

# Update: Increased Potential for Gasoline Price Spikes -- Spring & Summer

5/3/00

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**Author:** John Cook

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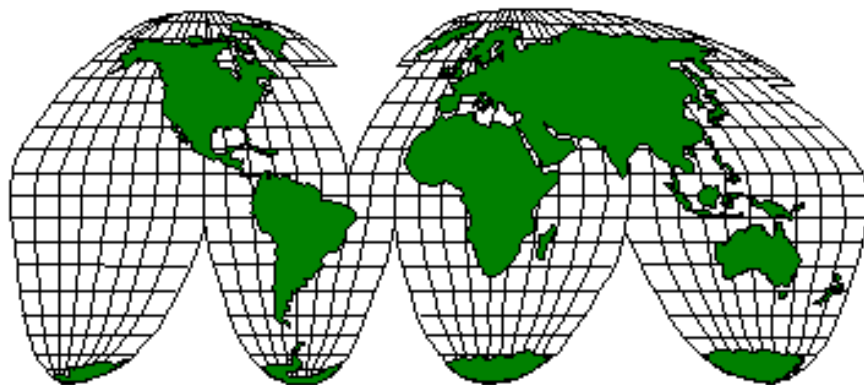
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# Update: Increased Potential for Gasoline Price Spikes -- Spring & Summer



**April 17, 2000**

**Energy Information Administration**

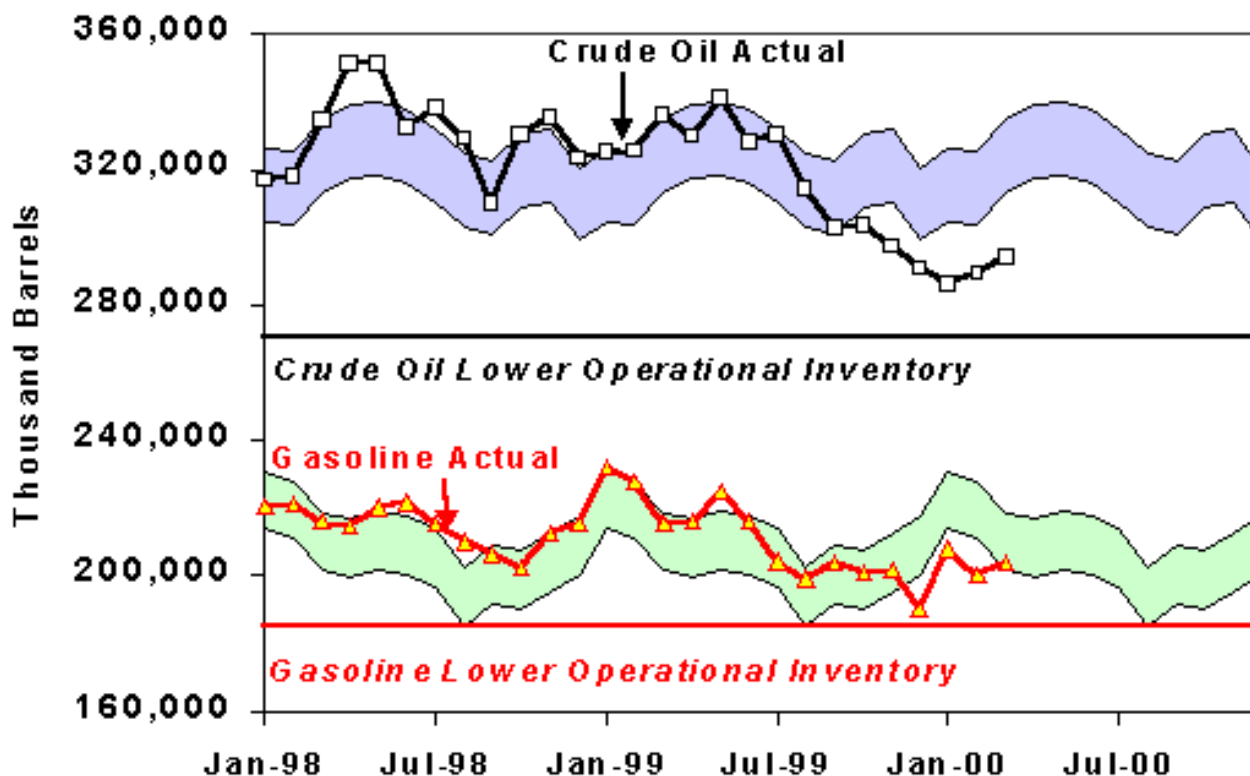


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## Notes:

