PARKS PATON HOEPFL & BROWN

ENERGY INVESTMENT BANKING, LP

MUSINGS FROM THE OIL PATCH

July 8, 2008

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Managing Director

Note: *Musings from the Oil Patch reflects an eclectic collection of stories and analyses dealing with issues and developments within the energy industry that I feel have potentially significant implications for executives operating oilfield service companies. The newsletter currently anticipates a semi-monthly publishing schedule, but periodically the event and news flow may dictate a more frequent schedule. As always, I welcome your comments and observations.* Allen Brooks

Wind Power Is Bond Between Texas And Rhode Island

Both Texas and Rhode Island are blessed with substantial wind resources

We have found that the largest and smallest states within the continental United States have something in common – wind. Both Texas and Rhode Island are blessed with substantial wind resources, and both states are becoming "hot beds" of wind power development. The critical difference between the two states is that Texas has worked aggressively to exploit its wind resources while Rhode Island has been trying to figure out just how to go about developing wind farms.

The Rhode Island legislature passed a bill mandating increased use of renewable resources by the state's power supplier, National Grid

For Rhode Island, the issue is twofold – how to incentivize the wind farm developers and where to locate them. At the end of its recent session, the Rhode Island legislature passed a bill mandating increased use of renewable resources by the state's power supplier, National Grid (NGG-N). As part of the approved bill, the legislature included a monthly fee for consumer electric bills to subsidize the purchase of long-term renewable power supplies by National Grid. Rhode Island's governor recently vetoed the bill calling the subsidy for National Grid unwarranted. According to the bill's legislative sponsor and National Grid officials, the subsidy is designed to offset the company's cost to finance the borrowings required to pay for these long-term renewable fuel contracts. Whether the legislature has the power to override this veto is not clear, but the veto has generated a political battle over whether the governor really wants to encourage the development of more renewable power supplies or is merely grandstanding.

This spring, the American Wind Energy Association (AWEA) released its 2007 rankings for installed wind power generating capacity showing Texas as the top state for total installed capacity

followed by California, Minnesota, Iowa and Washington, in that order. Texas, with 4,446 Megawatts (MW) of installed power has close to double the installed amount in California. As one might expect, Texas added the greatest amount of new wind capacity in 2007 with 1,618 MW. Texas was followed by Colorado, Illinois, Oregon and Minnesota in the 2007 new power installation ranking.

34 states in the country have installed wind power generating capacity

The AWEA rankings showed that there are 34 states in the country that have installed wind power generating capacity. Of the six New England states, Connecticut and Vermont have no wind power installations. Of the remaining four states, Rhode Island ranks last with 1 MW of installed wind power capacity and is tied with New Hampshire, but they trail Massachusetts (5 MW) and Maine (42 MW). When we look at the wind power development activity in these states, we find some interesting developments, however.

There were seven proposals submitted for the Rhode Island project, however 64 firms had registered their names with the state in order to download the request for proposal form

May 30, 2008, at 2:30 pm was the deadline for companies to submit responses to Rhode Island's request for proposals to finance, construct and operate a wind farm large enough to supply 15% of the state's electricity usage. This project has been proposed by Governor Carcieri (R-RI) and is expected to be about the same size and scope of the proposed Cape Wind project in Nantucket Sound off the coast of Massachusetts. There were seven proposals submitted for the Rhode Island project, however 64 firms had registered their names with the state in order to download the request for proposal form. At the present time, Governor Carcieri is choosing a team of state officials to examine the proposals, so the details of each bid were not revealed after they were opened following passage of the deadline.

The governor's office has said the state will select the winning proposal based on the total cost to Rhode Island taxpayers, the qualifications and experience of the developer and the number of jobs and amount of tax revenue the project would create. The project will have to be financed with private funds, a change from the original plan that envisioned the state providing the necessary funding. However, the state will work to expedite the permitting process and assure a long-term contract for the energy produced by the facility, which is now in limbo following the governor's veto.

The "preferred site" for the wind farm is off the south and western shores of Block Island

The "preferred site" for the wind farm is off the south and western shores of Block Island, about ten miles off the Rhode Island coast, but other sites will be considered. The governor said he wants the proposals to include providing power to the 1,000 residents of Block Island who currently pay about $0.40 per kilowatt hour, or roughly four times the rate paid by mainland residents. Those rates are scheduled to increase as National Grid has just revised its rate hike quest submitted to the Public Utility Commission. The new proposal calls for a 21.7% increase in electric rates, up from the initial May request for a 15.7% increase. The higher revised rate, according to National Grid, reflects the sharp rise in oil and natural gas prices that fuel the state's power generating plants.

The sites would each contain 56 wind turbines and could generate 220 megawatts of electricity, enough power for 220,000 homes

Rhode Island has examined a total of ten offshore sites for wind farms and concluded that the Block Island site could produce electricity at the lowest cost compared to the other nine sites. Several of the sites are located in federal waters, which means they would need to go through the federal permitting process while the sites in state waters only need Rhode Island approval unless it is close to a neighboring state that would also need to approve it. The sites would each contain 56 wind turbines and could generate 220 megawatts of electricity, enough power for 220,000 homes. This would be one and half times the power needed to reach the state's 15% wind-power goal.

So nearly eight years after beginning the effort the Cape Wind project may finally be ready to begin construction in 2009

Just how fast Rhode Island moves forward with its wind farm projects remains a question mark based on the recent veto. But in neighboring Massachusetts, the Cape Wind project has received some good news from the courts. On June 20, Barnstable (MA) Superior Court Judge Robert Kane, in a 37-page ruling, sided with Cape Wind and the Commonwealth of Massachusetts and dismissed four of the five charges brought in a suit by the Town of Barnstable to stop the offshore wind farm project. He also ruled that the fifth claim was not valid because the issue it was targeting had not been ruled on yet in the permitting process. At this point, Cape Wind is awaiting the final Environmental Impact Statement from the Minerals Management Service (MMS) and the 30 day final appeal period, both of which should occur before the end of 2008. So nearly eight years after beginning the effort and after battling significant political and lobbying forces, the Cape Wind project may finally be ready to begin construction in 2009 with startup in 2010.

One last attempt to derail the Cape Wind project was initiated in March of this year when Blue H, a British company with offices in the Netherlands, opened an office in Boston to oversee its proposal to build a large deepwater offshore wind project in federal waters south of Rhode Island and Massachusetts. The project was presented somewhat as an alternative to the Cape Wind project. Cape Wind would have 130 turbines and a total capacity of 468 megawatts, while Blue H's project would employ 120 turbines to produce a maximum of 420 megawatts.

