ILLINOIS ECONOMIC
and
FISCAL COMMISSION

MOTOR FUEL

Pricing Factors, Tax Structures And Other Related Issues

OCTOBER 2001
703 STRATTON BUILDING
SPRINGFIELD, ILLINOIS 62706

ILLINOIS ECONOMIC and FISCAL COMMISSION

COMMISSION CO-CHAIRS

Senator Patrick D. Welch
Representative Terry R. Parke

SENATE	*HOUSE*
Miguel del Valle	Mark H. Beaubien, Jr.
Rickey R. Hendon	Judy Erwin
Chris Lauzen	Frank Mautino
John W. Maitland, Jr.	Richard Myers
Steven Rauschenberger	Jeffrey M. Schoenberg

EXECUTIVE DIRECTOR
Dan R. Long

DEPUTY DIRECTOR
Trevor J. Clatfelter

UNIT CHIEF
Jim Muschinske

AUTHOR OF REPORT
Eric Noggle

EXECUTIVE SECRETARY
Donna K. Belknap

TABLE OF CONTENTS

CHARTS:

EXECUTIVE SUMMARY

Today in the United States, the product that may receive the most attention on an everyday basis is the energy source of motor fuel. In our fast-paced society, transportation has become a crucial part of our world. Affordable levels of motor fuel allow the world of transportation to be an independent and personalized entity. As long as motor fuel stays affordable, this energy source is considered just an everyday expense. However, as the price rises, the comfort levels of consumers are affected because these higher prices force people to reevaluate their spending habits and look for alternative ways of getting from place to place. The higher the price of motor fuel, the more attention motor fuel prices receive.

When motor fuel prices soared to record-breaking heights in the spring of 2000, the Illinois General Assembly took notice and temporarily suspended the sales tax on motor fuel for six months. Although this tax reduction cost the State approximately $157 million, it helped alleviate some of the high costs that Illinois motorists were experiencing during that time. Since the reduction, motor fuel prices have continued to fluctuate at levels that have kept the consumer concerned. Although, on average, prices have not surpassed those seen in 2000, the tragic events of September 11, 2001 have grabbed the motor fuel market's attention because of the unknown effects that it will have on this volatile product's future.

The following report was created to discuss these effects and other similar issues. The report provides a basic knowledge of the oil production cycle process and explains the factors that contribute to the price of motor fuel and why prices fluctuate the way they do. It takes a look back at the motor fuel prices of 2000, and explains the reasons for these record-breaking prices and the effects that the tax suspension had on the State. The report then discusses the current status of motor fuel prices in Illinois and the effects that the threat of war has had on prices already. Finally, the report gives a detailed description of the taxes that are included in the price of motor fuel, and shows how Illinois compares with other states in the taxation of this energy source. Highlights of the report are summarized below.

- The oil production cycle process includes the exploration of petroleum, transportation to refineries, production and distillation of the motor fuel, and transportation to retailers. Any interruptions or problems occurring during this process can have significant effects on the cost of motor fuel.

- Refining cost and profits make up approximately 20% of the retail price of gasoline. Distribution and marketing make up a little less than 10%, while the actual price of crude oil makes up a little over 40%. The remaining 30% stems from taxes.

- The profit margin has a tendency to fluctuate quite a bit on the retail price of gasoline. A major contributor to a margin's fluctuation is the economic force of

competition. Other contributors include the size of the storage tanks and timing issues associated with when the tanks are refilled.

- Gasoline prices increased to near record levels in the spring of 2000. It appears that there was no one reason for the sharp rises in price, but rather a combination of different factors, including EPA regulations, pipeline problems, production difficulties, OPEC strategies, and gasoline retailer decisions.

- The Federal Trade Commission found that there was no evidence that the price increases of 2000 were a result of a conspiracy or any other antitrust violation. They reported that most of the causes were beyond the immediate control of the oil companies.

- The director of the Bureau of Economics for the Federal Trade Commission states that it is quite likely that we will see more gasoline price spikes in the future, like the one we saw during the spring of 2000.

- In response to the 2000 motor fuel prices, Illinois temporarily suspended the sales tax on motor fuel for a six-month period. The cost of that suspension is estimated to be approximately $156.6 million.

- One question asked if there was an increase in total gallons of motor fuel sold, as a result of the sales tax reduction. Data indicates that on a statewide basis, the answer is probably not, as gallonage figures for the suspension period of 2000 were actually 4.63% below the 1999 figures for the same time period.

- August and September 2001 gasoline figures significantly have surpassed prices from a year ago. The factors that are putting upward pressure on the price include rising prices for crude oil, a steady or slightly increasing demand for gasoline, a decrease in the supply of refined product, and the increased possibility of war.

- Gasoline prices increased to as much as $5 per gallon in some locations shortly following the terrorist attacks on September 11, 2001. As a result of this alleged price gouging, on September 12, 2001, Attorney General Jim Ryan filed a lawsuit against the stations that created these exorbitant retail gas prices in Illinois.

- The taxes that affect the retail price of motor fuel in Illinois are the Federal Motor Fuel Tax, the State Motor Fuel Tax, the Local Motor Fuel Tax, the State Sales Tax, and the Local Sales Tax.

- Illinois ranked 30th in the nation in the category of State tax rates on gasoline in 2001. Illinois ranked 5th in the nation in the amount of State revenue collected for the Motor Fuel Sales Tax in 1999, but ranked only 37th in the nation when the revenue was on a per capita basis.

From the Well to the Pump

Over the last few years, the price of gasoline has approached record levels. This has created a dramatic increase in the number of motor fuel related stories in the press because of its importance to the people of Illinois. Because of how the price is advertised for every motorist to see, finding out the retail cost of gasoline is easy for anyone to obtain. However, few people would be able to explain how the retail price was arrived at or what factors contributed to that final price determination.

In order to understand how motor fuel prices are formulated and the causes for why these prices fluctuate as much as they do, a basic knowledge of the oil production cycle process is needed. Gasoline is made up of various hydrocarbons derived from petroleum. Petroleum can be found all over the world, but is heavily produced in the Middle East. It can be found both on land and off shore. Though the exploration technology of petroleum has improved over the years, it still can be affected by natural occurrences, such as storms, hurricanes, or even difficult terrain. These problems can cause difficulty in exploration, resulting in higher-than-normal exploration costs.

Once the petroleum has been located, the substance must be transported to the next stage of the gasoline process. The movement of crude oil is accomplished through various means of transportation. Crude oil from overseas is transported through the shipping process. After the Exxon Valdez disaster in 1989, the shipping of crude oil has seen many improvements such as double hulls, segregated ballast tanks, and redundant steering systems. These changes have made oil tankers safer and more reliable than they were previously. However, these improvements are costly, which can affect the price structure of gasoline.

When transporting petroleum over land, trucks can be utilized, but much of the petroleum is moved by pipeline. This is considered the most cost-effective means of transferring crude oil from the port facilities to the tankers. Although cheaper, pipeline operators still incur operating and labor costs, as well as various maintenance fees. If a pipeline should break, the cost of gasoline can be significantly affected. An example of this will be discussed later on in the report.

Transportation costs can vary depending on the distance from place to place. Obviously, it costs more to ship oil from the Middle East to the U.S. than it does from other locations in the Western Hemisphere. There are also added costs if a tanker is too large to dock and must be unloaded at an offshore facility.

