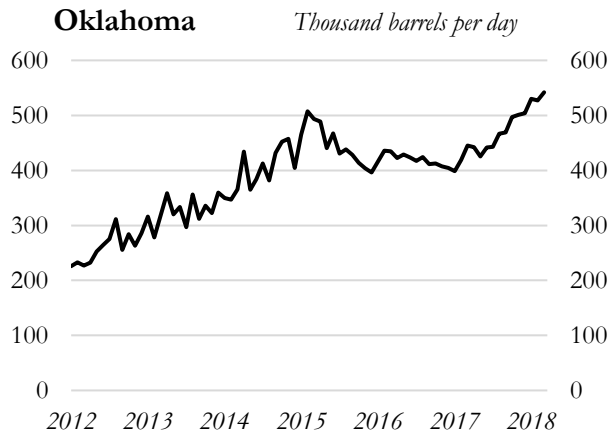
North Dakota		Change
Thousand barrels per day		from
Mar-18	1,150	
Month Ago	1,151	0.0%
3 Months Ago	1,155	-0.4%
6 Months Ago	1,081	6.5%
1 Year Ago	1,015	13.3%
Share of U.S. Production		11.0%



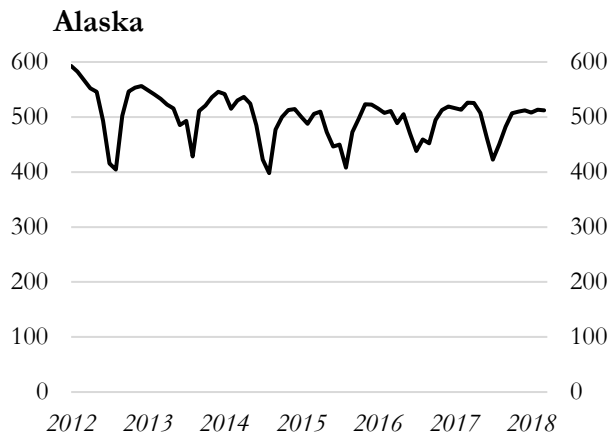
New Mexico		Change
Thousand barrels per day		from
Mar-18	625	
Month Ago	587	6.5%
3 Months Ago	558	12.0%
6 Months Ago	505	23.8%
1 Year Ago	440	42.2%
Share of U.S. Production		6.0%

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

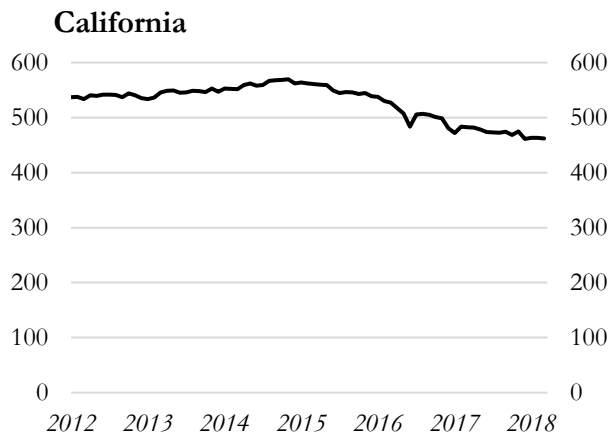
Data through March 2018



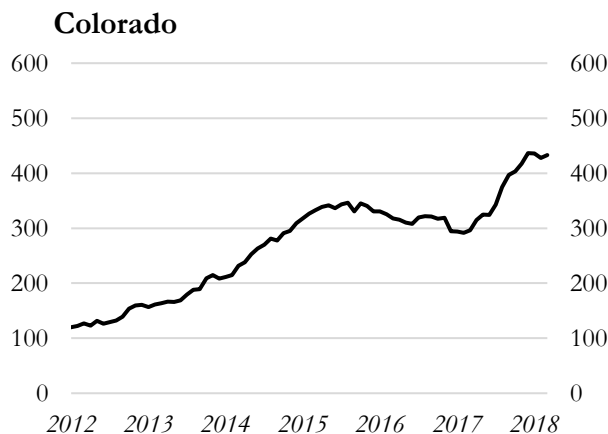
	Oklahoma Thousand barrels per day	Change from
Mar-18	542	
Month Ago	527	2.8%
3 Months Ago	504	7.6%
6 Months Ago	469	15.6%
1 Year Ago	445	21.8%
Share of U.S. Production	5.2%	



