

Going Nowhere:

The Price Consumers Pay for Stalled Fuel Economy Policies

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Environment Colorado Research & Policy Center

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EXECUTIVE SUMMARY

Every Memorial Day weekend, families and friends pile into their cars and drive to the beach, national parks, and other popular tourist destinations. This Memorial Day, with gas prices soaring above \$2 per gallon in some parts of the country, consumers will pay more for these weekend trips than in years past.

Politicians at the federal level are putting the blame for rising gas prices on everything from the Organization of Petroleum Exporting Countries (OPEC) to fuel additive requirements. While OPEC clearly plays a role in determining gas prices, this finger pointing overlooks the fundamental problem: America is too dependent on oil. As long as demand for oil continues to climb, consumers will remain vulnerable to price spikes at the gas pump—whatever their cause.

In 1975, in response to the oil embargo, Congress passed the Energy Policy and Conservation Act to increase automobile fuel economy standards, protect consumers from high gasoline prices and reduce our dependence on foreign oil. The law recognized that the only way to reduce foreign oil dependence was to reduce U.S. demand. It requires that the National Highway Traffic and Safety Administration (NHTSA) review and increase automobile fuel economy standards as technologically feasible. Although the technology does exist to safely increase automobile fuel economy standards to 40 miles per gallon (mpg) in the next ten years, NHTSA has not enacted a meaningful increase in fuel economy in almost three decades.

As a result, this holiday weekend, Americans will be paying more at the gas pump and using more foreign oil than they should be,

given technology available today. Specifically:

- Americans will pay almost twice as much at the gas pump—\$72 million more—this Memorial Day weekend than they would with a 40 mpg fuel economy standard;
- Americans will use 35.7 million more gallons of gas than they would under a 40 mpg fuel economy standard; and
- Americans will consume 1.8 million more barrels of foreign oil this Memorial Day weekend than they would with a 40 mpg fuel economy standard.

The Bush administration should be looking for ways to save consumers money at the pump and wean us from oil—foreign or domestic—in the long term. Instead of taking advantage of automobile technology to achieve a 40 mpg standard, the administration is pushing an energy policy that emphasizes the technologies of yesterday and has opposed all meaningful increases in fuel economy. In fact, the administration has proposed new fuel economy standards that would make it easier for gas-guzzling SUVs to get even fewer miles per gallon.

While consumers continue to pay more at the pump, oil companies are recording huge profits. In 2003, the top five oil companies enjoyed net profits of \$60 billion. Meanwhile, the Bush administration has done nothing to protect consumers from oil company mergers and instead has pushed an energy policy that rewards the oil industry with taxpayer-funded subsidies and tax breaks.

Applying existing technology to improve the fuel economy of cars and light trucks to 40 mpg within the next ten years would provide enormous benefits to the economy while reducing our dependence on oil, curbing global warming emissions from cars and light trucks, and mitigating the other environmental effects of drilling,

transporting and burning oil. At 40 mpg, the average new car or truck could go almost twice as far before filling up again. This is the biggest single step we can take to cut America's oil dependence, save consumers money at the gas pump, and curb global warming tailpipe emissions.

REDUCING OIL DEMAND: FUEL ECONOMY STANDARDS

Background

In response to the Arab oil embargo of the early 1970s, Congress implemented the first miles per gallon standards in 1975 to protect consumers from high gasoline prices and supply vulnerability resulting from U.S. dependence on foreign oil. The drafters of the successful oil savings law recognized that the only way to reduce dependence on foreign oil was to reduce oil demand, requiring cars and light trucks to increase miles per gallon averages to 27.5 and 20.7 miles, respectively.¹ As a result, consumers were able to go farther on a gallon of gas; these standards also had the benefit of reducing tailpipe emissions, including emissions of global warming gases.

