UNDERSTANDING GASOLINE PRICES

The retail price of a gallon of gasoline is the most recognized, yet least understood price for a specific product in the U.S. Every day, millions of Americans drive down the road and see gasoline prices posted on signs at virtually every gas station with numbers as large as three feet high. It should not be surprising that most individuals can more readily quote the current price of gasoline in his or her hometown than the price of the loaf of bread at the local grocery store.

To fully understand why a gallon of gasoline is priced at a particular level begins with answers based primarily on the fundamental principles of supply and demand. National security needs and world political events can dramatically affect availability of supply while the demand for motor gasoline in the United States remains steady and consumption typically grows each year. This sets the stage for price volatility. With steady demand, any change on the supply side will impact gasoline prices.

In the spirit of Indiana native David Letterman, the Indiana Petroleum Marketers and Convenience Store Association (IPCA) has prepared this "top ten" list to further help Hoosiers better understand the dynamics behind gasoline pricing.

TOP 10 LIST

#10 LET'S GET CRUDE

#9 IT'S MORE THAN ROCKET SCIENCE – TRY PREDICTING THE WEATHER

#8 WE'RE SO VULNERABLE HERE

#7 WE'RE FROM THE GOVERNMENT & HERE TO HELP YOU

#6 IT'S NOT ABOUT TODAY'S SUPPLY

#5 LET'S GET REAL

#4 ONLY THE TAX MAN WINS

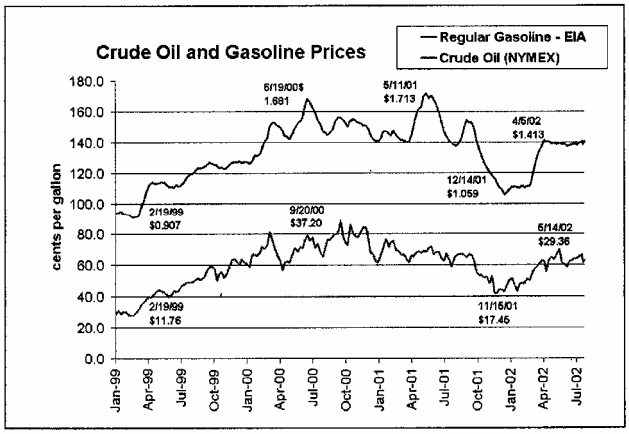
#3 HIGHER PRICES HURT RETAILERS TOO

#2 QUIT BEATING UP YOUR NEIGHBOR

#1 IT'S A STREET FIGHT

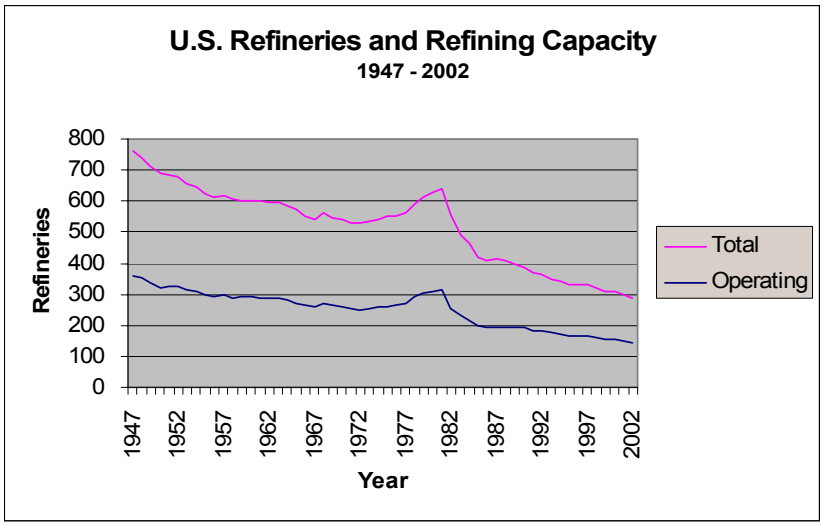
#10 LET'S GET CRUDE

Over the long run, gasoline prices generally track the prices of crude oil. Traded on the open market, crude oil accounts for more than 40% of the retail price of gasoline. The U.S. now imports nearly 60% of its crude oil needs. When crude oil supplies are plentiful prices tend to fall. When supplies become "tight," even small restrictions will cause prices to go up. Petroleum markets react overnight to world events and other developments affecting the supply of crude. Even a report of potential cuts in overseas production can influence retail prices before these cuts actually occur. As the main ingredient in gasoline, the price and availability of crude oil has a direct impact on the price of gasoline at the wholesale and retail level. The chart at the right, clearly demonstrates this.