Blue H's project would be located about 32 miles southeast of Block Island and in extremely deep water

Blue H's project would be located about 32 miles southeast of Block Island and somewhat closer to Martha's Vineyard. It would be located in extremely deep water, something that has yet to be demonstrated as technically and economically feasible. To date, all the offshore wind farms in operation around the world are located in relatively shallow water with the turbines mounted on bases resting on the ocean floor. Blue H's technology contemplates building square platforms of very lightweight steel with hollow cores enabling them to float on the surface of the ocean. They would be anchored to the ocean bottom by means of four chains, one at each corner, connected to a very heavy weight lying on the ocean floor. To those familiar with offshore field developments, this design is essentially a tension-leg platform.

A two-bladed turbine converts the energy of the wind into power more efficiently and spins more quickly than three-bladed turbines

Blue H also plans to use a two blade turbine rather than the customary three blades. A two-bladed turbine converts the energy of the wind into power more efficiently and spins more quickly than three-bladed turbines. Faster rotation offers two benefits. The 30-to-35 revolutions-per-minute frequency, which is twice that of three-bladed turbines, is less susceptible to interference from the back-and-forth swing of the platform under wave action. In addition, the faster rotation means less torque, and allows for the entire structure to be built lighter. However, these two-bladed turbines make much more noise, a reason that the wind industry does not use them on land or in near-shore areas.

Blue H has a prototype of the floating platform in the water off the east coast of Italy. It plans to install an 80-kilowatt two-bladed turbine on the platform sometime this summer. This small turbine would supply power for the platform, but not for transmission to shore. The power would be used for instruments to measure the wave action of the structure. Sometime in 2009, Blue H plans to install a 2.5-megawatt and a 3.5-megawatt turbine in the same area. The staging of this test facility suggests that Blue H's technology is not yet fully developed, meaning it is not a real alternative to the Cape Wind project.

The one thing the Blue H proposal has is significant political support. Blue H was encouraged to come to the U.S. and propose its Block Island wind farm by Representative William Delahunt (D-MA) a vocal opponent of Cape Wind. Rep. Delahunt has been trying to help Blue H get approval for its project after missing the filing deadline with the MMS. The Blue H proposal has also been aggressively supported by Sen. Ted Kennedy (D-MA) another arch-opponent of Cape Wind. The head of the Blue H office in Boston cited support from three other U.S. representatives from Massachusetts. One of the three has spoken positively of the Cape Wind project while the other two have not declared their position saying that not enough is known about it. The Blue H official said that given the current global energy crisis, both Cape Wind and the Blue H projects should be built.

There are a series of reasons why offshore wind power is attractive: better wind resources; improved aesthetics; increased power transmission options; and avoiding turbine size constraints encountered onshore

The development of offshore wind resources is very attractive, even though it is likely to be more costly than onshore and coastal-water wind farms. There are a series of reasons why offshore wind power is attractive: better wind resources; improved aesthetics; increased power transmission options; and avoiding turbine size constraints encountered onshore. Offsetting these benefits are the technical challenges of operating turbines in rougher water conditions and the high cost of offshore construction.

According to research done by the Massachusetts Institute of Technology (MIT) and the U.S. Department of Energy (DOE), the further offshore the stronger and steadier are the winds. This means turbines could be designed to be more efficient at converting the wind's power. Offshore sites are closer to the U.S. population centers minimizing the need to build more transmission lines to connect the more remote onshore wind farms to population centers.

Offshore construction costs could be lowered by building facilities in ports and floating them out to the wind farm sites. This eliminates the problems of road limitations of the size of turbine blades that can be transported onshore. The technology challenges involve how best to anchor the floating structures to provide greater stability within the typical wave action and maximizing the power output while minimizing the risk of damage due to strong winds and high wave action.

The wind forces turbines are subject to are greater than the wind forces the derricks of offshore drilling rigs encounter, but the issue of wind force and structural strength are similar

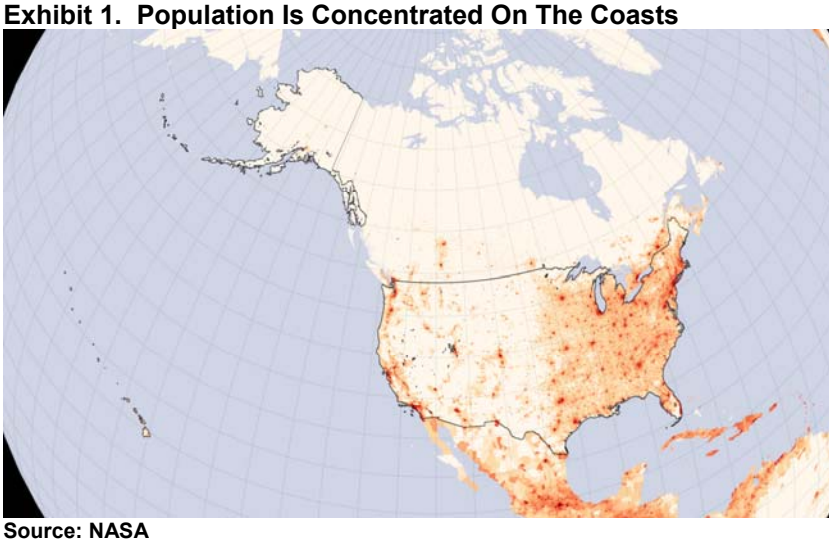
Another way offshore construction costs could be reduced would be to employ offshore oil industry technology to turbine structures. Offshore Wind Power Systems of Texas is working to transfer the jacking technology employed on offshore jackup drilling rigs to offshore turbine structures. The wind forces turbines are subject to are greater than the wind forces the derricks of offshore drilling rigs encounter, but the issue of wind force and structural strength are similar. Moreover, the ability of jacking up and down and moving turbines would allow wind farms to adjust their design after learning more about wind patterns. Theoretically, if prevailing wind patterns shifted seasonally, for example, the platforms could be jacked down and repositioned to maximize their efficiency. Conceivably, the units could be moved into port for repairs and maintenance, depending upon the distance and moving cost, rather than doing the work offshore. It strikes us that offshore oilfield technology could play a meaningful role in addressing the technical challenges of deepwater wind power facilities and their cost.

When one examines a map of the population concentration in the United States and the DOE's wind resource potential, it becomes clear how offshore wind could be exploited to supply low-cost power to major population centers

When one examines a map of the population concentration in the United States and the DOE's wind resource potential, it becomes clear how offshore wind could be exploited to supply low-cost power to major population centers. Many of the target wind farm sites are located so far offshore that the turbines, even if larger than onshore turbines, would either not be visible from shore or would appear as mere dots on the horizon eliminating the visual pollution argument. The 2006 MIT and DOE study on wind resources suggested that the combined resources of the Atlantic and Pacific coasts exceed the current electricity generation capacity of the entire U.S. power industry.