Today, average fuel economy is at a 23-year low of 20.8 mpg for model year 2003 light cars and trucks – six percent lower than the peak value of 22.1 mpg achieved in 1987 and 1988.² The general overall declining trend in new light-vehicle fuel economy is due to the recent light truck and SUV boom. “Light trucks” (minivans, pickups, and SUVs) are defined as weighing less than 8,500 pounds. Because fuel economy standards separate

light trucks as a class and subject them to different fuel economy standards, automakers often add weight to their trucks to exempt them from the miles per gallon standards altogether. Trucks weighing 8,600 pounds or more, such as the Hummer, Suburban, Tahoe, and Excursion, fall through this loophole and get significantly lower miles per gallon than even the light trucks. The Suburban, for example, gets between 10 and 18 miles per gallon, and the Tahoe gets between 14 and 18.³

One reason SUVs are so popular is the auto industry’s advertising campaign to convince the American people that SUVs, because of their weight, are safer than smaller automobiles. However, according to the Alliance of Automobile Manufacturers, SUV occupants are 3.5 percent more likely to die in crashes than sedan occupants.⁴ Most SUVs have a much narrower and taller profile with a higher center of gravity, making them more prone to rollover in a blowout or when the driver takes a corner too fast.⁵

Increasing Automobile Fuel Economy Standards to 40 Miles Per Gallon

The 1975 oil savings law requires that NHTSA continuously review and increase miles per gallon standards as technologically feasible.⁶

A 1996 Department of Transportation appropriations bill rider prevented NHTSA from even studying the need and the technological feasibility of new fuel economy standards. In 2001, the Senate

retracted this rider and agreed to study fuel economy standards. Congress ordered the National Academy of Sciences (NAS) to determine the effectiveness of the Corporate Average Fuel Economy (CAFE) program and make recommendations for moving forward with new standards.

In 2001, NAS identified ranges of fuel economy improvements for both cars and

trucks while holding acceleration, performance, size, accessories, amenities, the mix of vehicle types, makes, and models sold constant. The result was a 2002 NAS report, *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*, which concluded that automakers could use existing technology to increase the fuel economy of their fleets to 40 mpg over the next decade while improving safety and maintaining performance.⁷

According to the Union of Concerned Scientists, increasing automobile fuel economy standards to 40 mpg over a ten-year period would:⁸

- Reduce the oil used by cars and trucks by one-third in 2020;
- Save four million barrels of oil each day by 2020 (this is 10 times the projected

daily yield from the Arctic National Wildlife Refuge in the same year);

- Save consumers \$16 billion at the gas pump; and
- Cut global warming emissions from vehicles by 20 percent.

The technology is available today to make cars and light trucks go farther on a gallon of gas. The Toyota Prius, which gets 55 estimated combined miles per gallon, and the Ford SUV Escape, which gets 35-40 mpg, demonstrate that foreign and domestic manufacturers can produce smarter engines, more efficient transmissions, and other design improvements to make substantial gains in fuel economy.

FINDINGS: GASOLINE COSTS AND OIL DEMAND OVER MEMORIAL DAY

The technology exists to make cars go farther on a gallon of gas—even obtain 40 miles per gallon. The auto industry has long opposed any meaningful increase in fuel economy standards, even during times of high gas prices. The Bush administration has failed to act to apply our technological know-how to improve the fuel economy of America’s cars, which has led to higher prices at the pump, increased dependence on foreign oil, and a host of environmental problems stemming from oil exploration

and combustion. In fact, the Bush administration has actively opposed proposals to significantly increase the fuel economy of cars and light trucks.⁹

This Memorial Day weekend, consumers driving with their friends and families to enjoy the beach, hike in national parks, or visit relatives will pay more than they have to and use more oil than they should because of federal inaction on fuel economy.

Paying More at the Gas Pump on Memorial Day Weekend

About 30.9 million Americans are expected to travel 50 miles or more from home by car this Memorial Day weekend for a total of 1.5 billion miles.¹⁰ With gasoline priced at \$2.02 per gallon on average and even higher in some parts of the country, the three-day excursions will cost consumers approximately \$150 million. If automobile fuel economy standards were at 40 mpg instead of a fleetwide 20.8 mpg, the holiday trips would only cost consumers \$78 million. Americans will pay \$72 million more than

necessary for gasoline to drive to their vacation destinations this Memorial Day weekend (see Table 1).