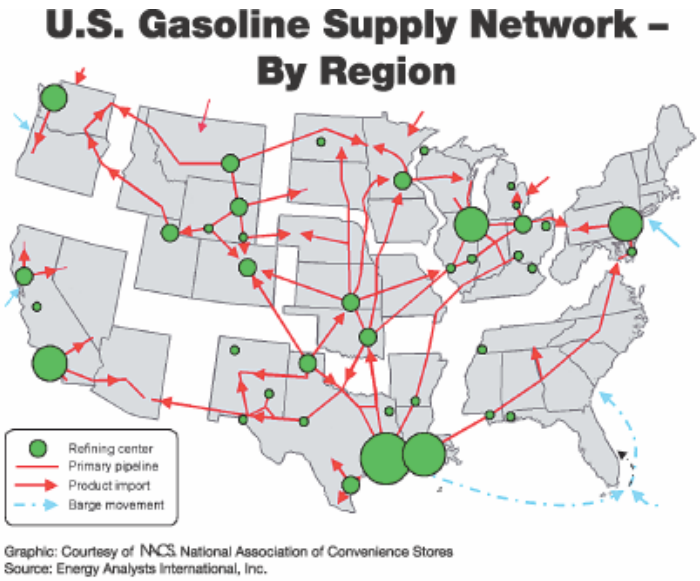
#9 IT'S MORE THAN ROCKET SCIENCE – TRY PREDICTING THE WEATHER

The process of refining crude oil into gasoline and other products is extremely complicated. Refinery operations typically involve a sixty (60) to ninety (90) day planning cycle. In addition to availability, the type and quality of crude oil affect how much gasoline can be produced. So does storage capacity, pipeline schedules and other factors. As these production plans attempt to forecast market conditions two to three months out, some guess work is involved. For example, they must determine in advance how much heating oil to produce versus gasoline. We all know how difficult predicting the weather can be. A wrong guess can have significant supply/demand consequences. Also, multi-product pipeline shipping schedules are set well in advance. Refineries simply do not have the flexibility to quickly change what they can produce and deliver. We have not built a new motor fuel refinery in the U.S. since 1974 and many have been closed. The remaining refineries operate at or near full capacity much of the time.



#8 WE'RE SO VULNERABLE HERE

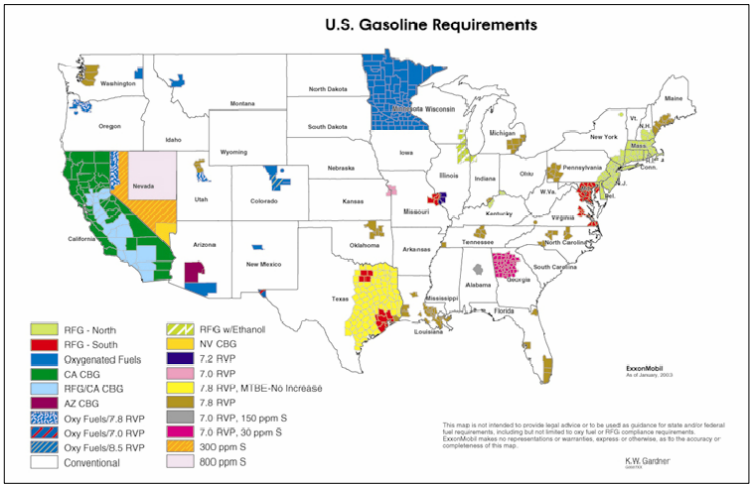
The Midwest region of the U.S. consumes about one-third of the country's supply of motor gasoline. Yet, we have a refining capacity that produces only about 40% of our gasoline needs. Most of our gasoline comes to us via pipeline from Gulf Coast refineries. (Moving gasoline via pipeline from the Gulf Coast to Indiana takes about two weeks.) We are extremely vulnerable to unplanned supply disruptions, such as the Explorer pipeline break which caused the May/June 2000 price spike. Any sudden restriction on supply, such as an outage at a Midwest refinery or a pipeline disruption has an immediate impact on price. It takes weeks to obtain product from other areas.



Graphic: Courtesy of NACS National Association of Convenience Stores
Source: Energy Analysts International, Inc.