Another factor that can affect the cost of transporting fuel is war. For example, fighting in the Middle East or even the threat of war can cause insurance rates to dramatically increase due to the higher likelihood that oil shipments could be interrupted. Higher insurance rates equate to higher oil prices. War can also affect gasoline prices in situations where a large-scale military operation is underway, and there is a high

demand for jet fuel. A high demand for fuel relative to its availability causes prices to increase. An example of this will be discussed later on in the report.

Once the petroleum has been transported, it is ready to be produced into gasoline. There are many hydrocarbons in petroleum, but only the ones that can evaporate under engine conditions can be used in gasoline. Because crude petroleum consists of hydrocarbons that are both more and less volatile than gasoline, gasoline must be separated from petroleum through a process called distillation. Distillation, however, provides an amount and quality of gasoline that is considered insufficient. Therefore, gasoline production must be supplemented with more sophisticated refinery processes. These processes take the less and more volatile petroleum hydrocarbons and turn them into hydrocarbons that have the correct volatility. The refinery process also adds specialty chemicals to the blend to enhance the performance of the hydrocarbons. Through this, gasoline can be created to have the desirable characteristics necessary for good engine performance.

Basic refining costs can run anywhere from 50 cents to $3 a barrel. However, when refining the gasoline, environmental laws add additional costs to this process. In order to have cleaner exhaust emissions, hazards such as lead and benzene must be removed from the fuel. Removing lead costs approximately 2 to 3 cents a gallon of gas. Also, the EPA has mandated that by 2005 the nation's largest oil refineries must reduce the sulfur content of gasoline by 90%, and calls for an equally large reduction in diesel fuel's sulfur levels by mid-2006. The estimated cost of the process to remove sulfur from motor fuel is estimated to be anywhere from 1 to 5 cents per gallon.

After the gasoline is produced, it is ready to be distributed to retailers. Again, transportation is needed for this to be accomplished. Ironically, the cost of transporting gasoline through fuel trucks depends a lot on the cost of gasoline. If gasoline prices increase, the cost of transporting the gasoline also increases, resulting in the costs being passed on to the consumer. Again, the cheapest way to transport gasoline in the United States is through the dozens of pipelines that crisscross the country. The 5,349-mile Colonial pipeline system between New York and Houston carries approximately 80 million gallons of petroleum products a day.

Once at the retailers, even more costs are added to the price of gasoline. There are several factors that contribute to these added costs. The first is for the general upkeep of running a gasoline station. This would include costs for maintenance, employee salaries, insurance, property taxes, as well as profit margins. The amount of this added cost varies from retailer to retailer.

For example, according to a MSNBC.com report entitled "Gasoline Price Mysteries Revealed," three gas stations within a mile of each other in the State of Washington were selling self-serve regular gasoline at different rates. One independent owner-operator was selling self-serve regular for $1.61 a gallon, while a dealer-owned station was charging 4 cents a gallon more for the same octane. The reason for the difference

was that the independent pays a mortgage for the property, purchases his gas from a third-party supplier, offers auto repair, and has no staff on duty after 11 p.m. The dealer-owned station pays a maintenance fee for the brand name gas, buys the gas directly from the company, runs a convenience store, and keeps on a late night staff. Down the road another station was only charging $1.51 for the same octane. He kept his prices down "…by not accepting credit cards – which companies pay a commission on – and by using an ethanol mixture, which is partially subsidized and, thus, less expensive."

The article points out that these gas stations, nevertheless, are dependent on the decisions of foreign oil producers thousands of miles away. Refining cost and profits make up approximately 20% of the retail price of gasoline. Distribution and marketing make up a little less than 10%, while the actual price of crude oil makes up a little over 40% of the costs. The rest of the retail cost that consumers pay stems from taxes.

According to a CNN.com report, "…U.S. consumers pay 18.4 cents per gallon in federal taxes and 23.1 cents per gallon, on average, in state taxes. Add local sales taxes and a 'severance tax' assessed when oil is taken from the ground, and taxes typically will account for 30 percent of the cost of a gallon of gasoline."

The State of Illinois imposes several taxes on motor fuel that affect the retail price, aside from the 18.4 cents per gallon federal tax. A State motor fuel tax of 19 cents per gallon is applied to gasoline, while a 21.5 cents per gallon tax is applied to diesel fuel. This does not include the 1.1 cents per gallon in environmental fees that are added to the price. In addition, a State sales tax of 5% and a local sales tax of 1.25% are also applied to the price of motor fuel. Some home-rule units can collect additional taxes on motor fuel, whether it is from a local motor fuel tax, or from additional local sales taxes. A detailed synopsis of these various taxes is included at the end of the report.

Another factor that contributes to the differences in the cost of gasoline is the grade of gasoline sold at the stations. Higher-graded gasoline costs more to make and, therefore, is sold at a higher price. But many times retailers will use the selling of premium gasoline as a way to gain some profit. There is a common feeling among many motorists that premium gasoline is the best fuel for their car. These motorists are willing to pay premium's higher cost, rather than unleaded gasoline's lower costs, in order to obtain maximum performance for their automobile.

However, an article in the Wall Street Journal entitled, "Disputing Oil Giants' Claims, Car Maker Say Premium Is Often a Waste of Money" may change the opinion of some consumers. The article states that even though premium gasoline prices increased to extremely high levels, loyal premium consumers were unwilling to change to lower graded gasoline because "they believe oil-company advertising and family lore that premium gasoline yields much better gas mileage and quicker acceleration…" and that "…it keeps their engines cleaner." But the article states that, "Today, however, what premium gasoline drives best is profit for refiners and gas stations, analysts say. The

performance advantages of the gasoline burned out a generation ago because U.S. auto makers now tailor the vast majority of their engines for regular-grade gasoline."

The article goes on to discuss that DaimierChrysler AG claims that only two-tenths of 1% of its vehicles need premium gasoline, excluding Mercedes-Benz. Ford Motor Corp. reports that 5% of the vehicles it sold last year required premium gasoline, including the luxury Lincoln Town Car. Most of the new cars that still require premium unleaded gasoline come from Europe, because these cars are generally built with higher compression engines to take advantage of a higher-octane gasoline pool. Though many refiners and oil companies believe that cars do run better on the extra "oomph" of premium unleaded gasoline, "…there has not been adequate research done to show what true impact the loss of octane has on performance." This was the response of the manager of product engineering at Chevron Corp.

Knowing that some motorists will pay the added costs of buying premium, gasoline retailers will use a "historical marketing practice" to add a little profit for their business. According to the same Wall Street Journal article, "Premium gasoline costs about five cents to seven cents more per gallon to make than regular gasoline, refiners say. But it is sold to dealers at 11 cents to 13 cents more than regular grade. Gas stations typically sell premium at 15 cents to 20 cents more a gallon than regular. After taxes, dealers get about a nickel more a gallon in extra profit, says Bruce Sirchio, director of the Illinois Gasoline Retailers Association."

The profit margin is an interesting portion of the price of gasoline, because it has a tendency to fluctuate quite a bit in the retail price of gasoline. One factor that contributes to the dramatic fluctuation of the profit margin, otherwise known as the "spread", is the economic force of competition. Profit margins seldom stay consistent because gas stations are constantly fighting for the business of the consumer. For example, retailers may want their profit margin to be 10 cents per gallon. If a competitor down the road is selling gasoline at a cheaper price, they may have to sacrifice their targeted profit margin ratio, in order to get the business of the motorists. This competition causes fluctuations in the spread that make the data very inconsistent. In a survey conducted by the IEFC in the fall of 2000, 58% of the respondents indicated that competition with retailers affects the pump price the most.