- The high crude oil prices of March, 2000 are expected to decline and bring gasoline prices down as well this summer. However, this assumes no price volatility.
  - Prices surge quickly when an unexpected event (e.g., unplanned refinery outage) causes demand to exceed production and imports long enough to drain available inventories to low levels.
  - The availability of nearby supply in the form of inventories or excess refinery capacity influences the magnitude and duration of any price surge.
- 
- Gasoline inventories at the end of March have improved from last month relative to normal, but they still remain low as we enter the year 2000 summer driving season.
- 
- EIA expects gasoline and crude oil stocks to remain low through the summer, and refineries to run at high utilization rates. This combination of factors increases the probability of price volatility during the high gasoline demand summer months.
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# U.S. Crude & Gasoline Stocks Low But Showing Signs of Recovering



**NOTE: Colored Bands are Normal Stock Ranges**

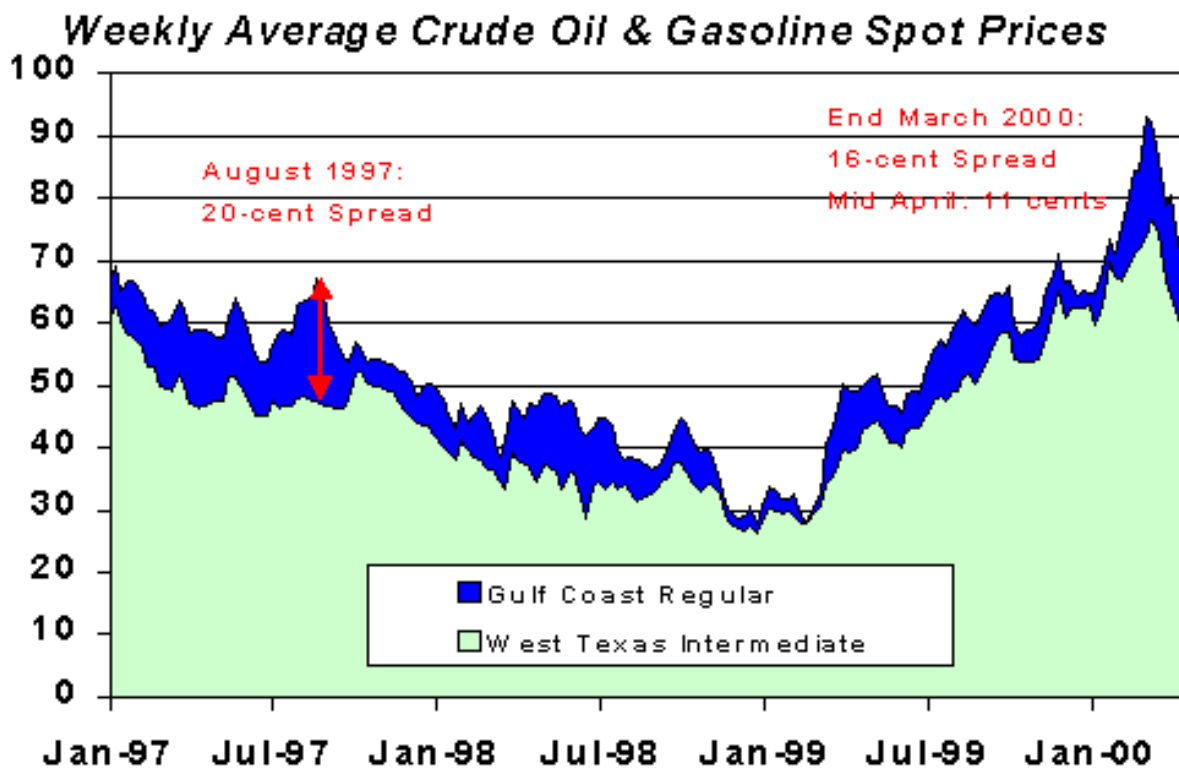


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## Notes:

- The current U.S. inventory levels for crude oil and gasoline stocks are low, but improved modestly in March.
  - While crude oil inventories are still well below normal levels, they have increased about 10 million barrels since the end of January, despite the tight crude oil market.
  - ○ Gasoline stocks at the end of February had dropped about 5% below the low end of the normal range. But during March, they rose slightly, instead of dropping further as they normally would do. This allowed gasoline inventories to re-enter the low end of the normal band.
- 
- While the inventory situation is improving, it remains low. With crude oil inventories still well below normal, and gasoline inventories on the low side of normal, we have little cushion to absorb unexpected events such as refinery or logistical disruptions.

# Gasoline Price Volatility Is a Concern This Summer



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## Notes:

- March began with gasoline spot prices showing large increases over crude oil. Spot prices were nearly 20 cents per gallon over the already high crude oil prices, when normally the spread would be half that size. This spread was comparable to the spread seen in August 1997 when high demand, low stocks, and some refinery problems cause prices to surge.
- 
- By the end of March the spread had fallen to about 16 cents per gallon, and by mid April was at about 11 cents per gallon as the inventory situation improved. Crude oil prices have also been falling, pulling gasoline spot prices down.
- 
- Retail prices, which lag behind changes in the spot market, are turning down also. Regular gasoline prices peaked the week of March 20 at \$1.53 and fell to \$1.48 the week of April 10.
- 
- Looking toward the summer, the situation could ease if the gasoline inventories continue to improve. However, it will not improve to the extent of creating a level that could buffer the market against unexpected supply problems or demand surges during the peak demand months. Moreover, the potential for price volatility is increased over last summer because of the high refinery capacity utilization rates that will be

needed to meet summer demand.

- 
- In summary, there is an increased potential for gasoline price volatility this year over last as a result of low inventories and high refinery utilization rates.

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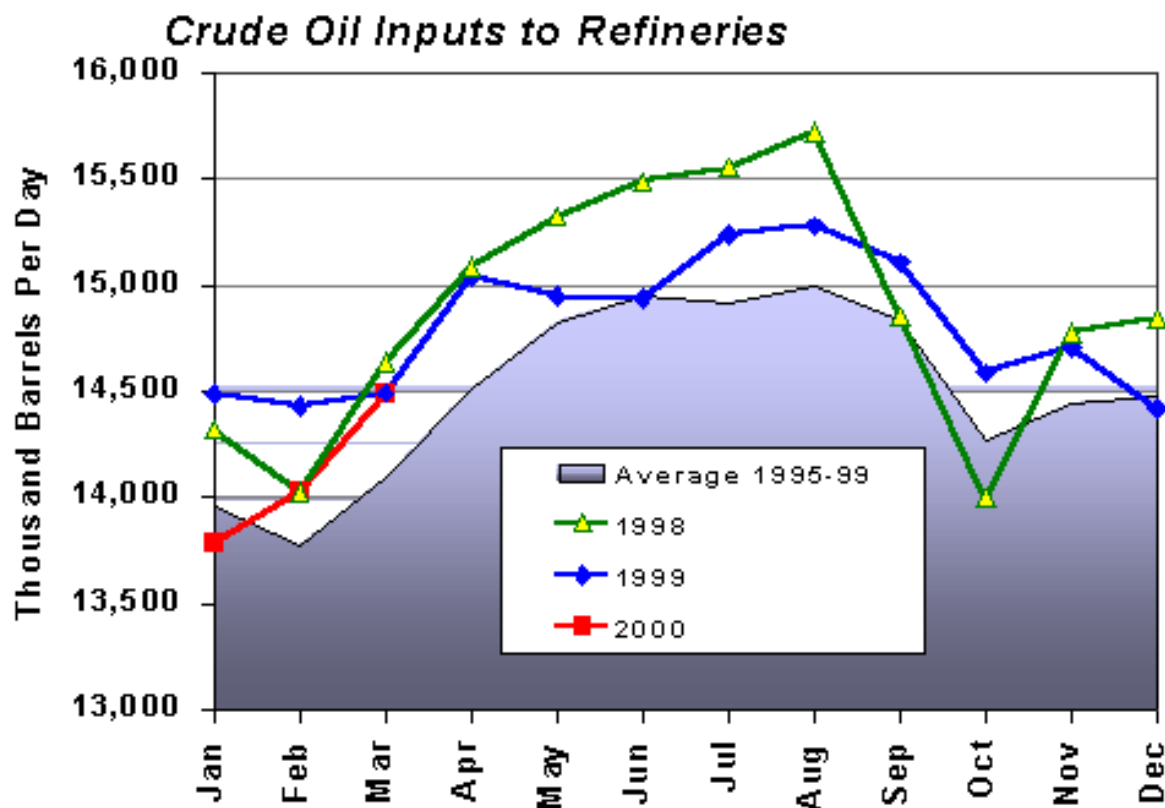
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# U.S. Crude Input Rising -- Still Need +1 MMB/D Through Mid-Summer