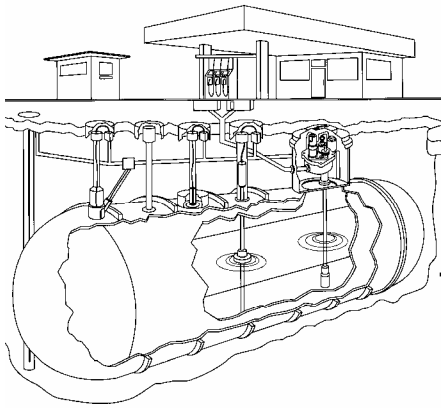
#7 WE'RE FROM THE GOVERNMENT & HERE TO HELP YOU

Twenty-five years ago there were essentially two grades of gasoline – regular and premium – and the U.S. had excess refining capacity. Since that time, our elected officials, have mandated a wide variety of unique fuel blends, forced massive changes in refinery operations and discouraged the construction of new petroleum infrastructure. Most of this was done in the interest of improving the environment – a worthy goal, of course, but it has led to major consequences. Today we have fewer refineries, more grades of gasoline (and diesel fuel) and a restricted ability to produce, store and distribute motor fuels. Today, there are more than 25 unique gasoline formulations required for specific markets throughout the U.S. These fuel formulations, for the most part, are not interchangeable which means that product cannot be moved from one area to another as it once was. Like the refining sector, the distribution system has limited capacity and minimal flexibility to meet new fuel mandates or to respond to supply disruptions. We are especially vulnerable to supply shortages in the Spring due to the government required change from winter-grade to summer-grade gasoline. This required draw down of supply takes a couple of months and usually causes an upward shift in prices, which usually stabilizes in early summer.



#6 IT'S NOT ABOUT TODAY'S SUPPLY

Gasoline, diesel and crude oil are commodities traded on futures markets all over the world. Commodities, whether gasoline, sugar, pork bellies, or precious metals, tend to be valued today based on what someone would be willing to pay for the same item at some future time. Gasoline is extremely vulnerable to world political events, refinery production problems and distribution systems restrictions. So why do changes in the cost of future supplies cause an increase in the value of current supplies purchased at the previous price. The answer is the "replacement costs." The price at which existing product is sold must be sufficient to replace it at new market rates. This trend reverberates through the product chain from refiners to wholesalers to gasoline retailers. For the retailer, it's not a matter of what the product in the tanks cost; it is a matter of being able to pay for the next load of fuel.

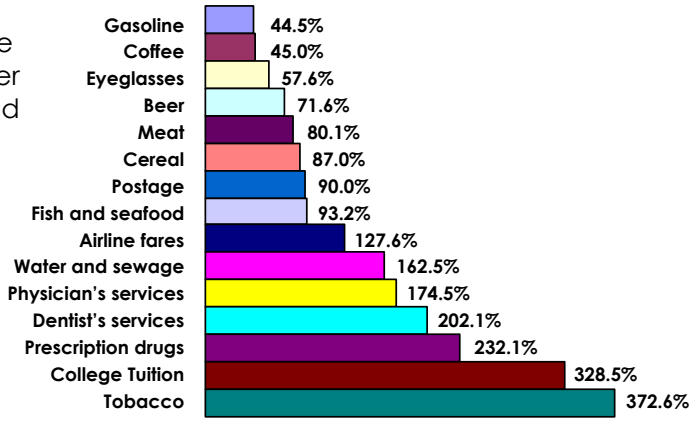


Petroleum marketers invest a great deal of money to insure environmental safety.

#5 LET'S GET REAL

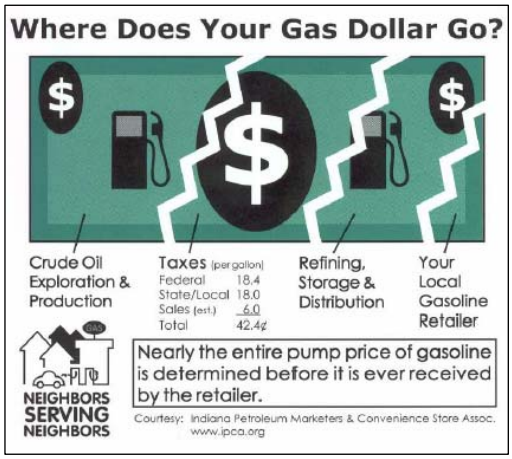
In inflation-adjusted terms, today's gasoline price is extremely low compared to the historical record of pump prices over the past 80 years. As depicted in the chart below, the real cost of gasoline to consumers has fallen dramatically. The combined cost to manufacture, distribute and market gasoline is 32¢ per gallon less today than it was twenty years ago. If pump prices had kept pace with inflation, consumers would be paying $2.75 or more per gallon. Can you think of any other product whose price is lower now than it was in the early 1980's?