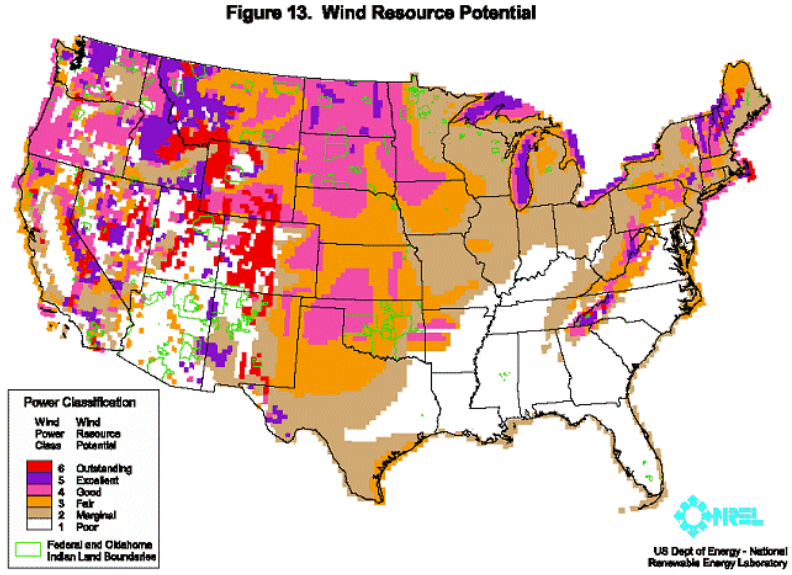
If one looks closely at the DOE wind resource potential map, one of the highest potential areas is the coast line of New England. This region is particularly vulnerable to rising oil and natural gas prices as the region is nearly totally devoid of domestic energy resources and it's dependent upon imported power – either the fuel to power electricity plants or imported electricity. In a series of recent speeches, former Maine Governor Angus King has outlined the impending energy and economic catastrophe the citizens of his state are facing. Gov. King pointed out that no state is more dependent on oil than Maine. "Eighty percent of homes in Maine are heated with oil. The national average is 9 percent. If you do the math, 87 percent of the total energy bill of the average Maine person is dependent on oil or natural gas, and that is a particularly serious problem," he said.

Exhibit 1. Population Is Concentrated On The Coasts



Source: NASA

Exhibit 2. Wind Power Has Significant Potential Offshore



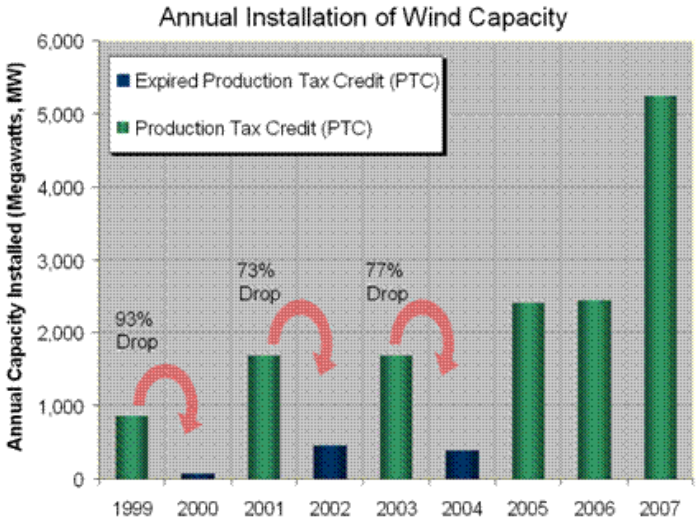
Source: U.S. Dept. of Energy

Gov. King told the 120 state, regional and national experts on alternative energy in the audience when he spoke that the time for talk is over and solutions need to be found and implemented

Gov. King went on to say, "In 1998, energy – all energy: cars, home heating and electricity – was 4 percent of the average Maine family's budget. Today, it's 20 percent. It went from 4 percent to 20 percent in 10 years. That's pain." He pointed out that forecasts call for crude oil to hit $300 a barrel by 2020, which means the percentage of a Maine family's budget going toward energy will approach 50%. As he put it, "Fifty percent of your budget for energy and 20 percent for health care leaves 30 percent for everything else: mortgage, rent, food. It's just absolutely unsustainable." Gov. King told the 120 state, regional and national experts on alternative energy in the audience when he spoke that the time for talk is over and solutions need to be found and implemented. Based on the wind potential

map, Maine looks like a candidate for an offshore wind farm that would certainly help its citizens' power bills in the future.

Exhibit 3. Subsidy Lapses Impact Pace of New Wind Capacity Installed



Source: American Wind Energy Association

Last year, because there was a falloff in the amount of power generating capacity employing other fuels, wind powered capacity accounted for 35% of the total new power capacity added in the country

One fly in the ointment for alternative energy resources, and especially wind, is the government subsidies. Those subsidies are always at the whim of Congress and as Exhibit 3 shows, every time the production credit for renewable energy sources such as wind expires, there is a sharp falloff in installed wind power capacity the following year. Stability of credits, whether economically justified or not at the moment, is imperative if the wind industry in the U.S. is to develop. Last year, because there was a falloff in the amount of power generating capacity employing other fuels, wind powered capacity accounted for 35% of the total new power capacity added in the country. Wind has been the fastest growing alternative renewable fuel supply (although whenever the productive credit extension debates begin, wind is never considered renewable) over the past decade. Wind power has a promising future and the oil industry's experience in offshore drilling and producing structures could play a meaningful role in the evolution of the wind industry's future. However, some politicians in the Northeast even think offshore drilling might be better than offshore wind farms.

Is Canada's "Dirty" Fuel Headed for Non-U.S. Use?

One of the great miracles of the global energy industry over the past 50 years has been the successful development of the Canadian oil sands resource as a major source of new oil supply. The existence of this resource has been known for decades, but making the mining, or in situ, extraction process economic has been a struggle.

The energy needed to extract the bitumen from the sand grains has always been the primary problem in making this oil profitable for its owners. That problem has been solved in recent years with the huge run-up in global oil prices.

While the economics of oil sands have improved, the challenges for the industry have continued to evolve due to growing concern about the environmental issues of extracting, refining and shipping the synthetic oil produced. This environmental challenge has become a lot worse in the past several weeks as the leading mayors of the United States have voted to ban the use of transportation fuels produced from the oil sands in their municipal vehicles, etc.

The leading mayors of the United States have voted to ban the use of transportation fuels produced from the oil sands in their municipal vehicles

At the 76th annual meeting of the U.S. Conference of Mayors held June 20-24 in Miami, Florida, the assembled mayors passed a resolution attacking the use of gasoline and diesel fuel produced from Canadian oil sands output due to the high greenhouse gases associated with its production. While the resolution lists various sources of high greenhouse-gas hydrocarbons – tar sands, oil shales and oil from coal – it singled out Canadian oil sands as the primary target of the group's outrage. Canadians were particularly caught by surprise and chastised by the rebuke. This resolution did not receive significant attention from the American media as the mayors' annual convention is generally not a major newsworthy event. The mayors' resolution is supportive of the federal legislation championed by Rep. Henry Waxman (D-CA), which bans the U.S. government from buying alternative fuels that generate more emissions than conventional oil. The Bush Administration has said that Canadian oil sands oil will not be impacted by this legislation.