	Alaska Thousand barrels per day	Change from
Mar-18	512	
Month Ago	513	-0.2%
3 Months Ago	512	0.0%
6 Months Ago	482	6.2%
1 Year Ago	526	-2.6%
Share of U.S. Production	4.9%	



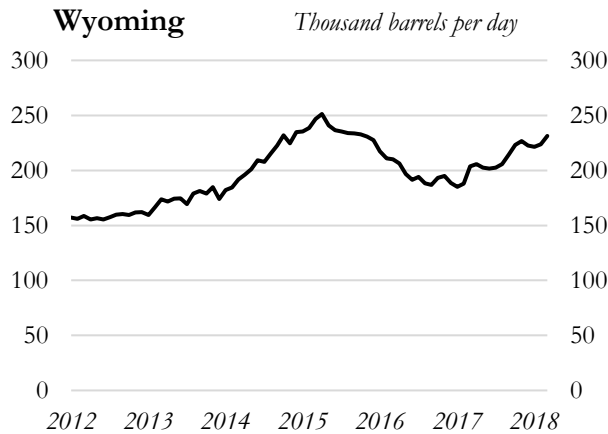
	California Thousand barrels per day	Change from
Mar-18	462	
Month Ago	463	-0.3%
3 Months Ago	461	0.2%
6 Months Ago	474	-2.5%
1 Year Ago	483	-4.3%
Share of U.S. Production	4.4%	



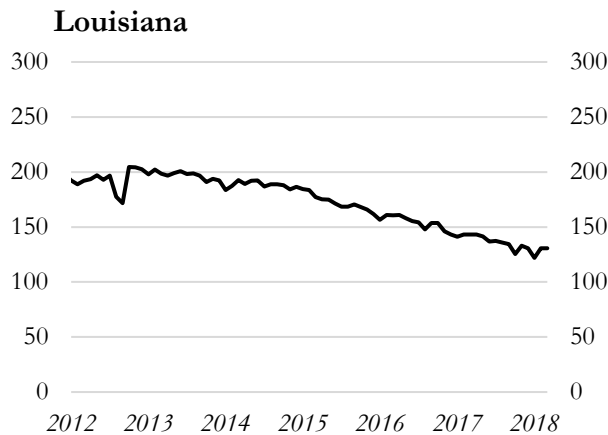
	Colorado Thousand barrels per day	Change from
Mar-18	433	
Month Ago	428	1.3%
3 Months Ago	436	-0.8%
6 Months Ago	397	9.1%
1 Year Ago	296	46.1%
Share of U.S. Production	4.1%	

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

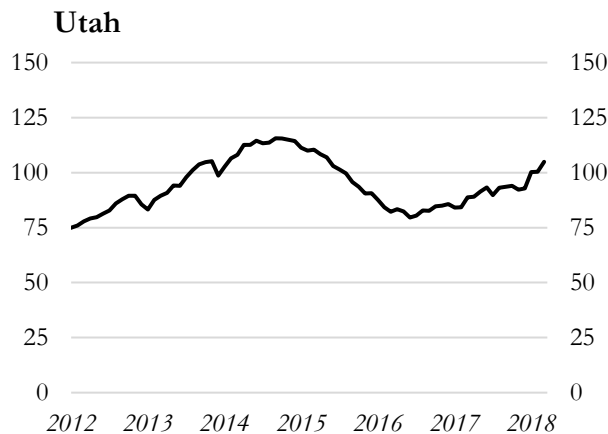
Data through March 2018



Wyoming		Change
Thousand barrels per day		from
Mar-18	231	
Month Ago	224	3.5%
3 Months Ago	222	4.0%
6 Months Ago	214	8.0%
1 Year Ago	204	13.6%
Share of U.S. Production		2.2%



Louisiana		Change
Thousand barrels per day		from
Mar-18	131	
Month Ago	131	0.1%
3 Months Ago	131	-0.1%
6 Months Ago	134	-2.7%
1 Year Ago	143	-8.7%
Share of U.S. Production		1.2%