The best way to protect consumers from high gasoline prices is to reduce demand by increasing miles per gallon standards to 40 mpg. Consumers would be able to travel almost twice as far before filling up their tanks and would save \$72 million over the three-day Memorial Day weekend alone.

Wasting Oil Over Memorial Day Weekend

Oil use for transportation in the U.S. accounts for more than two-thirds of domestic petroleum consumption – 67.1 percent,¹¹ which is 150 percent of domestic production. This means that our infatuation with the automobile alone consumes more oil than the United States can produce.¹² In 2002, the U.S. imported 53 percent of the

nation’s oil – 11.53 million barrels of oil, but consumed 21.84 million barrels of oil.¹³

This Memorial Day, Americans will use 35.7 million more gallons of gas than they would under a 40 mpg fuel economy standard. The increased gasoline usage equates to 1.8 million more barrels of oil that will have to be imported from abroad (see Table 1).

Table 1. Comparative Consumer Gasoline Costs and Foreign Oil Demand Over Memorial Day Weekend: 20.8 mpg vs. 40 mpg

	20.8 Miles Per Gallon¹⁴	40 Miles Per Gallon
Average Cost Per Gallon of Gasoline¹⁵	\$2.02	\$2.02
Projected Miles Traveled Over Memorial Day Weekend, 2004¹⁶	1,545,000,000	1,545,000,000
Gallons of Gasoline Required for Trip	74,278,846	38,625,000
Total Cost for Weekend Trip	\$150,708,194	\$78,368,261
Barrels of Oil Required to Meet Gasoline Demand for Weekend^a	3,809,172	1,980,769
Additional Oil Imported to Meet Demand (barrels)	1,828,403	0

^a Each barrel of oil contains 42 gallons, which yields 19.5 gallons of gasoline. (Each barrel also yields 9 gallons of fuel oil, 4 gallons of jet fuel, and 11 gallons of other products, including lubricants, kerosene, asphalt, and petrochemical feedstocks to make plastics.) Gibson Consulting Online, at <http://www.gravmag.com/oil.html>.

THE BUSH ADMINISTRATION'S ENERGY PLAN

America is simply too dependent on oil. The United States holds only two percent of the world's oil reserves. It produces 10.4 percent of the world's petroleum but consumes 25.5 percent of the world's total petroleum production.¹⁷ Our heavy reliance on oil products to fuel transportation vehicles takes a heavy toll on the environment. Oil and gas pollute the environment from the point of extraction to combustion, leaving a trail of oil spills, smog-forming air pollution, and global warming.

Despite the environmental, consumer, and economic problems with oil dependence, the Bush administration has supported efforts by Congress to enact an energy policy that would actually increase U.S. oil consumption by adding new loopholes to current automobile fuel economy standards.¹⁸ According to a recent analysis by the Energy Information Administration (EIA), by 2025, U.S. imports of petroleum would have increased by 82.9 percent under the administration's preferred energy policy, only slightly less than business as usual.¹⁹

The energy policy supported by the administration also would increase gasoline prices. The recent EIA report found that

“[c]hanges to production, consumption, imports, and prices are negligible.” In fact, the energy bill would actually slightly increase gas prices by 2010 compared with business as usual.²⁰

Not only does the administration's preferred energy policy fail to reduce our oil dependence, but it also rewards the oil and gas companies by giving them new tax breaks and uses taxpayer dollars to subsidize more oil drilling in pristine wilderness areas.²¹

Similarly, the administration's proposal to drill in the Arctic National Wildlife Refuge would do nothing to lower gas prices or reduce our dependence on foreign oil. It would destroy a pristine wilderness area for six months worth of oil that would not reach consumers for ten years.²² EIA recently reported that drilling in the Arctic National Wildlife Refuge would not have any impact on world oil prices, noting that “[a]ssuming that world oil markets continue to work as they do today, the Organization of Petroleum Exporting Countries could countermand any potential price impact of ANWR coastal plain production by reducing its exports by an equal amount.”²³

FEDERAL INACTION ON FUEL ECONOMY

Increasing automobile fuel economy standards to 40 miles per gallon would reduce the oil used by cars and trucks by one-third in 2020 and save consumers \$16

billion at the gas pump. Unfortunately, the federal government has not enacted a meaningful increase in fuel economy in almost 30 years.