An advisor to Sen. Obama said it is an "open question" whether oil from Canada's oil sands fits with the Democratic candidate's plan to shift the U.S. away from carbon-intensive fossil fuels

The significance of the mayors' resolution, however, is being magnified north of the border because of comments from presumptive Democratic presidential candidate Senator Barack Obama (D-IL) that he wants to break the United States' addiction to "dirty, dwindling and dangerously expensive" oil if elected president. An advisor to Sen. Obama said it is an "open question" whether oil from Canada's oil sands fits with the Democratic candidate's plan to shift the U.S. away from carbon-intensive fossil fuels. It could become a big problem for Canada given Sen. Obama's vow to renegotiate the North American Free Trade Agreement (NAFTA). Although, we know that when he was making that claim during the primary season, his advisors were at the same time telling Canadian consulate people in Chicago to ignore his comments as mere campaign rhetoric. Given Sen. Obama's recent reversal of some of his long-held, liberal positions in the past several weeks, one is hard pressed to know what he believes in and what he would do if elected president.

During Sen. Obama's White House campaign, he has proposed steps to reduce greenhouse-gas emissions by 180 million tons by 2020. He has also promised to invest $150 billion in developing alternative energy and cut U.S. dependence on foreign oil by 35% by 2020.

Last year, Canadian oil supplied 18% of U.S. needs

Last year, Canadian oil supplied 18% of U.S. needs. Some 50% of the oil refined in Illinois comes from Canada and the oil industry is planning to expand its Midwest refineries to accept greater amounts of Canadian oil sands output. But in recent weeks one request to expand and upgrade an Illinois refinery to accept greater oil sands volume has been challenged on environmental and emissions grounds.

California is the leading buyer of Alaskan heavy oil output and the site of the principle refinery for this oil

What is most interesting about this battle is that the environmentalists are not challenging the use of heavy oil from Venezuela. In fact, politicians and businessmen in Massachusetts and Rhode Island, including Rep. Patrick Kennedy (D-RI), and his cousin Robert Kennedy, Jr., the head of a retail oil company, have opened their arms and accepted subsidized low-cost heating oil from President Hugo Chavez of Venezuela for low-income citizens in Boston and Rhode Island during the past two winters. This bias against Canada's oil sands is further confounded by the fact that California is one of the leading states producing heavy oil with substantial carbon emissions output. In addition, California is the leading buyer of Alaskan heavy oil output and the site of the principle refinery for this oil. So what we have is a targeting of Canadian heavy oil from the oil sands while the critics ignore the heavy ("dirty") oil we produce and consume from other regions.

The impact of this environmental battle, coupled with the royalty changes in Alberta, the high cost of developing new production and the labor shortages, has led to lowered projections of future oil sands output. According to the latest projection from the Canadian Association of Petroleum Producers (CAPP), oil sands output is projected to increase from 1.2 million barrels per day (b/d) in 2007 to 3.5 million b/d in 2020 under their moderate growth case and to 4.1 million b/d under their aggressive growth scenario. These new forecasts are 200,000 b/d and 350,000 b/d lower, respectively, from CAPP's 2007 forecasts.

The greenhouse-gas emission concerns of the environmentalists only mean that oil sands production will be consumed in countries around the world who are less concerned about environmental restrictions

The one thing we do know is that regardless of the mayors' resolution and the attitude of other politicians, the oil sands output will be consumed. The recent investment in an oil sands project by Chinese interests raises the possibility that oil sands output will flow increasingly to the west coast for shipment to Asia rather than south to the U.S. Midwest and eventually the U.S. Gulf Coast where they could offset the declining Venezuelan oil. The greenhouse-gas emission concerns of the environmentalists only mean that oil sands production will be consumed in countries around the world who are less concerned about environmental restrictions - an interesting proposition.

Exhibit 4. The Anti-Oil Sands Resolution of the Mayors' Conference

Resolution No. 57

Submitted By:
The Honorable Kitty Piercy
Mayor of Eugene
The Honorable Gavin Newsom
Mayor of San Francisco
The Honorable Marty Blum
Mayor of Santa Barbara
The Honorable T. M. Franklin Cownie
Mayor of Des Moines

HIGH-CARBON FUELS

1. WHEREAS, The U.S. Conference of Mayors has previously adopted strong policy resolutions calling for cities, communities, and the federal government to take actions to reduce global warming pollution; and

2. WHEREAS, The U.S. Conference of Mayors has declared that climate change could have severe economic and environmental impacts on U.S. cities in the coming decades; and

3. WHEREAS, the production and burning of conventional fuel such as gasoline, and diesel by motor vehicles, contributes to air pollution, and increased carbon dioxide emissions that have been linked to global climate change; and

4. WHEREAS, the health of the planet, including its oceans, wildlands, rivers, air, and climate, faces increasing threats from our continued dependence on fossil fuels; and

5. WHEREAS, The U.S. Conference of Mayors has previously adopted strong resolutions to encourage clean, renewable energy sources and discourage our dependence on fossil fuels; and

6. WHEREAS, the production of fuels derived from unconventional sources, such as tar sands, liquid coal, and oil shale, emits even greater amounts of global warming pollution than conventional petroleum sources; and

7. WHEREAS, the production of tar sands oil from Canada

emits approximately three times the carbon dioxide pollution per barrel as does conventional oil production and significantly damages Canada's Boreal forest ecosystem--the world's largest carbon storehouse; and

8. WHEREAS, the continued production and purchase of these higher-carbon unconventional or synthetic fuels slows the United States' transition to clean, renewable energy sources,

9. NOW, THEREFORE, BE IT RESOLVED, that the U.S. Conference of Mayors supports federal legislation that prohibits government use of unconventional or synthetic fuels, such as tar sands, liquid coal, and oil shale, with lifecycle greenhouse gas emissions greater than fuel produced from conventional oil sources; and

10. BE IT FURTHER RESOLVED, that the U.S. Conference of Mayors encourages the use of life cycle analyses that evaluate the greenhouse gas emissions from the production-including extraction, refining, and transportation-of fuels, including unconventional and synthetic fuels; and

11. BE IT FURTHER RESOLVED, that the U.S. Conference of Mayors supports the creation of clear Federal and State guidelines for tracking the origin of various types of fuel in order to facilitate life cycle analysis; and

12. BE IT FURTHER RESOLVED, that the U.S. Conference of Mayors encourages mayors to track and reduce the lifecycle carbon dioxide emissions from their municipal vehicles by preventing or discontinuing the purchase of higher-carbon unconventional or synthetic fuels for these vehicles.

Project Cost: Unknown
Source: The United States Mayors Conference web site

Is A Dismal Energy Outlook Baked Into Our Future?