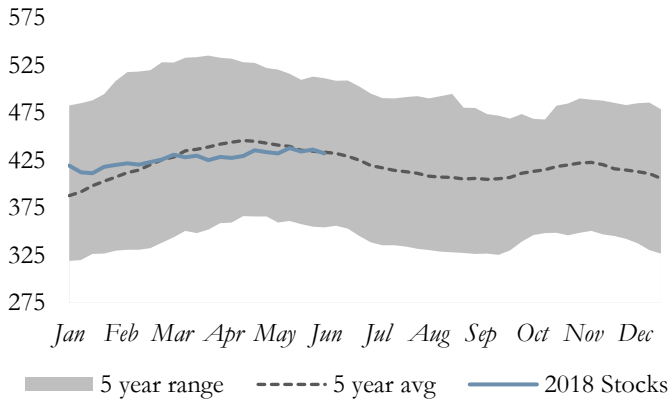


Utah		Change
Thousand barrels per day		from
Mar-18	105	
Month Ago	100	4.5%
3 Months Ago	93	12.9%
6 Months Ago	94	12.1%
1 Year Ago	89	18.2%
Share of U.S. Production		1.0%

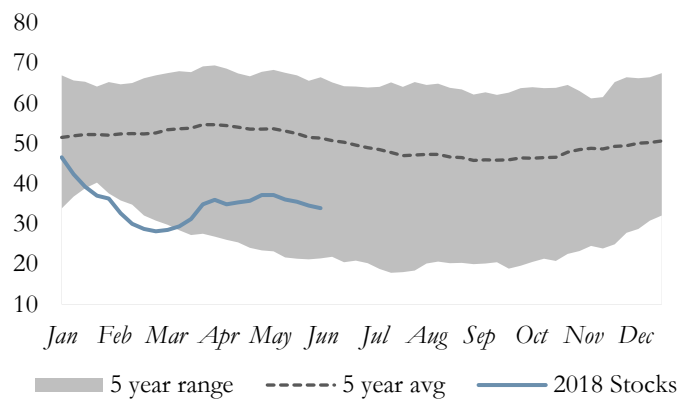
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

June 2018 Weekly U.S. Crude Oil Stocks

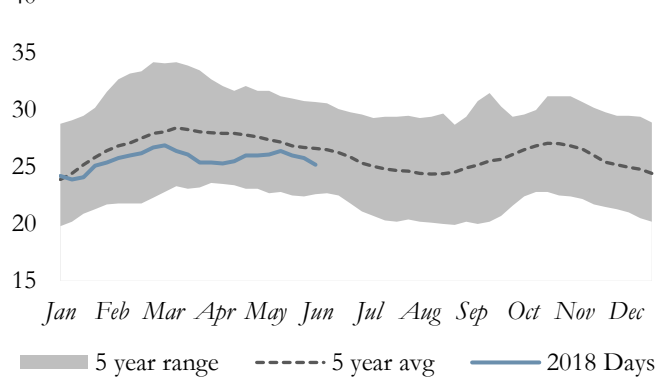
U.S. Oil Stocks, million barrels*



Cushing, OK Oil Stocks, million barrels



U.S. Oil Days of Supply, days



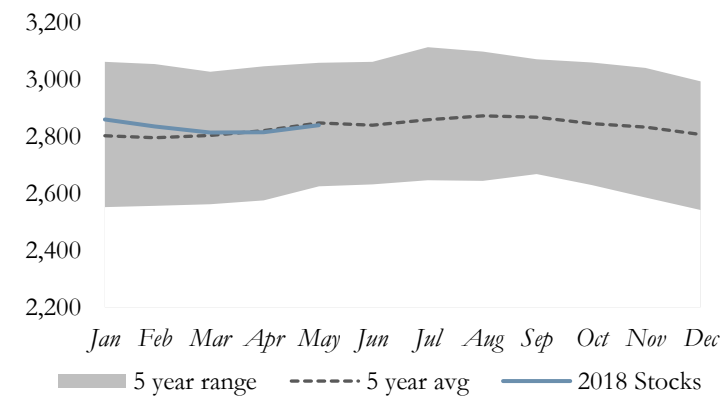
Crude Oil Stocks

	1 Week Ago	1 Year Ago
U.S.	-0.9%	-15.5%
Cushing, OK	-2.0%	-45.5%
Days of Supply	-2.3%	-14.6%
East Coast (PADD 1)	-3.4%	-16.9%
Midwest (PADD 2)	-2.1%	-23.5%
Gulf Coast (PADD 3)	-0.4%	-15.1%
Rocky Mountain (PADD 4)	-0.3%	-3.8%
West Coast (PADD 5)	-0.1%	0.7%

*Stocks include those domestic and Customs-cleared foreign stocks held at, or in transit to, refineries and bulk terminals, and stocks in pipelines.

