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United States General Accounting Office  
Washington, DC 20548

Resources, Community, and  
Economic Development Division

B-284379

February 23, 2000

The Honorable Gordon H. Smith  
United States Senate

Subject: Motor Fuels: Gasoline Price Spikes in Oregon in 1999

Dear Senator Smith:

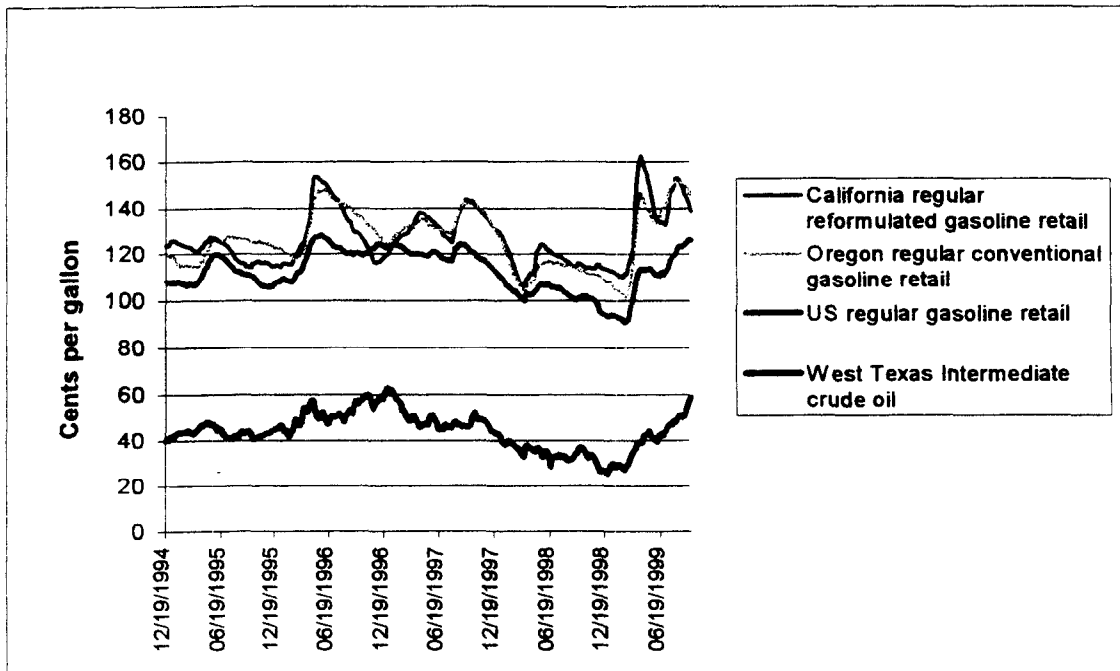
As requested, we are providing you with information on the extent to which retail gasoline prices in Oregon spiked from January through August 1999 and the factors that accounted for spikes. We used the attached material to brief you and your staff on February 4, 2000, (see enc. I) and have summarized our findings below.

From a historical perspective, gasoline demand in Oregon was about 100,000 barrels per day in 1998, according to federal and oil industry officials. Because there are no refineries in Oregon that produce gasoline, all the gasoline consumed in the state is supplied from outside the state. One industry source estimated that about 68 percent of Oregon's gasoline supply in 1998 came from Washington; 26 percent from California; and the rest from various other sources, such as Alaska. Gasoline prices in Oregon are among the highest in the United States. Moreover, demand for gasoline in Oregon grew rapidly from 1997 to 1998: According to the Federal Highway Administration's data, the demand for gasoline in Oregon grew by about 8.1 percent during this period, the highest growth rate in the country.

In summary, retail gasoline prices in Oregon spiked in the spring and again in the summer of 1999, as shown in the figure below. During the spring spike, average retail prices rose from a 4½-year low of \$1.01 per gallon in February to a high of \$1.47 per gallon in April—an increase of 46 cents. For the summer spike, after falling by about 14 cents per gallon, average prices rose from \$1.33 per gallon in June to \$1.52 per gallon in August—an increase of 19 cents. Over the whole period, from February to August, Oregon's average retail gasoline prices increased by about 51 cents per gallon, compared to an average increase of about 33 cents per gallon for the rest of the United States.

The price spikes in Oregon were due primarily to supply-related problems in California and Washington. According to oil industry officials and experts we contacted, the spring spikes were caused primarily by disruptions in refinery operations in California, which reduced gasoline production. According to estimates by the Department of Energy's Energy Information Administration, about 12 to 15 percent of California's gasoline production may have been affected by these disruptions during this period. The summer spike was due mostly to a combination of additional refinery disruptions in California and an explosion, in June, on the Olympic Pipeline, which carries the bulk of the gasoline supplies that go from Washington to Oregon. As a result of the explosion, gasoline supplies from Washington to Oregon through the pipeline went from 2.65 million barrels per month in May to 1.49 million barrels in June and 1.02 million barrels by September. Alternative modes of transportation, such as barges, tankers, and trucks, were used to ship gasoline to Oregon to compensate for this outage. This added to the price increases because these types of transportation are generally more expensive and slower than pipeline. Also, in both spikes, price increases may have been exacerbated because uncertainty about supply may have caused gasoline dealers to scramble to buy more gasoline than is usual for fear of running out of supplies in the future. This increased demand would contribute to rising wholesale and, ultimately, retail prices. In addition, crude oil prices were generally rising during the period of the price spikes, leading to higher gasoline prices in Oregon and in the rest of the country. Finally, as part of the West Coast gasoline market, Oregon's price trends tend to more closely resemble trends in California than in the United States in general.