"Energy is not just 'another issue.'"

As financial columnist Byron King recently wrote in discussing the energy challenges facing this country and its next president, "Energy is not just 'another issue.' It's not as if a politician could 'do energy' and then move onto other important items on the agenda – like appointing your friends federal judges and handing your political donors prestigious ambassadorships." He went on to say, "Energy will be the defining issue of the next president's term of office. This

is already baked into the cake. Nothing will change it, short of a major war. And even fighting a major war will be controlled by the energy issue…"

Energy prices have doubled over the past year and the hunt for scapegoats is well underway

Energy prices have doubled over the past year and the hunt for scapegoats is well underway. If we can't blame the price hike on the oil companies or the gasoline and heating oil distributors then how about we blame it on the speculators? So just what is speculation and what role do these people play in the oil pricing marketplace? To listen to Congressional comments and the testimony of witnesses called before the various Congressional committees, the speculators have seized control of oil pricing and are driving it upward. While this is happening, the oil companies are supposedly standing on the sidelines secretly cheering them on.

Michael Masters of Masters Capital Management fund who argues that better regulation of the commodities market would drive speculators out of the game and cut global oil prices to $65 to $75 per barrel in a matter of 30 days

Just as we have written before, Congress would like to repeal the laws of supply and demand when it comes to energy. The solutions offered by the proposed bills being discussed by Congress make one wonder where these "bright" people get their ideas. There have been a series of hearings into the role that speculators play in boosting oil prices. One of the main players in these sessions has been Michael Masters of Masters Capital Management fund who argues that better regulation of the commodities market would drive speculators out of the game and cut global oil prices to $65 to $75 per barrel in a matter of 30 days. He was supported in that view by other oil analysts and energy finance specialists, although they did acknowledge that underlying supply and demand trends were largely responsible for rising oil prices. In their view, the actions of oil speculators make the market more volatile.

It is interesting, according to sources we have tapped, that the top holdings in the Masters Capital Management fund at the time Mr. Masters testified on Capitol Hill were airline stocks. Can one think of a sector that has been more devastated by the rise in global oil prices? If legislation were enacted that accomplished what Mr. Masters suggested would be the outcome, it is hard not to expect that airline stocks would stage a huge rally making the Masters Capital Management fund substantial profits. We wonder whether Mr. Masters volunteered this information before stating his views.

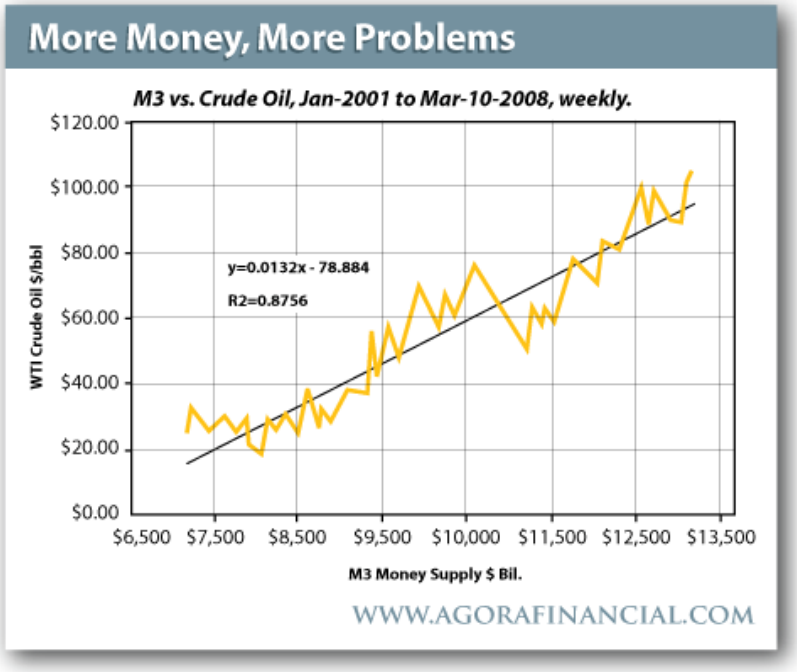
What is interesting is that speculators play a role in helping to develop market pricing information

The investigations and hearings focused on the role of speculators – who are being identified as anyone who does not take physical delivery of oil. That includes pension funds, and investment banks and other financial players. What is interesting is that speculators play a role in helping to develop market pricing information. As Hilary Till of Premia Capital Management put it, "As an experienced futures trader, I have learned that price is a messenger of current and future supply and demand conditions. When there is a strong rally in price, one has a signal that there is an impending scarcity and that price is searching for the level to bring on new supply or, unfortunately, ration demand. Right now this is not a popular message."

Dingell's legislation would have the impact of altering accepted investment theory dealing with diversification of assets to maximize return potential and to reduce risk

In response to the growth in non-industry participation in the futures market, congressional focus has been to develop legislation that will severely restrict the participation of these investors or outright ban their participation. Congressman John Dingell (D-MI) introduced a bill that would boost the margin requirements for financial speculators to 50% of the value of their contracts, prevent pension funds from investing in commodities and prohibit investment banks from owning any energy assets. This is more than an issue of poor legislation; it's similar to using a sledgehammer to swat a fly. Mr. Dingell's legislation would have the impact of altering accepted investment theory dealing with diversification of assets to maximize return potential and to reduce risk. It has been the publication of numerous investment studies on asset diversification several years ago that began this wave of pension money moving into commodities investments including petroleum. For many professional money managers, the use of investments in commodities used and traded worldwide has allowed them to protect their portfolios from erosion by the debasement of the American dollar by the excessive printing of money by the Federal Reserve.

Exhibit 5. Money Supply Growth Has Mirrored Oil Price Rise



Source: Agorafinancial.com

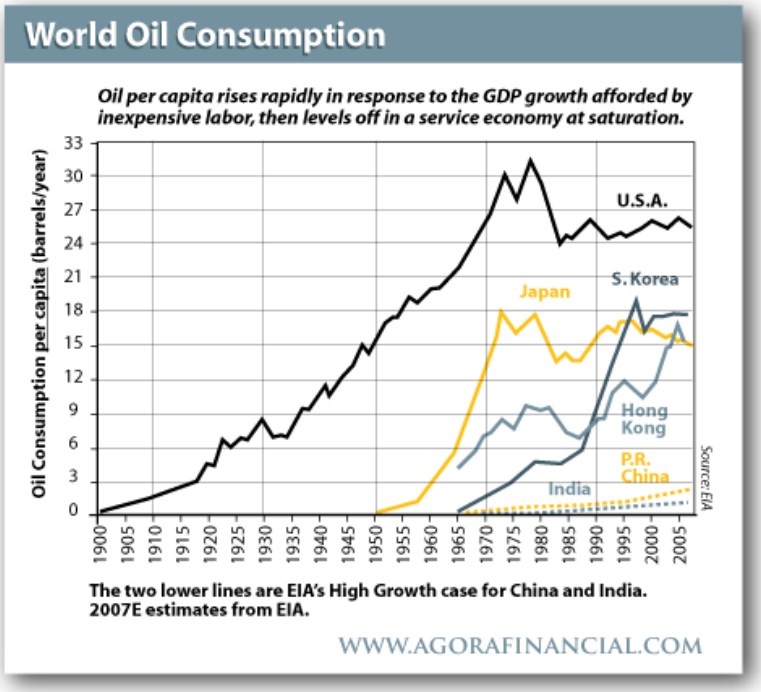
The chart in Exhibit 5 is the evidence that many investors point to as proof that the rapid increase in liquidity in U.S. financial markets, which has led to a significant decline in the value of the U.S. dollar versus other currencies such as the Euro, the Japanese yen, the Canadian dollar and the Australian dollar, is largely responsible for