April 2018 OECD Commercial Petroleum Inventory

OECD Commercial Petroleum Inventory, million barrels



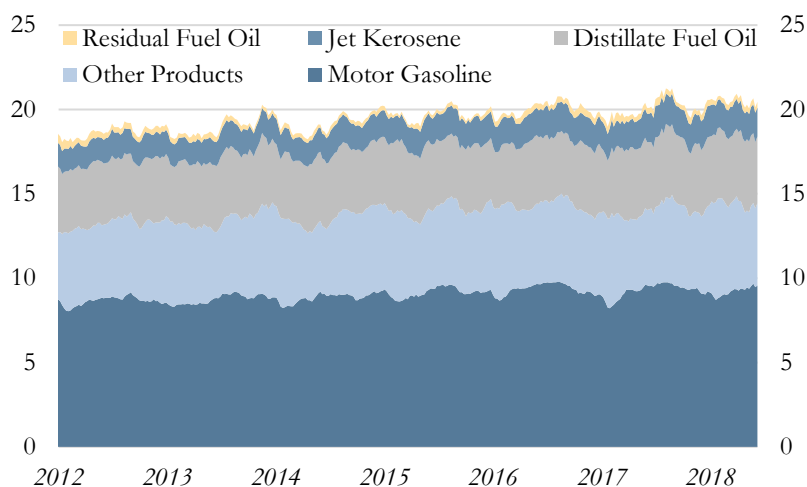
Petroleum Stocks	Million Barrels	Change from
Current Month	2,840	
1 Month Ago	2,815	0.9%
3 Months Ago	2,835	0.2%
6 Months Ago	2,893	-1.8%
1 Year Ago	3,049	-6.9%

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

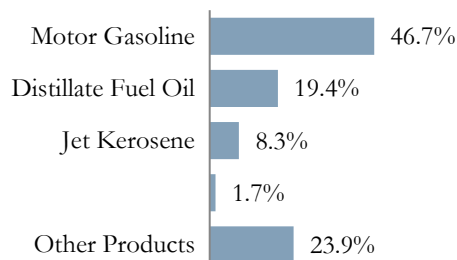
June 2018 Weekly U.S. Demand for Petroleum Products

4-Week Averages

All Petroleum Products, million barrels per day



Share of Total Consumption



U.S. Consumption by Product & Percent Change

U.S. Consumption by Product, thousand barrels per day

	Current 6/8/18	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
All Products	20,449	20,060	20,432	19,843	20,102
Motor Gasoline	9,558	9,370	9,195	9,076	9,528
Distillate Fuel Oil	3,966	4,191	3,976	4,014	3,984
Jet Kerosene	1,697	1,632	1,781	1,672	1,676
Residual Fuel Oil	346	325	278	407	354
Other Products	4,882	4,542	5,202	4,674	4,560

U.S. Consumption by Product, Change from

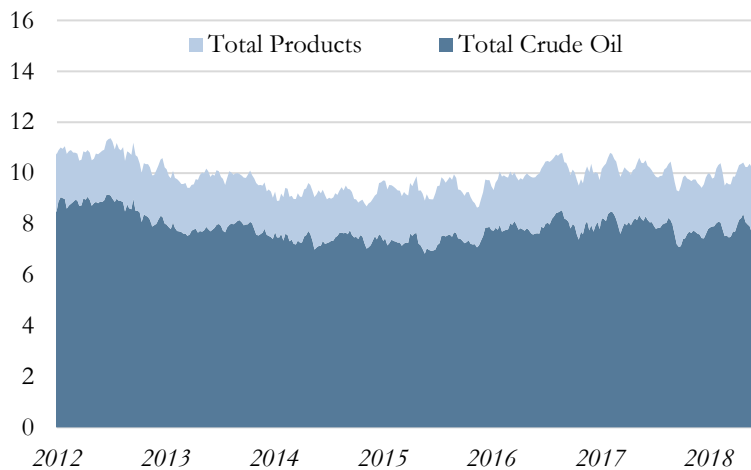
	Current 6/8/18	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
All Products	-	1.9%	0.1%	3.1%	1.7%
Motor Gasoline	-	2.0%	3.9%	5.3%	0.3%
Distillate Fuel Oil	-	-5.4%	-0.3%	-1.2%	-0.5%
Jet Kerosene	-	4.0%	-4.7%	1.5%	1.3%
Residual Fuel Oil	-	6.5%	24.5%	-15.0%	-2.3%
Other Products	-	7.5%	-6.2%	4.5%	7.1%