An example of this was seen in the Springfield area shortly after the elimination of the motor fuel sales tax in 2000. As supplies were replenished, prices that were near $2.00 per gallon, dropped to more normal levels near the middle of July 2000 throughout Illinois. In Springfield, the prices dropped to as low as $1.11 a gallon for regular unleaded. The reason: a new superstore opened up on the south side of town along with a related gas station. To bring people to the superstore, fuel was sold well below the average selling price at that time. This, in essence, caused a gasoline price war, sending prices that were once among the highest in the country to one of the lowest. The superstore could afford to sell gasoline at prices that brought in little to no profit because they had other merchandise to sell to make up for their loss. Other gasoline

stations did not have this luxury. Therefore, they had to take a hit to remain competitive. This is how margins at certain times can reach a point where zero profit is made. As the superstore's prices increased to "normal" levels, the competitors quickly followed suit, in order to regain the profit margin they needed. It is at this point that many retailers may exceed their normal profit margin levels in order to gain back some of the profit that was lost during a price war.

This situation points to a common phenomenon in the price of motor fuel. As rack prices (the price that retailers actually paid for the motor fuel) increase, the price margins tend to decrease. Conversely, as the average rack price of gasoline decreases, the average price margins tend to increase. *For a more detailed examination of profit margins and its relationship to rack prices, please see the IEFC's report to the Joint Committee on Legislative Support Services entitled, "Suspension of Motor Fuel Sales Tax", which can be accessed from the Commission's website:* ***http://www.legis.state.il.us/commission/ecfisc/ecfisc_home.html***

Another factor that may influence the price margin is the amount of fuel remaining in the retailer's tank at the time of a price increase. For example, let's say that a retailer has to pay a high price to fill his storage tanks. If the rack price of gasoline drops twenty cents the next day, the retailer is stuck with more expensive gasoline in his tanks. In order to pay for this gas, he has to charge the consumer the price that he paid for the fuel that he has in his storage tanks, not the current price of gasoline. This could be another reason for the appearance that profit margins tend to grow as the rack prices decrease.

Much of this price change is also dependent on the size of the storage tanks and how often they are filled. If retailers have tanks that are relatively small and they have good business, they may have their tanks refilled frequently and be able to change prices relative to the market value. But if stations have large tanks with little turnover, they may only be able to charge what the gasoline in their tank is worth. The problem for these retailers is that they may have paid for gasoline at a high rate, but may have to lower prices to stay competitive. The luxury they have is if they paid for gasoline at a lower rate, they would have the ability to charge the current higher price to make back some profit, or charge the gasoline purchase price, which could cause the competitors to lower their prices.

What Were the Causes of the Large Price Increases in Gasoline during the Spring of 2000?

As previously discussed, there are many factors that make up the retail cost of motor fuel. In past years the fluctuation of motor fuel prices was stable enough and low enough to avoid much attention from consumers and the media. But as prices increased to near record levels in the spring of 2000, questions regarding the cause of these rising prices began to surface. The prices became so abnormally high that the State of Illinois officials called a special session of the Illinois General Assembly to do what they could to help alleviate these high prices. As a result, the State suspended the 5% State portion of the sales tax applied to motor fuel and gasohol, for the period July 1, 2000, through December 31, 2000. The following section takes a closer look at the 2000 motor fuel prices and discusses the possible reasons for why these high prices occurred.

Retail gasoline prices in the Midwest hit their peek during the week of June 18-24, 2000. According to AAA's Motor Fuel Gauge Report, on June 21st Illinois' downstate average self serve regular unleaded price was $2.01, while Cook County had an average price of $2.17. Cook County's price was up $0.54 from the previous month and up $0.90 from the June 1999 price. By comparing Cook County and downstate Illinois' average prices on June 21st with the national average of $1.65, the dramatic situation Midwest gasoline consumers were in could be seen.

Because of this unique situation, many questions arose regarding the reason for these high prices and whether these prices were caused in whole or in part by antitrust violations. Since that time, several ideas for the price increases were formed, but it appears that there was no one reason for the sharp rises in price, but rather a combination of different factors.

Price increases during this time period were not uncommon. Gasoline prices have a seasonal nature to them, whereupon prices tend to rise in the late spring and early summer as the demand for gasoline increases with the onset of the summer driving season. However, according to the Interim Report of the Federal Trade Commission Midwest Gasoline Price Investigation, "the increases (seen in June, 2000) in some local markets, particularly in the Midwest, eclipsed those experienced in past years, and were much greater than those experienced in other U.S. markets."

So what were the reasons for such a dramatic difference? One explanation was the introduction of EPA Phase II regulations for summer-blend reformulated gasoline in high ozone urban areas. The regulations for this new blend of gasoline, commonly referred to as RFG, went into effect in the Chicago and Milwaukee areas on May 1, 2000. St. Louis also entered the RFG program in 2000, placing Illinois in the middle of a transitional period. The introduction of RFG created shortages throughout the Midwest, causing prices to increase.

There were several reasons for these shortages. One was due to the process of replacing the winter-blend gas with the new summer-blend Phase II RFG. The winter-blend gasoline had to be drained from the storage tanks before the new gasoline could be added, which led to lower-than-usual inventory levels. Also, the process of making the RFG turned out to be more difficult than expected which led to lower-than-expected refinery yields.

One article from the Energy Information Association entitled, "Supply of Chicago/Milwaukee Gasoline Spring 2000," writes that the Midwest region produces much of the RFG by using ethanol as the oxygenate, where most other RFG areas use the substance MTBE. As a result, not many refineries outside the Chicago/Milwaukee area were prepared to produce the base RFG materials needed to blend with ethanol. This caused marketers scrambling for limited supplies of both RFG and conventional gasoline. As the demand for gasoline in the Midwest went up, so did the prices.

Although the new reformulated gasoline explained some of the price differences, it did not "provide a complete explanation for recent Midwestern gas price increases, because in the Midwest as a whole, conventional gasoline prices rose more dramatically than RFG prices from May to the end of the June." This was the response of the Federal Trade Commission in their Midwest Gasoline Price Investigation report.

Aside from the RFG transition, another contributor to the price increases was due to pipeline problems in the Midwest. As stated earlier, pipeline is the major means of transporting gasoline products all over the United States, but this distribution method can occasionally encounter significant maintenance problems. This was the case for the 1,400-mile Explorer pipeline, which supplies gasoline to St. Louis and Chicago. In March 2000, this pipeline sprang a leak, which led to a five-day shutdown causing pressured supplies. An MSNBC.com article entitled, "Gasoline Price Mysteries Revealed," reports that "…pipeline shutdowns are particularly disruptive because companies have adopted policies of keeping only small inventories on hand as a means of saving on storage costs. As a result, there is little in the way of a cushion if pipelines fail…" The shortage of gasoline due to the Explorer's leak led to a higher demand for fuel, resulting in increases in the price of gasoline.

As seen in the previous examples, shortages of motor fuel cause prices to rise. Though the RFG gasoline transition and the pipeline leaks caused shortages in the Midwest, shortages already were occurring all over the United States due to the reduced global supply of crude oil. In the second half of 1999, members of the Organization of Petroleum Exporting Countries (OPEC), along with several non-OPEC oil exporting countries decided to curtail the global supply of crude oil. At the same time the demand for petroleum products increased significantly worldwide. This was due to the economic recoveries in Asia and Europe and continued strong economic growth in the United States. As a result, the consumption of crude oil exceeded production, and inventories were drawn down in the U.S. and all over the world. This high demand caused prices to rise.