the rise in global crude oil prices. The use of commodities such as oil and rice and various minerals as repositories for pension assets has enabled the pension funds to protect their value and even make money that has offset declines in other financial assets such as stocks, bonds and real estate.

The IEA believes that the fact that global oil demand continues to grow at a healthy rate and supply increases have failed to keep up is the primary reason for the worldwide oil price rise

The recent Medium-Term Oil Market Report issued by the International Energy Agency (IEA) in early July pointed out that there has been a significant growth in investor money buying into oil and other commodities as an inflation hedge and to balance asset portfolios in recent years. They suggest that investors have boosted their commitments from $15 billion in 2003 to $260 billion now, but the IEA does not see this money having a material impact on oil pricing, even though there has been some past experiences where investors' speculative money flows did contribute to oil price increases. The IEA believes that the fact that global oil demand continues to grow at a healthy rate and supply increases have failed to keep up is the primary reason for the worldwide oil price rise. The chart in Exhibit 6 reflects this underlying belief as recent rapid growth in oil demand from developing economies – China and India in particular – and the prospect that this growth will continue and likely accelerate in the future putting greater pressure on world oil supply sources.

Exhibit 6. Developing Economies Pressure Global Oil Supplies



Source: Agorafinancial.com

Another analysis we read relied on a government study prepared in 2006 that showed a significant portion of the world oil price could be

attributed to the actions of speculators in the commodities pits. The June 2006 staff report of the United States Senate Permanent Subcommittee on Investigations of the Committee on Homeland Security and Government Affairs entitled, "The Role of Market Speculation in Rising Oil and Gas Prices: A Need to Put the Cop Back on the Beat," suggested that $25 of the then $60 a barrel oil price could be accounted for by speculative factors at work in the futures market. They cited work by an oil analyst that world oil inventory levels suggested that the market clearing price should have been closer to $25 a barrel rather than $60. By this same logic, the analysis concluded that today, speculators are accounting for $50 to $60 a barrel of the current $145 price.

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One of the points of the 2006 analysis was that with speculators bidding up oil price futures, they were encouraging refiners to buy more oil even at the then current high price because the price of oil will likely go higher in the future. This view was supported by their analysis of the growth in world petroleum inventories during the two year period immediately prior to June 2006 that put inventories at the highest level they had been in the previous eight years, i.e., refiners were buying more expensive oil. We decided to see what the data that supported that analysis showed. In Exhibit 7, we plotted the monthly total crude oil and petroleum products stocks, excluding the oil in the Strategic Petroleum Reserve. We started with January 1986, a year that coincided with the collapse in world oil prices as the members of OPEC battled over market share and were overwhelmed by the power of Saudi Arabia.

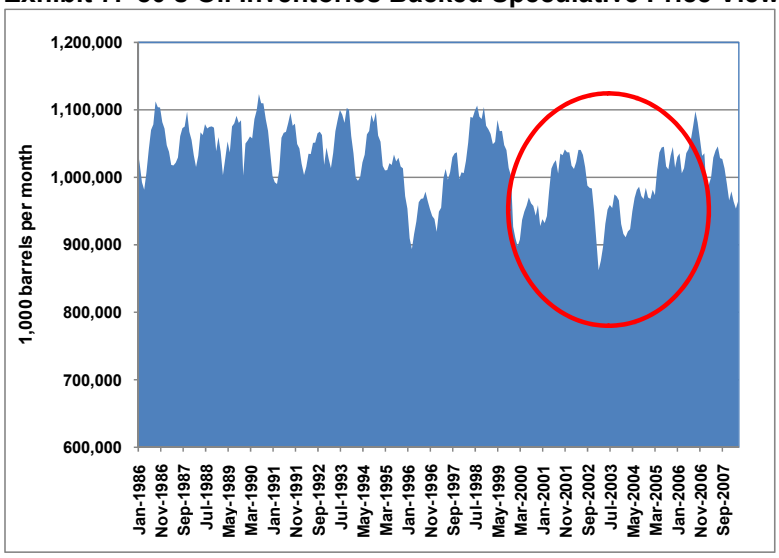
Speculators bidding up oil price futures, are encouraging refiners to buy more oil even at the then current high price because the price of oil will likely go higher in the future

As demonstrated by the chart, the analysis of oil inventories and oil prices and the role speculators played in those oil prices included an extended period when oil inventories were climbing. That period is within the red circle. However, as oil prices have more than doubled since that time, inventories have actually declined. That would suggest that oil consumers are either not confident that oil prices will continue to rise, or actually believe they might decline in the future. Those beliefs would support consumers not adding to their inventories and actually working to reduce them. It is possible, however, that fundamental supply and demand factors – greater demand than supply – is working to reduce inventories as this is the balancing agent in markets that are out of balance between underlying supply and demand. Adding to and drawing down inventories is the standard method suppliers use to meet seasonal demand imbalances. As a result of the declining inventory trend since the report was issued (June 2006), one has to wonder whether its analysis has any relevance today?

Declining inventories would suggest that oil consumers are either not confident that oil prices will continue to rise, or actually believe they might decline in the future

As it becomes more and more apparent that Congress has no practical solution to high petroleum prices, consumers are reacting by conserving. But possibly more significant are the recent public opinion polls showing consumers becoming increasingly supportive of opening up the United States' outer continental shelf for drilling and less supportive of environmental restrictions that are believed to be further contributing to high and rising petroleum prices. A recent

Exhibit 7. 80's Oil Inventories Backed Speculative Price View



Source: EIA; PPHB

A Rasmussen poll shows support for offshore drilling by a 70-19 margin

A Rasmussen poll shows support for offshore drilling by a 70-19 margin. How these cross-currents of sentiment toward increased energy supply development and reduced fuel consumption patterns work out remains to be seen. We are confident that many of our assumptions about energy consumption in the future will prove wrong – it's just that we can't tell which ones will be wrong and in which way. This makes it difficult to hang one's hat on any forecast of the future, which means the challenge for energy company managements and energy investors becomes that much more difficult.