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

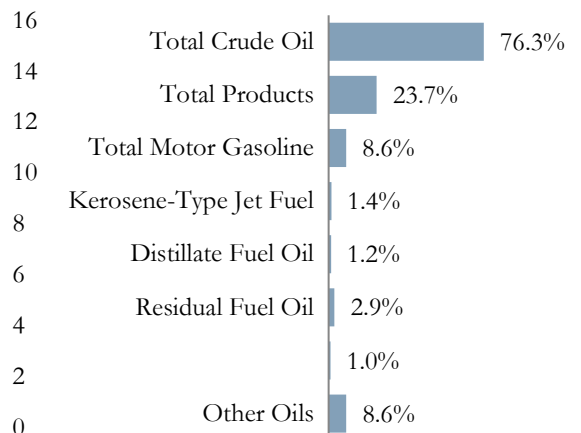
June 2018 Weekly U.S. Imports of Crude Oil & Petroleum Products

4-Week Averages

Imports, million barrels per day



Share of Total Imports



U.S. Imports by Product*

Thousand barrels per day

	Current 6/8/18	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
Total Crude Oil	8,059	7,986	7,473	7,442	8,161
Total Products	2,498	2,246	2,080	1,980	2,130
Total Motor Gasoline	906	836	502	503	697
Kerosene-Type Jet Fuel	144	119	127	117	120
Distillate Fuel Oil	128	101	234	151	105
Residual Fuel Oil	305	215	212	203	231
Propane/Propylene	106	130	167	193	116
Other Oils	910	845	837	804	861
Total Imports	10,557	10,232	9,553	9,422	10,291

U.S. Imports by Product, Change from

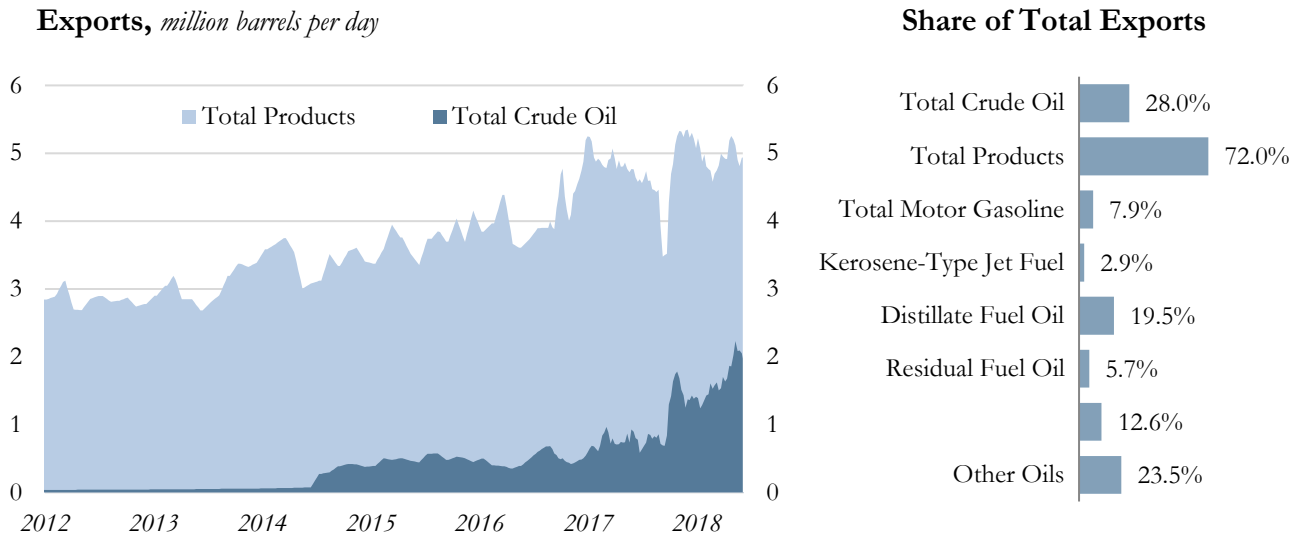
	Current 6/8/18	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
Total Crude Oil	-	0.9%	7.8%	8.3%	-1.2%
Total Products	-	11.2%	20.1%	26.2%	17.3%
Total Motor Gasoline	-	8.4%	80.5%	80.1%	30.0%
Kerosene-Type Jet Fuel	-	21.0%	13.4%	23.1%	20.0%
Distillate Fuel Oil	-	26.7%	-45.3%	-15.2%	21.9%
Residual Fuel Oil	-	41.9%	43.9%	50.2%	32.0%
Propane/Propylene	-	-18.5%	-36.5%	-45.1%	-8.6%
Other Oils	-	7.7%	8.7%	13.2%	5.7%
Total Imports	-	3.2%	10.5%	12.0%	2.6%