In response to the price increases, refiners cut gasoline production and used inventories of gasoline to meet demand in the expectation that inventories could later be replenished when the price of crude oil dropped. But according to MSNBC.com, "refineries appear to have been slow to rev up production in anticipation of lower world oil prices that have not materialized." These series of events contributed to exceptionally tight supply situations all over the world, especially in the United States. The worldwide production of crude oil was a significant cause of the high gasoline prices throughout the U.S., but only a portion of this can be contributed to the price increases seen in Illinois and throughout the Midwest.

Since that time, Saudi Arabia and other OPEC countries have agreed to increase production in an effort to moderate the price of crude oil. But as an article entitled, "Petro Politics – July, 2000 – a Comment" from energyindustry.about.com points out that a production increase that drops the price of crude from $30 to $25 per barrel is "really pretty small potatoes." The article uses an example where a person drives 15,000 miles per year with a vehicle whose gas mileage is 20 miles per gallon. Under these conditions the person uses 750 gallons per year or 62.5 gallons per month (15,000 miles per year / 20 miles per gallon / 12 months). In July of 1999, crude oil at $17.60 per barrel equated to a price of gas of $1.12. In July of 2000, crude oil at $34.00 per barrel equated to a price of gas of $1.60. The result: a decrease of $1.00 per barrel in the price of crude equates to about a 3 cent decrease in the price of gasoline (($1.60-$1.12) / ($34.00-$17.60)). Therefore a $5 drop in the price of crude oil results in a monthly savings of only around $9.40 per month ($.03 per gallon x $5 change x 62.5 gallons per month).

The reasons for the supply problems in the U.S. during the spring of 2000 have been blamed on EPA Phase II regulations, pipeline problems, OPEC, as well as gasoline retailers. But one CNN.com article entitled "On Fluctuating Gasoline Prices and American Independence" points out that vehicle popularity can contribute to the supply problems. The article states that just before the mid-1970s oil crisis, Americans were in love with big, gas-guzzling vehicles, such as the Cadillacs, Oldsmobiles, and Lincolns. In the 1980s, economical cars tended to be in style. Now entering the 21st century, Americans popularity has shifted to sport utility vehicles, vans, and pickup trucks, all of which have low fuel economy. In 1980, these vehicles accounted for less than 20% of new vehicle sales; now they make up almost half of the sales, according to the U.S. Department of Transportation. As the popularity of these vehicles continues to grow, as well as the love for travel, so does the demand for gasoline. The article writes, "According to the government's Energy Information Administration, demand hit a record 8.5 billion barrels of gasoline a day in April (2000)."

Because of the fore-mentioned supply problems, there was little argument against why gasoline prices increased in the Midwest. There were questions, however, on the extent to which they increased. U.S. Senators and Representatives strongly urged the Federal Trade Commission to take a closer look at the gasoline prices and to report to them of their findings. In their interim report, the FTC stated, "The sheer magnitude of the

price increases, their particular intensity in one section of the country, and their occurrence in conventional gasoline as well as in RFG, prompted the Commission's Bureau of Competition to consider the reasons for the price increases and, specifically, whether price fixing or other illegal activity might have occurred."

On March 30, 2001, the results of the FTC investigation were released to the public. The following are excerpts from their press release:

> *While the Commission found no credible evidence of collusion or other anticompetitive conduct by the oil industry, the investigation found that a combination of many factors was likely responsible for the price spike…The report states that the spike "appears to have been caused by a mixture of structural and operating decisions made previously (high capacity utilization, low inventory levels, the choice of ethanol as an oxygenate), unexpected occurrences (pipeline breaks, production difficulties), errors by refiners in forecasting industry supply (misestimating supply, slow reactions), and decisions by some firms to maximize their profits (curtailing production, keeping available supply off the market)."*
>
> *"There were many causes for the extraordinary price spike in Midwest markets last summer," stated Chairman Robert Pitofsky. "Importantly, there is no evidence that the price increases were a result of conspiracy or any other antitrust violation. Indeed, most of the causes were beyond the immediate control of the oil companies. There were, however, some strategic choices by some oil companies designed to maximize profits that contributed to the temporary price increases. Once the magnitude of the price increases became apparent, several oil companies moved aggressively to bring supply into the Midwest market, and the price spike was eliminated." Pitofsky added that "while there were many short-term causes of the increases, the underlying lack of U.S. refinery capacity threatens similar price spikes in the future in the Midwest and elsewhere."*

In response to these findings, Jeremy Burlow, the director of the Bureau of Economics for the Federal Trade Commission, expressed his concern that price spikes may be repeated in the future.

> *Over the years the capacity of U.S. refiners has not kept pace with the growth in demand for refined products. Average capacity utilization in 2000 was 94 percent, and higher in the summer. So most refineries are running at close to full capacity most of the time. This also means that there is no slack capacity available to respond quickly to a price shock. This trend is likely to continue. Most areas in the U.S. are not particularly interested in having a new refinery built nearby, and the cost of meeting U.S. regulations is high. If demand continues to outstrip*

capacity then ultimately imported products will become the marginal source of supply for some oil products. Inevitably it will take importers longer to respond to supply imbalances than domestic refiners, so it is quite likely that we will see more price spikes in the future.

The Effects of Eliminating the Sales Tax on Motor Fuel

As stated earlier, Illinois response to the 2000 motor fuel prices was to suspend temporarily the 5% State portion of the sales tax applied to motor fuel and gasohol, for the period July 1, 2000, through December 31, 2000. This resulted in the sales tax rate on motor fuel and gasohol being reduced from 6.25% to 1.25%. (The 1.25% represents the local government rate component).

Shortly after the tax suspension was enacted, the Joint Committee on Legislative Support Services directed the IEFC to report to the General Assembly on the impact of the 5% Sales Tax reduction in Motor Fuel. The following is a list of some of the issues that the Joint Committee asked to be addressed:

A) if the reduction in the State Sales Tax was passed through to motorists;
B) if the reduction was maintained throughout the period; and
C) if the Sales Tax reduction resulted in an increase in total gallons of motor fuel sold and whether or not there was an increase in ancillary sales (food, beverages, lottery tickets, etc.) at motor fuel establishments;

In response, the Commission released a report in November 2000, entitled, "Suspension of Motor Fuel Sales Tax," that addressed these issues. Much of the background information from that paper is included in this report. While definitive conclusions were not possible for many of these issues, the IEFC was able to provide significant insight to each of the requested subjects. The following are summaries of the Commission's findings. (For a more detailed discussion of these findings, please refer to the previously mentioned report.)

The first topic that the IEFC was asked to address was whether the sales tax reduction was passed through to motorists. While the findings were inconclusive as to whether the total savings in sales taxes were immediately passed on to motorists, data suggested that the suspension of the tax did contribute to the lowering of pump prices at the time the sales tax suspension took place. However, the degree to which the reduction was passed on to motorists could not be precisely measured. A mitigating factor that severely limited this analysis was the fact that wholesale prices were falling at the same time the sales tax suspension went into effect. It was not possible to precisely assign what amount of that price change was due to the tax suspension and what amount was due to lower wholesale prices.

The second question asked whether the sales tax reduction was maintained throughout the period. For many of the same limiting factors mentioned previously again severely limited the ability to reach definite findings. However, based on the available rack and margin data, it appeared that whatever impacts the suspension of the sales tax had on the price of fuel were maintained throughout the suspension period.

The question as to whether the sales tax reduction resulted in an increase in total gallons of motor fuel sold was not able to be accurately answered in the preliminary report because only a few months of gallonage data were available due to timing issues associated with gathering the data. Since that time, however, complete gallonage data for the tax suspension time period have been collected to allow the Commission to answer this question more precisely. The following table shows the gallonage breakdown for gasoline and diesel for calendar years, 1998, 1999, and 2000. More importantly, the gallonage totals for the tax suspension period (July 2000 – December 2000) are included in the table.