Pending Proposal to Overhaul Automobile Fuel Economy Standards

The Bush administration is currently considering changes to automobile fuel economy standards that could make it even easier for auto companies to qualify gas-guzzling SUVs and other light trucks for weaker fuel economy standards.

On December 22, 2003, the National Highway Traffic and Safety Administration (NHTSA) proposed overhauling the entire fuel economy system, noting that the current standards apply to vehicle classes created in 1972 that bear “little resemblance to today’s motor vehicle market or the current and emerging vehicle fleet.”²⁴ Although the proposal seeks public input on the structure of the automobile fuel economy program, it specifically requests that the public not

suggest a specific number for future miles per gallon standards.²⁵

The proposal would scrap the current automobile fuel economy standards for a new system that would establish separate standards for a new series of vehicle weight categories. The new system would close a loophole that exempts 8,500 pound to 10,000 pound trucks from automobile fuel economy standards, but it would create more truck weight classes, with different fuel economy standards for each classification. This could encourage automakers to add weight to their vehicles to allow them to qualify for weaker standards. In fact, the notice even states that the new criteria could result in a decrease in fuel economy.²⁶

THE OIL INDUSTRY IS PROFITING FROM HIGH GASOLINE PRICES

Politicians at the federal level and oil industry representatives are putting the blame for rising gas prices on everything from the Organization of Petroleum Exporting Countries (OPEC) to fuel additive requirements. While OPEC plays a role in determining gas prices, this finger pointing overlooks the fundamental problem: America is too dependent on oil. As long as demand for oil continues to climb, consumers will remain vulnerable to price spikes at the gas pump—whatever their cause.

It is instructive, however, to examine some of the other market factors that drive gasoline price spikes, in addition to growing demand. Over the last decade, with little resistance by federal regulators, oil companies have merged into mega corporations with the ability to manipulate supply. These mega corporations, the first to benefit from high gas prices, are reaping huge profits while consumers pay more at the pump.

Highly Concentrated Oil Markets are Threatening Consumers

Federal regulators have allowed multiple large, vertically integrated oil companies to merge into even larger entities, enabling them to exploit supply and demand to increase profits. Because people use gasoline to get to work, the grocery store, and school, the demand for gasoline is inelastic, meaning that demand does not change despite increases in price. Americans' reliance on oil products in their daily lives places them in the hands of the small number of multinational corporations that now control the bulk of the refineries and market for oil and gas in the United States.

In 1981, 189 companies operating in the United States owned 324 refineries; by 2001, 65 firms owned 155 refineries. The market share of the top ten largest refiners grew from 55 percent to 62 percent over the same period of time.²⁷ Today, the top ten refineries control 78.5 percent of domestic refinery capacity while the five largest oil companies (ExxonMobil, ChevronTexaco,

ConocoPhillips, BP and Royal Dutch Shell) control half of all domestic refinery capacity.²⁸ In addition, together they own 48 percent of domestic oil production and 61.8 percent of the retail gasoline market.²⁹

The mergers in the oil industry have forced the closing of many refineries, creating highly concentrated or “tight” markets in many states. The Federal Trade Commission (FTC) and the Department of Justice (DOJ) guidelines state that “mergers should not be able to enhance market power or facilitate its exercise. Market power to a seller is the ability to profitably maintain prices above competitive levels for a significant period of time.” Sellers may also lessen competition on dimensions other than price, such as product. “The result of the exercise of market power is a transfer of wealth from buyers to sellers or a misallocation of resources.”³⁰

The government gains its authority to review mergers and acquisitions under Section 7 of

the Clayton Act.³¹ Section 7 prohibits mergers and acquisitions that may substantially lessen competition or tend to create a monopoly (ownership of one). The FTC and DOJ measure market concentration with the Herfindahl-Hirschman Index (HHI).