*Totals may not sum due to component rounding

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

June 2018 Weekly U.S. Exports of Crude Oil & Petroleum Products

4-Week Averages



U.S. Exports by Product*

Thousand barrels per day

	Current 6/8/18	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
Total Crude Oil	1,918	2,231	1,619	1,362	802
Total Products	4,944	5,116	4,750	5,231	4,645
Total Motor Gasoline	539	800	750	905	578
Kerosene-Type Jet Fuel	198	207	126	134	138
Distillate Fuel Oil	1,339	1,281	1,063	1,336	1,168
Residual Fuel Oil	391	341	299	282	263
Propane/Propylene	863	852	804	888	719
Other Oils	1,615	1,636	1,708	1,687	1,780
Total Exports	6,862	7,347	6,368	6,593	5,447

U.S. Exports by Product, Change from

	Current 6/8/18	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
Total Crude Oil	-	-14.0%	18.5%	40.8%	139.2%
Total Products	-	-3.4%	4.1%	-5.5%	6.4%
Total Motor Gasoline	-	-32.6%	-28.1%	-40.4%	-6.7%
Kerosene-Type Jet Fuel	-	-4.3%	57.1%	47.8%	43.5%
Distillate Fuel Oil	-	4.5%	26.0%	0.2%	14.6%
Residual Fuel Oil	-	14.7%	30.8%	38.7%	48.7%
Propane/Propylene	-	1.3%	7.3%	-2.8%	20.0%
Other Oils	-	-1.3%	-5.4%	-4.3%	-9.3%
Total Exports	-	-6.6%	7.8%	4.1%	26.0%

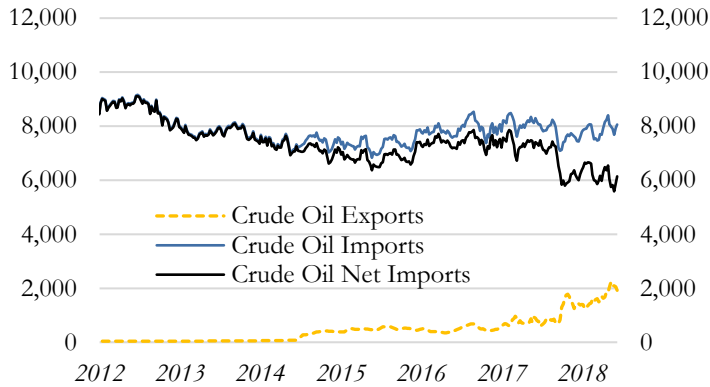
*Totals may not sum due to rounding

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

June 2018 Weekly U.S. Net Imports of Crude Oil & Petroleum Products

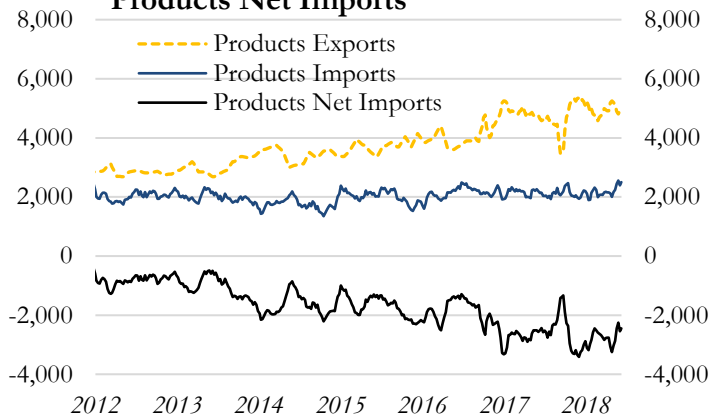
4-Week Averages, Thousand barrels per day