GALLONAGE BREAKDOWN FOR CALENDAR YEARS 1998-1999-2000

	GASOLINE			*DIESEL*		
	1998 Gallons	**1999 Gallons**	**2000 Gallons**	**1998 Gallons**	**1999 Gallons**	**2000 Gallons**
JAN	322,036,592	268,370,121	450,430,131	69,298,101	61,668,720	6,755,063
FEB	395,815,166	412,756,749	322,845,147	59,207,342	95,646,796	130,614,307
MAR	424,562,713	286,639,587	256,895,369	82,008,855	63,235,904	55,610,429
APR	383,486,887	405,695,463	588,683,169	80,987,170	103,688,551	124,454,767
MAY	412,523,348	554,415,574	482,690,789	84,520,617	105,378,607	84,108,675
JUN	419,152,202	454,227,376	423,861,567	84,850,080	124,023,734	84,077,246
JUL	432,882,801	384,491,082	420,683,783	80,922,753	39,715,115	88,338,282
AUG	412,126,829	589,252,350	384,145,942	78,302,094	147,849,899	87,223,868
SEP	409,091,434	443,264,894	488,006,738	86,175,883	125,713,081	104,874,635
OCT	427,760,692	428,200,650	397,410,541	92,629,709	96,910,450	87,414,804
NOV	370,196,583	407,847,477	443,309,665	79,917,665	93,584,220	89,710,587
DEC	451,306,044	438,060,533	432,975,249	84,566,599	57,216,775	85,675,798
ANNUAL TOTAL	4,860,941,291	5,073,221,856	5,091,938,090	963,386,868	1,114,631,852	1,028,858,461
% Change		4.37%	0.37%		15.70%	-7.70%
JUL - DEC Total	2,503,364,383	2,691,116,986	**2,566,531,918**	502,514,703	560,989,540	**543,237,974**
% Change		7.50%	**-4.63%**		11.64%	**-3.16%**

The question asked if there was an increase in total gallons of motor fuel sold, as a result of the sales tax reduction. The table indicates that the answer to this question is probably not. In fact, for gasoline, gallonage figures for July through December of 2000 were actually -4.63% below the gallonage figures of 1999 for the same time period. The same held true for diesel, as 2000 gallonage figures were -3.16% below the gallonage data of 1999 for the months of July through December. It should be noted that this does not mean that all locations throughout Illinois experienced a decline in motor fuel sales. Gas stations near state borders may very well have seen an increase in motor fuels sales. However, it appears that any increase in sales that these locations experienced were more than offset by the decline of motor fuel sales in Illinois as a whole.

As for the other questions that the Commission addressed in the report, the answers remain the same. Because of the way sales are reported to the Department of Revenue, it was impossible to know whether ancillary sales increased as a result of the sales tax

reduction on motor fuel. Lottery sales data continued to indicate that the impact that the suspension of the motor fuel sales tax had on lottery sales was minimal at best.

Now that the six-month suspension on motor fuel sales has completed, the actual cost of the suspension can now be formulated. Before the suspension began, most sources estimated the cost of the suspension to be in the range of $150 - $180 million. The IEFC at that time estimated the cost to be approximately $175 million. Through the assistance of the Department of Revenue, the following is the estimated cost of the suspension using actual gallonage figures from July through December of 2000, and the average gasoline and diesel prices for that time period as reported by the AAA Motor Club.

Estimated Cost of Sales Tax Suspension on Motor Fuel

July - December 2000

	Gasoline	*Gasohol**	*Diesel*
AAA Avg. Reg. Unl. Daily Price (in cents):	**$151.55**	**$151.55**	**$162.00**
Removing State Motor Fuel Tax:	19.00	19.00	21.50
Removing Other Motor Fuel Taxes:**	2.00	2.00	2.00
	130.55	130.55	138.50
Divided by Sales Tax:***	1.0240	1.0168	1.0240
Taxable Amount:	127.49	128.39	135.25
Eliminated 5% Sales Tax:	5.0%	5.0%	5.0%
Amount of tax per gallon lost (in cents):	**$6.37**		**$6.76**
Amount of tax per gallon lost @ 70% (in cents):		**$4.49**	
Gasoline Revenue Lost:	**$ 74,193,706**	**$ 63,030,302**	**$ 36,737,529**

Revenue Lost:	**$ 173,961,537**
Assuming 10% of all retail sales are to exempt organizations:	**$ 17,396,154**
Total Loss of Revenue:	**$ 156,565,383**

* Gasohol revenue lost is calculated by multiplying gasohol gallonage times the lost tax per gallon times 70%.

** Other Motor Fuel Taxes include environmental fees and the average local motor fuel tax for the State.

*** Sales tax includes the 1.25% Local Sales Tax as well as the average city sales tax for the State.

The following gallonage totals were used for the estimate:

FY 2001 Jul-Dec actual gallons:

Gasoline	Gasohol	Diesel
1,163,911,981	1,402,619,937	543,237,974

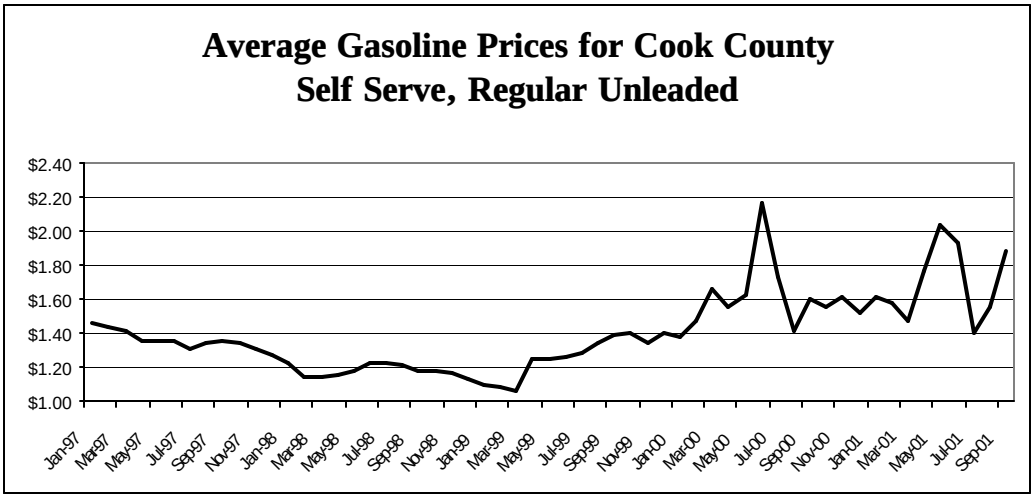
Sources: Gallonage figures, exempt percentage, and average tax rates came from the Department of Revenue. The average regular unleaded daily price came from the AAA Motor Club.

As the table shows, the suspension of sales tax on motor fuel cost the State approximately $74.2 million from gasoline sales, $63.0 million from gasohol sales, and approximately $36.7 million from diesel sales for a total of approximately $174.0 million. However, the Department of Revenue indicates that an estimated 10% of all retail sales are to exempt organizations. Therefore, the actual cost of the suspension of sales tax on motor fuel is approximately $156.6 million.