Figure 1: Weekly Retail Gasoline and Crude Oil Prices, Dec. 1994-Aug. 1999



Source: Energy Information Administration and Platt's Oil Price Database.

Enclosure I

To prepare the information in this report, we reviewed and analyzed data on Oregon's gasoline demand/supply in 1997 and 1998, as well as data on average retail gasoline prices for January through August 1999 available from various sources, including the Energy Information Administration, Federal Highway Administration, and oil industry officials. We also used crude oil price data from Platt's Oil Price Database, a private industry data source. In addition, we interviewed officials and experts in the oil industry, federal and state officials, and experts in academia.

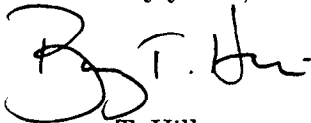
In general, we found little information on Oregon's gasoline market, even from the state's energy office or other relevant agencies. The data we used were the best available but may contain some limitations. For example, Energy Information Administration officials noted that the data they provided us on Oregon's weekly average retail gasoline prices were calculated from a relatively small sample and may not be fully representative of the entire state's weekly average. Furthermore, we focused our analysis on supply and demand factors that we believe accounted for price spikes. We did not address issues of Oregon's market structure or competition. The Federal Trade Commission is studying allegations of anticompetitive behavior by oil companies in Oregon and other West Coast states. We conducted our work from October 1999 through January 2000 in accordance with generally accepted government auditing standards.

We provided a draft of this report to the Energy Information Administration's Petroleum Division for review and comment. We discussed the report with officials from that Division, who advised us that they agreed with the contents of the report.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 14 days from the date of this letter. At that time, we will send copies to interested Members of Congress and make copies available to others upon request.

If you have any questions about this report or need additional information, please call me at (202) 512-3841. Major contributors to this report included Daniel Haas, Godwin Agbara, Byron Galloway, and Frank Rusco.

Sincerely yours,



Barry T. Hill  
Associate Director, Energy,  
Resources, and Science Issues

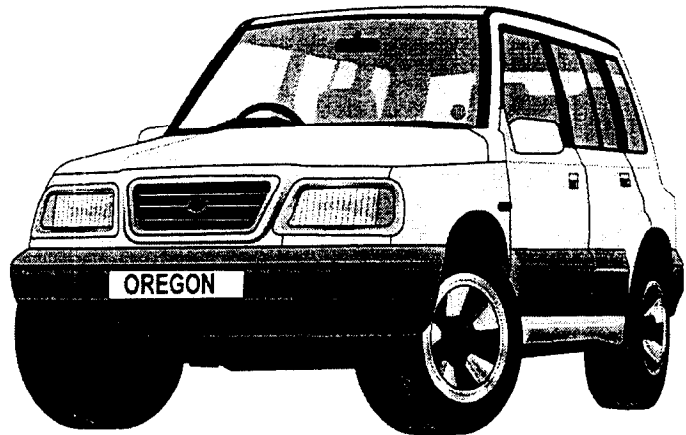
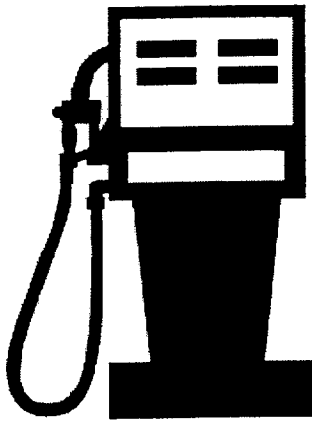
Enclosure

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**GAO** U.S. General Accounting Office  
Resources, Community, and Economic Development Division

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## Retail Gasoline Price Spikes in Oregon in 1999