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## Notes:

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- Refineries in fourth quarter 1999 and first quarter 2000 were running at fairly low input rates compared to prior years, despite higher demand.
  - U.S. refineries typically increase their crude inputs during the second quarter over the first quarter as they return from maintenance and turnaround schedules to ramp up for the high demand gasoline season.
  - The year began with low refining margins and a low level of crude inputs in January and February. This created a lower base than last year from which to grow into the summer gasoline season, when inputs will need to peak at higher levels than in 1998 or 1999.
- 
- The good news is that crude runs have been increasing strongly as expected during March the first quarter. Keep in mind that they still need an additional 1 million barrels per day of crude oil between now and mid summer. However, given the recently announced OPEC crude production increases, we do not see crude supply being a constraint to meeting the required refinery input increases.

# U.S. Crude & Gasoline Stocks Low But Showing Signs of Recovering

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# Production Will Meet Demand Increase This Summer

	<i>3rd Qtr</i> <i>1999</i>	<i>3rd Qtr</i> <i>2000</i>	<i>Change</i>
<b><i>Gasoline Demand (MB/D)</i></b>	8,590	8,728	+138
<b><i>Refinery Production (MB/D)</i></b>	8,189	8,363	+174
<b><i>Imports (MB/D)</i></b>	271	293	+22
<b><i>Stock Draw (MB/D)</i></b>	130	72	-58
<b><i>Refinery Utilization</i></b>	94.8%	97.4%	+2.6%



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## Notes:

- Production must meet increases in demand this year. Last year, increased imports met most of the summer demand increase, and increases in stock draws met almost all of the remainder. Production did not increase much. But this year, inventories will not be available, and increased imports seem unlikely. Thus, increases in production will be needed to meet increased demand.
- 
- Imports availability is uncertain this summer. Imports in 1999 were high, and with Phase II RFG product requirements, maintaining this level could be challenging since not all refineries exporting to the U.S. will be able to meet the new gasoline specifications.
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- Stocks will also contribute little supply this summer. Last year's high gasoline stocks allowed for a stock draw that was 58 MB/D higher than volumes projected for the high-demand third quarter this summer. Thus, with low stocks, production will have to cover both new demand growth and 58 MB/D of additional supply that came from inventories last summer. Even with the smaller stock draw this summer, stocks are likely to remain low.
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- Refinery utilization this summer will be high, in spite of increases in capacity that have occurred since last

year. Should demand be stronger than expected or imports be less than projected, utilization will be even higher than that shown above.

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