Crude Oil Net Imports



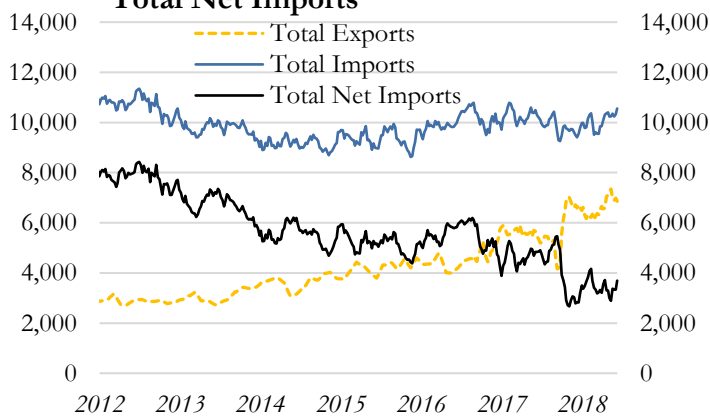
Crude Oil Net Imports		Change
Thousand barrels per day		from
6/8/18	6,141	
Month Ago	5,755	6.7%
3 Months Ago	5,854	4.9%
6 Months Ago	6,080	1.0%
1 Year Ago	7,360	-16.6%

Products Net Imports



Products Net Imports		Change
Thousand barrels per day		from
6/8/18	-2,446	
Month Ago	-2,870	-
3 Months Ago	-2,670	-
6 Months Ago	-3,251	-
1 Year Ago	-2,515	-

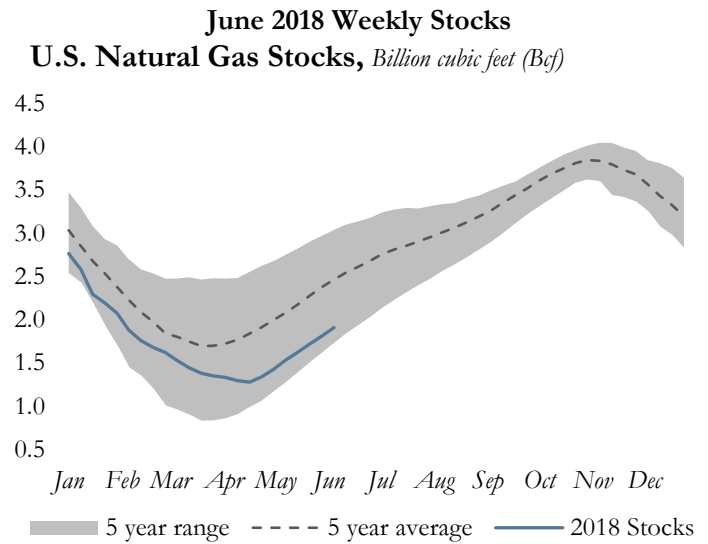
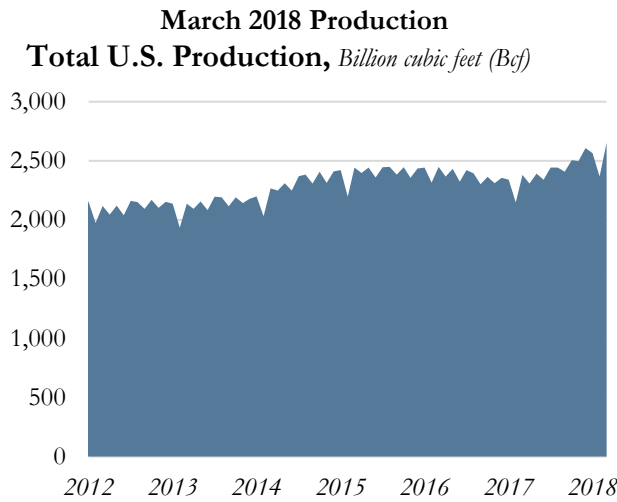
Total Net Imports



Total Net Imports		Change
Thousand barrels per day		from
6/8/18	3,696	
Month Ago	2,885	28.1%
3 Months Ago	3,185	16.0%
6 Months Ago	2,829	30.6%
1 Year Ago	4,845	-23.7%

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

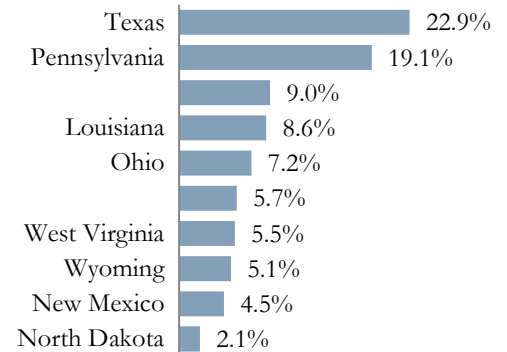
U.S. Natural Gas Production & Stocks



U.S. Natural Gas, Billion cubic feet (Bcf)

	Current Period*	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
U.S. Production	2,653	2,368	2,607	2,408	2,381
U.S. Stocks	1,913	1,538	1,532	3,626	2,709