The Current Status of Motor Fuel Prices in Illinois and the Effects that War Could Have On These Prices

Although, on average, Illinois motor fuel prices in 2001 have not reached the high levels that were seen a year ago, the erratic fluctuations of current prices have continued to keep the public interested in the status of this volatile product. As mentioned earlier, the Federal Trade Commission expressed its concern that price spikes, like the ones we saw during the spring of 2000, may be repeated in the future. One such price spike formulized during the summer of 2001. As seen in the following graph, prices increased dramatically in May 2001 to $2.04 per gallon for unleaded gasoline in Cook County. Supply problems associated with distribution and pipeline disruptions were stated as the cause of this price increase.

CHART 1



Prices fell in June and July 2001 to amounts lower than 2000 prices. However, August and September 2001 figures have significantly surpassed prices from a year ago. The AAA-Chicago Motor Club states the factors that are putting upward pressure on the pump price of gasoline include "rising prices for crude oil, steady or slightly increasing demand for gasoline and a decrease in the supply of refined product. Refineries are reporting a glut of refined product in their inventories and are moving to reduce production and undertake seasonal maintenance activities in an effort to adjust inventories and support lagging wholesale gasoline prices."

AAA also adds that, "predicting gasoline prices in the near future is extremely difficult. A slow down in the nation's economy could lessen the demand for gasoline and hold prices in check. On the other hand, an expected military build-up and instances of panic buying could reduce inventories and force prices higher."

The possibility of war in the near future already has affected the motor fuel industry. As discussed earlier, wars often cause dramatic increases in the price of motor fuel.

This is because a high demand for fuel relative to its availability causes prices to increase. However, the threat of war can often prematurely raise rates, even though supplies are yet to be affected. The unfortunate example of this was realized after the terrorist attacks in New York City and in Washington D.C. In the hours following the attacks, gasoline stations throughout the nation began raising their prices. In some areas, the prices increased to as much as $5 per gallon. State Attorney General Jim Ryan stated in a news conference in Chicago that, "gasoline prices may have legitimately increased after the terrorist actions because of rising wholesale costs, but by only 20 to 30 cents per gallon. Doubling gasoline prices at the pump isn't acceptable."

As a result of this alleged price gouging, on September 12, 2001, the attorney general filed a lawsuit against the Illinois stations that dramatically raised their prices in the hours after the terrorist attacks. Specifically, Casey's General Store Inc. was the focus of the lawsuit where in some locations the store raised their gasoline prices from $1.68 a gallon before the terrorist attacks to $4 to $5 later that afternoon. Since that time, Casey's General Store Inc. has apologized to Illinois motorists for these prices and has offered refunds on gasoline sales at 20 central and southern Illinois convenience stores. They have also agreed to a settlement in which the company will pay $30,000 to the State, $25,000 of which will be given to the American Red Cross.

In addition, on September 14, 2001, Governor Ryan ordered the first wave of state inspections of 13 other gasoline station owners throughout Illinois to investigate reports of high gasoline pump prices. Inspectors from the Department of Agriculture were dispatched to gas stations throughout the State to visit more than 30 communities including Springfield, Rockford, Peoria, Decatur, Bloomington, Belleville, Alton, Monmouth, Rock Island, and Moline. The governor indicated in a September 17, 2001 press release that inspectors would also be dispatched to communities in Eastern and Southern Illinois including Danville, Charleston, Marion, and Mt. Vernon. These inspections all stem from an inordinate number of complaints regarding high pump prices in certain areas of the State following the terrorist attacks.

Although prices may very well increase to record highs in the next several months if the U.S. response to the attacks result in a full-scale military action, it appears that the large increases that already have taken place were not justified. Jim Ryan stated, "It is unconscionable that anyone would try to use one of the darkest days in American history to take advantage of consumers." Governor Ryan added in a press release, "I will not tolerate any situation where the people of Illinois are being taken advantage of in a time of national emergency."

Taxes Included in the Price of Motor Fuel:

As mentioned earlier, there are various taxes that are included in the retail price of motor fuel. The following is a description of these taxes, including a detailed look at the State's Motor Fuel Tax.

Federal Motor Fuel Tax:

Rate: 18.4 cents per gallon (gasoline).

State Motor Fuel Tax

The State's Motor Fuel Tax is imposed on motor fuel for motor vehicles on public highways or waterways in Illinois. Motor fuel distributors and suppliers include the tax in their pump price. The following are exempt from the motor fuel tax:

- Motor fuel used for aviation purposes
- Sales to the federal government and foreign governments
- Sales to municipal corporations owning and operating local transportation systems for public service within Illinois
- Sales to privately owned public utilities owning and operating two-axle vehicles designed and used for transporting more than seven passengers

The current rate and base of the motor fuel tax is:

Gasoline:	*19 cents per gallon, plus (a) and (b).*
Diesel (Special Fuel):	*21.5 cents per gallon, plus (a) and (b).*

Gasoline, special fuel, aviation fuel (unless sold at Midway or O'Hare Airports), kerosene, and home heating oil:

(a) 0.3 cents per gallon tax for Underground Storage Tank Fund (USTF) (until 2013)
(b) 0.8 cents per gallon environmental impact fee for USTF (until 2003)

Tax Rate History:

The following is a rate summary of the motor fuel tax since its implementation in 1927:

	Tax per gallon			Tax per gallon			Tax per gallon	
Year	Gasoline	Diesel	Year	Gasoline	Diesel	Year	Gasoline	Diesel
1927	2.0 cents	2.0	1967	6.0	6.0	1985	13.0	15.5
1929	3.0	3.0	1969	7.5	7.5	1989	16.0	18.5
1951	4.0	4.0	1983	11.0	13.5	1990	19.3	21.8
1953	5.0	5.0	1984	12.0	14.5	Current	20.1	22.6

Source: Illinois Tax Handbook for Legislators, 17th edition

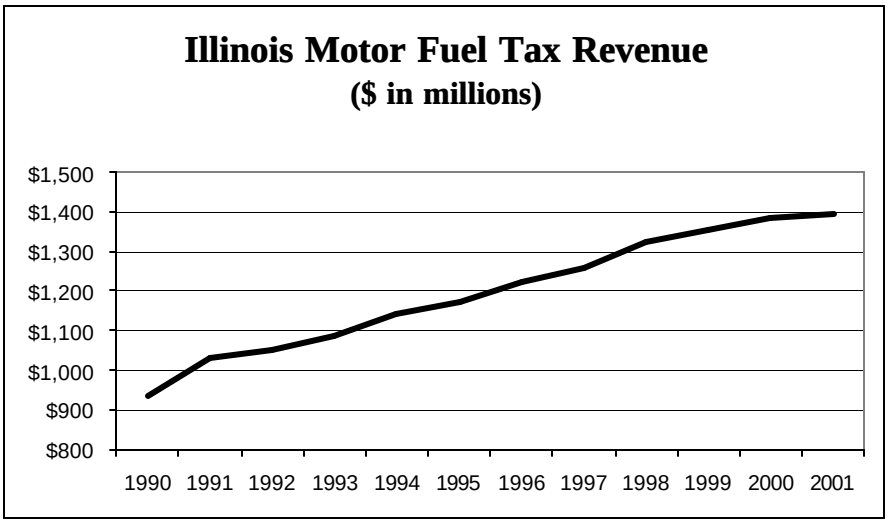
The temporary tax of 0.3 cents per gallon was added in 1990. This tax is used to pay for leaking underground storage tanks. The temporary tax of 0.8 cents per gallon was added in 1996. This tax is used as an environmental impact fee.