Westerly's First Peak Oil Task Force Meeting a Success

On June 25, the first meeting of the Westerly Peak Oil Task Force was attended by around 30 people. The panel, created by the Westerly Town Council, entitled its first meeting, "The Crisis in High Energy Prices: A Community Conversation." According to the press report about the meeting, the leaders of the panel presented some interesting data about energy costs and solicited ideas for local action to mitigate their impact.

According to the panel leaders, in 2004, in Rhode Island, a gallon of gasoline sold for $1.85 at retail and was comprised of 47% crude oil. By February 2008, the price had risen to $3.03 a gallon with crude oil accounting for 69%. In May, the price was $3.77 a gallon, containing 75% crude oil. They also pointed out that 20% of the United States' fossil fuel consumption goes into the food chain.

Based on the above facts, the panelists said Westerly needs to begin thinking locally about food and other matters. As one attendee put it, "It seems pretty clear if we wait for Washington,

Since the task force is charged with identifying the town's vulnerabilities when it comes to peak oil, or energy scarcity, its first meeting was designed to highlight the issues that might be confronting citizens

we're all going to freeze and starve." The ideas offered up by the attendees and panelists included a community garden, local transportation system, "green" building codes, bike paths, an electric trolley and a co-op with local oil delivery companies. Since the task force is charged with identifying the town's vulnerabilities when it comes to peak oil, or energy scarcity, its first meeting was designed to highlight the issues that might be confronting citizens, including the impact on low-income residents and employees in local manufacturing businesses that might be the victims of business curtailments. To get people focused on these issues, it aired 15 minutes of the documentary called "The End of Suburbia" that focused on America's dependence on oil.

It is interesting that a recent poll of 500 registered voters in Rhode Island, conducted by Opinion Factor Inc. showed that the economy was cited by 33% of respondents as their number one concern. Gasoline prices were tied with taxes for fourth on the list of concerns with a 6% response. Interestingly the environment received only 1% of the votes and was tied with roads and unions in ninth place. All in all, it looks like the Peak Oil panel has made a good start in raising the awareness of the issue of how oil scarcity might impact the Town of Westerly and its citizens and certainly their lifestyles. Based on the statewide poll of voter concerns, Westerly citizens are well ahead of their neighbors.

Texans' Transportation Views Are Out of Step With Country

In our last issue of Musings we wrote about the changes being forced on airline passengers due to rising jet fuel prices and the shifting attitudes of American drivers to high gasoline prices. These results are displayed in Exhibit 8. We were intrigued to see a new poll conducted by the Texas Lyceum on the state's transportation policy and its infrastructure. The poll was taken of 1,000 adults, split evenly between males and females, and was conducted by phone over the June 12-20 period. This is the second annual poll conducted by the organization and the results will be used in its upcoming annual conference scheduled for October.

The response of Texans to the question of what are you doing or thinking of doing to deal with high gasoline prices seems at odds with the national survey

If we compare the response of Texans to the question of what are you doing or thinking of doing to deal with high gasoline prices, we find a noticeable difference with the results of the April survey of 43,000 drivers about what they had done as we reported on last issue. That survey, published by *The New York Times*, showed that Americans were reacting to high prices, and probably being squeezed by financial conditions, by canceling vacations and carpooling – 12% of respondents each. In the Texas poll, 63% said they had or were thinking of carpooling and 51% had, or were considering, cancelling their vacation.

Exhibit 8. How Drivers Deal With High Gas Prices

Driven to Change

"Considering the price of gasoline over the past year, which of the following have you actually done?"

Canceled vacation	12%
Carpooled	12
Used public transportation	8
Vacationed closer to home	8
Bought a more fuel-efficient vehicle	6
Telecommuted	6
Worked closer to home	5
Worked less	4
Sold a less fuel-efficient vehicle	3
Moved closer to work	2

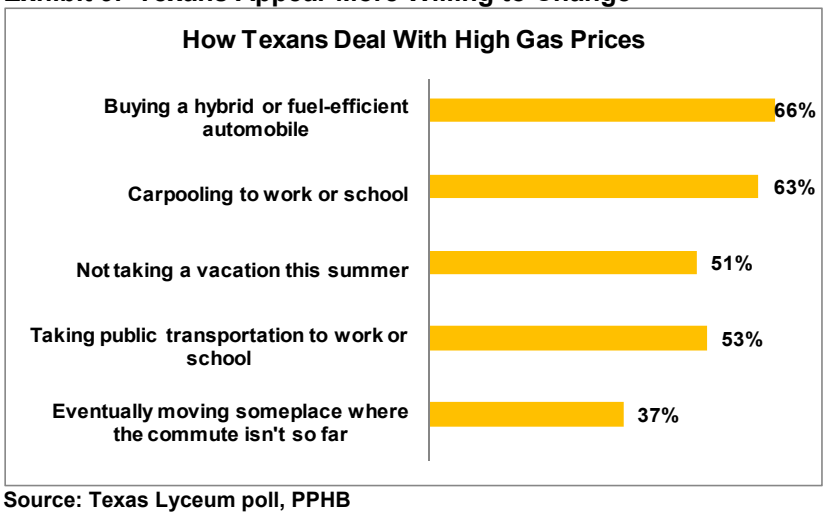
Survey of 43,000 drivers in April.

Source: NPD Group

THE NEW YORK TIMES

Source: NPD Group, *The New York Times*

Exhibit 9. Texans Appear More Willing to Change



Source: Texas Lyceum poll, PPHB

The health of the Texas economy may be providing people the opportunity to consider more significant actions to confront high gasoline prices

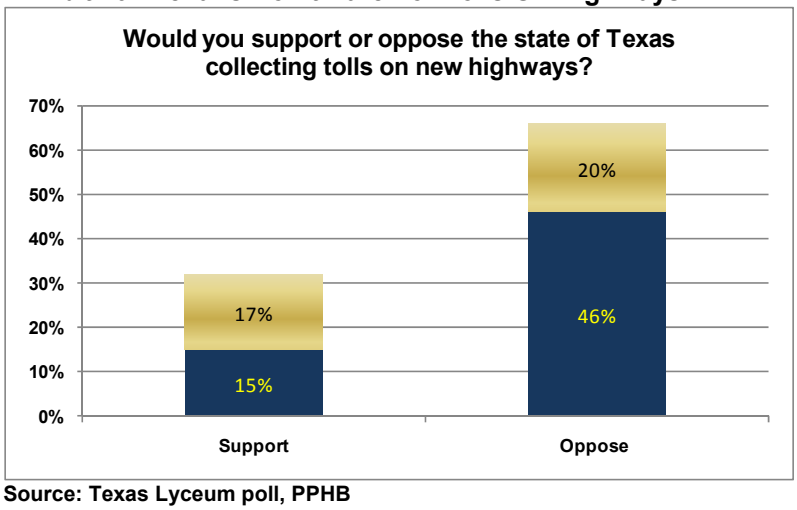
We were struck by the fact that more than a third of Texas respondents were planning to eventually move to someplace where the commute to work isn't as far as they do now. Of course as the saying goes, 'talking the talk and walking the walk' may be very different things. But the high response of Texans to this question suggests that the health of the state's economy is providing people the opportunity to seriously consider moving closer to work to reduce their commuting cost. The economy's health may also explain some of the other high responses such as 66% of people who are

thinking about buying a hybrid or more fuel-efficient automobile.