Under the HHI, market concentration is equal to the sum of the squares of the individual market shares of every firm in the market. For example, if there were only four firms in a particular market, each with 25% of the market, the HHI would be 2,500 ($25^2 \times 4$). Any market with an HHI over 1,800 is considered highly concentrated by the enforcement agencies and viewed with some suspicion; between 1,800 and 1,000 the market is considered moderately concentrated; and below 1,000, the enforcement agencies consider such markets to be unconcentrated.³²

Where products are relatively undifferentiated, the FTC and DOJ guidelines also find that a merged firm may lessen competition through unilaterally raising prices and suppressing output where the merged firm owns a combined market share of at least 35 percent. The merger provides the merged firm a larger base of sales on which to enjoy the resulting price rise and also eliminates a competitor to which customers otherwise would have diverted their sales.³³

If a merger does not pose a serious threat to competition, it is unlikely to be challenged. If a substantial threat is present, however, the enforcement agencies may exercise discretion to prosecute.³⁴

A recent investigation by the FTC into 2000 Midwest price spikes disclosed unilateral

actions by firms to manipulate the market to increase prices. An executive of one of the companies made clear that he “would rather sell less gasoline and earn a higher margin on each gallon sold than sell more gasoline and earn a lower margin.”³⁵ This evidences the business practice of lessening competition through the suppression of a product to increase price. But despite the oil executive’s blatant admission that he was responsible for withholding supply to drive up price, the FTC found that “a decision to limit supply does not violate antitrust laws...Firms that withheld or delayed shipping additional supply in the face of a price spike did not violate antitrust laws.”³⁶

In 2000, 28 states were considered moderately concentrated, and nine states had an index above 1800 and were thus considered “highly concentrated.”³⁷ As a point of comparison, in 1994, as measured by the HHI, the gasoline wholesale market was “moderately concentrated” in 22 states (see Appendix B).

A few mega firms are gaining an exceedingly larger market share, enabling them to control the flow of gasoline in the U.S. This provides the opportunity to manipulate the market to turn a quick profit, because no standards govern selective pricing or withholding of supply. These firms individually own such a large percentage of the industry as a whole that collusion is not needed to manipulate the market. If they so chose, individual actions would be sufficient to upset the supply in any given sector. As long as there is no collusion involved, firms are free to set prices and withhold supply to increase gasoline prices and turn higher profits.

Clean Fuels Programs Are Not Causing the Increase in Gas Prices

The Bush administration and domestic oil companies are claiming that cleaner-burning fuel requirements are partly responsible for fuel supply shortages and price increases. Michael Ports, an oil executive, stated that “the environmental compliance burdens placed on the nation’s motor fuel refining industry over the past 20 years have effectively destroyed the world’s most efficient commodity manufacturing and distribution system.”³⁸ But according to air pollution control officials in the Northeast, the oil industry “urged states to adopt the very state-based fuel requirements about which they now voice concern.”³⁹

Cleaner-burning fuel requirements are not causing gasoline prices to increase. Gasoline prices have increased nationwide, with conventional and cleaner-burning gasoline prices rising at the same rate.⁴⁰ If “boutique” fuels were a major factor in gasoline price increases, the price of cleaner-burning fuels would be rising at a faster rate, which is not occurring. For example, the price of gasoline in Atlanta, which uses a low volatility, low sulfur “boutique” fuel, has been consistently below the national average price for conventional gasoline.

Oil Company Profits

Currently, oil companies are enjoying huge profits. In 2003, the top five oil companies earned \$60 billion dollars in net profits – ranging from \$3.5 billion to more than \$10 billion in net income (Table 3). All five have already reported significant profits for the first quarter of 2004 during a time of escalating gasoline prices and increasing crude oil costs (Table 4). Essentially, the oil companies are benefiting financially from consumers paying more at the pump.

As long as the oil companies can indirectly affect prices through their supply decisions, they may act in their self-interest to manage supply so as to maximize their profits; this means that they may attempt to achieve and maintain a tight balance between supply and demand in a concentrated market.