Revenue Collections History:

Fiscal Year	Revenue	% Change	Fiscal Year	Revenue	% Change
1990	$936.941	-	1996	$1,224.779	4.61%
1991	$1,031.144	10.05%	1997	$1,255.497	2.51%
1992	$1,049.928	1.82%	1998	$1,324.896	5.53%
1993	$1,088.285	3.65%	1999	$1,354.928	2.27%
1994	$1,140.447	4.79%	2000	$1,383.789	2.13%
1995	$1,170.773	2.66%	2001	$1,394.378	0.77%

Note: Revenue in millions.
Source: Economic and Fiscal Commission Itemized Detail Report

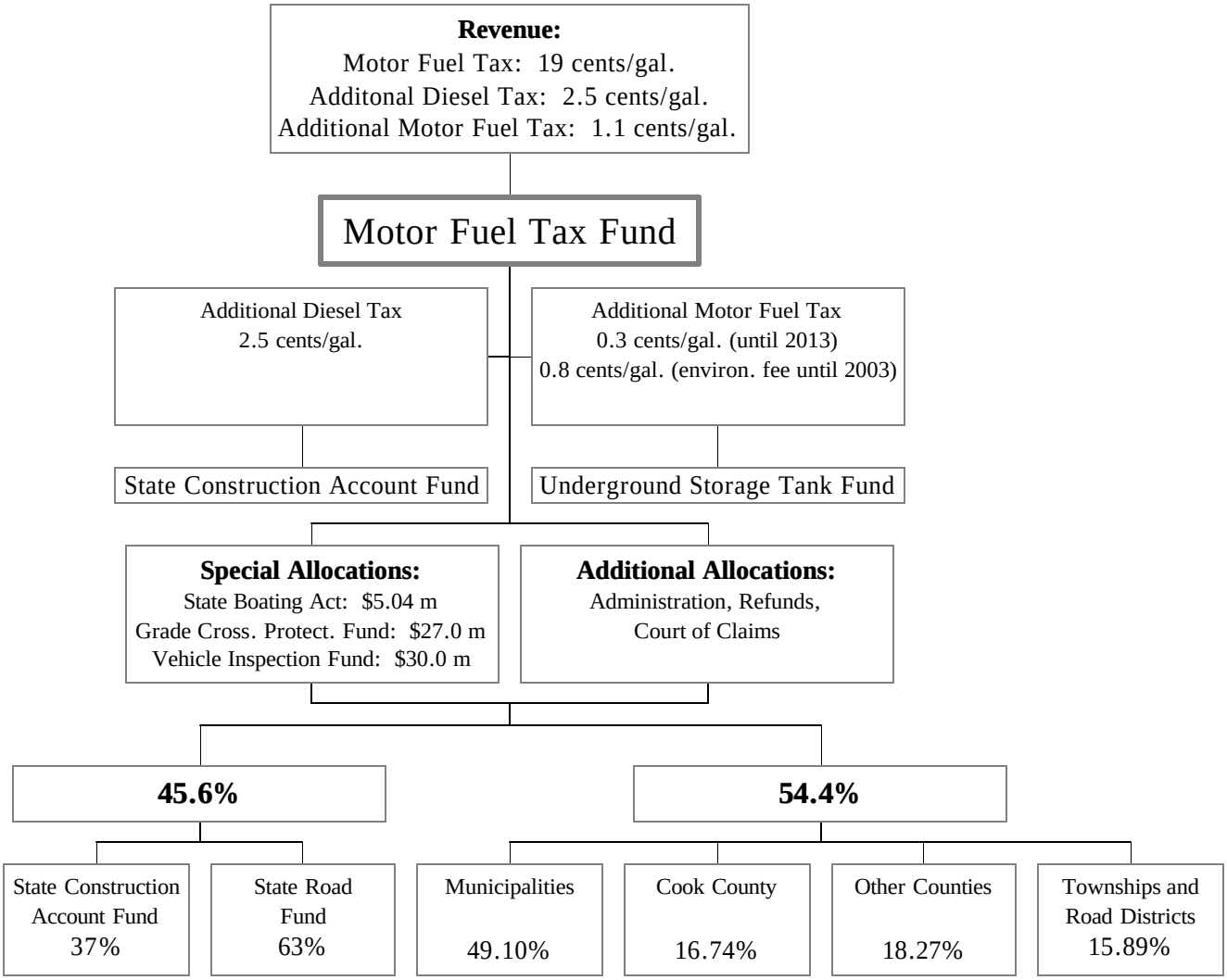
CHART 2



Motor Fuel Tax Distribution:

The distribution of revenue from the Motor Fuel Tax is spread out between several different areas. Sufficient amounts pay for administrative expenses, refunds, and Illinois Court of Claims judgments. It also distributes to several funds, which include: the Underground Storage Tank Fund, the State Construction Account Fund, the State Boating Act Fund, the Grade Crossing Protection Fund, the Vehicle Inspection Fund, and the State Road Fund. Sufficient amounts are also apportioned to municipalities, counties, townships, and road districts in the State of Illinois. A more detailed look at the distribution can be seen in the attached page.

MOTOR FUEL TAX DISTRIBUTION



In FY 2001, revenue from the motor fuel tax was distributed in the following manner:

FY 2001 Total Revenue:	**$1,394.4 million**	
Underground Storage Tank Fund:	$78.3 m	(Additional Motor Fuel Tax)
County Option Motor Fuel Tax:	$27.8 m	
Administration Expenditures:	$33.8 m	
Vehicle Inspection Fund:	$30.4 m	
Other Expenses:	$57.9 m	(Refunds, payments, & other transfers)
Apportioned Transfers:	$1,179.7 m	
State Boating Act Fund:	*$5.04 m*	
Grade Crossing Protection Fund:	*$27.0 m*	
Municipalities:	*$297.2 m*	*(49.10% of 54.4% of remaining funds)*
Counties:	*$211.9 m*	*(35.01% of 54.4% of remaining funds)*
Townships and Road Districts:	*$96.2 m*	*(15.89% of 54.4% of remaining funds)*
State Road Fund:	*$319.6 m*	*(63.00% of 45.6% of remaining funds)*
State Construction Account Fund:	*$187.7 m*	*(37.00% of 58.4% of remaining funds)*
State Construction Account Fund:	*$35.1 m*	*(Additional Diesel Tax)*

SOURCE: June 2001, Monthly Management Report, Illinois Department of Transportation

Other taxes that impact the price of motor fuel include:

Local Motor Fuel Tax:

Home-rule units can collect taxes on motor fuel by the gallon. Cook County collects 6 cents per gallon, and Chicago 5 cents. DuPage, Kane, and McHenry Counties can impose motor fuel taxes up to 4 cents per gallon without referendum approval. DuPage and McHenry Counties collect 4 cents, and Kane County collects 2 cents. Any city of over 100,000 can also impose a tax of 1 cent per gallon by referendum. Rockford imposes a tax under that provision. In addition, 18 home-rule cities impose taxes of various amounts.

Sales Tax:

A State sales tax of 6.25% is also imposed on motor fuel. Of that, the State keeps 5% of the purchase price and pays the remaining 1.25% to local governments. For gasohol, the retailers' occupation tax applies to only 70% of the sales price until July 2003, when the full price is to be taxed.

The State sales tax (5%) on regular motor fuels and gasohol was suspended from July through December 2000, but resumed on January 1, 2001. The estimated amount of

money that consumers saved by this suspension was between 7 and 10 cents per gallon, depending on the wholesale price of gasoline. This is because a higher price of motor fuel equates to a larger amount of sales tax imposed on that amount of motor fuel.

