

Gas Prices

Overview – With gas prices passing \$4.00 per gallon, oil companies reporting large profits, and the price of crude oil a daily part of newspaper headlines, this brief will provide an overview and perspective on gas prices.

How Gas is Delivered to Washington – Washington has four major refineries that supply most of the gas consumed in Washington and Oregon. The four refineries, two near Ferndale and two in Anacortes, produce about 265,000 barrels of gasoline per day. Although Washington consumes about 178,000 barrels of gas per day, much of the gas produced in Washington is shipped out of state. Some of the gas produced in Washington is refined to meet California air pollution standards and shipped there.

The refineries supply gas through the Olympic Pipeline which runs from northern Washington to Portland, Oregon. Terminals at various locations along the pipeline allow fuel distributors to deliver gas to retail stations.

Of the gasoline consumption in Washington and Oregon, about 82 percent comes from the four Washington refineries, with the remainder coming from Montana refineries and sometimes California or Canada.

Components of Gas Prices – Crude oil prices are the major driving force of gas prices. A barrel of crude oil sold for \$101.54 on March 31, 2008. Today, that same barrel sells for around \$129. This translates into a gas price increase of about 65 cents/gallon. At current prices, crude oil accounts for more than 70 percent of the cost of a gallon of gas.

Below is a breakdown of recent gas prices from the federal government and the recently released Attorney General report on gas prices:

National Average Price of Gas: \$3.24/gallon (as of March 2008)

Components of gas price:

- 72% - Crude Oil
- 8% - Refining
- 8% - Distribution/Marketing
- 12% - Federal, state, and local taxes

Washington State: \$3.35/gallon - statewide average on February 25, 2008

- 65% - Crude Oil
- 13% - Refining
- 6% - Distribution/Marketing
- 16% - Federal, state, and local taxes

Other Factors that Influence Gas Prices –In addition to crude oil prices, several other factors influence the price of gas:

- Concern about world supply, production capacity, and demand from China and India;
- The declining value of the US Dollar (which makes crude oil more expensive);
- Overall lack of refinery capacity;

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- Federal mandates for the use of ethanol in gas;
- Environmental rules that require different blends of gas in different parts of the country;
- Gas taxes

The effect of supply and demand on gas prices

Gas, like other consumer products such as milk and meat, is a commodity bought and sold on the open market. The laws of supply and demand apply to the price of oil and gas. When supply is lower and demand higher, prices will increase.

According to the federal Energy Information Administration, world oil supply is at 84 million barrels per day. However, the major oil producing countries are near their limit of current production capacity. As of 2006 spare oil production capacity is only 1.0 – 1.3 million barrels per day. And in 2008, world oil consumption is expected to grow by 1.2 million barrels per day, primarily driven by demand from China and India as those economies continue to expand.

Although there are oil supply concerns, gas consumption in the U.S. is projected to decrease by nearly one percent, which may help lower prices in the future.

The US Dollar and Crude Oil Prices

As the Federal Reserve has lowered interest rates in the past year, the rate cuts, designed to stimulate the US economy, has had the opposite effect on crude oil prices. Because crude is traded in US dollars on the world market, a decline in interest rates lowers the value of the dollar against other currencies. Thus, traders outside the U.S. demand more dollars for their crude oil and investors also move money into crude oil as a hedge against further drops in the value of the dollar. The combination of these actions bid up the price of crude oil.

The Chairman of the Federal Reserve recently commented that no further interest rate cuts are expected in the future. That could help stabilize the US Dollar and lower crude oil prices.

Lack of Refinery Capacity

There are few prospects for increased refining capacity in the long term. There has not been a new oil refinery built in this state for nearly 37 years, while our population has increased over 82 percent since then. Energy companies have expressed interest in expanding or building refineries in our area, but cite the overly complex permitting process as the main reason they will not do it.

The four major refineries that operate in Washington state also supply gas to Oregon and some parts of California. Since California requires special blends of gas that are priced higher than conventional gas, this has resulted in a lower supply of conventional gas in Washington state and higher prices. In addition, five refineries in California have shut down in the past 10 years, further cutting refining capacity.

Federal and State Ethanol Mandates

In 2005, Congress passed the federal Energy Policy Act, requiring for the first time the blending of ethanol with gasoline. Under the current mandates, refineries must incorporate 9 billion gallons of ethanol into the nation's gasoline supply in 2008 and 36 billion gallons by

2022. While this mandate has helped corn growers, it has also shifted farmland into production for ethanol, which has in turn contributed to rising food prices. Refineries have reported problems with blending ethanol into gas, and there are numerous studies that show ethanol uses more energy to produce and burn than regular gas. This can lead to lower fuel economy and possibly higher carbon emission.

Washington state is set to implement a 2 percent ethanol mandate in December 2008 as a result of legislation passed in 2006. While there is no minimum amount of blending with gasoline, the 2 percent requirement could affect gas prices as fuel suppliers comply with the new law.

Gas Blends – “Boutique Fuels”

During the 1990s, specialized blends of gasoline were required for different parts of the country with the goal of reducing air pollution. These are often called “boutique” blends. While Washington state uses conventional gasoline, refineries, including the four located in Washington, are under pressure to produce different blends of gasoline depending on where it will be shipped. This adds to gas prices. New federal mandates are expected to push up prices in the future.

Gas Taxes

The current state fuel tax is 36 cents/gallon and is scheduled to go up by 1.5 cents on July 1, 2008. This is the last increase that was part of the 9.5 cent increase approved by the Legislature in 2005.

In Washington the following fuel taxes apply:

- Gasoline (assuming \$4.00/gallon): 54.4 cents (13.6%)
 - Federal excise tax – 18.4 cents (4.6%)
 - State excise tax – 36 cents (9%)

- Diesel (assuming \$5.00/gallon): 60.4 cents (12.1%)
 - Federal excise tax – 24.4 cents (4.9%)
 - State excise tax – 36 cents (7.2%)

Oil Company Profits and Gas Price Manipulation – Oil companies report earnings on a quarterly basis, and lately these reports have become newspaper headlines. Congress has held hearings on gas prices, often accusing oil companies of gouging consumers.

Investigations by federal and state regulators over the past few years have found no evidence that oil companies are manipulating the price of gas and other petroleum products. In May 2008, the State Attorney General released a report finding no evidence of price manipulation by oil companies of Washington state gas prices. Rather, he found, supply and demand issues and the price of crude oil were the main drivers of recent gas prices increases.

In a local market, oil companies charge what the market will bear, while taking cues from commodity and spot markets. Some gasoline station operators raise prices to avoid running out of fuel. That is because they have fixed costs to cover, whether or not they are selling fuel.