**Table 3. Increases in Net Income of Top Oil Companies:
Fiscal Year 2003**

Oil Company	Fiscal Year 12/31/03	Fiscal Year 12/31/02	Increase in Net Income	% Change
ExxonMobil⁴¹	\$21.51 billion	\$11.46 billion	\$10.05 billion	+ 88%
ChevronTexaco⁴²	\$7.23 billion	\$1.132 billion	\$6.098 billion	+ 539%
ConocoPhillips⁴³	\$4.735 billion	(\$295) million	\$5.03 billion	n/a
BP⁴⁴	\$13.14 billion	\$8.397 billion	\$4.746 billion	+ 57%
Royal Dutch Shell⁴⁵	\$13.067 billion	\$9.577 billion	\$3.49 billion	+ 36%

**Table 4. Increases in Net Income of Top Oil Companies:
First Quarter of Fiscal Year 2004**

Oil Company	First Quarter 2004	First Quarter 2003	Increase in Net Income	Percent Change
ExxonMobil⁴⁶	\$5.44 billion	\$7.04 billion ^b	\$ 650 million	+ 14%
ChevronTexaco⁴⁷	\$2.6 billion	\$1.9 billion	\$700 million	+ 37%
ConocoPhillips⁴⁸	\$1.616 billion	\$1.221 billion	\$395 million	+ 32%
BP⁴⁹	\$4.717 billion	\$4.048 billion	\$669 million	+ 17%
Royal Dutch Shell^{50,51}	\$4.4 billion	\$5.3 billion ^c	\$400 million	+ 9%

^b Net income of \$5.44 billion decreased \$1.6 billion from the first quarter of 2003. First quarter 2003 earnings included a \$550 million positive impact from the required adoption of the new accounting standard for assessment retirement obligations and a one-time gain of \$1.7 million from the transfer of shares in Ruhrgas AG. Excluding these impacts, first quarter 2004 earnings were a record and increased by \$650 million. “Exxon Mobil Corporation Announces Estimated First Quarter 2004 Results,” ExxonMobil Press Release, Thursday, April 29, 2004.

^c Reported net income for the first quarter in 2003 included special credits in the amount of \$1.3 billion, and as a result reported net income declined by 16 percent from 2003. Excluding these items in 2003, earnings in 2004 improved 9 percent. “Satisfactory Performance by Royal Dutch/Shell in First Quarter and Restart Buy Back Program,” Royal Dutch Shell News & Media Release, April 29, 2004.

POLICY RECOMMENDATIONS

This Memorial Day, Americans are spending \$72 million more at the pump and using 35.7 million gallons of gas more than they would be if federal regulators and the Bush administration increased fuel economy standards to 40 mpg—the level that is technologically feasible. Of course, the savings that could be realized from implementing a 40-mpg standard extend to the other 362 days of the year – and so do the consequences of the Bush administration’s inaction.

In order to curtail America’s foreign oil dependence and save consumers money at the gas pump:

- The Secretary of Transportation should use his authority to increase Corporate Average Fuel Economy standards to 40 miles per gallon. His authority enables any increase that represents the “maximum feasible” standard consistent with technological feasibility, economic practicability, the

effect of other government regulations on fuel economy, and the nation’s need to conserve energy. A 40 mpg fleet wide standard is consistent with the criteria.⁵²

- Policy-makers should strengthen federal anti-trust laws to give the FTC greater market enforcement capabilities and to specifically prohibit companies from intentionally withholding supplies to drive up prices.
- The FTC should block mergers that make it easier for oil companies to manipulate gasoline supplies and take steps, such as forcing companies to sell assets, to remedy the situation.
- The Bush administration should conduct a study of the reasons for the closure of more than 50 refineries in the past ten years and assess how to expand refinery capacity.

METHODOLOGY

Costs per gallon of gasoline: Obtained from the Energy Information Administration, Gasoline and Diesel Fuel Update, May 18, 2004 (www.eia.doe.gov). Regional prices based on EIA's Petroleum Administration for Defense Districts (PADD); the definition for each PADD region is detailed at <http://tonto.eia.doe.gov/oog/info/twip/padddef.html>.