Prepared for:  
Gordon H. Smith, United States Senator  
February 4, 2000

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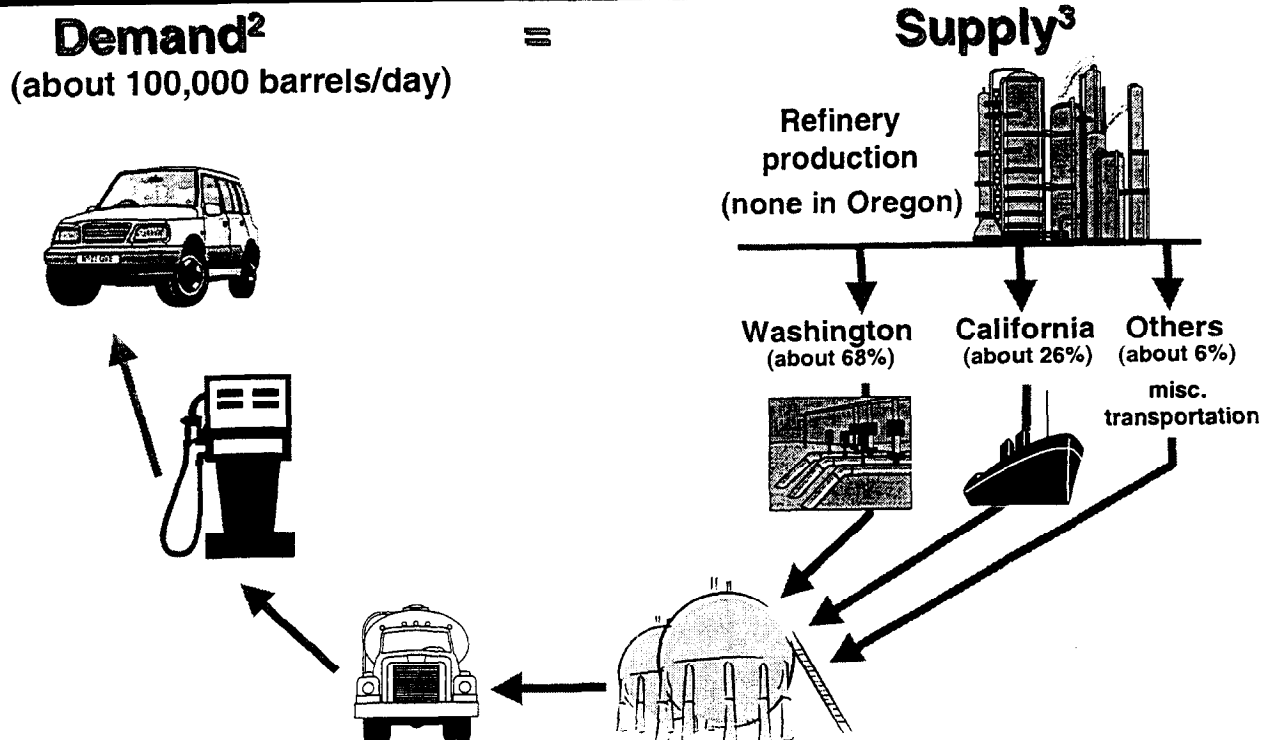
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# GAO Background Oregon's Gasoline Demand/Supply Network<sup>1</sup>



<sup>1</sup>Demand and supply numbers are for 1998.

<sup>2</sup>Demand estimate is from DOE's Energy Information Administration and oil industry officials.

<sup>3</sup>Supply sources and percentages are from oil industry officials.

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**GAO** Objective

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To what extent did Oregon's retail gasoline prices spike in the first half of 1999 and what factors accounted for spikes?

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**GAO** Results in Brief

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- Retail gasoline prices in Oregon spiked in the spring and summer of 1999--about 46 cents/gallon and 19 cents/gallon, respectively.
- Spikes were due primarily to supply-related problems in California and Washington.



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## GAO Scope and Methodology

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- We reviewed and analyzed Oregon's gasoline demand/supply data for 1997-98 and its average weekly retail gasoline price data for Jan. 1999 - Aug. 1999.
  - We interviewed officials and experts in the oil industry, federal and state officials, and academia.
  - Little information was available on Oregon's gasoline market.
    - We used the best available data from federal and oil industry sources.
    - The data we used may contain some limitations (e.g., Oregon's weekly retail price data from the Energy Information Administration were calculated from a relatively small sample and may not be fully representative of the entire state average).
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# GAO Retail Gasoline Price Spikes in Oregon in 1999

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- **Spring spike**
    - Average prices rose from a 4-1/2-year low of \$1.01/gallon in February to a high of \$1.47/gallon in April--46-cent increase.
  
  - **Summer spike**
    - After falling about 14 cents/gallon, average prices rose from \$1.33/gallon in June to \$1.52 /gallon in August--19-cent increase.
  
  - Over the whole period, February to August, Oregon's average retail gasoline prices rose by 51 cents/gallon, compared to an increase of about 33 cents/gallon for the U.S. average.
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# GAO Oil Industry Officials/Experts Views on Why Prices Spiked

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## Spring

- Disruptions in refinery operations in California reduced gasoline production.
  - About 12-15% of California's production was affected (Energy Information Administration's estimate).
- Market psychology--dealers demanding more supplies for fear of running out--may have played a role.

## Summer

- Explosion disrupted flow of gasoline on the Olympic Pipeline from Washington to Oregon.
  - The flow declined from about 2.65 million barrels/month in May to 1.49 million barrels/month in June, to 1.02 million barrels/month in September.
  - Marine and other transportation modes were used, but they are slower and costlier, adding to price spikes.
- Additional refinery disruptions occurred in California.
- Again, market psychology may have played a role.

FTC is studying allegations of anticompetitive behavior by oil companies.

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