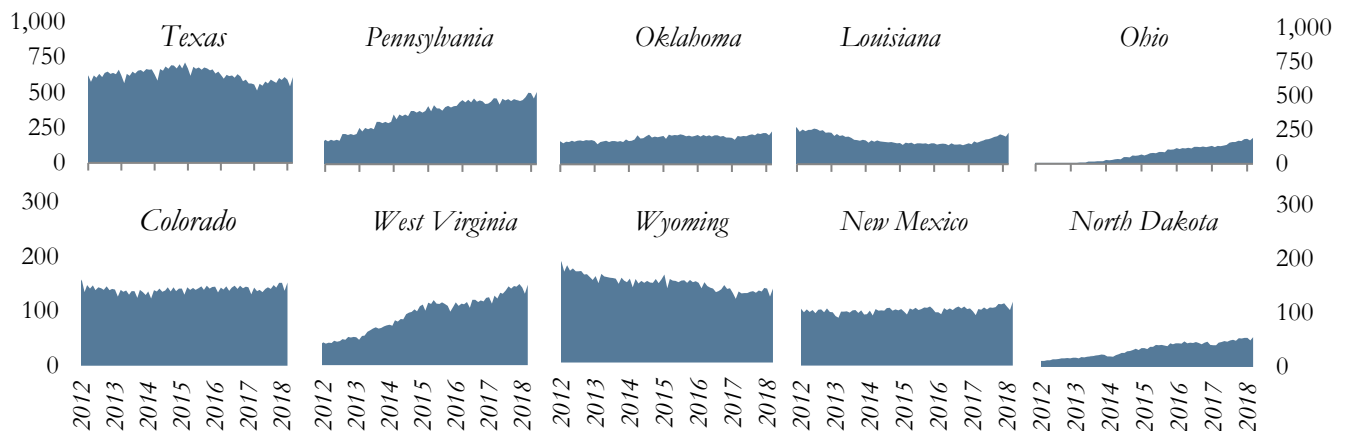
Share of Production



U.S. Natural Gas, Change from

	Current Period*	1 Month Ago	3 Months Ago	6 Months Ago	1 Year Ago
U.S. Production	-	12.0%	1.8%	10.2%	11.4%
U.S. Stocks	-	24.4%	24.9%	-47.2%	-29.4%

Top Producing States, Billion cubic feet (Bcf)



*U.S. production is monthly data & stocks are weekly data

Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

Definitions:

West Texas Intermediate: A crude oil produced in Texas and southern Oklahoma which serves as a reference or "marker" for pricing a number of other crude streams and is traded in the domestic spot market at Cushing, Oklahoma.

Brent: A blended crude oil produced in the North Sea region which serves as a reference or "marker" for pricing a number of other international crude streams.

Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Refined petroleum products include but are not limited to gasolines, kerosene, distillates (including No. 2 fuel oil), liquefied petroleum gas, asphalt, lubricating oils, diesel fuels, and residual fuels.

Notes:

Page 2: Petroleum Administration for Defense Districts (PADD) are geographic aggregations of the 50 States and the District of Columbia into five districts by the Petroleum Administration for Defense in 1950. These districts were originally defined during World War II for purposes of administering oil allocation. For more information, visit: <http://www.eia.gov/petroleum/supply/monthly/pdf/append.pdf>

Page 3: For OPEC countries & the U.S., only crude oil production data is used. For non-OPEC countries (excluding the U.S.) total petroleum production data is used. Total petroleum production includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

Page 5: The active rig count is the number of rigs actively exploring for or developing oil or natural gas. Rig counts provide an indicator of new drilling activity and potential for expanded crude oil or natural gas production.

Pages 10: Crude oil stocks are stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

Crude oil stocks for Cushing include domestic and foreign crude oil stocks held in tank farms in Lincoln, Payne, and Creek counties in Oklahoma. Cushing, Oklahoma, is the designated delivery point for NYMEX crude oil futures contracts.

Days of supply are calculated by taking the current stock level and dividing by product supplied (used as an estimate of demand) averaged over the most recent four-week period. For crude oil, refinery inputs of crude oil are used as a proxy for demand.

Notes:

Page 11: Petroleum Consumption approximately represents consumption of petroleum products because it measures the disappearance of these products from primary sources, i.e., refineries, natural gas-processing plants, blending plants, pipelines, and bulk terminals.

Data Revisions

Most data are revised periodically to correct for errors and incorporate additional information as it becomes available. Data shown in this report are subject to change.

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