Texans are not supportive of the use of tolls on either new or existing highways or for the state to boost gasoline taxes to pay for transportation projects

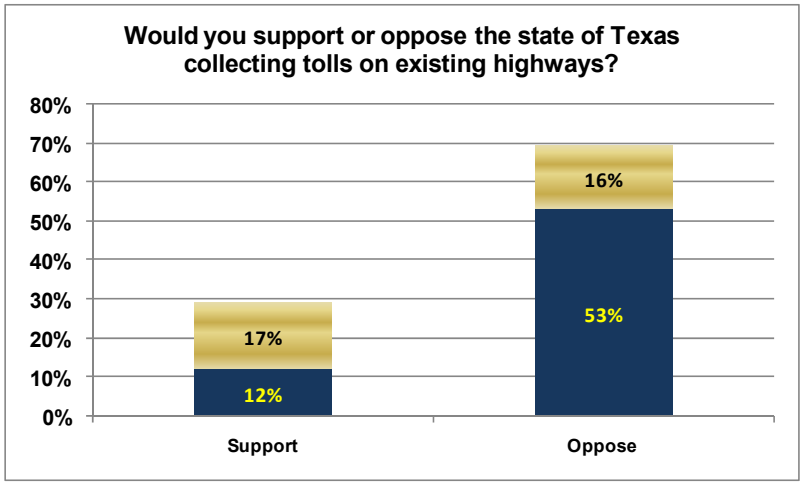
Another aspect of the Texas Lyceum survey we found interesting was locals' attitudes toward the use of tolls and increased gasoline taxes to finance new road construction and maintenance of existing roads. In general, Texans are not supportive of the use of tolls on either new or existing highways or for the state to boost gasoline taxes to pay for transportation projects. The survey results for these questions are contained in the next few exhibits. (In all the following exhibits, the solid color represents 'strong' views while the gradient color represents 'somewhat' views.)

Exhibit 10. Texans Don't Care For Tolls On Highways



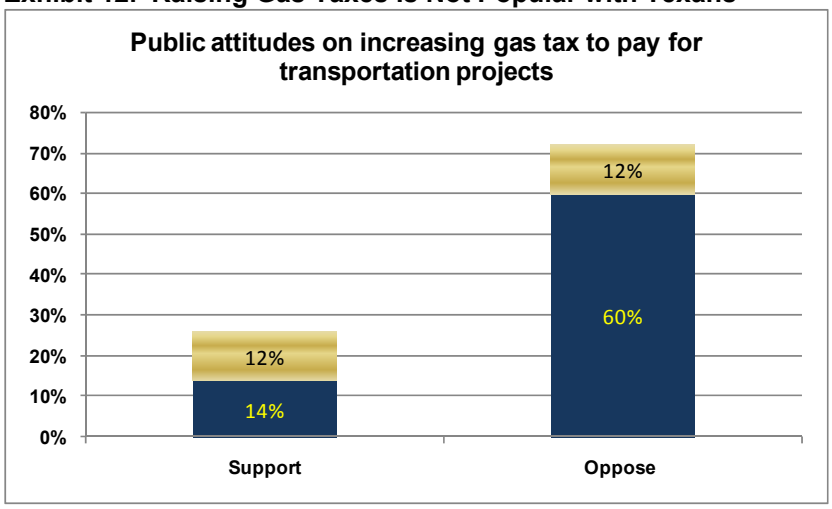
Source: Texas Lyceum poll, PPHB

Exhibit 11. There Is Less Support For Tolls on Currently Free Roads



Source: Texas Lyceum poll, PPHB

Exhibit 12. Raising Gas Taxes Is Not Popular with Texans

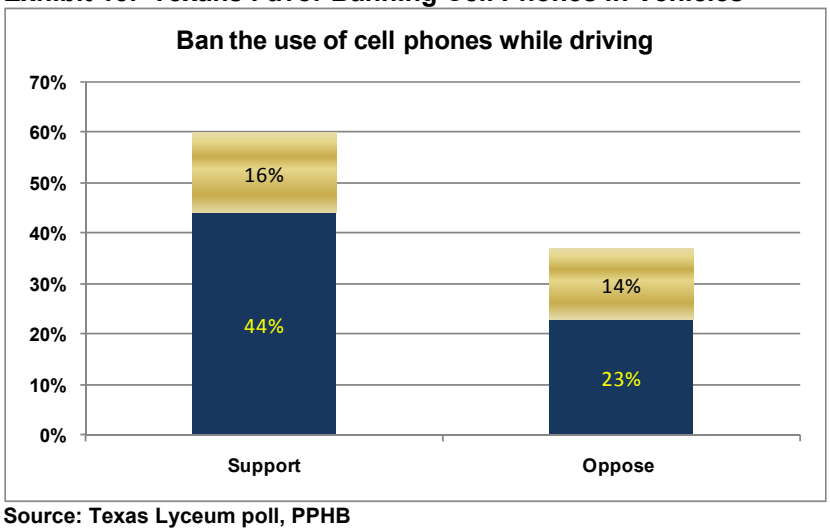


Source: Texas Lyceum poll, PPHB

Overwhelmingly people would support a total ban on cell phone use

One survey question that did surprise us was the attitude of Texans toward the use of cell phones while driving. Overwhelmingly people would support a total ban on their use, which was a little bit of a surprise. On the other hand, we know that many of the oil and oilfield service companies ban outright the use of cell phones by their employees when driving. These bans are the direct result of studies conducted by the companies and their insurance underwriters that show that cell phone usage is a direct contributor to vehicle accidents.

Exhibit 13. Texans Favor Banning Cell Phones In Vehicles



Source: Texas Lyceum poll, PPHB

The bottom line of the Texas Lyceum poll results is that Texans are not keen on paying for highways outside of the traditional approach of gasoline taxes (the highway trust fund). This attitude is consistent with the attitude of most Americans toward the use of taxes and user fees to fund construction and repair of infrastructure. We suspect

this attitude would hold if Texas decided to use pricing as a way to reduce traffic congestion, much like the rebellion in New York City when that city's mayor proposed raising tolls and vehicle fees for entering and keeping a vehicle in Manhattan. Do you think congestion pricing as a conservation technique could ever become a factor in the American energy economy?

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