Besides Illinois, only eight other states also collect general sales taxes on motor fuel. These states are California, Florida, Georgia, Hawaii, Indiana, Michigan, New York, and West Virginia.

Local Sales Tax:

Some home-rule units in Illinois impose an additional sales tax as well. This additional tax ranges from 0.25% in Madison and St. Clair counties too as much as 2.5% in the City of Chicago.

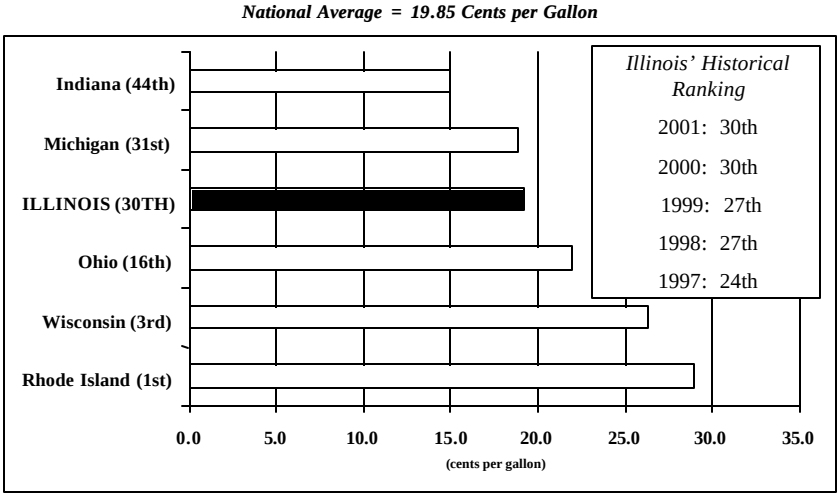
Federal Sales Tax:

None.

Motor Fuel Tax Comparison: Illinois versus the other States

So how does Illinois compare to other states when taxing motor fuel? According to *State Rankings 2001*, state tax rates on gasoline in 2001 ranged from 29 cents per gallon in Rhode Island to 7.5 cents per gallon in Georgia. (Again, Illinois is at 19.0 cents for gasoline). Illinois tax rate ranked them 30th in the nation in this category. The national average tax rate was 19.85 cents per gallon. A graph depicting this ranking and how Illinois compares with other Midwestern states is shown below.

Chart 3: State Tax Rates on Gasoline in 2001



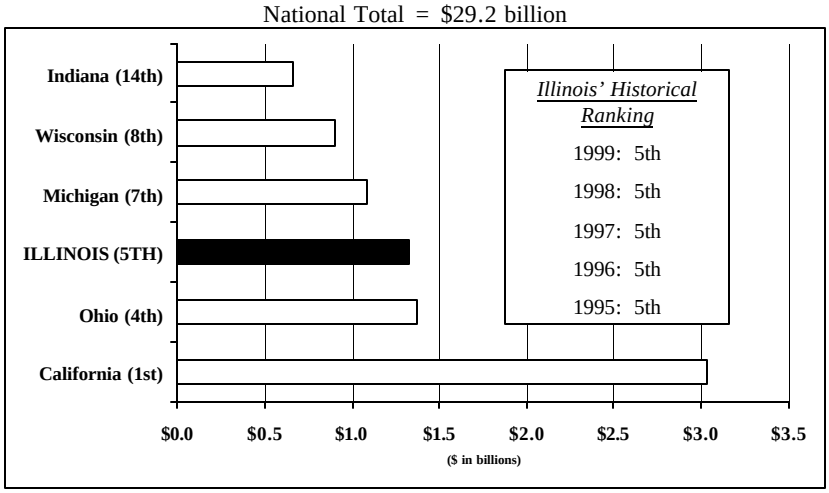
SOURCE: State Rankings: 2001

Several states periodically reset rates per gallon based on the retail or wholesale price of motor fuel, or other factors. These states are Florida, Kentucky, Massachusetts, Nebraska, North Carolina, Ohio, and Wisconsin.

Also according to *State Rankings 2001*, Illinois ranks fifth, behind California, Texas, Florida, and Ohio, in the amount of State revenue collected for the Motor Fuel Sales Tax with a 1999 amount of $1.3 billion. (California was first at $3.0 billion.) However, Illinois ranked 37th in the nation when the revenue from motor fuel was on a per capita basis with a rate of $110 per capita. First was the state of Montana with a per capita rate of $204. The per capita rate for the nation was $107. On the following page are graphs depicting these rankings.

Chart 4: State Government Motor Fuels Sales Tax Revenue in 1999

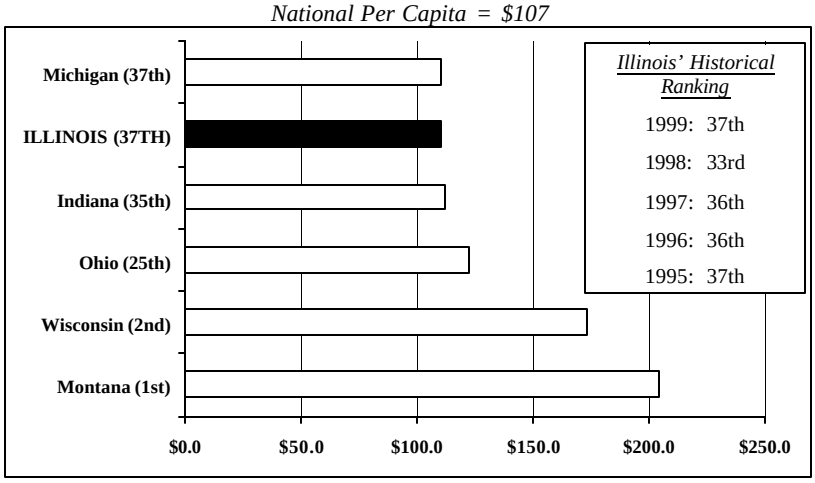
National Total = $29.2 billion



Source: State Rankings: 2001

Chart 5: Per Capita State Government Motor Fuel State Tax Revenue in 1999

National Per Capita = $107



Source: State Rankings: 2001

BACKGROUND

The Illinois Economic and Fiscal Commission, a bipartisan, joint legislative commission, provides the General Assembly with information relevant to the Illinois economy, taxes and other sources of revenue and debt obligations of the State. The Commission's specific responsibilities include:

1) Preparation of annual revenue estimates with periodic updates;

2) Analysis of the fiscal impact of revenue bills;

3) Preparation of "State Debt Impact Notes" on legislation which would appropriate bond funds or increase bond authorization;

4) Periodic assessment of capital facility plans; and

5) Annual estimates of the liabilities of the State's group health insurance program and approval of contract renewals promulgated by the Department of Central Management Services.

The Commission also has a mandate to report to the General Assembly ". . . on economic trends in relation to long-range planning and budgeting; and to study and make such recommendations as it deems appropriate on local and regional economic and fiscal policies and on federal fiscal policy as it may affect Illinois. . . ." This results in several reports on various economic issues throughout the year.

The Commission publishes two primary reports. The "Revenue Estimate and Economic Outlook" describes and projects economic conditions and their impact on State revenues. "The Illinois Bond Watcher" examines the State's debt position as well as other issues directly related to conditions in the financial markets. The Commission also periodically publishes special topic reports that have or could have an impact on the economic well being of Illinois.

These reports are available from:

Illinois Economic and Fiscal Commission
703 Stratton Office Building
Springfield, Illinois 62706
(217) 782-5320
(217) 782-3513 (FAX)

Reports can also be accessed from our Webpage:

http://www.legis.state.il.us/commission/ecfisc/ecfisc_home.html