Miles traveled over Memorial Day weekend: National miles traveled over Memorial Day weekend obtained from AAA on May 18, 2004. To generate approximate state numbers, we first calculated the state's population as a percentage of the national population in 2000, according to the U.S. Census. We then applied this percentage to the total miles traveled nationally over Memorial Day weekend.

Gallons of gasoline required for trip: Calculated by dividing the miles traveled over Memorial Day weekend by average miles per gallon (20.8 mpg and 40 mpg).

Total cost for the weekend trip: Calculated by multiplying the gallons of gasoline required for Memorial Day travel (see above) by the average cost per gallon of gasoline in each state and then summing up the total for each state. Multiplying the national average cost of gasoline (\$2.02) by the total miles traveled yields a slightly lower number.

Barrels of oil required to meet gasoline demand for weekend: Calculated by dividing the gallons of gasoline required for Memorial Day travel by 19.5. Each barrel of oil contains 42 gallons, which yields 19.5 gallons of gas.

Additional foreign oil consumed: The difference between the number of barrels of oil required to meet gasoline demand for the weekend with 20.8 miles per gallon and a 40 miles per gallon. Because U.S. oil production is flat, and the U.S. imports more than 50 percent of the nation's oil, we assumed that any increase in demand is an increase in demand for imported oil.

APPENDIX A. COMPARATIVE CONSUMER GASOLINE COSTS OVER MEMORIAL DAY WEEKEND (20.8 MPG VS. 40 MPG): BY STATE

Rank	State	Approximate Miles Traveled	Average Regional Gas Prices	Cost for Trip at 20.8 mpg	Cost for Trip at 40 mpg	Amount Consumers Would Save at 40 mpg
23	Alabama	23,911,376	\$1.89	\$2,172,716	\$1,129,813	\$1,042,904
47	Alaska	3,447,009	\$2.24	\$371,216	\$193,032	\$178,184
15	Arizona	29,649,460	\$2.24	\$3,193,019	\$1,660,370	\$1,532,649
33	Arkansas	14,481,040	\$1.89	\$1,315,825	\$684,229	\$631,596
1	California	188,520,071	\$2.27	\$20,574,065	\$10,698,514	\$9,875,551
22	Colorado	24,176,673	\$1.99	\$2,313,057	\$1,202,789	\$1,110,267
28	Connecticut	18,506,289	\$2.03	\$1,806,143	\$939,194	\$866,948
45	Delaware	4,343,126	\$2.02	\$421,784	\$219,328	\$202,457
50	District of Columbia	2,993,119	\$2.02	\$290,678	\$151,153	\$139,525
4	Florida	90,418,074	\$1.94	\$8,433,224	\$4,385,277	\$4,047,948
10	Georgia	46,139,730	\$1.94	\$4,303,417	\$2,237,777	\$2,065,640
39	Hawaii	6,681,358	\$2.24	\$719,531	\$374,156	\$345,375
40	Idaho	7,258,982	\$1.99	\$694,489	\$361,134	\$333,355
5	Illinois	67,225,131	\$2.00	\$6,463,955	\$3,361,257	\$3,102,698
16	Indiana	32,915,910	\$2.00	\$3,164,991	\$1,645,795	\$1,519,196
30	Iowa	15,641,069	\$2.00	\$1,503,949	\$782,053	\$721,895
31	Kansas	14,469,315	\$2.00	\$1,391,280	\$723,466	\$667,815
25	Kentucky	21,876,990	\$2.00	\$2,103,557	\$1,093,850	\$1,009,707
24	Louisiana	23,887,904	\$1.89	\$2,170,584	\$1,128,703	\$1,041,880
41	Maine	6,937,008	\$2.03	\$677,025	\$352,053	\$324,972
19	Maryland	29,267,463	\$2.02	\$2,842,321	\$1,478,007	\$1,364,314
14	Massachusetts	34,179,171	\$2.03	\$3,335,756	\$1,734,593	\$1,601,163
8	Michigan	53,552,453	\$2.00	\$5,149,274	\$2,677,623	\$2,471,652
21	Minnesota	26,879,201	\$2.00	\$2,584,539	\$1,343,960	\$1,240,578
32	Mississippi	15,307,529	\$1.89	\$1,390,925	\$723,281	\$667,644
18	Missouri	30,306,504	\$2.00	\$2,914,087	\$1,515,325	\$1,398,762
44	Montana	4,875,092	\$1.99	\$466,415	\$242,536	\$223,879
38	Nebraska	9,240,420	\$2.00	\$888,502	\$462,021	\$426,481
34	Nevada	11,906,694	\$2.24	\$1,282,259	\$666,775	\$615,484
42	New Hampshire	6,841,161	\$2.03	\$667,671	\$347,189	\$320,482
9	New Jersey	45,893,649	\$2.02	\$4,456,979	\$2,317,629	\$2,139,350
36	New Mexico	9,959,358	\$1.89	\$904,961	\$470,580	\$434,381
3	New York	101,952,307	\$2.02	\$9,901,138	\$5,148,592	\$4,752,546
11	North Carolina	44,665,617	\$1.94	\$4,165,928	\$2,166,282	\$1,999,645
48	North Dakota	3,367,418	\$2.00	\$323,790	\$168,371	\$155,419
7	Ohio	60,755,550	\$2.00	\$5,841,880	\$3,037,777	\$2,804,102
29	Oklahoma	18,655,896	\$2.00	\$1,793,836	\$932,795	\$861,041
27	Oregon	18,911,248	\$2.24	\$2,036,596	\$1,059,030	\$977,566