A Relative Bargain
Changes in the price of gasoline and other consumer goods and services during the past 20 years:



Source: The Columbus Dispatch

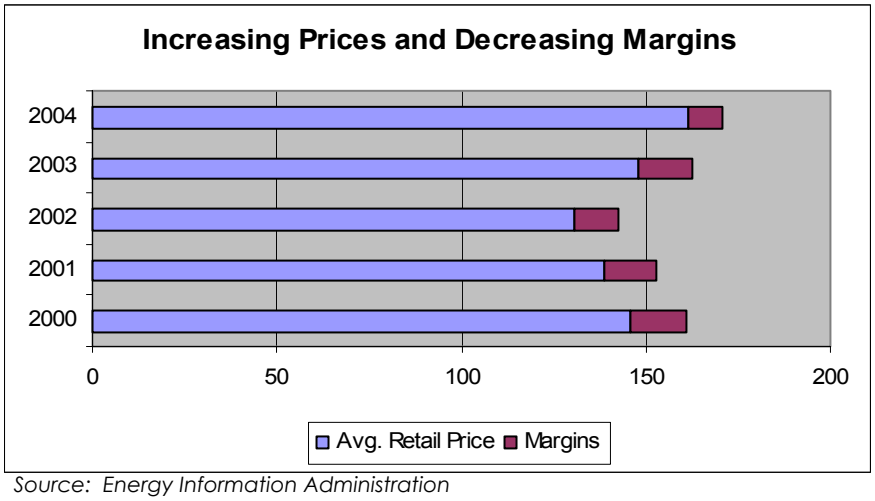
#4 ONLY THE TAX MAN WINS



The only element of gasoline prices to increase over the past twenty years is federal and state taxes. At current pump prices, the amount of taxes collected in Indiana amount to more than 48¢. That's 18.4¢ in federal tax, 18¢ Indiana gasoline tax and 12¢ in state sales tax. Indiana taxes could become even more of a factor if some in the General Assembly have their way. A bill was introduced in the last session that would have tied increases in our gasoline tax to a complicated indexing formula. Had this measure passed 10 years ago, Indiana would have the highest gasoline taxes in the nation. Amazingly, Indiana's gasoline tax would have increased a whopping 68 percent with only one vote by state lawmakers. While everyone involved in the refining and distribution system takes considerable risk to earn a few pennies per gallon, the government can sit back and rake in the dough.

#3 HIGHER PRICES HURT RETAILERS TOO

The public tends to believe that during times of high prices that the retailer is "gouging" the consumer. In fact, as the chart below clearly shows, margins (the retailer's profits) stay flat or actually shrink when prices increase. To make matters worse, higher prices also mean higher costs for the retailers. A large percentage of consumers now purchase gasoline by using credit cards. Retailers must pay credit card companies a percentage of the total sale – obviously the higher the sale, the higher the credit card transaction fee. In addition, higher prices also mean "drive offs" occur more frequently. Although the industry prosecutes violators to the fullest extent of the law, just one "drive off" can rob the retailer of all gasoline profits for a day.



Source: Energy Information Administration

#2 QUIT BEATING UP YOUR NEIGHBOR

Far from the notion of colluding big oil companies, the petroleum industry actually consists of thousands of independent business owners who are involved in the wholesale and retail marketing of petroleum products. In Indiana, the vast majority of retail stations are owned and operated by independent petroleum marketers. While consumers may often see a major oil "flag" at retail locations where they purchase their gasoline, in most cases the station is operated by an independent marketer who displays the major oil company brand under a supply agreement with that company. In Indiana, more than ninety percent of the cost of gasoline is determined before it ever reaches the retail outlet. This includes the cost of crude oil, refining, distribution and taxes. The rest of the cost of getting gasoline into the consumer's tank are the costs of the retail operation, such as employee wages, utilities, equipment, taxes, credit card costs, etc. Today, if he's lucky, your local petroleum marketer may make a slight profit on the gasoline he sells. Often times he is losing money on gasoline. There should be little wonder why most gasoline "stations" today are tied to convenience stores, fast food restaurants, etc. There is more profit made on a large cup of coffee or a fountain drink than the fill-up of a SUV!

#1 IT'S A STREET FIGHT

All of the above referenced supply/demand factors are important, but the number one rule of gasoline pricing in Indiana is keen street level competition. Retailers realize that with prices posted on big signs at every gasoline outlet, consumers will have a tendency to compare prices. If a retailer doesn't stay in line with competition, he will risk losing customers. This means that often, a retailer must choose between staying competitive by pricing at a loss, or giving up market share by selling at a profit. In today's marketplace, gasoline tends to be used to drive market share, in the hopes of making a profit by selling something to the customer besides just gasoline. While prices are pushed higher by a variety of factors, including the need to cover costs to make a profit to stay in business, the fierce competition at the retail level consistently keeps prices at the lowest possible level.

You Think Gasoline is Expensive…

Coke: $3.33 per gallon (based on a 2-liter bottle)

Tide: $12.61 per gallon (based on a 100-oz. jug)

Pepto Bismol: $56 per gallon (based on a 16-oz. bottle)

A1 steak sauce: $64 per gallon (based on a 10-oz. bottle)

Raid Home & Garden: $73 (based on a 11-oz. can)

Vaseline: $88 per gallon (based on a 13-oz.jar)

Coppertone sun block: $192 per gallon (based on a 8-oz. bottle)

Source: CBS MarketWatch