Rank	State	Approximate Miles Traveled	Average Regional Gas Prices	Cost for Trip at 20.8 mpg	Cost for Trip at 40 mpg	Amount Consumers Would Save at 40 mpg
6	Pennsylvania	65,694,586	\$2.02	\$6,379,955	\$3,317,577	\$3,062,378
43	Rhode Island	5,717,392	\$2.03	\$557,995	\$290,158	\$267,838
26	South Carolina	22,032,787	\$1.94	\$2,054,981	\$1,068,590	\$986,391
46	South Dakota	4,060,584	\$2.00	\$390,441	\$203,029	\$187,412
17	Tennessee	31,035,754	\$2.00	\$2,984,207	\$1,551,788	\$1,432,419
2	Texas	117,510,136	\$1.89	\$10,677,604	\$5,552,354	\$5,125,250
35	Utah	12,492,759	\$1.99	\$1,195,221	\$621,515	\$573,706
49	Vermont	3,289,161	\$2.03	\$321,010	\$166,925	\$154,085
12	Virginia	39,241,734	\$1.94	\$3,660,046	\$1,903,224	\$1,756,822
13	Washington	32,574,842	\$2.24	\$3,508,060	\$1,824,191	\$1,683,869
37	West Virginia	9,617,960	\$1.94	\$897,060	\$466,471	\$430,589
20	Wisconsin	29,072,963	\$2.00	\$2,795,477	\$1,453,648	\$1,341,829
51	Wyoming	2,662,974	\$1.99	\$254,775	\$132,483	\$122,292
Total				\$150,708,194	\$78,368,261	\$72,339,933

APPENDIX B. STATES WITH CONCENTRATED OIL MARKETS

Moderately Concentrated	Highly Concentrated
Connecticut	District of Columbia
Massachusetts	West Virginia
Maine	Indiana
Rhode Island	Kentucky
Vermont	North Dakota
Delaware	Ohio
Maryland	Montana
Illinois	Alaska
Indiana	Hawaii
Michigan	
Minnesota	
Oklahoma	
Tennessee	
Wisconsin	
Louisiana	
New Mexico	
Colorado	
Idaho	
Wyoming	
Alaska	
Arizona	
California	
Nevada	
Oregon	
Washington	
New York	
New Jersey	
Pennsylvania	

Source: "Gas Prices: How Are They Really Set?" Report prepared by the Majority Staff of the Permanent Subcommittee on Investigations, Released in Conjunction with the Permanent Subcommittee on Investigations' Hearings on April 30 and May 2, 2002.

END NOTES

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- ⁶ 49 U.S.C 32902.
- ⁷ National Research Council, *Effectiveness and Impact of Corporate Average Fuel Economy (CAFE) Standards*, 2002.
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